Hyundai Corporation and its subsidiaries

Consolidated financial statements for the years ended December 31, 2022 and 2021 with the independent auditor's report

Hyundai Corporation and its subsidiaries

Table of contents

Independent auditor's report	Paga
Consolidated financial statements	Page
Consolidated statements of financial position	1
Consolidated statements of profit or loss	2
Consolidated statements of comprehensive income	3
Consolidated statements of changes in equity	4
Consolidated statements of cash flows	5
Notes to the consolidated financial statements	6



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> Independent auditor's report (English Translation of a Report Originally Issued in Korean)

The Shareholders and Board of Directors Hyundai Corporation

Opinion

We have audited the accompanying consolidated financial statements of Hyundai Corporation and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2022 and 2021, and the consolidated statements of profit or loss and consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS").

Basis for opinion

We conducted our audits in accordance with Korean Standards on Auditing ("KSA"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the 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 those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

> Occurrence of overseas sales and period to which they are attributable

As described in Note 2 to the consolidated financial statements, the Group recognizes sales at the time of delivery, considering the terms of trade transactions, when a control of inventory is transferred to overseas customers. The Group's overseas sales for the year ended December 31, 2022 are # 5,411,880 million, accounting for about 88% of its total sales.

Since it is probable that the occurrence of overseas sales and period to which such sales are attributable will be recognized incorrect in identifying performance obligations and determining the timing of satisfaction of such performance obligations for the contract with customer relating to overseas sales of the Group, we identified the occurrence of overseas sales and the period to which such sales are attributable as a key audit matter.



The main audit procedures we have performed for this key audit matter are as follows:

- We assessed revenue recognition accounting policies by the type of major overseas sales contract and changes in such policies, if any.
- We assessed contract documents by the type of overseas sales, including the assessment on identification of performance obligations, measurement of transaction amount, allocation of transaction price, and timing of revenue recognition.
- We tested details of overseas sales transactions occurring during the current period by comparing samples of sales to relevant documents.
- We checked whether the period to which overseas sales transactions is attributable is correct if such transactions occurred before or after the end of the reporting period.

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 KIFRS, 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.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KSA 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 KSA, 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, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to



the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate 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 to 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 auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Hee Seong Moon.

Einst Joung Han Joung

March 21, 2023

This audit report is effective as of the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

Hyundai Corporation and its subsidiaries

Consolidated financial statements for the years ended December 31, 2022 and 2021

"The accompanying consolidated financial statements, including all footnotes and disclosures, have been prepared by, and are the responsibility of, the Group."

Anseok Jang Chief Executive Officer Hyundai Corporation

Hyundai Corporation and its subsidiaries Consolidated statements of financial position as of December 31, 2022 and 2021

(In Korean won)

(In Rolean won)	Natas	0000	0004
Assets	Notes	2022	2021
Current assets			
Cash and cash equivalents	4,7,9	₩ 356,938,418,361	₩ 195,079,937,786
Short-term financial instruments	4,7	5,000,000,000	2,000,000,000
Trade receivables	4,7,8,10,36	525,741,457,894	649,740,947,644
Inventories	13	293,977,634,260	213,245,326,330
Derivative financial assets	4,5,7,12	5,774,599,634	2,276,942,149
Current portion of finance lease receivables	7,18,36	344,317,942	372,918,614
Other current receivables	4,7,10,36	16,204,009,792	23,408,763,049
Other current assets	14,36	31,234,406,879	25,285,001,980
		1,235,214,844,762	1,111,409,837,552
Non-current assets			
Long-term financial instruments	7	19,000,000	19,000,000
Financial assets at fair value through profit or loss	5,7,11	1,668,779,000	2,559,763,600
Financial assets at fair value through other comprehensive income	5,7,11,16	52,647,035,802	49,357,801,339
Other financial assets Investments in joint ventures and associates	7 15,16,37	319,489,817 84,781,119,073	349,990,744 88,300,471,096
Long-term loan receivables	4,7,16,36	20,111,394,473	28,386,959,582
Investments in resource development projects	4,7,16,36	20,552,109,435	24,956,797,714
Property, plant and equipment	17	33,022,212,912	29,453,821,160
Investment properties	19	347,000,000,000	342,000,000,000
Right-of-use assets	18,36	7,045,368,627	8,416,278,097
Intangible assets Deferred tax assets	20 25	9,750,486,134 2,693,191,812	8,906,663,499 6,252,665,226
Finance lease receivables (non-current)	7,18,36	159,016,947	563,430,066
Net defined benefit assets	23	2,257,358,376	-
Other non-current receivables	7,10	9,133,550,855	473,352,151
Other non-current assets	4,7,14,36	4,926,843,528	5,976,343,782
		596,086,956,791	595,973,338,056
Total assets		₩ 1,831,301,801,553	₩ 1,707,383,175,608
Liabilities			
Current liabilities			
Trade payables	4,7,36	₩ 444,427,442,563	₩ 255,963,840,201
Other payables	4,7,36	45,187,532,038	64,184,440,214
Advances from customers	36	110,852,376,295	36,966,249,301
Short-term borrowings Current portion of debentures	4,7,8,22,34 4,7,22,34	290,967,447,548 49,943,005,915	466,626,083,425 29,962,289,013
Current portion of provisions	4,7,24,35	2,223,034,740	1,948,999,901
Current tax liabilities	1,7,21,00	15,281,677,489	7,218,727,859
Derivative financial liabilities	4,5,7,12	5,678,949,689	1,435,869,919
Current portion of lease liabilities	4,7,18,34	3,343,635,492	3,196,974,407
Other current liabilities	7,21,36	9,346,822,558	6,281,628,950
		977,251,924,327	873,785,103,190
Non-current liabilities			
Long-term other payables	4,7	9,865,137	4,875,523
Debentures	4,7,22,34	49,906,986,194	99,713,220,794
Long-term borrowings	4,7,22,34	322,931,932,176	322,737,812,608
Net defined benefit liability Provisions	23 4,7,24,35	- 4,833,561,057	1,845,012,106 5,820,822,295
Deferred tax liabilities	4,7,24,33	21,367,373,539	22,041,881,862
Lease liabilities	4,7,18,34	4,780,894,121	6,607,337,545
Other non-current liabilities	4,7,21	3,947,912,743	4,081,103,615
Others		9,677,070,184	7,915,702,115
		417,455,595,151	470,767,768,463
Total liabilities		1,394,707,519,478	1,344,552,871,653
Equity			
Equity attributable to owners of the parent			
Issued capital	1	66,144,830,000	66,144,830,000
Other components of equity	26	(282,140,365,887)	(281,978,480,507)
Accumulated other comprehensive income Retained earnings	26 27	73,499,649,123 575,527,682,561	72,639,148,872 504,261,835,732
notamet carnings	21	433,031,795,797	361,067,334,097
Non-controlling interests		3,562,486,278	1,762,969,858
Total equity		436,594,282,075	362,830,303,955
Total liabilities and equity		₩ 1,831,301,801,553	₩ 1,707,383,175,608

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

Hyundai Corporation and its subsidiaries Consolidated statements of profit or loss for the years ended December 31, 2022 and 2021

(In Korean won)

	Notes	2022	2021
Sales	6,16,28,36	₩ 6,126,968,751,169	₩ 3,782,497,523,034
Cost of sales	13,16,28,29,36	(5,968,249,702,824)	(3,671,382,343,166)
Gross profit		158,719,048,345	111,115,179,868
Selling and administrative expenses	29,30	(91,891,540,331)	(76,045,278,170)
Operating profit	6	66,827,508,014	35,069,901,698
Other income	7,31	207,497,033,387	85,269,529,390
Other expenses	7,31	(199,867,253,077)	(66,410,539,985)
Share of profit of associates and joint ventures	15,16	29,302,476,106	7,268,796,478
Finance income	7,32	63,962,795,891	25,841,954,925
Finance costs	7,32	(77,184,918,887)	(30,818,953,659)
Profit before tax		90,537,641,434	56,220,688,847
Income tax expenses	25	(11,851,315,729)	(18,214,692,550)
Profit for the year		₩ 78,686,325,705	₩ 38,005,996,297
Profit (loss) for the year attributable to:			
Owners of the parent		₩ 78,715,077,815	₩ 37,789,612,149
Non-controlling interests		(28,752,110)	216,384,148
Earnings per share attributable to owners of the parent			
Basic earnings per share	33	₩ 6,554	₩ 3,146

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

Hyundai Corporation and its subsidiaries Consolidated statements of comprehensive income for the years ended December 31, 2022 and 2021

(In Korean won)

	Notes		2022	2021
Profit for the year Other comprehensive income Items will not be reclassified to profit or loss in subsequent		₩	78,686,325,705	₩ 38,005,996,297
periods: Remeasurement loss on defined benefit plans Gain on equity instruments designated at fair value through other	23		(242,651,386)	(961,960,238)
comprehensive income	5,7,11		2,863,492,435	2,847,943,438
Share of other comprehensive income (loss) of associates and joint ventures	15		(8,483,742,904)	4,760,729,134
Items that may be reclassified to profit or loss in subsequent periods: Share of other comprehensive income of associates and joint				
ventures	15		4,953,970,259	4,314,659,629
Gain on valuation of derivative instruments			354,483,195	254,268,398
Exchange differences on translation of foreign operations			1,135,512,932	6,330,843,319
Other comprehensive income for the year Total comprehensive income for the year		W	581,064,531 79,267,390,236	<u>17,546,483,680</u> ₩ 55,552,479,977
Total comprehensive income for the year		vv	19,201,390,230	W 33,332,479,977
Total comprehensive income for the year is attributable to: Owners of the parent Non-controlling interests		₩	79,332,926,680 (65,536,444)	₩ 55,216,976,255 335,503,722

Hyundai Corporation and its subsidiaries Consolidated statements of changes in equity for the years ended December 31, 2022 and 2021 (In Korean won)

(In Korean won)				Attri	Attributable to	ble to the owners of the parent	parent						
		Issued canital	ð	Other component of equity	Acct	Accumulated other comprehensive income	Re	Retained earnings		Total	Non-contre	olling interests	Total equity
As of January 1, 2021	A	66,144,830,000	A	(281,978,480,507)	M	54,249,824,528	A	474,640,763,421	AA	313,056,937,442	W	W 1,407,466,136 W	
Comprenensive income Profit for the year								37,789,612,149		37,789,612,149		216,384,148	38,005,996,297
Gain on valuation of financial assets at fair value through other comprehensive income Share of other commonehensive						2,847,943,438				2,847,943,438		 , 	2,847,943,438
income of associates and joint ventures						9,071,877,949				9,071,877,949		3,510,814	9,075,388,763
defined benefit plans				,		•		(961,960,238)		(961,960,238)			(961,960,238)
Gain on valuation of derivative instruments Exchange differences on						254,268,398				254,268,398			254,268,398
translation of foreign operations						6,215,234,559				6,215,234,559		115,608,760	6,330,843,319
Transaction with owners						18,389,324,344		36,827,651,911		55,216,976,255		335,503,722	55,552,479,977
Dividends (Note 27) Equity transactions with non-				•				(7,206,579,600)		(7,206,579,600)			(7,206,579,600)
controlling interests As of December 31, 2021	A	- 66.144.830.000	M	- (281.978.480.507)	M	- 72.639.148.872	A	- 504.261.835.732	A	- 361.067.334.097	A	20,000,000 1.762.969.858 W	20,000,000 362.830.303.955
As of January 1 2022	TH		TH	(701 070 100 E07)	TH		711	E01 061 00E 700	711	700 100 L30	711	H 000 000 00 00 00 00 00 00 00 00 00 00	
Comprehensive income	M	00,144,000,000	M	(201,310,400,001)	AV.	12,039,148,812	^	204,201,033,132	AA	30 1,007,334,097	AV.	1,1 02,303,030	302,830,303,955
Profit for the year				'		ſ		78,715,077,815		78,715,077,815		(28,752,110)	78,686,325,705
assets at fair value through other comprehensive income Share of other comprehensive		·				2,863,492,435				2,863,492,435		ı	2,863,492,435
loss of associates and joint ventures						(3,528,554,468)		•		(3,528,554,468)		(1,218,177)	(3,529,772,645)
defined benefit plans				,				(242,651,386)		(242,651,386)			(242,651,386)
Exchange differences on						354,483,195				354,483,195			354,483,195
translation of foreign						1,171,079,089				1,171,079,089		(35.566.157)	1.135.512.932
Transmiss with summer						860,500,251		78,472,426,429		79,332,926,680		(65,536,444)	79,267,390,236
Dividends (Note 27)								(7,206,579,600)		(7,206,579,600)			(7,206,579,600)
controlling interests												1,865,052,864	1,865,052,864
Other canital adjustments				-				(7,206,579,600)		(7,206,579,600)		1,865,052,864	(5,341,526,736)
As of December 31, 2022	A	66,144,830,000	A	(282, 140, 365, 887)	A	73,499,649,123	A	575,527,682,561	A	433,031,795,797	W	3,562,486,278 W	436
The accompanying notes are integral part of the consolidated	ou ouo	art of the concollidate		financial statements									

✤ The accompanying notes are integral part of the consolidated financial statements.

Hyundai Corporation and its subsidiaries Consolidated statements of cash flows for the years ended December 31, 2022 and 2021

(In Korean won)

	Notes		2022		2021
Operating activities				·	
Cash generated from operations	34	₩	365,065,824,653	₩	(340,267,012,756)
Profit for the year			78,686,325,705		38,005,996,297
Adjustments to reconcile profit for the year to net cash flows					
provided by (used in) operating activities:			17,928,792,862		19,483,026,085
Working capital adjustments:			268,450,706,086		(397,756,035,138)
Interest received			4,051,327,874		1,276,384,027
Interest paid			(19,869,216,573)		(12,304,135,360)
Dividends received			35,636,439,360		17,995,118,781
Income tax refund (payment)			1,568,683,089		(11,491,960,129)
Net cash flows provided by (used in) operating activities			386,453,058,403		(344,791,605,437)
Investing activities					
Decrease in short-term financial instruments			2,000,000,000		6,703,000,000
Proceeds from disposal of financial assets at fair value					
through profit or loss			4,087,394,700		-
Collection of long-term loan receivables			128,172,201		301,077,603
Proceeds from disposal of property, plant and equipment			789,117,105		90,712,246
Proceeds from disposal of intangible assets			-		345,454,546
Increase in leasehold deposits received			(13,544,817)		106,847,464
Collection of finance lease receivables Proceeds from disposal of financial assets at amortized			428,578,403		411,463,998
cost Proceeds from disposal of investments in joint ventures			65,500,000		131,000,000
and associates			14,420,329,374		11,328,122,903
Increase in short-term financial instruments			(5,000,000,000)		(6,527,000,000)
Acquisition of financial assets at fair value through profit or			(-,,,,		(-,,,
loss			(1,300,000,000)		(350,000,000)
Increase in long-term loan receivables			(1,096,879,583)		(3,524,612,381)
Acquisition of property, plant and equipment			(6,575,836,243)		(4,320,850,603)
Acquisition of intangible assets			(1,440,773,666)		(2,034,696,142)
Decrease in leasehold deposits received			(150,402,647)		-
Acquisition of investments in joint ventures and associates			(8,999,276,864)		(12,102,317,582)
Increase in investments in resource development projects			(2,267,623,494)		(2,194,277,073)
Acquisition of investment properties			-	·	(8,392,845,774)
Net cash flows used in investing activities			(4,925,245,531)		(20,028,920,795)
Financing activities					
Proceeds from short-term borrowings			24,072,140,000		337,871,327,306
Proceeds from long-term borrowings			1,146,330,748		8,687,682,224
Proceeds from issuance of debentures			-		49,791,780,000
Repayment of short-term borrowings			(202,766,664,702)		(45,145,803,000)
Repayment of long-term borrowings			(1,254,229,840)		(4,171,084,224)
Repayment of debentures			(30,000,000,000)		(30,000,000,000)
Payment of lease liabilities			(4,398,519,221)		(4,224,121,966)
Increase in non-controlling interest			1,980,000,000		-
Dividends paid			(7,261,353,698)		(7,206,579,600)
Net cash flows provided by (used in) financing activities			(218,482,296,713)		305,603,200,740
Net increase (decrease) in cash and cash equivalents			163,045,516,159		(59,217,325,492)
Net foreign exchange difference			(1,187,035,584)		6,262,215,248
Cash and cash equivalents as of January 1			195,079,937,786		248,035,048,030
Cash and cash equivalents as of December 31		₩.		117	
עמשו מות למשוו בקתועמובותש מש טו שבלבווושבו שו		₩	356,938,418,361	₩	195,079,937,786

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

1. Corporate information

The consolidated financial statements include Hyundai Corporation (the "Company"), and its twenty six (26) consolidated subsidiaries, including Hyundai Corp. USA (collectively referred to as the "Group"), and twelve (12) associates and joint ventures, including PT HD INTI. DEVE., which are accounted for using the equity method.

