CONSOLIDATED FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 ATTACHMENT: INDEPENDENT AUDITOR'S REPORT

HANSOL TECHNICS CO., LTD. AND ITS SUBSIDIARIES

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Independent auditor's report

The Shareholders and Board of Directors Hansol Technics Co., Ltd.

Opinion

We have audited the consolidated financial statements of Hansol Technics Co., Ltd. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2021 and 2020, and the consolidated statements of comprehensive income, consolidated statements of changes in shareholders' equity and consolidated statements of cash flows, for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2021 and 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("KIFRS").

Basis for Opinion

We conducted our audit in accordance with Korean Auditing Standards ("KGAAS"). 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. For each matter below, our description of how our audit addressed the matter is provided in that context.

Sales Cutoff

The Group's sales are one of the Group's key financial performance evaluation indicators. As described in Note 28 to the consolidated financial statements, the Group recognizes significant amount of sales from export transactions. Export sales require management's judgment as to when to recognize revenue, as various performance obligations exist depending on contracts and export conditions with customers and the point in time at which a customer obtains control of each product or service is different. Accordingly, we identified the revenue cutoff as a key audit matter because it is exposed to the risk of overestimation of profits due to errors in judgment or intention. The primary procedures we conducted to address this key audit matter are as follows:

- Perform analytical procedures such as comparing performance with historical periods and analyzing trends in monthly performance

- Perform detailed substantive procedure using sampling method for the export transactions that occurred during the current period

- Review the proof documents with respect to the export transactions that occurred immediately before and after the end of the reporting period (December 31, 2021) and assess whether sales are recorded in the proper period.

- Inquire whether there were any non-recurring export transactions or any transactions with unusual or abnormal terms or conditions



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 the 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 KGAAS 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 KGAAS, 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, including those related to independence, and communicate with them all 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 Sun Gu Kang.

Einst Joung Han Joung

March 15, 2022

This audit report is effective as of March 15, 2022, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditor's report 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.

CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

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

Park, Hyun Soon

Chief Executive Officer HANSOL TECHNICS CO., LTD.

Main Office Address: 100, Eulji-ro, Jung-gu, Seoul 02-3287-7903

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AS OF DECEMBER 31, 2021 AND 2020

			Korean	won
	Notes		2021	2020
ASSETS:				
Cash and cash equivalents	34	₩	86,934,815,560	₩ 113,144,221,110
Short-term financial instruments	5		201,314,400	2,020,724,000
Trade receivables and other receivables	6		179,377,540,690	115,497,083,820
Inventories	7		153,063,524,153	66,928,548,234
Income tax refund receivable			2,470,794	13,908,203
Other current financial assets	13,36		2,076,109,873	286,108,026
Other current assets	14		46,340,111,179	13,237,714,670
Current assets			467,995,886,649	311,128,308,063
Other long-term financial instruments	5,36		922,011,554	802,011,554
Available-for-sale (AFS) financial assets	8,36		12,150,000	12,255,000
Financial assets measured at fair value through	9		1,376,135,280	950,000,000
profit or loss				
Property, plant and equipment	10		249,899,292,893	227,773,350,035
Intangible assets	11		36,197,441,947	37,470,083,880
Right-of-use assets	12		17,650,691,163	3,491,071,302
Deferred income tax assets	33		8,669,927,924	7,982,443,160
Other non-current financial assets	13,36		5,632,125,510	649,879,059
Other non-current assets	14		314,689,872	1,132,983,061
Non-current assets			320,674,466,143	280,264,077,051
Total assets		₩	788,670,352,792	₩ 591,392,385,114
LIABILITIES:				
Trade payables and other current payables	15,36	₩	172,354,725,861	₩ 114,985,741,508
Short-term borrowings	16,21,36		114,217,392,428	68,478,457,053
Short-term debentures	16,36		-	39,000,000,000
Current portion of long-term debt	16,36		1,483,547,500	682,361,250
Current portion of long-term debentures	16,36		29,985,582,921	-
Income tax payable			712,630,303	1,013,977,156
Short-term provisions	18		2,420,368,127	2,681,893,118
Other current financial liabilities	12,19,36		634,803,368	753,537,119
Other current liabilities	20		11,461,295,188	6,671,217,950
Current liabilities			333,270,345,696	234,267,185,154
Trade payables and other current payables	15,36		1,920,406,079	1,877,213,526
Long-term borrowings	16,36		47,325,875,291	9,560,557,750
Long-term debentures	16,36		84,438,396,959	29,928,804,196
Net defined benefit liabilities	17		32,754,378,977	30,093,953,268
Other current financial liabilities	12,19,36		7,155,956,326	873,275,264
Long-term provisions	18		2,714,548,343	4,469,260,528
Deferred tax liabilities	33		814,192,773	1,219,165,529
Non-current liabilities			177,123,754,748	78,022,230,061
Total liabilities		₩	510,394,100,444	₩ 312,289,415,215