1.1 Overview of the Company

The Company was established on December 8, 1976, under the Commercial Code of the Republic of Korea to primarily engage in the export and import of goods. On December 1, 1977, the Company's shares were listed on the Korea Stock Exchange. The Company has been designated as a general trading company by the government of the Republic of Korea since February 11, 1978. As of December 31, 2022, the Company has 20 overseas branches and mainly exports vehicles, steel products, machinery, construction equipment and vessels, and plants on a deferred payment basis. The Company also engages in the import and domestic sale of merchandise and resource development business, such as overseas exploration of petroleum and minerals.

The Company is authorized to issue 80 million shares with a par value of \mathbb{W} 5,000 per share and its issued capital was \mathbb{W} 50 million at incorporation. As of December 31, 2022, the Company has 13,228,966 common shares issued and outstanding, and through several capital increases, conversions of convertible bonds and capital reductions, its issued capital amounts to \mathbb{W} 66,145 million.

The Company's major shareholders and their shareholdings as of December 31, 2022 are as follows:

Shareholders	Number of shares	Percentage of ownership (%)
HYUNDAI CORPORATION HOLDINGS Co., Ltd.	2,882,000	21.79
KCC Corporation	1,587,475	12.00
National Pension Service	761,614	5.75
Chung Mong-hyuk	319,601	2.42
Chung Mong-seok	264,579	2.00
Halla Holdings Corporation	264,579	2.00
MIDAS Active Value Securities Investment Company -		
Equity	132,776	1.00
Hyundai Home Shopping Network Corporation	132,289	1.00
Hyundai Department Store Co., Ltd.	132,289	1.00
Others	5,533,764	41.83
	12,010,966	90.79
Treasuay shares	1,218,000	9.21
	13,228,966	100.00

1.2 Subsidiaries

Details of subsidiaries as of December 31, 2022 and 2021 are as follows:

		Percen owners		Closing	
Name		2022	2021	Closing month	Main business
HYUNDAI CORP. USA	U.S.A	100	100	December	Trading
HYUNDAI AUSTRALIA PTY., LTD.	Australia	100	100	December	Trading
HYUNDAI JAPAN CO., LTD.	Japan	100	100	December	Trading
HYUNDAI CANADA INC.	Canada	100	100	December	Trading
HYUNDAI CORP. EUROPE GMBH	Germany	100	100	December	Trading
HYUNDAI CORPORATION SINGAPORE PTE. LTD.	Singapore	100	100	December	Trading
HYUNDAI CORPORATION (SHANGHAI) CO., LTD.	China	100	100	December	Trading
POS-HYUNDAI STEEL MFG. (I) PVT. LTD.	India	94	94	March	Manufacture of steel
HYUNDAI RENEWABLE LAB	Korea	100	100	December	Photovoltatic power generation
Hangang Domestic Specialized Private Equity in Real					
Estate Investment Trust No.13 (*5)	Korea	100	100	May/November	Real estate trust
HYUNDAI PLATFORM CORP (*3)	U.S.A	100	100	December	Transport and Installation
HYUNDAI RENEWABLE LAB JAPAN (*1)	Japan	100	100	December	Photovoltatic power generation
HYUNDAI ONE EUROPE GMBH (*3)	Germany	100	100	December	Trading
HYUNDAI FUELS PTE. LTD. (*2)	Singapore	100	100	December	Trading
HYUNDAI ONE ASIA PTE. LTD. (*2)	Singapore	100	100	December	Trading
HYUNDAI CORPORATION (CAMBODIA) CO., LTD. (*2)	Cambodia	100	100	December	Trading

1.2 Subsidiaries (cont'd)

		Percen owners	0		
Name		2022	2021	Closing month	Main business
HYUNDAI CORPORATION PHNOM PENH INVESTMENT CO., LTD. (*2, *6)	Cambodia	49	49	December	Trading and farming
SHANGHAI ONE ASIA LOGISTICS CO., LTD (*3) HANOI ONE ASIA LOGISTICS (*3)	China Vietnam	100 80	100 80	December December	Transport Transport
HYUNDAI RENEWABLE LAB MIMASAKA (*1) HYUNDAI NAVIS CO., LTD.	Japan Korea	100 100	100 100	December December	Photovoltatic power generation Transport
HYUNDAI RENEWABLE LAB YUMESAKI (*1) HYUNDAI RENEWABLE LAB EHIME (*1)	Japan Japan	100 100	100 100	December December	Photovoltatic power generation Photovoltatic power generation
PROLOGUE VENTURES INC. PT HYUNDAI CORP INDONESIA (*7)	Korea Indonesia	82 100	82	December December	Management consulting Trading
HYUNDAI CORPORATION ITALIA S.R.L. (*4, *7) HYUNDAI CORPORATION MEXICO, S. DE R.L DE C.V.	Italia	100	-	December	Trading
(*7)	Mexico	100	-	December	Trading

(*1) The subsidiary of HYUNDAI JAPAN CO., LTD.

(*2) The subsidiary of HYUNDAI CORPORATION SINGAPORE PTE. LTD.

(*3) The subsidiary of HYUNDAI NAVIS CO., LTD.

(*4) The subsidiary of HYUNDAI CORP. EUROPE GMBH.

- (*5) The Group holds preferential acquisition rights to major real estate of private equity real estate investment trusts, and the percentage of ownership was calculated based on the holding rate of Type 2 beneficiary securities held by the Group.
- (*6) Although the Group owns less than 50% of the voting rights of HYUNDAI CORPORATION PHNOM PENH INVESTMENT CO., LTD., the Group is considered to have control over HYUNDAI CORPORATION PHNOM PENH INVESTMENT CO., LTD., as the Group has a right to appoint or dismiss the majority of its Board of Directors by virtue of an agreement with the other investors.

(*7) Newly established during the year ended December 31, 2022.

1.3 Summarized financial information

Summarized financial information of consolidated subsidiaries as of and for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

						20	22					
												Total
										ofit (loss)		prehensive
Company name		Assets		iabilities		Equity		Sales		the year		ome (loss)
HYUNDAI CORP. USA	₩	142,162	₩	78,105	₩	64,057	₩	566,732	₩	17,610	₩	20,294
HYUNDAI AUSTRALIA PTY., LTD.		15,212		14,036		1,176		10,228		321		72
HYUNDAI JAPAN CO., LTD.		73,233		52,750		20,483		255,325		896		(718)
HYUNDAI CANADA INC.		90,460		77,108		13,352		226,761		802		821
HYUNDAI CORP. EUROPE GMBH		54,865		46,244		8,621		178,654		782		830
HYUNDAI CORPORATION SINGAPORE PTE. LTD.		48,512		39,183		9,329		207,864		821		1,371
HYUNDAI CORPORATION (SHANGHAI) CO., LTD.		9,097		4,068		5,029		42,814		100		(36)
POS-HYUNDAI STEEL MFG. (I) PVT. LTD. HYUNDAI RENEWABLE LAB		45,398		24,845		20,553		70,996		153		(567)
Hangang Domestic Specialized Private Equity in Real		11,178		1,309		9,869		1,255		526		526
Estate Investment Trust No. 13		356,418		321,482		34,936		20,186		2.714		2,714
HYUNDAI PLATFORM CORP		2,354		497		1.857		6,829		2,714		168
HYUNDAI RENEWABLE LAB JAPAN		2,354		497 1.546		606		287		52 77		32
HYUNDAI ONE EUROPE GmbH		, -		,								
		5,537		889		4,648		13,955		329		355
HYUNDAI FUELS PTE. LTD.		142,665		119,805		22,860		1,381,044		10,828		11,714
HYUNDAI ONE ASIA PTE. LTD.		10,316		5,377		4,939		24,404		1,318		1,528
HYUNDAI CORPORATION (CAMBODIA) CO., LTD.		25		32		(7)		-		(7)		(7)
HYUNDAI CORPORATION PHNOM PENH												
INVESTMENT CO., LTD.		8		-		8		-		-		1
SHANGHAI ONE ASIA LOGISTICS CO., LTD		3,873		1,439		2,434		8,763		769		682
HANOI ONE ASIA LOGISTICS		2,992		674		2,318		9,984		589		626
HYUNDAI RENEWABLE LAB MIMASAKA		891		575		316		129		23		(1)
HYUNDAI NAVIS CO., LTD.		32,434		12,838		19,596		159,638		1,536		1,536
HYUNDAI RENEWABLE LAB YUMESAKI		1,804		1,260		544		165		59		18
HYUNDAI RENEWABLE LAB EHIME		3,863		3,027		836		212		(19)		(58)
PROLOGUE VENTURES INC.		10,052		39		10,013		43		(823)		(823)
PT HYUNDAI CORP INDONESIA		1.391		223		1.168		779		7		(26)
HYUNDAI CORPORATION ITALIA S.R.L.		1,226		34		1,192		50		(79)		(60)
HYUNDAI CORPORATION MEXICO, S. DE R.L DE		1,220		54		1,102		50		(10)		(00)
C.V.		1,303		-		1,303		-		-		(80)
		,				,						

1.4 Summarized Financial Information (cont'd)

						20	21					
									Prof	it (loss)	-	otal ehensive
Company name	As	sets	Li	abilities	E	Equity		Sales		he year		ne (loss)
HYUNDAI CORP. USA	₩	167,778	₩	124,015	₩	43,763	₩	287,152	₩	7,023	₩	10,276
HYUNDAI AUSTRALIA PTY., LTD.		1,853		3,617		(1,764)		5,418		(251)		(290)
HYUNDAI JAPAN CO., LTD.		57,645		36,444		21,201		170,760		1,601		1,126
HYUNDAI CANADA INC.		131,816		119,285		12,531		149,266		1,971		2,882
HYUNDAI CORP. EUROPE GMBH		42,675		34,883		7,792		97,115		(72)		(48)
HYUNDAI CORPORATION SINGAPORE PTE. LTD.		59,091		50,949		8,142		116,248		1,217		1,826
HYUNDAI CORPORATION (SHANGHAI) CO., LTD.		23,755		18,690		5,065		86,985		1,062		1,524
POS-HYUNDAI STEEL MFG. (I) PVT. LTD.		46,935		23,899		23,036		56,706		3,270		4,686
HYUNDAI RENEWABLE LAB		10,682		1,339		9,343		953		228		228
Hangang Domestic Specialized Private Equity in Real										. =		. =
Estate Investment Trust No.13		353,984		319,962		34,022		16,606		1,533		1,533
HYUNDAI PLATFORM CORP		2,659		971		1,688		7,887		72		208
HYUNDAI RENEWABLE LAB JAPAN		2,468		1,893		575		303		64		51
HYUNDAI ONE EUROPE GMBH		4,778		483		4,295		17,568		1,583		1,579
HYUNDAI FUELS PTE. LTD.		93,957		82,812		11,145		675,970		3,177		4,177
HYUNDAI ONE ASIA PTE. LTD.		8,085		4,674		3,411		17,695		1,294		1,511
HYUNDAI CORPORATION (CAMBODIA) CO., LTD.		22		22		-		-		109		103
HYUNDAI CORPORATION PHNOM PENH												
INVESTMENT CO., LTD.		8		-		8		-		-		1
SHANGHAI ONE ASIA LOGISTICS CO., LTD		4,212		2,460		1,752		12,844		455		610
HANOI ONE ASIA LOGISTICS		2,102		410		1,692		5,536		190		342
HYUNDAI RENEWABLE LAB MIMASAKA		1,015		698		317		136		17		10
HYUNDAI NAVIS CO., LTD.		38.917		20.903		18.014		140.886		667		667
HYUNDAI RENEWABLE LAB YUMESAKI		2,053		1,528		525		70		10		13
HYUNDAI RENEWABLE LAB EHIME		2,680		2,220		460		10		(4)		(20)
PROLOGUE VENTURES INC.		2,000		2,220		400 108		-		(4)		()
		108		-		108		-		(2)		(2)

2. Basis of preparation and summary of significant accounting policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of preparation

The Group prepares statutory financial statements in Korean in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS") enacted by the *Act on External Audit of Stock Companies*. The accompanying consolidated financial statements have been translated into English from Korean financial statements. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, Korean version, which is used for regulatory reporting purposes, shall prevail.

The consolidated financial statements have been prepared on a historical cost basis, except for investment properties and derivative financial instruments that have been measured at fair value. The carrying values of recognized assets and liabilities that are designated as hedged items in fair value hedges that would otherwise be carried at amortized cost are adjusted to record changes in the fair values attributable to the risks that are being hedged in effective hedge relationships. The consolidated financial statements are presented in Korean won (KRW or ₩) and all values are rounded to the nearest millions, except when otherwise indicated.

The Group has prepared the consolidated financial statements on the basis that it will continue to operate as a going concern.

2.2 Changes in accounting policies and disclosures

2.2.1 New and amended standards and interpretations

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2022. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to KIFRS 1037

The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labor and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The Group applied the amendments to the contracts for which it had not fulfilled all of its obligations at the beginning of the reporting period. These amendments had no impact on the consolidated financial statements of the Group as there were no provisions recognized additionally after the allocation of incremental costs and costs directly related to contract activities during the period.

Reference to the Conceptual Framework – Amendments to KIFRS 1103

The amendments replace a reference to a previous version of the International Accounting Standards Board (IASB)'s *Conceptual Framework* with a reference to the current version issued in March 2018 without significantly changing its requirements. The amendments add an exception to the recognition principle of KIFRS 103 *Business Combinations* to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of KIFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets* or KIFRS Interpretation 2121 *Levies*, if incurred separately. The exception requires entities to apply the criteria in KIFRS 1037 or KIFRS Interpretation 2121, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date. The amendments also add a new paragraph to KIFRS 1103 to clarify that contingent assets do not qualify for recognition at the acquisition date. In accordance with the transitional provisions, the Group applies the amendments prospectively, i.e., to business combinations occurring after the beginning of the annual reporting period in which it first applies the amendments (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.

Property, Plant and Equipment: Proceeds before Intended Use – Amendments to KIFRS 1016

The amendment prohibits entities from deducting from the cost of an item of property, plant and equipment, any proceeds of the sale of items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the costs of producing those items, in profit or loss. In accordance with the transitional provisions, the Group applies the amendments retrospectively only to items of PP&E made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no sales of such items produced by property, plant and equipment made available for use on or after the beginning of the earliest period presented.

2.2.1 New and amended standards and interpretations (cont'd)

KIFRS 1101 *First-time Adoption of International Financial Reporting Standards* – Subsidiary as a first-time adopter

The amendment permits a subsidiary that elects to apply paragraph D16(a) of KIFRS 1101 to measure cumulative translation differences using the amounts reported in the parent's consolidated financial statements, based on the parent's date of transition to KIFRS, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(a) of KIFRS 1101. These amendments had no impact on the consolidated financial statements of the Group as its subsidiary is not a first-time adopter.

KIFRS 1109 Financial Instruments - Fees in the '10 per cent' test for derecognition of financial liabilities

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. There is no similar amendment proposed for KIFRS 1039 Financial Instruments: Recognition and Measurement. In accordance with the transitional provisions, the Group applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no modifications of the Group's financial instruments during the period.

KIFRS 1041 Agriculture - Taxation in fair value measurements

The amendment removes the requirement in paragraph 22 of KIFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of KIFRS 1041. These amendments had no impact on the consolidated financial statements of the Group as it did not have assets in scope of KIFRS 1041 as of the reporting date.

2.2.2 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below.

KIFRS 1117 Insurance Contracts

In 2021, KIFRS 1117 *Insurance Contracts*, a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure was issued. Once effective, KIFRS 1117 will replace KIFRS 1104 *Insurance Contracts* that was issued in 2007. KIFRS 1117 applies to all types of insurance contracts (i.e., life, non-life, direct insurance and re-insurance), regardless of the type of entities that issue them, as well as to certain guarantees and financial instruments with discretionary participation features. A few scope exceptions will apply. The overall objective of KIFRS 1117 is to provide an accounting model for insurance contracts that is more useful and consistent for insurers. In contrast to the requirements in KIFRS 1104, which are largely based on grandfathering previous local accounting policies, KIFRS 1117 provides a comprehensive model for insurance contracts, covering all relevant accounting aspects. The core of KIFRS 1117 is the general model, supplemented by:

- > A specific adaptation for contracts with direct participation features (the variable fee approach); and
- A simplified approach (the premium allocation approach) mainly for short-duration contracts.

KIFRS 1117 is effective for reporting periods beginning on or after January 1, 2023, with comparative figures required. Early application is permitted, provided the entity also applies KIFRS 1109 and KIFRS 1115 on or before the date it first applies KIFRS 1117. This standard is not applicable to the Group.