(Continued)

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AS OF DECEMBER 31, 2021 AND 2020 (CONT'D)

			Korean	won	
	Notes		2021		2020
EQUITY:					
Issued capital	22	₩	160,549,390,000	₩	160,549,390,000
Share premium	23		54,963,416,153		54,661,148,039
Retained earnings	24		59,385,028,268		69,872,444,263
Other components of equity	25		3,094,250,428		(6,278,757,222)
Equity attributable to the owners of the parent			277,992,084,849		278,804,225,080
Non-controlling interests			284,167,499		298,744,819
Total equity			278,276,252,348		279,102,969,899
Total liabilities and equity		₩	788,670,352,792	₩	591,392,385,114

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

		Korea	n won
-	Notes	2021	2020
REVENUE	4,28,37	₩ 1,490,620,987,769	₩ 1,194,892,147,184
COST OF SALES	29	1,387,169,505,685	1,043,905,136,527
GROSS PROFIT		103,451,482,084	150,987,010,657
Selling and administrative expenses	4,29,30	107,707,352,276	118,526,823,002
OPERATING INCOME (LOSS)	4	(4,255,870,192)	32,460,187,655
Financial income	32	24,449,962,357	28,970,960,136
Financial cost	32	28,596,018,169	29,995,464,169
Other non-operating income	31	2,810,431,886	1,571,121,315
Other non-operating expenses	4,31	979,070,750	7,649,560,963
INCOME (LOSS) BEFORE INCOME TAX EXPENSE		(6,570,564,868)	25,357,243,974
Income tax expense(benefit)	33	2,775,285,277	(828,574,059)
NET INCOME (LOSS)		₩ (9,345,850,145)	₩ 26,185,818,033
OTHER COMPREHENSIVE INCOME (LOSS)		₩ 8,216,864,480	₩ (9,226,657,570)
Items not subsequently reclassified to net income: Remeasurements of net defined benefit liabilities, net of income tax		(1,157,179,051)	1,053,964,267
Items subsequently reclassified to net income:			
Exchange differences on translating foreign operations, net of income tax		₩ 9,374,043,531	₩ (10,280,621,837)
TOTAL COMPREHENSIVE INCOME (LOSS)		₩ (1,128,985,665)	₩ 16,959,160,463
(Continued)			

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020 (CONT'D)

			Korea	n woi	1
	Notes		2021		2020
Net income (loss) attributable to:					
Owners of the parent		₩	(9,330,236,944)	₩	26,212,356,903
Non-controlling interests			(15,613,201)		(26,538,870)
Total comprehensive income (loss) attributable to:					
Owners of the parent			(1,114,408,345)		16,975,631,573
Non-controlling interests			(14,577,320)		(16,471,110)
Earnings per share:	26				
Basic earnings(loss) per share		₩	(297)	₩	834
Diluted earnings(loss) per share		₩	(297)	₩	834