2.2.2 Standards issued but not yet effective (cont'd)

Amendments to KIFRS 1001: Classification of Liabilities as Current or Non-current

The amendments to paragraphs 69 to 76 of KIFRS 1001 specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement;
- · That a right to defer must exist at the end of the reporting period;
- That classification is unaffected by the likelihood that an entity will exercise its deferral right; and
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification.

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and must be applied retrospectively. The Group is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation.

Definition of Accounting Estimates - Amendments to KIFRS 1008

The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted as long as this fact is disclosed. The amendments are not expected to have a material impact on the Group.

Disclosure of Accounting Policies - Amendments to KIFRS 1001

The amendments provide guidance and examples to help entities apply materiality judgements to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures. The amendments are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted. The Group is currently revisiting their accounting policy information disclosures to ensure consistency with the amended requirements.

Deferred Tax related to Assets and Liabilities arising from a Single Transaction - Amendments to KIFRS 1012

The amendments narrow the scope of the initial recognition exception under KIFRS 1012, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences. The amendments should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period presented, a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability should also be recognized for all deductible and taxable temporary differences associated with leases and decommissioning obligations. The Group is currently assessing the impact of the amendments.

2.3 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries for each fiscal year ended December 31, 2021. Control is achieved when the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Company has:

Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)

- > Exposure, or rights, to variable returns from its involvement with the investee
- > The ability to use its power over the investee to affect its returns

2.3 Basis of consolidation (cont'd)

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- > The contractual arrangement(s) with the other vote holders of the investee
- Rights arising from other contractual arrangements
- > The Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control over a subsidiary, it derecognizes the related assets (including goodwill), liabilities, non-controlling interest and other components of equity, while any resulting gain or loss is recognized in profit or loss. Any investment retained is recognized at fair value.

2.4 Investment in associates and joint ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The Group's investments in associates and joint ventures are accounted for using the equity method. Under the equity method, the investments in associates and joint ventures are initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The consolidated statement of comprehensive income reflects the Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI.

In addition, when there has been a change recognized directly in the equity of the associate or joint venture, the Group recognizes its share of any changes, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the associates or joint ventures are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the consolidated statement of comprehensive income outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture.

2.4 Investment in associates and joint ventures (cont'd)

The financial statements of the associate or joint venture are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investment in its associate or joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognizes the loss as 'Share of profit of an associate and a joint venture' in the consolidated statement of comprehensive income.

Upon loss of significant influence over the associate or joint control over the joint venture, the Group measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the associate or joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

2.5 Current versus non-current classification

The Group presents assets and liabilities in the statement of financial position based on current/non-current classification.

An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in the normal operating cycle
- Held primarily for the purpose of trading
- > Expected to be realized within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

A liability is current when:

- > It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading
- > It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Group classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

2.6 Foreign currency translation

The Group's consolidated financial statements are presented in Korean won, which is also the parent company's functional currency. For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency. The Group uses the direct method of consolidation and on disposal of a foreign operation, the gain or loss that is reclassified to profit or loss reflects the amount that arises from using this method.

(1) Transactions and balances

Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rates of exchange at the reporting date.

2.6 Foreign currency translation (cont'd)

Differences arising on settlement or translation of monetary items are recognized in profit or loss with the exception of monetary items that are designated as part of the hedge of the Group's net investment of a foreign operation. These are recognized in OCI until the net investment is disposed of, at which time, the cumulative amount is reclassified to profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in OCI.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognized in OCI or profit or loss is also recognized in OCI or profit or loss, respectively).

In determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which the Group initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of advance consideration.

Foreign exchange differences arising from monetary items that are part of the Group's net investment in overseas operations are recognized in OCI and reclassified from equity to profit or loss at the time of disposal of the net investment.

(2) Translation of overseas operation

The assets and liabilities of overseas operations are translated into Korean won at the rate of exchange prevailing at the reporting date and their statements of income are translated at exchange rates prevailing at the dates of the transactions. The exchange differences arising on translation for consolidation are recognized in OCI. On disposal of a foreign operation, the component of OCI relating to that particular foreign operation is recognized in profit or loss.

2.7 Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash at banks and on hand and shortterm deposits with a maturity of three months or less, which are subject to an insignificant risk of changes in value.

2.8 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

2.8.1 Financial assets

(1) Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortized cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient or for which the Group has applied the practical expedient are measured at the transaction price determined under KIFRS 1115.

2.8.1 Financial assets (cont'd)

In order for a financial asset to be classified and measured at amortized cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognized on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

(2) Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- > Financial assets at amortized cost (debt instruments)
- > Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortized cost (debt instruments)

Financial assets at amortized cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

Financial assets at fair value through OCI (debt instruments)

The Group measures debt instruments at fair value through OCI if both of the following conditions are met:

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

For debt instruments at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognized in the statement of profit or loss and computed in the same manner as for financial assets measured at amortized cost. The remaining fair value changes are recognized in OCI. Upon derecognition, the cumulative fair value change recognized in OCI is recycled to profit or loss.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under KIFRS 1032 *Financial Instruments*.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other income in the statement of profit or loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

The Group may elect to classify irrevocably its non-listed equity investments under this category.

2.8.1 Financial assets (cont'd)

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortized cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the consolidated statement of financial position at fair value with net changes in fair value recognized in the consolidated statement of profit or loss.

This category includes derivatives and listed equity instruments that do not make an irrevocable choice to treat changes in fair value in other comprehensive income. Dividends for listed equity instruments are recognized in profit or loss at the time the rights are established.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

(3) Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the Group's consolidated statement of financial position) when:

- > The rights to receive cash flows from the asset have expired, or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognize the transferred asset to the extent of its continuing involvement. In that case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

2.8.1 Financial assets (cont'd)

(4) Impairment of financial assets

Further disclosures relating to impairment of financial assets are also provided in the following notes:

		Notes
\succ	Disclosures for significant assumptions	3
\triangleright	Trade receivables, including contract assets	10

The Group recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

2.8.2 Financial liabilities

(1) Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts and derivative financial liabilities.

(2) Subsequent measurement

The measurement of financial liabilities depends on their classification, as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as of fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by KIFRS 1109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the statement of profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in KIFRS 1109 are satisfied. The Group has not designated any financial liability as of fair value through profit or loss.

Loans and borrowings

This is the category most relevant to the Group. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR.

2.8.2 Financial liabilities (cont'd)

This category generally applies to interest-bearing loans and borrowings.

(3) Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the consolidated statement of profit or loss.

2.8.3 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

2.9 Derivative financial instruments and hedge accounting

2.9.1 Initial recognition and subsequent measurement

The Group uses derivative financial instruments, such as forward currency contracts, interest rate swaps and forward commodity contracts, to hedge its foreign currency risks, interest rate risks and commodity price risks, respectively. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognized firm commitment
- > Hedges of a net investment in a foreign operation

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined).

A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

- > There is 'an economic relationship' between the hedged item and the hedging instrument.
- > The effect of credit risk does not 'dominate the value changes' that result from that economic relationship.
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

Fair value hedges

The change in the fair value of a hedging derivative is recognized in the statement of profit or loss. The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognized in the consolidated statement of profit or loss.

2.9.1 Initial recognition and subsequent measurement (cont'd)

For fair value hedges relating to items carried at amortized cost, any adjustment to carrying value is amortized through profit or loss over the remaining term of the hedge using the EIR method. EIR amortization may begin as soon as an adjustment exists and no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

If the hedged item is derecognized, the unamortized fair value is recognized immediately in profit or loss.

When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain or loss recognized in profit and loss.

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the consolidated statement of profit or loss. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The Group uses forward currency contracts as hedges of its exposure to foreign currency risk in forecast transactions and firm commitments, as well as forward commodity contracts for its exposure to volatility in the commodity prices. The ineffective portion relating to foreign currency contracts is recognized as other expense and the ineffective portion relating to commodity contracts is recognized in other income or expenses.

2.10 Inventories

The Group evaluates the inventory at the lower of the acquisition cost or net realizable value. Meanwhile, acquisition costs for each inventory include purchase costs, conversion costs, and other costs incurred in bringing the inventory to its current place. The unit cost of inventories is determined using the specific identification method.

In addition, the net realizable value is calculated as the expected selling price in the ordinary course of business minus the expected cost to complete and related selling expenses.

2.11 Property, plant and equipment

Construction-in-progress is stated at cost, net of accumulated impairment losses, and property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any.

Depreciation of property, plant and equipment, excluding land, is calculated on a straight-line basis over the estimated useful life of the assets, as follows:

	Useful life
Buildings	30 years
Machinery and equipment	15 years
Others	2 to 13 years

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate. In particular, the Group considers the impact of health, safety, and environmental laws when reviewing estimates of useful life and residual value. An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of profit or loss when the asset is derecognized.

2.12 Investment properties

Investment properties are measured initially at cost, including transaction costs and includes alternative costs that meet the recognition requirements of the asset at the time of occurrence. However, the costs incurred in daily management activities are recognized as expenses when they occur. Since initial recognition, investment property has been accounted for at fair value reflecting current market conditions at the end of the reporting period, and gains or losses from changes in fair value are reflected in profit or loss at the time of occurrence.

2.13 Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

2.13.1 Group as a lessee

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

(1) Right-of-use assets

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

• Real estate: 1 to 20 years

• Vehicles and other assets: 1 to 10 years

The Group reviews the estimated residual values and expected useful lives of assets at least annually. In particular, the Group considers the impact of health, safety and environmental legislation in its assessment of expected useful lives and estimated residual values.

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment. Refer to the accounting policies in section 3.6 Impairment of non-financial assets.

(2) Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including insubstance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate.

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

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

2.13.1 Group as a lessee (cont'd)

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

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

2.13.2 Group as a lessor

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

2.14 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

2.15 Intangible assets

Intangible assets are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Intangible assets consist of software, membership and others.

Others included software and membership rights. Software is amortized using the straight-line method over their useful lives of five years. Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the asset is expected to be utilized.

2.16 Financial guarantee contracts

Financial guarantee contracts provided by Group are measured at fair value at initial recognition and are subsequently recognized as provisions by measuring at a greater of:

- the amount determined in accordance with the expected credit loss model under KIFRS 1109 Financial Instruments and
- the amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with KIFRS 1115 Revenue from Contracts with Customers

2.17 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the consolidated statement of comprehensive income net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

2.17 Provisions (cont'd)

The impact of climate-related matters on environmental damage recovery is taken into account when determining provisions related to the restoration of overseas mines disclosed in Note 24.

2.18 Taxes

(1) Current income tax

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where the Group operates and generates taxable income.

Current income tax relating to items recognized directly in equity is recognized in equity and not in the consolidated statement of comprehensive income. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

(2) Deferred tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- > When the deferred tax liability arises from the initial recognition of goodwill
- An asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

- When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognized subsequently if new information about facts and circumstances change. The adjustment is either treated as a reduction in goodwill (as long as it does not exceed goodwill) if it was incurred during the measurement period or recognized in profit or loss.

2.18 Taxes (cont'd)

The Group offsets deferred tax assets and deferred tax liabilities if and only if it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

2.19 Employee benefits

(1) Defined benefit plans

The Group has defined benefit plans. Generally, retirement benefits are payable after the completion of employment, and the benefit amount depended on the employee's age, periods of service or salary levels. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms approximating to the terms of the related obligation. Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income.

Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognized immediately in profit or loss as past service costs.

(2) Other long-term employee benefits

The Group provides long-term employee benefits, which are entitled to employees with service period for ten years and above. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. The Group recognizes service cost, net interest on other long-term employee benefits and remeasurements as profit or loss for the year.

2.20 Revenue from contracts with customers

(1) Sales of goods

The Group recognizes sales at the time of delivery taking the terms and conditions of trade into account, when control of assets is transferred to the customer. Receivables are recognized when the goods are delivered, because from the point of delivery of the goods, the price will be paid as time passes, and there will be an unconditional right to receive the payments.

(2) Principal versus agent consideration

When another party is involved in providing goods or services to a customer, the Group shall determine whether the nature of its promise is a performance obligation to provide the specified goods or services itself (i.e. the entity is a principal) or to arrange for those goods or services to be provided by the other party (i.e. the entity is an agent). The Group is a principal (recognized the gross amount as revenue) if it controls the specified good or service before that good or service is transferred to a customer. However, the Group is an agent (recognizes commission revenue as the net amount) if the entity's performance obligation is to arrange for the provision of the specified good or service by another party.

2.21 Other income

(1) Interest income

Interest income is recognized using the EIR method over time. When an impairment of receivables occur, the carrying amount is decreased to the recoverable amount and the portion of the amount increasing over time is recognized as interest income. Meanwhile, interest income regarding impairment receivables is recognized using the initial effective interest.

2.21 Other income (cont'd)

(2) Dividend income

Dividends are recognized as other income in the statement of profit or loss when the right of payment has been established

2.22 Treasury shares

Own equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Group's own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in the share premium. Share options exercised during the reporting period are satisfied with treasury shares.

2.23 Segment reporting

Information of each operating segment is reported in a manner consistent with the business segment reporting provided to the chief operating decision-maker (Note 6). The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, makes strategic decisions.

2.24 Earnings per share (EPS)

Basic EPS is calculated by dividing the profit for the year attributable to ordinary owners of the parent by the weighted average number of common shares outstanding during the year.

2.25 Fair value measurement

The Group measures financial instruments such as derivatives, and non-financial assets such as investment properties, at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- > In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

For assets and liabilities that are recognized in the financial statements at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

2.25 Fair value measurement (cont'd)

Fair-value related disclosures for financial instruments and non-financial assets that are measured at fair value or where fair values are disclosed, are summarized in the following notes:

		Notes
\succ	Disclosures for valuation methods, significant estimates and assumptions	3, 5
\triangleright	Quantitative disclosures of fair value measurement hierarchy	5
\triangleright	Financial instruments (including those carried at amortized cost)	7

2.26 Cash dividend

The Group recognizes a liability to pay a dividend when the distribution is authorized and the distribution is no longer at the discretion of the Group. A distribution is authorized when it is approved by the shareholders. A corresponding amount is recognized directly in equity.

2.27 Approval of issuance of the consolidated financial statements

The consolidated financial statements of the Group for the year ended December 31, 2022 were approved By the Board of Directors on February 9, 2023 and will be submitted at the annual shareholders' meeting for revision and final approval, if any.

3. Significant accounting judgments estimates and assumptions

The preparation of consolidated financial statements requires the Group to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Group's accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. As the resulting accounting estimates will, by definition, seldom equal the related actual results, it can contain a significant risk of causing a material adjustment.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Additional information of significant judgement and assumptions of certain items are included in relevant notes.

3.1 Income taxes

The Group is operating in numerous countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain (see Note 25).

If certain portion of the taxable income is not used for investments, increase in wages, or dividends in accordance with the *Tax System for Recirculation of Corporate Income*, the Group is liable to pay additional income tax calculated based on the tax laws. Accordingly, the measurement of current and deferred tax is affected by the tax effects from the new system. As the Group's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects.

3.2 Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period. The valuation of fair value through other comprehensive income arising from resources development project, which is subject to fair value measurement, is determined based on the project's long-term business plan, unit price of major products, expected production term, discount rate, and the political and economic environment of the country (see Note 5).

3.3 Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (see Note 23).

3.4 Provisions

The Group recognizes provisions for restoration related to overseas explorations as of the reporting date. The amounts are estimated based on historical data (see Note 24).

3.5 Provision for expected credit losses of trade and other receivables

The Group estimates the amount of allowance for doubtful considering that ages, historical default events and other economic and industry environment factors of receivables in order to calculate provision for credit losses regarding trade and other receivables, loan receivables (see Note 10).

3.6 Impairment of non-financial assets

The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists. Goodwill and intangible assets with indefinite useful lives are tested for impairment annually and when circumstances indicate that the carrying value may be impaired. For non-financial assets excluding goodwill and intangible assets with indefinite useful lives, an assessment is made when there is any indication that the carrying amount of such assets cannot be recovered. In assessing value in use, management estimates future cash flows generated from the asset or cash-generating unit and discounts the cash flows to their present value using a proper discount rate.

4. Financial instruments risk management objectives and policies

4.1 Financial risk factors

The Group's activities expose it to a variety of financial risks: market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize any adverse effects on the financial performance of the Group. The Group uses derivative financial instruments to hedge certain risk exposures.

4.1.1 Market risk

(1) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from foreign currency transactions, primarily with respect to the US dollar, Euro and the Japanese yen. Foreign exchange risk arises from future commercial transactions, and recognized assets and liabilities.

The Group operates hedging policies (reduction of exposure through matching) for each operating segment within the Group, considering the nature of business and the existence of instruments to cope with the risks of exchange rate fluctuation. Additionally, the Group periodically evaluates and handles such risks exposed through managing system for receivables and payables denominated in foreign currencies, and reports the results to the management. In order to hedge the risk of foreign currency exchanges in foreign currency - denominated assets and liabilities, the Group entered into the contracts of foreign exchange forwards with KEB Hana Bank and others, and accounts for short-term trading purposes.

4.1.1 Market risk (cont'd)

Financial assets and liabilities denominated in foreign currency as of December 31, 2022 and 2021 are as follows (Korean won in millions and USD in thousands):

		20)22		2021						
Financial assets	Equiva	alent in USD	Conve	erted to KRW	Equiv	alent in USD	Conve	erted to KRW			
Cash and cash equivalents	\$	142,415	₩	180,482	\$	42,820	₩	50,763			
Trade receivables		389,243		493,288		492,900		584,333			
Other current receivables		627		794		8,256		9,787			
Long-term loan receivables		14,022		17,770		21,078		24,988			
Investments in development											
projects		16,217		20,552		21,052		24,957			
Other non-current assets		224		284		220		260			
Total	\$	562,748	₩	713,170	\$	586,326	₩	695,088			
		20)22			20	021				

		20)22		2021						
Financial liabilities	Equivalent in USD		Conve	erted to KRW	Equiva	alent in USD	Converted to KRW				
Trade payables	\$	247,755	₩	313,980	\$	140,815	₩	166,936			
Short-term borrowings		219,553		278,239		352,948		418,420			
Other payables		9,702		12,295		22,280		26,413			
Long-term borrowings		4,782		6,060		4,782		5,669			
Total	\$	481,792	₩	610,574	\$	520,825	₩	617,438			

The analysis is based on the assumption that the interest rate has increased/decreased by 10% with all other variables held constant (Korean won in millions).

		20	22		2021					
	10% increase			10% decrease		10% increase	10% decrease			
Income effect before tax	₩	10,260	₩	(10,260)	₩	7,765	₩	(7,765)		

(2) Price risk

The Group's equity investments, which are classifies as FVPL and FVOCI, are susceptible to price risk.

The Group has determined that an increase/(decrease) of 10% on price of FVPL and FVOCI that the Group is holding, could have an impact of approximately 5,432 million increase/(decrease) on equity before tax of the Group resulted from changes of gain(loss) on valuation of financial instruments.

(3) Interest risk

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate because of changes in future market interest rate. The interest rate risk mainly arises through floating-rate deposits and borrowings. Part of the interest rate risk is offset by the variable interest rate risk from the underlying cashable assets and short-term financial instruments.

4.1.2 Credit risk

Credit risk is managed on a Group basis. Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. For banks and financial institutions, only highly-rated financial institutions from independent rating agency are accepted. For the general customers, the Group hedges credit risks by assessing level of credit ratings and entering into an export credit insurance contracts with Korea Trade Insurance Corporation.

As of the end of the reporting date, the maximum exposure to credit risk of each of financial assets is the carrying amount of each of financial assets.

4.1.3 Liquidity risk

In order to maintain appropriate amount of liquidity, the Group manages liquidity risk by making cyclical expectations and adjustments of capital inflows and outflows. The Group management team monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Group's debt financing plans, covenant compliance, compliance with internal statement of financial position ratio targets and, if applicable, external regulatory or legal requirements.

The table below summarizes the maturity profile of the Group's financial liabilities based on contractual undiscounted payments as of December 31, 2022 and 2021 (Korean won in millions):

	2022											
	Less	than 1 year	1-	1~2 years		2~3 years		Over 3 years		Total		ying amount
Trade payables	₩	444,427	₩	-	₩	-	₩	-	₩	444,427	₩	444,427
Other payables		45,188		6		-		3		45,197		45,197
Derivative financial												
liabilities		5,679		-		-		-		5,679		5,679
Borrowings (*1)		305,016		14,048		308,196		13,988		641,248		613,899
Debentures (*1)		52,575		51,194		-		-		103,769		99,850
Lease liabilities		3,619		2,222		916		1,733		8,490		8,125
Financial guarantee												
contracts (*2)		-		-		-		2,040		2,040		200
	₩	856,504	₩	67,470	₩	309,112	₩	17,764	₩	1,250,850	₩	1,217,377

(*1) Borrowings and debentures include nominal interests.

(*2) Represents the maximum amount that can be claimed at the earliest period.

	2021											
	Less	than 1 year	1	1~2 years 2~3 years		2~3 years	Ove	er 3 years		Total	Carr	ying amount
Trade payables	₩	255,964	₩	-	₩	-	₩	-	₩	255,964	₩	255,964
Other payables		64,184		-		-		-		64,184		64,184
Derivative financial												
liabilities		1,436		-		-		-		1,436		1,436
Borrowings (*1)		480,656		14,052		308,204		14,458		817,370		789,364
Debentures (*1)		33,377		52,575		51,194		-		137,146		129,676
Lease liabilities		4,160		3,591		1,113		2,314		11,178		9,804
Financial guarantee												
contracts (*2)		-		-		-		2,040		2,040		48
Total	₩	839,777	₩	70,218	₩	360,511	₩	18,812	₩	1,289,318	₩	1,250,476

(*1) Borrowings and debentures include nominal interests.

(*2) Represents the maximum amount that can be claimed at the earliest period.

4.2 Capital risk management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Group uses debt-to-equity ratio for capital management. This ratio is calculated as total debts divided by total equity as shown in the consolidated statement of financial position.

Debt-to-equity ratios as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Liabilities	₩	1,394,708	₩	1,344,553
Equity		436,594		362,830
Debt-to-equity ratios (%)		319.5		370.6

5. Fair value

5.1 Fair value of financial instruments by category

There are no significant differences between carrying value and fair value of financial instruments except for financial assets at fair value measured at cost, which do not have a quoted price in an active market and their fair value cannot be measured reliably and thus excluded from the fair value disclosures.

5.2 Fair Value Hierarchy

Financial instruments measured at fair value or for which the fair value is disclosed are categorized within the fair value hierarchy, and the defined levels are as follows:

- > Level 1 Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

The Group's financial assets and financial liabilities that are measured at fair value as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022									
		Level 1		Level 2	L	_evel 3		Total		
Recurring fair value measurements										
Derivative financial assets	₩	-	₩	5,775	₩	-	₩	5,775		
Financial assets at FVOCI		-		-		51,965		51,965		
Derivative financial liabilities		-		5,679		-		5,679		
	2021									
		Level 1	Level 2		Level 3			Total		
Recurring fair value measurements										
Derivative financial assets	₩	-	₩	2,277	₩	-	₩	2,277		
Financial assets at FVPL		-		-		2,191		2,191		
Financial assets at FVOCI		-		-		48,497		48,497		
Derivative financial liabilities		-		1,436		-		1,436		

Fair value of cash and cash equivalents, trade receivable, long and short-term financial instruments, finance lease receivable, other financial assets, long-term loan receivables, trade payable, other payable, long and short-term borrowings and etc. is excluded from disclosure of fair value since fair value is similar to the carrying amounts that the effects discounted are not material.

There were no transfers between Level 1 and Level 2, to Level 3 and from Level 3 for the years ended December 31, 2022 and 2021.

When calculating fair value measures, the impact of potential climate-related issues, including laws and regulations that may affect the fair value measurement of assets and liabilities in financial statements, was considered. Climate-related risks are included in major assumptions if they have a significant impact on the measurement of recoverable amounts. This assumption was included in the cash flow estimation when evaluating the value of use.

Currently, the impact of climate-related issues is not material to the Group's consolidated financial statements.
5.3 Valuation technique and the inputs

Valuation techniques and inputs used in the fair values categorized within Level 3 of the fair value hierarchy as of December 31, 2022 and 2021 are as follows (Korean won in millions):

			2022		
_	Fair value	Level	Valuation techniques	Inputs	Range of inputs
Financial assets at FVOCI	40,670	3	Discounted cash flow (DCF) model	Discount rate Main product unit price (\$/mmbtu) Estimated period of	12.25% 8.28 ~ 13.75
Hyundai Miraero Co., Ltd.	11,295	3	Net asset method	cash flow -	By 2029 -
			2021		
	Fair value	Level	Valuation techniques	Inputs	Range of inputs
Financial assets at FVPL			Discounted cash flow (DCF) model	Discount rate Perpetuity growth rates	12.15% 0%
Almac Co., Ltd.	2,191	3	Comparable company valuation multiples	Comparable company peer	Manufactures of aluminum with rolled, extrusion, stretching
Financial assets at FVOCI					C C
KOREA Ras Laffan LNG Ltd.	39,791	3	Discounted cash flow (DCF) model	Discount rate Main product unit price (\$/mmbtu) Estimated period of cash flow	7.59% 7.08 ~ 11.76 By 2029
Hyundai Miraero Co., Ltd.	8,706	3	Net asset method	-	Dy 2029

The fair value measurement for the purpose of financial reporting is annually performed by the external independent valuation institution.

5.4 Sensitivity analysis for recurring fair value measurements categorized within Level 3

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments which are affected by the unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the amounts represent the most favorable or most unfavorable. The equity securities of Korea Ras Laffan LNG Ltd., which is classified as Level 3, is subject to sensitivity analysis. The results of the sensitivity analysis from changes of 1% in discounted rate, which is unobservable input, for financial assets at fair value through other comprehensive income, which is categorized within Level 3 and subject to sensitivity analysis, are as follows (Korean won in millions):

	F	avorable change		Unfavorable change
Gain (loss) on valuation of financial assets at FVOCI	₩	912	₩	(872)

6. Operating segment and regional information.

6.1 Operating segment

Management who makes strategic decisions determines the Group's operating segments. Management makes decisions about allocation of resources and reviews to assess performance of the operating segments based on their sales. Based on product type, operating segments are categorized as steel division, auto & parts division, smart mobility & energy convergence division, infra & machinery division, petroleum & chemical products division, and others.

The Group's financial information by operating segments for the years ended December 31, 2022 and 2021 is as follows (Korean won in millions):

	2022							
		Sales	Operating profit		Depreciation		Α	mortization
Steel	₩	2,106,900	₩	36,444	₩	2,091	₩	168
Auto & Parts		1,133,779		13,580		896		91
Smart mobility & Energy								
convergence		167,434		(5,410)		1,000		72
Infra & Machinery		320,774		4,045		253		26
Petroleum & Chemical products		2,233,957		17,291		1,765		179
Others		164,125		878		131		12
	₩	6,126,969	₩	66,828	₩	6,136	₩	548

	2021							
	Sales		Ope	rating profit	Dep	preciation	Amortization	
Steel	₩	1,342,286	₩	23,439	₩	2,009	₩	132
Auto & Parts		550,485		2,435		658		54
Smart mobility & Energy								
convergence		205,220		926		1,000		63
Infra & Machinery		223,400		1,332		267		22
Petroleum & Chemical products		1,357,961		5,468		1,622		134
Others		103,146		1,470		123		10
	₩	3,782,498	₩	35,070	₩	5,679	₩	415

Share of profit and other income (dividend income) of resource development business division, which are not included in operating income amount to \mathbb{W} 34,860 million and \mathbb{W} 15,832 million for the years ended December 31, 2022 and 2021, respectively.

Assets, liabilities, other income and expenses, and finance income and costs of operating segments are not reported to the chief operating decision-maker. Accordingly, the information is not presented in the tables above.

6.2 Regional Information.

As of December 31, 2022 and 2021, the details of non-current assets by region (based on location) are as follows (Korean won in millions):

						202	22				
	Korea		America		Asia		Europe		Others		Total
₩	367,266	₩	1,703	₩	29,016	₩	71	₩	133	₩	398,189
						202	21				
	Korea		America		Asia		Europe		Others		Total
₩	365,608	₩	1,726	₩	23,868	₩	57	₩	166	₩	391,425

The amount of non-current assets by region excludes financial instruments, deferred tax assets, and investments in joint ventures and associates.

7. Financial instruments by category

Details of financial assets by category as of December 31, 2022 and 2021 are as follows (Korean won in millions):

,	2022								
	At an	nortized cost		At FVPL	ŀ	At FVOCI		Total	
Current assets:									
Cash and cash equivalents	₩	356,938	₩	-	₩	-	₩	356,938	
Short-term financial instruments		5,000		-		-		5,000	
Trade receivables		525,741		-		-		525,741	
Derivatives financial assets		-		5,074		701		5,775	
Finance lease receivables		344		-		-		344	
Other current receivables		16,204		-		-		16,204	
		904,227		5,074		701		910,002	
Non-current assets:									
Long-term financial instruments		19		-		-		19	
Financial assets at FVPL		-		1,669		-		1,669	
Financial assets at FVOCI		-		-		52,647		52,647	
Other financial assets		319		-		-		319	
Long-term loan receivables Investments in resource		20,111		-		-		20,111	
development projects		20,552		-		-		20,552	
Finance lease receivables		159		-		-		159	
Other non-current receivables		9,134		-		-		9,134	
Other non-current assets (*1)		3,556		-		-		3,556	
		53,850		1,669		52,647		108,166	
	₩	958,077	₩	6,743	₩	53,348	₩	1,018,168	

(*1) Long-term prepaid expenses are excluded.

At an	nortized cost	t At FVPL			At FVOCI		Total
₩	195,080	₩	-	₩	-	₩	195,080
	2,000		-		-		2,000
	649,741		-		-		649,741
	-		2,022		255		2,277
	373		-		-		373
	23,409		-		-		23,409
			2,022		255		872,880
	·		·				
	19		-		-		19
	-		2,560		-		2,560
	-		-		49,358		49,358
	350		-		-		350
	28,387		-		-		28,387
	24,957		-		-		24,957
	563		-		-		563
	473		-		-		473
	3,328		-		-		3,328
			2,560		49,358		109,995
₩		₩		₩	49,613	₩	982,875
		2,000 649,741 - 373 <u>23,409</u> 870,603 19 - - 350 28,387 24,957 563	 ₩ 195,080 ₩ 2,000 649,741 - 373 23,409 870,603 19 - 350 28,387 24,957 563 473 3,328 58,077 	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	At amortized cost At FVPL At FVOCI	At amortized cost At FVPL At FVOCI

(*1) Long-term prepaid expenses are excluded.

7. Financial instruments by category (cont'd)

Details of financial liabilities by category as of December 31, 2022 and 2021 are as follows (Korean won in millions):

			2022			
	At a	mortized cost		At FVPL		Total
Current liabilities						
Trade payables	₩	444,427	₩	-	₩	444,427
Other payables		45,188		-		45,188
Short-term borrowings		290,967		-		290,967
Current portion of debentures		49,943		-		49,943
Derivative financial liabilities		-		5,679		5,679
Lease liabilities		3,344		-		3,344
Other current liabilities		9,347		-		9,347
		843,216		5,679		848,895
Non-current liabilities:						
Long-term other payables		10		-		10
Debentures		49,907		-		49,907
Long-term borrowings		322,932		-		322,932
Lease liabilities		4,781		-		4,781
Other non-current liabilities		3,948		-		3,948
Provision for financial guarantee		-		201		201
		381,578		201		381,779
	₩	1,224,794	₩	5,880	₩	1,230,674

		2021			
At a	amortized cost		At FVPL		Total
₩	255,964	₩	-	₩	255,964
	64,184		-		64,184
	466,626		-		466,626
	29,962		-		29,962
	-		1,436		1,436
	3,197		-		3,197
	6,282		-		6,282
	826,215		1,436		827,651
	5		-		5
	99,713		-		99,713
	322,738		-		322,738
	6,607		-		6,607
	4,081		-		4,081
	-		48		48
	433,144		48		433,192
₩	1,259,359	₩	1,484	₩	1,260,843
	₩	64,184 466,626 29,962 - 3,197 6,282 826,215 5 99,713 322,738 6,607 4,081 - - 433,144	₩ 255,964 64,184 466,626 29,962 - 3,197 6,282 826,215 5 99,713 322,738 6,607 4,081 - 433,144	At amortized cost At FVPL	At amortized cost At FVPL

7. Financial instruments by category (cont'd)

Net gains or losses on each category of financial instruments for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Financial assets at FVPL:		
Gain on disposal of financial assets at FVPL	₩ 1,896	₩ -
Dividend income	30	4
Gain on valuation of financial assets at FVPL	-	6
	1,926	10
Financial assets at FVOCI:		
Dividend income	13,733	7,989
Gain on valuation of financial assets at FVOCI	2,863	2,848
	16,596	10,837
Financial assets at amortized cost:		
Interest income	5,381	2,212
Bad debt expenses	(24,887)	(2,733)
Foreign exchange gain	7,573	16,596
Loss on disposal of trade receivables	(10,226)	(1,768)
	(22,159)	14,307
Derivative instruments:		
Gain (loss) on valuation (through profit or loss)	(1,190)	491
Gain on valuation (through other comprehensive income)	354	254
Gain (loss) on transactions	6,065	(530)
	5,229	215
Financial liabilities at amortized cost:		
Interest expenses	(19,650)	(13,067)
Foreign exchange loss	(9,818)	(10,875)
	(29,468)	(23,942)
Finance guarantee provision:		
Reversal of provision for financial guarantee	439	175
Contribution to Provision for financial guarantee	(757)	(169)
č	(318)	6
	₩ (28,194)	₩ 1,433

Details of restricted financial instruments as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021	description
Long-term financial instruments and others	₩	191	₩	202	Bank overdrafts and etc.