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

							Other	Non-	
		Issued		Share	ç		components	controlling	Ē
		capital		premium	Reta	Retained earnings		interests	Total
January 1, 2020	AA	160,549,390,000	AA	56,106,299,688 ¥	AA	40,859,426,528 W	4,011,932,375 W	315,215,929 W	261,842,264,520
Total comprehensive income :									
Net income				ı		26,212,356,903		(26,538,870)	26,185,818,033
Exchange differences on translating foreign operations, net	t								
of income tax		ı					(10, 290, 689, 597)	10,067,760	(10,280,621,837)
Remeasurements of defined benefit plans, net of income									
tax						1,053,964,267			1,053,964,267
Transactions with owners of the Company, recognized									
directly in equity:									
Deficit recovery				(1,746,696,565)		1,746,696,565			
Stock options				301,544,916		1	ı		301,544,916
December 31, 2020	AA	160,549,390,000	AA	54,661,148,039 ¥	AA	69,872,444,263 W	(6,278,757,222) W	298,744,819 W	279,102,969,899
							Other	Non-	
		Issued		Share			components	controlling	
		capital		premium	Reta	Retained earnings	of equity	interests	Total
January 1, 2021	AA	160,549,390,000	A	54,661,148,039	A	69,872,444,263 W	(6,278,757,222) W	298,744,819 W	279,102,969,899
Total comprehensive income :									
Net loss						(9, 330, 236, 944)		(15,613,201)	(9, 345, 850, 145)
Exchange differences on translating foreign operations, net	t								
of income tax				•			9,373,007,650	1,035,881	9,374,043,531
Remeasurements of defined benefit plans, net of income									
tax						(1,157,179,051)	ı		(1,157,179,051)
Transactions with owners of the Company, recognized									
directly in equity:									
Stock options		1		302,268,114		T	T	T	302,268,114
December 31, 2021	A	160,549,390,000	A	54,963,416,153	AA	59,385,028,268 W	3,094,250,428 W	284,167,499 W	278,276,252,348

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

			Korea	ın wo	on
	Notes		2021		2020
CASH FLOWS FROM OPERATING ACTIVITIES:					
Net income (loss)		₩ (9	,345,850,145)	₩	26,185,818,033
Adjustments	34	39	9,340,377,072		52,730,523,540
Changes in net operating assets and liabilities	34		,846,682,788)		(29,704,505,507)
Interest received		X ·	457,290,650		593,185,174
Interest paid		(3	,802,975,962)		(3,885,309,325)
Income taxes paid			,030,308,163)		(3,914,662,676)
Net cash flows provided by (used in) operating activities			,228,149,336)		42,005,049,239
CASH FLOWS FROM INVESTING ACTIVITIES:					
Proceeds from disposal of financial instruments		/	2,000,000,000		-
Purchase of short-term financial instruments			-		(2,000,000,000)
Increase in other financial assets		(3	,986,672,596)		(120,452,640)
Proceeds from disposal of available-for-sale financial assets		,	105,000		-
Acquisition of financial assets measured at fair value through profit or loss			(426,135,280)		(950,000,000)
Increase in advance payments		(32	,600,000,000)		_
Decrease in asset held for sale		(32			1,065,000,000
Proceeds from disposal of property, plant and equipment		14	5,024,012,605		371,565,574
Acquisition of property, plant and equipment			,196,344,289)		(34,236,004,725)
Proceeds from disposal of intangible assets		(72	58,960,350		180,000,000
Acquisition of intangible assets			(353,291,393)		(808,350,437)
Proceeds from other assets			105,971,000		143,372,829
Increase in other assets		(2	,840,481,000)		(290,521,000)
Net cash flows used in investing activities			,213,875,603)		(36,645,390,399)
-			, <u>213,075,005</u>		<u>(30,0+3,370,377)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:					
Proceeds from short-term borrowings			4,969,541,212		30,561,753,731
Payment of short-term borrowings		(263	,566,738,576)		-
Issue of short-term debt			-		39,000,000,000
Issue of long-term debt			4,378,980,000		29,916,000,000
Payment of short-term debentures			,000,000,000)		(35,000,000,000)
Proceeds from long-term borrowings		3'	7,993,221,302		10,852,752,000
Payment of current portion of long-term debt			-		(43,000,000,000)
Payment of lease			<u>(637,055,472</u>)		(512,455,510)
Net cash flows provided by financing activities		124	4,137,948,466		31,818,050,221
NET INCREASE(DECREASE) IN CASH AND CASH QUIVALENTS		(27	,304,076,473)		37,177,709,061
CASH AND CASH EQUIVALENTS AT JANUARY 1		11;	3,144,221,110		77,863,536,191
NET FOREGIN EXCHANGE DIFFERENCES			1,094,670,923		(1,897,024,142)
CASH AND CASH EQUIVALENTS AT DECEMBER 31		₩ 8	<u>6,934,815,560</u>	₩	113,144,221,110