8. Transfers of financial assets

(1) Transferred financial assets that are not derecognized in their entirety

The D/A export receivables that have not matured have been discounted with banks and the receivables that the Group has a redemption appeal duty are not derecognized because the Group has risks and rewards.

Financial assets which were transferred but not derecognized as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	Financial assets at amortized cost						
		2021					
Book value of assets	\mathbb{W}	278,175	₩	423,992			
Book value of related liabilities (*1)		278,175		423,992			
(*1) Net of prepaid expenses.							

(2) Transferred financial assets that are derecognized in their entirety

The Group derecognized the receivables, which were discounted with the financial institutions, from the consolidated financial statements on transfer date by transferring substantially all the risks and rewards. As of December 31, 2022, the carrying amount of receivables which have not matured amounts to W 79,291 million.

9. Cash and cash equivalents

Details of cash and cash equivalents as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Cash at bank and on hand	₩	356,938	₩	131,872
Short-term deposits		-		63,208
	₩	356,938	₩	195.080

10. Trade and other receivables

10.1 Trade receivables

Details of trade receivables as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Trade receivables	₩	543,590	₩	679,879
Allowance for expected credit losses		(17,849)		(30,138)
	₩	525,741	₩	649,741

Details of the aging analysis and loss allowance for expected credit losses of trade receivables as of December 31, 2022 and 2021 are as follows (Korean won in millions):

				2	022			
		Current		< 3 months		r 3 months	Total	
General receivables:								
Carrying amount	₩	482,998	₩	28,796	₩	5,229	₩	517,023
Expected loss rate (%)		0.02%		0.12%		0.06%		-
Allowance for expected credit losses		(102)		(34)		(3)		(139)
Individual impaired receivables:				· · ·				· · ·
Carrying amount		-		523		26,045		26,568
Allowance for expected credit losses		-		(523)		(17,187)		(17,710)
Total of receivables		482,998		29,319		31,273		543,590
	₩	(102)	₩	(557)	₩	(17,190)	₩	(17,849)

Hyundai Corporation and its subsidiaries Notes to the consolidated financial statements December 31, 2022 and 2021

10.1 Trade receivables (cont'd)

		2021									
	Current		<	< 3 months		er 3 months		Total			
General receivables											
Carrying amount	₩	600,473	₩	41,714	₩	4,757	₩	646,944			
Expected loss rate (%)		0.02%		0.21%		19.78%		-			
Allowance for expected credit losses		(146)		(89)		(941)		(1,176)			
Individual impaired receivables						i					
Carrying amount		-		-		32,935		32,935			
Allowance for expected credit losses		-		-		(28,962)		(28,962)			
Total of receivables		600,473		41,714		37,692		679,879			
	₩	(146)	₩	(89)	₩	(29,903)	₩	(30,138)			

Changes in the allowance for expected credit losses of trade receivables for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
As of January, 1	₩	30,138	₩	27,073
Provision of allowance for expected credit loss		872		2,948
Others (*)		(13,161)		117
	₩	17,849	₩	30,138

(*) It includes # 13,180 million of loss allowance for receivables reclassified to long-term receivables for the year ended December 31, 2022.

10.2 Other receivables

Details of other receivables as of December 31, 2022 and 2021 are as follows (Korean won in millions):

				2022			2021						
	Re	ceivables	Allowance for doubtful accounts		doubtful Car		Carrying amount	Receivables		Allowance for doubtful accounts			Carrying amount
Short-term loan receivables	₩	49	₩		₩	49	₩	-	₩	-	₩	-	
Other receivables Accrued income Guarantee deposits		132,850 14,905 829		(118,513) (4,782) -		14,337 10,123 829		114,579 13,521 451		(104,669) - -		9,910 13,521 451	
	₩	148,633	₩	(123,295)	₩	25,338	₩	128,551	₩	(104,669)	₩	23,882	

11. Financial assets at fair value

(1) Financial assets at fair value through profit or loss

Details of financial assets at FVPL as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Investment fund				
Shinhan Gentium Startup Fund No.2	₩	350	₩	350
Non-listed equity investments				
EUROTEM DEMIRYOLU ARA-LARI SAN		19		19
Almac Co., Ltd.		-		2,191
Prologue Ventures New Technology				
Investment Association No.1		1,000		-
Aureum Gold Rush ESG General Private				
Equity Investment Trust No.1		300		-
	₩	1,669	₩	2,560

11. Financial assets at fair value (cont'd)

(2) Financial assets at fair value through other comprehensive income

Details of financial assets at FVOCI as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Non-listed equity investments				
KOREA RAS LAFFAN LNG LIMITED	\mathbb{W}	40,670	₩	39,791
Hyundai Miraero Co., Ltd.		11,295		8,706
SHWE DAEHAN MOTORS		-		861
STEELARIS PTE LTD		682		-
	₩	52,647	₩	49,358

Changes in financial assets at FVPL and FVOCI for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2	022		2021				
		icial assets t FVPL		cial assets at FVOCI		cial assets t FVPL	Financial assets at FVOCI		
As of January 1	₩	2,560	₩	49,358	₩	2,204	₩	45,530	
Additions		1,300		-		350		-	
Disposals		(2,191)		-		-		-	
Valuation		-		3,230		6		3,757	
Effect of changes in foreign currency		-		59		-		71	
As of December 31	₩	1,669	₩	52,647	₩	2,560	₩	49,358	

12. Derivative instruments

Details of derivative instruments as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022					2021			
	Asset			Liability		Asset		Liability	
Foreign exchange forward	₩	3,996	₩	4,908	₩	1,830	₩	1,093	
Instruments futures - fair value risk hedge (*1)		1,078		771		192		343	
Instruments futures - cash flow hedge (*2)		701		-		255		-	
	₩	5,775	₩	5,679	₩	2,277	₩	1,436	

(*1) The Group conducts futures trading to avoid price fluctuation in connection with the asphalt supply contract.

(*2) The Group applies cash flow hedge accounting to commodity futures regarding vessel fuel oil. The effective portion of hedge that was recognized in the equity amounts to \mathbb{W} 541 million and \mathbb{W} 187 million as of December 31, 2022 and 2021, respectively.

12. Derivative instruments (cont'd)

Details of foreign exchange forward as of December 31, 2022 and 2021 are as follows (Korean won in millions, foreign currency in thousands):

			2022				
			Derivative		ivative	De	rivative
Currency (buy)	Amount (buy)	Currency (sell)	Amount (sell)	instrume	ents assets	instrume	ents liabilities
AUD	254	KRW	230	\mathbb{W}	-	₩	12
CAD	923	USD	696		-		19
CNY	942	KRW	185		-		14
EUR	905	KRW	1,224		6		5
EUR	9,673	USD	9,896		588		-
JPY	513,792	USD	3,673		283		-
KRW	1,290	AUD	1,427		65		-
KRW	185	CNY	942		14		-
KRW	3,106	EUR	2,299		8		15
KRW	1,075	JPY	110,996		6		-
KRW	95,774	USD	73,406		2,996		166
USD	2,284	CAD	3,075		22		5
USD	35,270	EUR	33,910		1		1,316
USD	24,493	JPY	3,436,989		7		2,070
USD	21,150	KRW	28,094		-		1,286
				₩	3,996	₩	4,908

2021

				Derivative		De	rivative
Currency (buy)	Amount (buy)	Currency (sell)	Amount (sell)	instruments assets		instrume	nts liabilities
EUR	9,898	USD	11,851	₩ -		₩	749
JPY	100,957	KRW	1,048		-		7
KRW	18,954	CNY	103,025		-		205
KRW	791	EUR	588		1		-
KRW	3,904	JPY	376,846		19		-
KRW	62,791	USD	52,970		35		80
USD	1,706	CAD	2,172		11		10
USD	50,126	EUR	42,944		1,728		42
USD	1,200	JPY	137,027		11		-
USD	7,258	KRW	8,583		25		
				₩	1,830	₩	1,093

Details of instruments futures as of December 31, 2022 and 2021 are as follows (Korean won in millions):

			2022				2021					
Contract	Position		Derivative instruments assets		Derivative instruments liabilities		Derivative instruments assets		Derivative instruments liabilities			
Instruments futures - fair value risk hedge Asphalt futures	Buy	₩	1,078	₩	771	₩	192	₩	343			
Instruments futures - cash flow hedge Gas oil futures	Buy		-		-		51		-			
Fuel oil futures	Buy		701		-		204		-			
			701		-		255		-			
		₩	1,779	₩	771	₩	447	₩	343			

13. Inventories

Details of inventories as of December 31, 2022 and 2021 are as follows (Korean won in millions):

			2	2022		2021						
	Pur	chase cost		Valuation				Pur	chase cost	Valuation allowance		Carrying amount
Merchandise	₩	273,993	₩	-	₩	273,993	₩	194,195	₩	(1,084)	₩	193,111
Finished goods	**	2,224	vv	-	**	2,224	vv	2,010	**	- (1,001)	vv	2,010
Raw materials		17,635		-		17,635		18,057		-		18,057
Work in progress		126		-		126		67		-		67
	₩	293,978	₩	-	₩	293,978	₩	214,329	₩	(1,084)	₩	213,245

The reversal of loss on valuation of inventories recognized in cost of sales amounts to $\forall 1,084$ million for the year ended December 31, 2022 (loss on valuation of inventories in 2021: $\forall 332$ million).

14. Other assets

Details of other assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Other current assets:	117		117	
Prepayments	₩	22,222	₩	19,624
Prepaid expenses		6,265		3,175
Others		2,747		2,486
		31,234		25,285
Other non-current assets:				
Long-term prepaid expenses		1,371		2,649
Deposits		3,556		3,327
		4,927		5,976
	₩	36,161	₩	31,261

15. Investments in joint ventures and associates

(1) Details of investments in joint ventures and associates as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022	2021			
	Equity		Equity			
	interest (%)	Book value	interest (%)	Book value	Domicile	Business
PT HD INTI DEVE. (*1)	55.00	₩ 1,142	55.00	₩ 1,154	Indonesia	Management of facility
HYUNDAI YEMEN LNG COMPANY LIMITED						
(*1, *2)	51.00	31,920	51.00	36,759	Bermuda	Yemen LNG development
KOREA LNG LIMITED	20.00	29,837	20.00	31,360	Bermuda	OMAN LNG development
H&DE CO., LTD.	34.00	-	34.00	896	Korea	Aluminum forged products
KAPSTEX VINA., JSC (*3)						Manufacture and sale of
	13.00	4,241	13.00	4,018	Vietnam	technical textiles
INTERGIS BUSAN NEWPORT CENTER CO.,						Warehouse and
LTD. (*4)						Transportation
	20.00	1,101	20.00	1,056	Korea	related Service
ELIAS AUTO INDIA PRIVATE LIMITED (*1,*5)	51.00	577	51.00	700	India	Vehicle knock down business
HY Auto Solution	50.00	7,301	50.00	7,438	Russia	Auto parts manufacturing
KCA New Growth Sector No.2 Private Equity						
Investment Co., Ltd. (*8)	-	-	44.96	4,919	Korea	Securities investment
Aeonus Co., Ltd. (*6, *9)						Renewable energy and
	8.94	614	-	-	Korea	mobile ESS development
KCA ESG No.1 Private Equity Investment Co.,						
Ltd. (*9)	34.17	7,324	-	-	Korea	Securities investment
Infinite Marine Connect Co., Ltd. (*7, *9)	49.00	100	-	-	Korea	Ship fuel supply business
SUGIHARA HYUNDAI AUTOMOTIVE (*9)	50.00	624	-		Indonesia	Auto parts manufacturing
		₩ 84,781		₩ 88,300		

(*1) It is excluded from the scope of consolidation despite the Group's shares in the associate exceeds 50% because the consent of other shareholders is required to make major decisions under shareholders' agreement.

- (*2) Although the percentage of ownership of the Group is 51%, the equity method is applied at a percentage considering the contractual terms regarding dividends.
- (*3) Although the percentage of ownership of the Group is 13%, it is determined to be an associate because the entity has an authority to appoint key executives of the associate.
- (*4) The associate of Hyundai Corporation Singapore Pte. Ltd.
- (*5) The joint venture of Pos-Hyundai Steel Mfg. (I) Pvt. Ltd.
- (*6) Although the percentage of ownership of the Group is 8.94%, it is determined to be an associate because the entity has an authority to appoint key executives of the associate.
- (*7) The associate of Hyundai Fuels Pte. Ltd.
- (*8) The entity was disposed during the year ended December 31, 2022.
- (*9) The entity was newly established during the year ended December 31, 2022.

15. Investments in joint ventures and associates (cont'd)

(2) Changes in investments in joint ventures and associates as of December 31, 2022 and 2021 are as follows (Korean won in millions):

							2022					
					Share o	f profit	Share of ot	her				
					(loss) of	comprehensive inc	ome (loss)				
					associat	es and	of associates a	nd joint				
		Jan. 1	Acc	uisition	joint vei	ntures	ventures	•	0	thers	D	ec. 31
PT HD INTI DEVE.	₩	1,154	₩	-	₩	308	₩	(29)	₩	(291)	₩	1,142
HYUNDAI YEMEN LNG COMPANY		, -										
LIMITED		36,759		-		105		(4,944)		-		31,920
KOREA LNG LIMITED		31,360		-		21,022		(1,240)	(21,305)		29,837
H&DE CO., LTD.		896		-		(896)		-		-		-
KAPSTEX VINA., JSC		4,018		-		404		80		(261)		4,241
INTERGIS BUSAN NEWPORT CENTER												
CO., LTD.		1,056		-		61		-		(16)		1,101
ELIAS AUTO INDIA PRIVATE LIMITED		700		-		(103)		(20)		-		577
HY Auto Solution		7,438		-		(720)		583		-		7,301
KCA New Growth Sector No.2 Private												
Equity Investment Co., Ltd.		4,919		(14,354)		9,435		-		-		-
Aeonus Co., Ltd.		-		751		(137)		-		-		614
KCA ESG No.1 Private Equity Investment												
Co., Ltd.		-		7,500		(176)		-		-		7,324
Infinite Marine Connect Co., Ltd.		-		98		-		-		2		100
SUGIHARA HYUNDAI AUTOMOTIVE		-		651		-		(27)		-		624
	₩	88,300	₩	(5,354)	₩	29,303	₩	(5,597)	₩ (21,871)	₩	84,781

							2021					
		Jan. 1	Aco	quisition	Share of p (loss) o associates joint ventu	of and	Share of other comprehensive income (k of associates and joint ventures		Otl	hers	D	ec. 31
PT HD INTI DEVE.	₩	1,162	₩	-	₩	351	₩	66	₩	(425)	₩	1,154
HYUNDAI YEMEN LNG COMPANY												
LIMITED		33,804		-	(1,324)	4,2	279		-		36,759
KOREA LNG LIMITED		24,273		-		9,167	7,0	099	((9,179)		31,360
H&DE CO., LTD.		2,180		-	(1,284)		-		-		896
KAPSTEX VINA., JSC		3,591		-		359	:	227		(159)		4,018
INTERGIS BUSAN NEWPORT CENTER												
CO., LTD.		1,039		-		23		16		(22)		1,056
ELIAS AUTO INDIA PRIVATE LIMITED		931		-		(290)		59		-		700
Multi-Asset Eco-Friendly Ship Equipment												
Private Equity Trust		11,328		(11,328)		218		-		(218)		-
HY Auto Solution		-		7,102		130		206		-		7,438
KCA New Growth Sector No.2 Private												
Equity Investment Co., Ltd.		-		5,000		(81)		-		-		4,919
	₩	78,308	₩	774	₩	7,269	₩ 11,9	952	₩ (1	0,003)	₩	88,300

(3) Financial information of investments in joint ventures and associates as of and for the years ended December 31, 2022 and 2021 are as below (Korean won in millions):

				2022		
	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	Total comprehensive income (loss)
PT HD INTI DEVE.	₩ 2,726	₩ 649	₩ 2,077	₩ 4,654	₩ 582	₩ 506
HYUNDAI YEMEN LNG COMPANY						
LIMITED	172,459	117,254	55,205	-	205	(7,708)
KOREA LNG LIMITED	149,345	162	149,183	107,361	105,110	98,908
H&DE CO., LTD.	21,290	22,941	(1,651)	12,818	(3,727)	(4,284)
KAPSTEX VINA., JSC	24,768	2,748	22,020	40,486	2,624	3,728
INTERGIS BUSAN NEWPORT						
CENTER CO., LTD.	9,408	3,906	5,502	3,454	293	293
ELIAS AUTO INDIA PRIVATE						
LIMITED	1,661	529	1,132	5,148	(198)	(238)
HY Auto Solution	18,755	4,154	14,601	2,227	(1,441)	(275)
Aeonus Co., Ltd.	2,763	2,312	451	286	(1,534)	(1,534)
KCA ESG No.1 Private Equity						
Investment Co., Ltd.	21,542	107	21,435	3	(515)	(515)
Infinite Marine Connect Co., Ltd.	215	11	204	-	(1)	(1)
SUGIHARA HYUNDAI						
AUTOMOTIVE	1,251	3	1,248	-	-	(54)

15. Investments in joint ventures and associates (cont'd)

				2021		
					Profit (loss)	Total comprehensive
	Assets	Liabilities	Equity	Sales	for the year	income (loss)
PT HD INTI DEVE.	₩ 2,729	₩ 629	₩ 2,100	₩ 4,230	₩ 637	₩ 758
HYUNDAI YEMEN LNG COMPANY						
LIMITED	166,791	103,878	62,913	-	(2,596)	4,278
KOREA LNG LIMITED	157,018	217	156,801	47,857	45,834	81,333
H&DE CO., LTD.	18,578	15,945	2,633	4,640	(3,779)	(3,780)
KAPSTEX VINA., JSC	25,497	5,194	20,303	39,136	2,725	4,510
INTERGIS BUSAN NEWPORT						
CENTER CO., LTD.	9,861	4,571	5,290	3,364	125	203
ELIAS AUTO INDIA PRIVATE						
LIMITED	2,242	872	1,370	2,085	(568)	(454)
Multi-Asset Eco-Friendly Ship						
Equipment Private Equity Trust	-	-	-	-	653	653
HY Auto Solution	18,127	3,251	14,876	1,234	260	672
KCA New Growth Sector No.2						
Private Equity Investment Co., Ltd.	10,939	-	10,939	-	(181)	(181)

(4) The tables below provide a reconciliation between interest in net assets and book amount of the joint ventures or associates (Korean won in millions).

		20	22	
	Interest in net			
	assets	Goodwill	Others (*)	Book value
PT HD INTI DEVE.	₩ 1,142	₩ -	₩ -	₩ 1,142
HYUNDAI YEMEN LNG COMPANY LIMITED (*)	28,154	-	3,766	31,920
KOREA LNG LIMITED	29,837	-	-	29,837
H&DE CO., LTD.	(561)	-	561	-
KAPSTEX VINA., JSC	2,862	1,379	-	4,241
INTERGIS BUSAN NEWPORT CENTER CO., LTD.	1,101	-	-	1,101
ELIAS AUTO INDIA PRIVATE LIMITED	577	-	-	577
HY Auto Solution	7,301	-	-	7,301
Aeonus Co., Ltd.	40	574	-	614
KCA ESG No.1 Private Equity Investment Co., Ltd.	7,324	-	-	7,324
Infinite Marine Connect Co., Ltd.	100	-	-	100
SUGIHARA HYUNDAI AUTOMOTIVE	624	-	-	624

(*) Adjusted amount considering contractual terms regarding dividends.

		202	21	
	Interest in net			Dealestalue
	assets	Goodwill	Others (*)	Book value
PT HD INTI DEVE.	₩ 1,154	₩ -	₩ -	₩ 1,154
HYUNDAI YEMEN LNG COMPANY LIMITED (*)	32,086	-	4,673	36,759
KOREA LNG LIMITED	31,360	-	-	31,360
H&DE CO., LTD.	896	-	-	896
KAPSTEX VINA., JSC	2,639	1,379	-	4,018
INTERGIS BUSAN NEWPORT CENTER CO., LTD.	1,058	-	-	1,058
ELIAS AUTO INDIA PRIVATE LIMITED	698	-	-	698
Multi-Asset Eco-Friendly Ship Equipment Private				
Equity Trust	-	-	-	-
HY Auto Solution	7,438	-	-	7,438
KCA New Growth Sector No.2 Private Equity				
Investment Co., Ltd.	4,919	-	-	4,919

(*) Adjusted amount considering contractual terms regarding dividends.

15. Investments in joint ventures and associates (cont'd)

(5) The accumulated unrecognized changes in equity due to the suspension of application of the equity method are as follows (Korean won in millions):

		20		2021				
		Accumulated					Accum	ulated
	Unrecog	nized loss	unrec	ognized loss	Unrecogniz	zed loss	unrecogni	zed loss
H&DE CO., LTD. (*)	\overline{W}	561	₩	561	₩	-	₩	-

(*) Unrecognized gains and losses in equity method were recognized as loss allowance for long-term loans for the year ended December 31, 2022.

16. Resource development

The Group organized a consortium that includes Korea National Oil Corporation to invest in exploration of resource projects, and the details as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Project name	Accounts	2022	2021	Production commencement
Vietnam 11-2 sector	Overseas mining development costs (*1)	₩ -	₩ -	2007
Yemen LNG (HYLNG) (*2)	Investments in joint ventures (HYUNDAI YEMEN LNG COMPANY			
	LIMITED)	31,920	36,759	2009
	Investments in resource development			
	projects (*3)	14,492	19,288	
	Long-term loan receivables (*4)	15,478	23,700	
West Kamchatka Project	Investments in resource development			
	projects (*5)	6,060	5,669	Under liquidation
Oman LNG	Investments in associates			
	(KOREA LNG LIMITED)	29,837	31,360	2000
Qatar LNG	Financial assets at FVOCI			
	(KOREA Ras Laffan LNG Ltd.)	40,670	39,791	1999
Total	Investments in resource development			
	projects	20,552	24,957	
	Long-term loan receivables	15,478	23,700	
	Investments in associates and joint			
	ventures	61,757	68,119	
	Financial assets at FVOCI	40,670	39,791	

- (*1) In 2018, the Group recognized an impairment loss for the entire amount of overseas mining development costs of the mining project considering its low profitability. The Group has recognized a provision for the onerous contract related to the overseas mining development costs.
- (*2) The production of the project commenced on October 15, 2009 with two (2) long-term sales contracts with Suez LNG Trading S.A. and Total Gas & Power Ltd. However, the production suspended due to Yemeni Civil War that broke out in April 2015 and the production is estimated to resume after 2025 as of December 31, 2022.
- (*3) ₩ 8,339 million of loss allowance was recognized after the indications of impairment were identified for the year ended December 31, 2022.
- (*4) ₩ 10,331 million of loss allowance was recognized after the indications of impairment were identified for the year ended December 31, 2022.
- (*5) The project is under liquidation process and the project's recoverable amount is determined at the balance of relevant long-term borrowing, which will be exempted by its creditor when failure of related project is confirmed by creditor.

16. Resource development (cont'd)

The pre-tax comprehensive income (loss) from investments in resources development project for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

Project name	Description		2022	2021		
Vietnam 11-2 sector	Sales	₩	3,824	₩	4,279	
	Cost of sales		(3,556)		(2,926)	
Yemen LNG (HYUNDAI YEMEN LNG COMPANY LIMITED)	Share of loss of joint ventures and associates		105		(1,324)	
·	Share of other comprehensive income (loss)					
	of associates and joint ventures		(4,943)		4,278	
Oman LNG (KOREA LNG LIMITED)	Share of profit of joint ventures and					
	associates		21,022		9,167	
	Share of other comprehensive income (loss)					
	of associates and joint ventures		(1,241)		7,099	
Qatar LNG (KOREA Ras Laffan LNG Ltd.)	Other comprehensive income (loss)		880		4,014	
	Dividend income		13,733		7,989	
		₩	29,824	₩	32,576	

The equity interests in investments in the resource development project as of December 31, 2022, are as follows:

Project name	Consortium interest in investments (*1)	Equity interests of the Group in consortium (*2)
Vietnam 11-2 sector	75.0%	6.5%
Yemen LNG (HYUNDAI YEMEN LNG COMPANY		
LIMITED)	5.9	51.0
Oman LNG (KOREA LNG LIMITED)	5.0	20.0
Qatar LNG (KOREA Ras Laffan LNG Ltd.)	5.0	8.0

(*1) Represents the interests of the consortium in which the Group is involved.

(*2) Represents the Group's interests within the consortium.

17. Property, plant and equipment

Changes in the book value of property, plant and equipment for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

					2	2022				
		a se al		D:!		struction				T. (.)
		_and		Building	- in-p	rogress		Others		Total
Book value as of Jan. 1	₩	1,409	₩	12,808	₩	-	₩	15,237	₩	29,454
Changes during the year										
Additions/capital expenditures		128		-		4,715		1,733		6,576
Disposals		(336)		(353)		-		(19)		(708)
Depreciation		-		(357)		-		(1,564)		(1,921)
Transfer (*1)		-		-		-		-		-
Exchange differences, etc.		(84)		484		(321)		(458)		(379)
Book value as of Dec. 31		1,117		12,582		4,394		14,929		33,022
Book value as of Dec. 31										
Acquisition cost		1,117		17,404		4,394		28,249		51,164
Accumulated depreciation		-		(2,983)		-		(13,320)		(13,303)
Accumulated impairment losses		-		(1,839)		-		-		(1,839)
Net book value	₩	1,117	₩	12,582	₩	4,394	₩	14,929	₩	33,022

17. Property, plant and equipment (cont'd)

	2021									
	L	and	E	Building	С	Others	Total			
Book value as of Jan. 1	₩	445	₩	3,558	₩	12,824	₩	16,827		
Changes during the year										
Additions/capital expenditures		646		-		3,675		4,321		
Disposals		-		-		(90)		(90)		
Depreciation		-		(314)		(1,344)		(1,658)		
Transfer (*1)		336		8,819		-		9,155		
Exchange differences, etc.		(18)		745		172		899		
Book value as of Dec. 31		1,409		12,808		15,237		29,454		
Book value as of Dec. 31										
Acquisition cost		1,409		17,464		27,537		46,410		
Accumulated depreciation		-		(2,817)		(12,300)		(15,117)		
Accumulated impairment losses		-		(1,839)		-		(1,839)		
Net book value	₩	1,409	₩	12,808	₩	15,237	₩	29,454		

(*1) It has been transferred from intangible assets and investment properties during the year ended December 31, 2021.

18. Leases

18.1 Right-of-use assets

Changes in the carrying amount of right-of-use assets for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022									2021							
	P	roperty		lotor hicles	С	Others		Total	F	Property		lotor hicles		Others		Total	
Book value as of Jan. 1 As of Dec. 31, 2021 Change in accounting policy	₩	7,983	₩	299	₩	134	₩	8,416	₩	9,965	₩	240	₩	110	₩	10,315	
As of Jan. 1, 2022 Changes during the year		7,983		299		134		8,416		9,965		240		110		10,315	
Additions Disposals		2,487		274		-		2,761		1,453 -		309 -		132		1,894 -	
Depreciation Exchange differences, etc.		(3,902) 82		(252) 1		(61)		(4,215) 83		(3,627) 192		(284) 35		(110) 1		(4,021) 228	
Book value as of Dec. 31 Book value as of Dec. 31:		6,650		322		73		7,045		7,983		300		133		8,416	
Acquisition cost Accumulated depreciation		20,125 (13,475)		1,126 (804)		311 (238)		21,562 (14,517)		18,128 (10,145)		935 (636)		310 (176)		19,373 (10,957)	
Net book value	₩	6,650	₩	322	₩	73	₩	7,045	₩	7,983	₩	299	₩	134	₩	8,416	

18.2 Lease liabilities

Changes in the carrying amount of lease liabilities for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

			20)22	2021							
		ent lease bilities		current liabilities		Total		ent lease abilities		n-current liabilities		Total
As of Jan. 1	₩	3,197	₩	6,607	₩	9,804	₩	3,277	₩	8,418	₩	11,695
Additions		851		1,782		2,633		173		1,721		1,894
Accretion of interest		22		352		374		35		375		410
Payments		(4,773)		-		(4,773)		(4,663)		-		(4,663)
Other (*)		4,047		(3,960)		87		4,375		(3,907)		468
As of Dec. 31	₩	3,344	₩	4,781	₩	8,125	₩	3,197	₩	6,607	₩	9,804

(*) It includes the amount of transfer to current portions and the effect of exchange differences.

18. Leases (cont'd)

The table below summarizes the maturity profile of lease liabilities based on contractual undiscounted payments for the years ended December 31, 2022 and 2021 (Korean won in millions):

		2022								2021							
	<	1 year	1-5	5 years	> 5	years		Total	<	1 year	1-5	5 years	•	5 years		Fotal	
Current lease liabilities	₩	3,619	₩	-	₩	-	₩	3,619	₩	4,160	₩	-	₩	-	₩	4,160	
Non-current lease liabilities		-		3,961		910		4,871		-		5,665		1,353		7,018	
	₩	3,619	₩	3,961	₩	910	₩	8,490	₩	4,160	₩	5,665	₩	1,353	₩	11,178	

18.3 Amounts recognized in profit or loss related to leases

The following are the amounts recognized in profit or loss for the years ended December 31, 2022 and 2021 (Korean won in millions):

		2022		2021
Depreciation expense of right-of-use assets	₩	(4,215)	₩	(4,021)
Interest expense on lease liabilities		(374)		(410)
Expense relating to short-term leases		(479)		(496)
Expense relating to leases of low-value assets		(40)		(43)
Interest income relating to finance lease receivables		28		44
	₩	(5,080)	₩	(4,926)

18.4 Group as a lessor

The Group has entered into a sub-lease contract on offices with Hyundai Corporation Holdings Co., Ltd. etc. Future undiscounted rentals relating the sub-lease contract as of December 31, 2022 are as follows (Korean won in millions):

	_	2023		2024		2025		2026		After 2027	
Annual rentals	₩	422	₩	412	₩	104	₩	-	₩		-

18.5 The Group had total cash outflows for leases of \mathbb{W} 4,489 million for the year ended December 31, 2022 (2021: \mathbb{W} 4,869 million).

19. Investment properties

Changes in the carrying amount of investment properties as of December 31, 2022 and 2021 are as follows (Korean won in millions):

			2022		2021							
		Land		Building	То	tal (*1, *2)		Land		Building	То	tal (*1, *2)
As of January, 1	₩	232,560	₩	109,440	₩	342,000	₩	231,200	₩	108,800	₩	340,000
Additions		-		-		-		-		8,393		8,393
Valuation (*3)		24,220		(19,220)		5,000		1,360		640		2,000
Transfer		-		-		-		-		(8,393)		(8,393)
As of December, 31	₩	256,780	₩	90,220	₩	347,000	₩	232,560	₩	109,440	₩	342,000

(*1) Investment properties are pledged as collateral for borrowings (the maximum amount of the receivables: # 247,200 million) of the Group.

(*2) Insurance claim right of the investment property is pledged as collateral up to # 247,200 million. Relevant accounts for insurance benefit and rental receipt are pledged as collateral up to the corresponding amount.

(*3) For the year ended December 31, 2022, the Group recognized ₩ 1,761 million (2021: 343 million) as other non-current liabilities, including the amount to be allocated to the investors of Type 1 beneficiary securities on the fluctuation of the fair value of the investment properties based on the agreement between the investors of Hangang Domestic Specialized Private Equity in Real Estate Investment Trust No.13, and also recognized ₩ 3,239 million (2021: 1,657 million) in gain on valuation of investment properties excluding that amount.

19. Investment properties (cont'd)

Details of income and expenses associated with investment properties for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Other income:				
Rental income derived from investment properties	₩	11,413	₩	11,365
Gain on valuation on investment properties (*1)		3,239		1,657
Other		5,533		5,241
		20,185		18,263
Other expense:				
Operating expenses		2,118		1,946
Fees		2,045		2,145
Other (*2)		7,998		7,269
		12,161		11,360
Interest expense		5,310		5,371
Profit arising from investment properties carried at fair value	₩	2,714	₩	1,532

(*1) It excludes the amount to be allocated to the investors of Type 1 beneficiary securities on the fluctuation of the fair value of the investment properties based on the agreement between the investors.

(*2) It includes the distributions on the agreement between the investors regarding non-controlling interests liabilities (Type 1 beneficiary securities).