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

1. GENERAL

(1) Outline of the Group

Hansol Technics Co., Ltd. (the "Company") is a controlling company. The Company, which was incorporated on August 20, 1966, is engaged in the production and selling of power modules, LED ingots and wafers, solar modules and others. The Company is headquartered at Eulji-ro, Jung-gu, Seoul, and its manufacturing facilities are located at Jincheon-gun and Cheongju-si (Ochang), North Chungcheong Province, Republic of Korea. The Company listed its stocks on the Korea Stock Exchange on July 6, 1988. The Company's name changed from Hansol LCD Co., Ltd. to Hansol Technics Co., Ltd. in accordance with the resolution of the extraordinary general meeting of shareholders held on December 10, 2010.

As of December 31, 2021, the share capital of the Company amounts to W160,549,390 thousand, and the Company issued 32,109,878 shares of common stock with a par value of W5,000 per share to the following shareholders:

	Number of shares	Percentage of ownership
Hansol Holdings Co., Ltd.	6,506,088	20.26 %
Treasury shares	692,361	2.16 %
Others	24,911,429	77.58 %
Total	32,109,878	100.00 %

(2) Subsidiaries

1) Subsidiaries as of December 31, 2021 and 2020, are as follows:

				Percentage o	f ownership
		Closing		December 31,	December 31,
	Location	date	Main business	2021	2020
			Electronic		
Hansol Technics (Thailand) Co., Ltd.	Thailand	December 31	components	100.00%	100.00%
			manufacturing		
			Sale of		
Hansol Technics Europe s.r.o.	Slovakia	December 31	electronic	84.20%	84.20%
			components		
			Electronic		
Hansol Electronics Vietnam Co., Ltd.	Vietnam	December 31	components	100.00%	100.00%
			manufacturing		
Hansol Technics America LLC	USA	December 31	Sale of solar	100.00%	100.00%
Hansol Technics America LLC	USA	December 51	products	100.00%	100.00%
Hansol Precision Materials (KunShan)			Electronic		
Co., Ltd	China	December 31	components	100.00%	100.00%
CO., Liu			manufacturing		
HanselFlastronicsVietnem Hashiminheity			Electronic		
HansolElectronicsVietnam Hochiminhcity	Vietnam	December 31	components	75.00%	100.00%
Co.,Ltd.(*)			manufacturing		

1. GENERAL (CONT'D)

(2) Subsidiaries (cont'd)

(*) The stake changed as Hansol Electronics Virtnam Co.,Ltd, a subsidiary of the current term, conducted a capital increase to Hansol Electronics Vietnam Hochiminhcity Co.,Ltd. The parent company has a 75% stake and Hansol Electronics Vietnam Co.,Ltd has a 25% stake.

2) Summary of financial information of subsidiaries as of December 31, 2021 and 2020, are as follows:

				Kore	an w	on (In thousand	ls)			
				Ι	Decen	nber 31, 2021				
Company		Assets	Ι	iabilities	Sales	N	et income (loss)		Total omprehensive income(loss)	
Hansol Technics (Thailand) Co., Ltd.	₩	130,555,747	₩	96,112,420	₩	389,541,895	₩	(6,563,001)	₩	(6,563,001)
Hansol Technics Europe s.r.o.		1,814,613		16,086		-		(98,818)		(98,818)
Hansol Electronics Vietnam Co., Ltd.		114,165,690		38,697,133		321,949,917		14,178,809		14,178,809
Hansol Technics America LLC		107,835		206,767		-		(9,413)		(9,413)
Hansol Precision Materials (KunShan) Co., Ltd.		14,816,758		11,922,101		21,778,583		1,105,417		1,105,417
Hansol Electronics VietnamHochiminh City Co.,Ltd		159,369,626		158,034,872		454,405,437		(2,731,193)		(2,731,193)