Description of valuation techniques used and key inputs to valuation of investment properties as of December 31, 2022, is follow (Korean won in millions):

Fair value	Level	Valuation technique	Key input	Range
		Cost approach	Replacement cost	-
		Comparable	Costs of cases	Similar cases considering on the factors of location and region
₩ 347,000	3	Income approach	Discounted rate Rent growth and other increase	4.00%
			rates	2.00 ~ 3.00%
	<u>Fair value</u> ₩ 347,000		Cost approach Comparable M 347 000 3 method	Cost approach Replacement cost Comparable Costs of cases method Income approach Discounted rate Rent growth and other increase

20. Intangible assets

Changes in the carrying amount of intangible assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022						2021					
	Min	ing rights	Oth	ners (*1)		Total	Mir	ning rights	Ot	hers (*1)		Total	
As of January, 1	₩	-	₩	8,907	₩	8,907	₩	-	₩	8,406	₩	8,406	
Additions/capital expenditures		-		1,441		1,441		-		2,035		2,035	
Amortization		-		(548)		(548)		-		(415)		(415)	
Disposals		-		-		-		-		(390)		(390)	
Transfer (*2)		-		-		-		-		(762)		(762)	
Exchange differences		-		(50)		(50)		-		33		33	
As of December, 31		-		9,750		9,750		-		8,907		8,907	
Acquisition cost		44,372		15,981		60,353		44,372		14,600		58,972	
Accumulated amortization (*3)	₩	(44,372)	₩	(6,231)	₩	(50,603)	₩	(44,372)	₩	(5,693)	₩	(50,065)	

(*1) It includes membership rights and others.

(*2) It has been transferred to property, plant and equipment during the year ended December 31, 2021.

(*3) It includes accumulated impairment losses.

21. Other financial liabilities

Details of other financial liabilities as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Other current liabilities:				
Withholdings	\mathbf{W}	1,354	₩	1,018
Guarantee deposits		519		446
Accrued expenses		7,341		4,701
Other current financial liabilities		133		117
		9,347		6,282
Other non-current liabilities:				
Rental deposits		3,948		4,081
	₩	13,295	₩	10,363

22. Borrowings and debentures

Details of long and short-term borrowings as of December 31, 2022 and 2021 are as follows (Korean won in millions):

			Interest rate		
	Purpose	Creditor	(%)	2022	2021
Foreign currency short-term borrowings	D/A NEGO (*1)	WOORI BANK and others	-	₩278,175	₩423,992
5	USANCE	The Korea Development Bank			
		and others	2.80~6.09	12,398	24,925
Korean won short-term	Operations	Hyundai Energy Solution			
borrowings			2.98	-	3,114
		KEB Hana Bank	Libor(3mont		
			h) + 1.1	-	14,226
	Real estate mortgage loan	DBS Bank	1.50	394	369
				290,967	466,626
Foreign currency long-term	Investments in development projects (*2)	Korea Energy Agency			
borrowings			-	6,060	5,669
	General borrowings	AOZORA Bank	1.00	5,060	5,243
	Real estate mortgage loan	DBS Bank	3M SORA		
			+ 4	5,312	5,326
Korean won long-term	Real estate mortgage loan (*3, *4)	Samsung Life Insurance co.,			
borrowings		Ltd and others	2.85~4.50	184,000	184,000
	Non-controlling interests liabilities	The Korea Securities Finance			
		Corporation and others	6.00	122,500	122,500
				322,932	322,738
				₩ 613,899	₩ 789,364

- (*1) Trade receivables are pledged as collateral (see Note 8).
- (*2) As a specific purpose borrowing for exploration project, its redemption obligation of the Group will be exempted by its creditor when the project's ultimate failure is confirmed.
- (*3) If the investment property provided as collateral is disposed or the Group receives insurance claims exceeding amount of \mathbb{W} 500 million in relation to the investment property, early redemption may be required.
- (*4) In relation to the borrowings, the Group's investment property and right of the insurance claim for the investment property are provided as collateral (see Note 19).

Details of debentures as of December 31, 2022 and 2021 are as follows (Korean won in millions):

				Interest		
	Managing company	Issue date	Maturity	rate (%)	2022	2021
39th non-guarantee public bonds	The Korea Securities Finance Corporation	5 Nov. 2019	4 Nov. 2022	2.67	₩ -	₩ 30,000
40th non-guarantee public bonds	Korea Securities Depository	29 Oct. 2020	27 Oct. 2023	2.76	50,000	50,000
41th non-guarantee public bonds	Korea Securities Depository	27 Apr. 2021	26 Apr.2024	2.39	50,000	50,000
					100,000	130,000
	(Less: discount on debe	entures)			(150)	(325)
	(Less: current portion of de	ebentures)			(49,943)	(29,962)
					₩ 49,907	₩ 99,713

23. Net defined benefit liability (asset)

Details of net defined benefit liability (asset) as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Defined benefit obligations	\overline{W}	25,862	₩	25,196
Fair value of plan assets (*)		(28,119)		(23,351)
	\overline{W}	(2,257)	₩	1,845

(*) It includes deposits to the National Pension Fund of ₩ 17 million as of December 31, 2022 (2021: ₩ 19 million).

Changes in the carrying amount of defined benefit obligations for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
As of January, 1	₩	25,196	₩	24,756
Current service cost		2,740		2,565
Interest cost		338		267
Remeasurement loss (gain) in OCI:		(214)		1,080
 Actuarial changes arising from changes in demographic assumptions Actuarial changes arising from changes in 		-		-
financial assumptions		(1,789)		(440)
- Experience adjustments		1,575		1,520
Transfer from (to) related companies		(51)		(190)
Benefits paid		(2,123)		(3,298)
Exchange differences		(24)		16
As of December, 31	₩	25,862	₩	25,196

Expected maturity analysis of undiscounted pension benefits as of December 31, 2022, is as follows (Korean won in millions):

	< 1	1 year	1 ~	- 2 years	2 -	- 5 years	5 ~	10 years	Ove	r 10 years		Total
Pension benefits	₩	1,657	₩	15,281	₩	3,901	₩	4,885	₩	6,485	₩	32,209

The weighted average duration of the defined benefit obligations is 6.01 years.

Changes in fair value of plan assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
As of January, 1	₩	23,351	₩	22,107
Interest income		640		469
Remeasurement gain (loss) in OCI		(290)		(237)
Contributions by employer		6,396		4,045
Benefits paid		(1,978)		(3,033)
	₩	28,119	₩	23,351

The significant actuarial assumptions as of December 31, 2022 and 2021 are as follows:

	2022	2021
Discount rate	5.28~5.35%	2.20~3.01%
Future salary growth rate	4.00~4.04%	4.00%

23. Net defined benefit liability (cont'd)

The sensitivity of the overall pension liability as of December 31, 2022 to changes in the weighted principal assumptions is:

	Changes in principal	Impact on defined
	assumption	benefit obligation
Discount rate	1% increase	2.39% decrease
	1% decrease	2.66% increase
Future salary growth rate	1% increase	2.73% increase
	1% decrease	2.50% decrease

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized on the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the prior period.

The fair values of each major class of plan assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		20)22	2021			
		Amount Composition (%) Amount				Composition (%)	
National Pension Fund	₩	17	0.1	₩	19	0.1	
Financial instruments and others		28,102	99.9		23,332	99.9	
	₩	28,119	100	₩	23,351	100	

24. Provisions

Changes in provisions for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

			2022		
		Onerous contract			
	Restoration (*1)	(*2)	Legal claim (*3)	Others	Total
As of Jan. 1	₩ 532	₩ 5,559	₩ 949	₩ 730	₩ 7,770
Arising during the year	-	-	546	1,085	1,631
Interest expense	8	94	-	-	102
Reversal	(33)	(105)	(242)	(59)	(439)
Utilized	(210)	(1,875)	(300)	(131)	(2,516)
Others	48	424	37	-	509
As of Dec. 31	345	4,097	990	1,625	7,057
Less: current portions	(176)	(2,018)	-	(29)	(2,223)
Non- current	₩ 169	₩ 2,079	₩ 990	₩ 1,596	₩ 4,834

						2021				
			0	nerous contract						
		Restoration (*1)		(*2)		Legal claim (*3)		Others		Total
As of Jan. 1	₩	2,024	₩	6,705	₩	870	₩	841	₩	10,440
Arising during the year		-		-		-		169		169
Interest expense		61		66		-		-		127
Reversal		(1,367)		(324)		-		(175)		(1,866)
Utilized		(358)		(1,444)		-		(126)		(1,928)
Others		172		557		78		21		828
As of Dec. 31		532		5,560		948		730		7,770
Less: current portions		(194)		(1,755)		-		-		(1,949)
Non- current	₩	338	₩	3,805	₩	948	₩	730	₩	5,821

(*1) It is the present value of the estimated recovery cost until the completion of the 11-2 mine production in Vietnam, which is expected to occur until 2024.

(*2) It is present value of the expected amount of compensation for losses incurred when the minimum guaranteed quantity is not met in relation to the transportation contract for liquefied natural gas produced in the 11-2 mine in Vietnam. The amount is expected to occur until 2024.

(*3) It is probable that an outflow of resources embodying economic benefits will be required to settle the obligation relating to legal claim.

25. Income tax

The major components of income tax expense for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Current income tax charge	₩	23,160	₩	11,788
Adjustments in respect of current income tax of previous years		21		128
Relating to origination and reversal of temporary differences		3,439		3,384
Refund from claim for reassessment and others		(14,682)		2,914
Other		(87)		1
	₩	11,851	₩	18,215

The reconciliation between income tax expense at the effective tax rate and accounting profit before income tax at the Korea statutory rate for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Accounting profit before income tax	₩	90,538	₩	56,221
Tax at domestic tax rates applicable to profits in the respective countries	₩	29,424	₩	17,716
Tax effects of:				
Non-deductible expenses and non-taxable income for tax purposes		392		(135)
Adjustments in respect of current income tax of previous years		21		128
Refund from claim for reassessment and others		(14,682)		2,914
Other		(3,304)		(2,408)
Income tax expense	₩	11,851	₩	18,215
Effective tax rate		13.1%		32.4%

Details of deferred tax assets (liabilities) as of December 31, 2022 and 2021 and the years then ended are as follows (Korean won in millions):

					20	22		
					Oth	er comprehensive		
		Jan. 1	Prof	it or loss		income (loss)		Dec. 31
Financial assets at fair value	₩	(7,890)	₩	(39)	₩	(420)	₩	(8,349)
Investments in subsidiaries, joint ventures								
and associates		(24,122)		(1,782)		1,087		(24,817)
Intangible assets		2,420		(2,004)		-		416
Allowance for doubtful		5,481		5,214		-		10,695
Gain (loss) on foreign currency translation		(319)		14		-		(305)
Provisions		7,460		(4,158)		-		3,302
Net defined benefit liability		(128)		(252)		(113)		(493)
Other		1,309		(432)		-		877
	₩	(15,789)	₩	(3,439)	₩	554	₩	(18,674)

					202	21		
					Oth	er comprehensive		
	Jar	n. 1	Profit	or loss		income (loss)		Dec. 31
Financial assets at fair value	₩	(6,525)	₩	(456)	₩	(909)	₩	(7,890)
Investments in subsidiaries, joint ventures								
and associates	(18,507)		(2,739)		(2,876)		(24,122)
Intangible assets		2,854		(434)		-		2,420
Allowance for doubtful		5,481		-		-		5,481
Gain (loss) on foreign currency translation		(320)		1		-		(319)
Provisions		6,931		529		-		7,460
Net defined benefit liability		5		(436)		303		(128)
Other		1,158		151		-		1,309
	₩	(8,923)	₩	(3,384)	₩	(3,482)	₩	(15,789)

25. Income tax (cont'd)

Realization of the future tax benefits related to deferred tax assets is dependent on many factors, including the Group's ability to generate taxable income within the period during which the temporary differences reverse, the outlook of the Korean economic environment, and the overall future industry outlook. Management periodically considers these factors in reaching its conclusion. The Group has not recognized deferred tax assets of \mathbb{W} 63,396 million (2021: \mathbb{W} 66,646 million) related to subsidiaries and associates whose realizability is uncertain and such amount can be changed if estimation of the future tax benefits changes.

26. Accumulated other comprehensive income and other components of equity

Details of other components of equity as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Treasury shares	₩	(21,062)	₩	(21,062)
Adjustment of other components of equity		(19,027)		(18,865)
Loss from spin-off		(242,051)		(242,051)
	₩	(282,140)	₩	(281,978)

Details of accumulated other comprehensive income as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Gain on valuations of financial assets at FVOCI	₩	31,991	₩	29,128
Share of other comprehensive income of joint ventures and associates		47,041		50,569
Gain on valuation of derivatives		541		187
Loss on foreign operation currency translation differences		(6,073)		(7,245)
	₩	73,500	₩	72,639

The Group has 1,218,000 shares and 1,218,000 shares of common shares as treasury shares as of December 31, 2022 and 2021, respectively.

27. Retained earnings

Details of retained earnings as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		
Legal reserve (*)	₩	10,381	₩	9,660
Unappropriated retained earnings		565,147		494,602
	₩	575,528	₩	504,262

(*) The Commercial Code of the Republic of Korea requires the Company to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its issued capital. The reserve is not available for cash dividends payment but may be transferred to issued capital or used to reduce accumulated deficit. When the accumulated legal reserves (the sum of capital reserves and earned profit reserves) are greater than 1.5 times the paid-in capital amount, the excess legal reserves may be distributed (in accordance with a resolution of the shareholders' meeting).

27. Retained earnings (cont'd)

The dividends paid in 2022 and 2021 were \mathbb{W} 7,207 million (\mathbb{W} 600 per share) and \mathbb{W} 7,207 million (\mathbb{W} 600 per share), respectively. A dividend for the year ended December 31, 2022, of \mathbb{W} 600 per share, amounting to total dividends of \mathbb{W} 7,207 million, is to be proposed at the annual general meeting on March 29, 2023.

28. Revenue and cost of sales from contracts with customers

Set out below is the disaggregation of the Group's revenue from contracts with customers for the years ended December 31, 2022 and 2021 (Korean won in millions):

	2022			2021
Type of goods or service:				
Merchandise sales	₩	5,898,083	₩	3,589,552
Product sales		72,668		58,098
Commissions		152,394		130,569
Resource development		3,824		4,279
	₩	6,126,969	₩	3,782,498
Geographical markets:				
Republic of Korea	₩	715,089	₩	505,354
United States		1,527,788		966,204
Asia		2,865,823		1,599,669
Europe		724,559		485,605
Other		293,710		225,666
	₩	6,126,969	₩	3,782,498
Timing of revenue recognition:				
Goods and services transferred at a point in time	₩	5,885,040	₩	3,656,349
Goods and services transferred over time		241,929		126,149
	₩	6,126,969	₩	3,782,498

Details of cost of sales for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022			2021
Cost of merchandise sales	₩	5,759,679	₩	3,504,558
Cost of product sales		67,969		50,904
Cost of commissions		137,046		112,994
Cost of resource development		3,556		2,926
	₩	5,968,250	₩	3,671,382

There are no external customers over 10% of the portion of the Group's total sales.

29. Expenses by nature

Expenses by nature included in the cost of sales, selling and administrative expenses, and other expenses in the consolidated statement of profit or loss for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Changes in inventories	₩	5,660,634	₩	3,358,827
Wages and salaries		49,163		40,487
Employee benefits		5,218		4,626
Depreciation		6,136		5,679
Amortization		548		415
Others		338,443		337,394
	₩	6,060,142	₩	3,747,428

(*) The amount is sum of cost of sales and selling and administrative expenses.

30. Selling and administrative expenses

Details of selling and administrative expenses for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022		2021
Wages and salaries	₩	46,704	₩	37,835
Retirement benefits		2,457		2,360
Employee benefits		5,161		4,624
Travel expenses		3,040		911
Taxes and dues		1,428		1,305
Entertainment expenses		2,955		1,835
Overseas branch expenses (*)		6,298		5,070
Rental expenses		851		654
Service fees		9,319		7,378
Computer system expenses		1,448		1,570
Depreciation		4,842		4,518
Amortization		490		372
Bad debt expenses		872		2,948
Others		6,027		4,665
	₩	91,892	₩	76,045

(*) Among overseas branch expenses, the amount of ₩ 118 million presents retirement benefits for the year ended December 31, 2022 (2021: ₩ 84 million).

31. Other income and expense

Details of other income for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022	2021
Gain on foreign currency transaction	₩	91,456	₩ 28,933
Gain on foreign currency translation		12,451	7,974
Dividend income		13,763	7,993
Gain on transaction of derivatives		42,096	11,689
Gain on valuation of derivatives		5,417	2,031
Gain on disposal of property, plant and equipment		101	1
Reversal of provision		439	1,866
Reversal of other bad debt expense		138	176
Gain on disposal of financial assets at FVPL		1,896	-
Gain on valuation of financial assets at FVPL		-	6
Gain on valuation of investment properties		3,239	1,657
Gain on disposal of associates		67	-
Other		36,434	22,944
	₩	207,497	₩ 85,270

Details of other expense for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022			2021
Loss on foreign currency transaction	₩	100,542	₩	32,472
Loss on foreign currency translation		6,657		4,592
Contributions		597		63
Loss on disposal of property, plant and equipment		10		-
Loss on disposal of intangible assets		-		44
Loss on transaction of derivatives		36,031		12,219
Loss on valuation of derivatives		6,607		1,540
Loss on disposal of trade receivables		10,226		1,768
Reversal of provision		757		169
Other bad debt expense		24,152		-
Other		14,288		13,544
	₩	199,867	₩	66,411

32. Finance income and costs

Details of finance income for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	20	22		2021
Gain on foreign currency transaction	₩	57,478	₩	22,547
Gain on foreign currency translation		1,104		1,083
Interest income		5,381		2,212
	₩	63,963	₩	25,842

Details of finance costs for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	202	22		2021
Loss on foreign currency transaction	₩	53,569	₩	16,765
Loss on foreign currency translation		3,966		987
Interest expense		19,650		13,067
	₩	77,185	₩	30,819

33. Earnings per share ("EPS")

The following table reflects the income and share data used in the basic EPS computations for the years ended December 31, 2022 and 2021:

		2022		2021
Profit attributable to ordinary owners of the parent:	₩	78,715,077,815	₩	37,789,612,149
Weighted average number of common shares for basic EPS		12,010,966		12,010,966
Basic EPS	₩	6,554	₩	3,146

The Group did not issue any potential common shares. Therefore, basic earnings per share is identical to diluted earnings per share.

Weighted average number of common shares outstanding for the years ended December 31, 2022 and 2021, is computed as follows:

	2022	2021
Common shares outstanding accumulated	4,384,002,590	4,384,002,590
Days	365	365
Weighted average number of common shares	12,010,966	12,010,966

34. Cash generated from operations

Reconciliation between profit for the year and net cash inflow (outflow) from operating activities for the years ended December 31, 2022 and 2021 is as follows (Korean won in millions):

		2022	2021
Profit for the year	₩	78,686 ₩	38,006
Adjustments:		17,929	19,483
Interest income		(5,381)	(2,212)
Interest expense		19,650	13,067
Income tax expense		11,851	18,215
Dividend income		(13,763)	(7,993)
Depreciation		6,136	5,679
Amortization		548	415
Retirement benefits		2,438	2,363
Bad debt expense		872	2,948
Loss (gain) on valuation of derivatives		1,190	(491)
Gain on valuation of financial assets at FVPL		(1,896)	(6)
Loss on foreign currency translation		(2,932)	(3,478)
(Reversal of) Other bad debts expense		24,014	(176)
Loss on disposal of trade receivables		10,226	1,768
Share of profit of joint ventures and associates		(29,302)	(7,269)
Loss on disposal of property, plant and equipment		(91)	(1)
Gain on disposal of intangible assets		-	44
(Reversal of) Loss on valuation of inventories		(1,084)	332
Inclusion to (reversal of) provisions		<u></u> 318	(1,697)
Gain on valuation of investment properties		(5,000)	(1,657)
Gain on disposal of associates		(67)	-
Other		202	(368)
Changes in operating assets and liabilities:		268,451	(397,756)
Decrease (increase) in trade receivables		124,970	(355,416)
Increase in inventories		(79,027)	(133,940)
Increase in derivative financial assets		(103)	-
Increase in other current receivables		(2,195)	(5,559)
Decrease (increase) in other current assets		(5,881)	4,401
Increase in other non-current receivables		(999)	(128)
Decrease in other non-current assets		1,130	1,232
Increase in trade payables		181,844	81,634
Decrease (increase) in other payables		(20,257)	4,292
Increase in derivative financial liabilities		-	486
Increase in advances from customers		73,822	12,495
Increase (decrease) in other current liabilities		3,436	(540)
Increase in other non-current liabilities		1,761	343
Retirement benefits paid		(145)	(266)
Transfer from (to) affiliates		(51)	(190)
Contributions to plan assets		(6,396)	(4,045)
Decrease in provisions		(2,516)	(1,928)
Other		(942)	(627)
	₩	365,066 ₩	(340,267)

34. Cash generated from operations (cont'd)

Significant non-cash transactions for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

		2022		2021
Increase in right-of-use assets and lease liabilities	₩	2,761	₩	1,894
Valuation on financial assets at FVOCI		3,230		3,757
Changes in joint ventures and associate from share of other				
comprehensive income of joint ventures and associates		5,597		11,952
Transfer from construction-in-progress		-		-
Transfer of intangible assets and investment properties to				
property, plant and equipment		-		9,155

Changes in liabilities arising from financing activities for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

						2022				
				Cash flow from		Discount on		Exchange		
		Jan. 1		financing activities		bonds		differences, etc.		Dec. 31
Borrowings	₩	789,364	₩	(178,802)	₩	-	₩	3,337	₩	613,899
Debentures		129,676		(30,000)		174		-		99,850
Lease liabilities		9,804		(4,399)		-		2,720		8,125
	₩	928,844	₩	(213,201)	₩	174	₩	6,057	₩	721,874
						2021				
				Cash flow from		Discount on		Exchange		
		Jan. 1		financing activities		bonds		differences, etc.		Dec. 31
Borrowings	₩	488,706	₩	297,242	₩	-	₩	3,416	₩	789,364
Debentures		109,687		19,792		197		-		129,676
Lease liabilities		11,695		(4,224)		-		2,333		9,804
	₩	610,088	₩	312,810	₩	197	₩	5,749	₩	928,844

35. Commitments and contingencies

As of December 31, 2022, Group has provided the guarantees of USD 1,610 thousand to financial institutions for local banking transactions of joint ventures and associates.

The Group has provided nine (9) blank promissory notes as collaterals for the borrowings in relation to the investment in resources development project as of December 31, 2022.

As of December 31, 2022, Group is involved in two (2) lawsuit as a defendant with litigation fee of USD 3,030 thousand. Provision of \mathbb{W} 990 million which is expected to probably pay has been made in these financial statements.

Hyundai Corporation Holdings Co., Ltd., a company with significant influence over the Group, has been involved in a lawsuit as a defendant in the Brazil court related to the product supply contract with legal proceeding of BRL 14,575 thousand. In connection with the lawsuit, the Group provides joint guarantees.

Commitments for trade financial transactions with Korea Exchange Bank and others as of December 31, 2022, are as follows (Korean won in millions and USD in thousand):

	Currency	Limits (*1)	Used amount
D/A, D/P (*2)	USD	556,541	337,754
L/C and others	USD	679,830	557,759
Bonds and others	USD	121,048	65,939
Real estate mortgage loan	USD	4,501	4,501
Real estate mortgage loan	KRW	206,000	184,000
Total	USD	1,361,920	965,953
	KRW	206,000	184,000

(*1) It includes comprehensive limits.

(*2) It includes USD 27,009 thousand used for disposal of D/A, D/P trade receivables without recourse.

As of December 31, 2022 Company is provided with payment guarantees from Seoul Guarantee Insurance Company for up to $\frac{1}{2}$ 56 million related to deposits in courts, liscensing, performance guarantees and others.

The bond contract of the unguaranteed public offering debenture issued by the Group includes conditions of i) debt-to-equity ratio less than 550%, ii) a collateral limit within 250% of equity capital (based on consolidated financial statements), and iii) the restriction in disposal of asset, up to 50% from the annual total assets. If the corresponding rules are violated, the payment may be accerlerated (see Note 22).

In accordance with an arrangement with HYUNDAI YEMEN LNG COMPANY LIMITED, the Group has an obligation to provide loans for up to USD 42,000 thousand if i) an obligation occurs for HYUNDAI YEMEN LNG COMPANY LIMITED related to Yemen LNG project or, ii) upon request by HYUNDAI YEMEN LNG COMPANY LIMITED in accordance with a resolution of the Board of Directors for operating funds.

36. Related party transactions

Details of associates and other related parties that have sales and other transactions with the Group or have outstanding balances as of December 31, 2022 and 2021 are as follows:

Company name

Entities with significant influence over the Company	Hyundai Corporation Holdings Co., Ltd.
Joint venture and associates	KOREA LNG LIMITED
	HYUNDAI YEMEN LNG COMPANY LIMITED
	PT HD INIT.DEVE.
	KAPSTEX VINA., JSC
	INTERGIS BUSAN NEWPORT CENTER CO., LTD.
	ELIAS AUTO INDIA PRIVATE LIMITED
	H&DE Co., Ltd.
	HY AUTO SOLUTION LLC Aeonus Co., Ltd.
	KCA ESG No.1 Private Equity Investment Co., Ltd.
	Infinite Marine Connect Co., Ltd.
	SUGIHARA HYUNDAI AUTOMOTIVE
Other related parties	HYUNDAI C SQUARE CO., LTD.

Significant transactions with related parties for years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022				2021			
	Company name	Sa	les (*1)	Purch	nases (*2)	Sal	es (*1)	Purch	nases (*2)
Entities with significant influence	e Hyundai Corporation Holdings Co., Ltd.	₩	1,915	₩	4,644	₩	824	₩	2,192
over the Company	(*3)								
Joint venture and associates	HYUNDAI YEMEN LNG COMPANY								
	LIMITED		37		-		739		-
	KAPSTEX VINA., JSC		13,592		2,291		14,088		845
	H&DE Co., Ltd.		-		4		78		80
	ELIAS AUTO INDIA PVT. LTD		17		-		-		-
	INTERGIS BUSAN NEWPORT CENTER CO., LTD.		-		-		21		-
	HY AUTO SOLUTION LLC		229		-		8,241		-
Other related parties	HYUNDAI C SQUARE CO., LTD. (*4)		44		179		110		-
	HYUNDAI CNS CO., LTD		-		-		-		32
		₩	15,834	₩	7,118	₩	24,101	₩	3,149

(*1) It includes merchandise sales, commission income, and other revenues.

(*2) It includes purchase of goods and services.

(*3) Finance lease receivables and interest income received from the sub lease contract, are \mathbb{W} 393 million and \mathbb{W} 23 million, respectively, which are excluded from the above transaction.

(*4) Finance lease receivables and interest income received from the sub lease contract are ₩ 16 million and ₩ 1 million, respectively, which are excluded from the above transaction.

Significant receivables and payables with related parties as of December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022			2021				
		Rec	eivables	P	ayables	Re	ceivables	Pa	yables
	Company name		(*1)		(*2)		(*1)		(*2)
Entities with significant	Hyundai Corporation Holdings Co.,								
influence over the Company	Ltd.	₩	826	₩	1,575	₩	1,994	₩	4,348
Joint venture and associates	HYUNDAI YEMEN LNG COMPANY								
	LIMITED		12,006		-		10,519		-
	KAPSTEX VINA., JSC		1,118		-		1,159		-
	H&DE Co., Ltd.		-		-		-		80
	ELIAS AUTO INDIA PVT. LTD		27		-		-		-
	HY AUTO SOLUTION LLC		877		-		1,465		-
Other related parties	HYUNDAI C SQUARE CO., LTD.		382		3		445		-
	HYUNDAI CNS CO., LTD		-		-		-		6
		₩	15,236	₩	1,578	₩	15,582	₩	4,434

(*1) It includes trade receivables, other current receivables and other non-current assets, etc.

(*2) It includes trade payables, other payables, advances from customers, other current liabilities, etc.

36. Related party transactions (cont'd)

Fund transactions with related parties for years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

					2022			
			Loan	receivables a			Dividends	and etc.
		Jan. 1	Increase	Recall	Foreign currency translation	Dec. 31	Receipts	Payments
Hyundai Corporation Holdings Co.,		- Juli 1		rtooan			₩	111
Ltd.	Dividend	₩ -	₩ -	₩ -	₩ -	₩ -		^W 1,729
PT HD INTI. DEVE	Dividend	-	-	-	-	-	290	-
HYUNDAI YEMEN LNG COMPANY								
LIMITED	Loans	23,701	618	-	1,491	25,810	-	-
	Investment in							
	resource							
	development	19,287	2,268	-	1,275	22,830	-	-
KOREA LNG LIMITED	Dividend	-	-	-	-	-	21,305	-
KAPSTEX VINA., JSC	Dividend	-	-	-	-	-	262	-
H&DE Co., Ltd.	Loans	1,700	-	-	-	1,700	-	-
INTERGIS BUSAN NEWPORT								
CENTER CO., LTD.	Dividend	-	-	-	-	-	16	-
HY AUTO SOLUTION LLC	Loans	2,727	-	-	188	2,915	-	-
KCA New Growth Sector No.2		5,000	_	(5,000)	_	_	_	
Private Equity Investment Co., Ltd.	Capital Injection	0,000						
Aeonus Co., Ltd. KCA ESG No.1 Private Equity	Capital Injection	-	751	-	-	751	-	-
Investment Co., Ltd.	Capital Injection	-	7,500	-	-	7,500	-	-
Infinite Marine Connect Co., Ltd.	Capital Injection	-	100	-	-	100	-	-
SUGIHARA HYUNDAI	. ,							
AUTOMOTIVE	Capital Injection	-	651	-	-	651	-	-
		₩ 52,415	₩ 11,888	₩ (5,000)	₩ 2,954	₩ 62,257	₩ 21,873	₩ 1,729
					2021			
			Dividends and etc.					
				eceivables a	Foreign			
		Jan. 1	Increase	Recall	currency translation	Dec. 31	Receipts	Payments
Hyundai Corporation Holdings Co.,							₩	₩ 1,537

Hyundai Corporation Holdings Co.,							₩	₩ 1,537
Ltd.	Dividend	₩	₩	₩ -	₩	₩		1,001
PT HD INTI. DEVE	Dividend	-	-	-	-	-	424	-
HYUNDAI YEMEN LNG COMPANY								
LIMITED	Loans	21,289	652	-	1,760	23,701	-	-
	Investment in							
	resource							
	development	15,624	2,194	-	1,469	19,287	-	-
KOREA LNG LIMITED	Dividend	-	-	-	· -	-	9,180	-
KAPSTEX VINA., JSC	Dividend	-	-	-	-	-	159	-
INTERGIS BUSAN NEWPORT								
CENTER CO., LTD.	Dividend	-	-	-	-	-	21	-
Multi-Asset Eco-Friendly Ship								
Equipment Private Equity Trust	Capital Injection	11,328	-	(11,328)	-	-	-	-
	Dividend	-	-	-	-	-	218	-
H&DE Co., Ltd.	Loans	1,700	-	-	-	1,700	-	-
HY AUTO SOLUTION LLC	Capital Injection	-	7,102	-	-	7,102	-	-
	Loans	-	2,707	-	20	2,727	-	-
KCA New Growth Sector No.2								
Private Equity Investment Co., Ltd.	Capital Injection	-	5,000	-	-	5,000	-	-
,		₩ 49,941	₩ 17,655	₩ (11,328)	₩ 3,249		₩ 10,002	₩ 1,537
		11 49,941	,, 17,055	,, (11,320)	11 3,249	,, 39,317	,, 10,002	1,007

Details of the loss allowance recognized by the Group for receivables to the related parties for the year ended December 31, 2022 are as follows (Korean won in millions):

		Jan. 1		I	Provision	Reversal		D	ec. 31
HYUNDAI YEMEN LNG COMPANY LIMITED	Investment in resource development	₩	- 3	₩	8,339	₩	-	₩	8,339
	Loans		-		10,331		-		10,331
	Accrued revenue		-		4,781		-		4,781
H&DE Co., Ltd.	Loans		-		561		-		561
		₩	- 3	₩	24,012	₩	-	₩	24,012

36. Related party transactions (cont'd)

The Group provides payment guarantees to overseas subsidiaries as follows (US Dollar in thousands):

	Financial institution		Amount providing
H&DE Co., Ltd.	Korea Development Bank	\$	1,610

The Group provides a cash deficiency support agreement to HYUNDAI YEMEN LNG COMPANY LIMITED for limit up to USD 42,000 thousand (see Note 35).

The Group provides joint payment guarantees for the related party, Hyundai Corporation Holdings Co., Ltd, in relation to a lawsuit (see Note 35).

The compensation of key management personnel of the Group for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

		2022	2021		
Wages and salaries	W	4,911	₩	4,394	
Retirement benefits		864		745	
	\overline{W}	5,775	₩	5,139	

37. Uncertainty of the impact of the Ukraine incident

The ongoing armed conflicts in Ukraine area which began in February 2022 and international sanctions imposed against Russia may impact entities, entities doing business with Ukraine or Russia as well as entities exposed directly or indirectly to industries or economy of Ukraine or Russia. The events described above represent non-adjusting events after the reporting period. The Group has a joint venture, HY AUTO SOLUTION, in Russia as of December 31, 2022. The Group identified indications of impairment for HY AUTO SOLUTION and recognized impairment loss of W 848 million (including share of loss of associates and joint ventures under equity method) for the year ended December 31, 2022.