		Korean won (In thousands)								
-				Ι	Decen	nber 31, 2020				
<u>Company</u>		Assets	Ι	iabilities		Sales		income loss)	com	Total prehensive come(loss)
Hansol Technics (Thailand) Co., Ltd.	₩	104,765,080	₩	62,914,147	₩	394,635,293	₩	4,208,458	₩	4,208,458
Hansol Technics Europe s.r.o.		1,908,069		17,280		-		(167,968)		(167,968)
Hansol Electronics Vietnam Co., Ltd.		103,070,156		26,514,340		308,285,512		15,606,325		15,606,325
Hansol Technics America LLC		107,545		189,392		-		(22,097)		(22,097)
Hansol Precision Materials (KunShan) Co., Ltd.		12,540,986		10,986,457		12,378,883		1,151,371		1,151,371
Hansol Electronics VietnamHochiminh City Co.,Ltd		43,825,161		42,213,286		122,061,863		(5,316,860)		(5,316,860)

1. GENERAL (CONT'D)

(2) Subsidiaries (cont'd)

3) Summary of cash flows of subsidiaries is as follows:

			Korean won (In thousands)		
			December	31, 2021		
	Hansol Technics (Thailand) Co., Ltd.	Hansol Technics Europe s.r.o.	Hansol Electronics Vietnam Co., Ltd.	Hansol Technics America LLC	Hansol Precision Materials (KunShan) Co., Ltd.	Hansol Electronics Vietnam Hochiminh City Co.,Ltd
Cash flows from operating activities	₩ 15,723,198	₩ (73,980)	₩ 15,912,849	₩ (9,024)	₩ (78,742)	₩(46,163,683)
Cash flows used in invest in activities	(18,503,760)	-	(2,663,461)	-	(1,266,780)	(37,079,568)
Cash flows from (used in) financing activities	2,517,379	-	(21,743,980)	-	(141,767)	79,214,111
Net change in cash and cash equivalents	(263,183)	(73,980)	(8,494,592)	(9,024)	(1,487,289)	(4,029,140)
Beginning balance (cash and cash equivalents)	2,151,064	1,814,751	13,605,786	53,145	1,546,295	4,812,043
Effect of foreign exchange rate	(43,888)	6,132	923,441	4,439	104,730	345,172
Ending balance (cash and cash equivalents)	1,843,993	1,746,903	6,034,635	48,560	163,736	1,128,075

-	Korean won (In thousands) December 31, 2020										
-	Hansol Technics (Thailand) Co., Ltd.		Hansol Technics <u>Europe s.r.o.</u>		Hansol Electronics Vietnam Co., Ltd.		Hansol Technics America LLC		Hansol Precision Materials (KunShan) Co., Ltd.		Hansol Electronics Vietnam Hochiminh City Co.,Ltd
Cash flows from operating activities	₩ 1,8	11,746	₩	(76,621)	₩ 19	9,724,676	₩	(128,972)	₩(4,722,20	4)	₩(11,809,190)
Cash flows used in investing activities	(20,269,078)		-			(829,509)	')		(439,79	0)	(5,911,392)
Cash flows from (used in) financing activities	financing activities change in cash and h equivalents 19,284,032 826,700		-	(9	,440,400)		-	6,562,6	57	21,195,606	
Net change in cash and cash equivalents		26,700	(76,621)		9,454,767		(128,972)		1,400,6	63	3,475,024
Beginning balance (cash and cash equivalents) Effect of foreign exchange rate Ending balance (cash and cash equivalents)	1,44	41,089		1,833,267	4	5,199,098		183,095	176,4	64	1,506,127
	(116,725)		58,105		(1,048,079)		(978)		(30,83	2)	(169,109)
	2,151,06		1,814,751		13,605,786		53,145		1,546,2	95	4,812,043

(1) Basis of preparation

The Company and its subsidiaries (the "Group") prepares statutory financial statements in Korean in accordance with Korean International Financial Reporting Standards ("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 principal accounting policies are set out below. Except for the effect of the amendments to KIFRS and new interpretations set out below, the principal accounting policies used to prepare the consolidated financial statements as of and for the year ended December 31, 2021, are consistent with the accounting policies used to prepare the consolidated financial statements as of and for the year ended December 31, 2021.

The consolidated financial statements have been prepared on a historical cost basis, except for investment properties that have been measured at fair value. The consolidated financial statements are presented in Korean won (KRW) and all values are rounded to the nearest thousands, except when otherwise indicated.

(2) 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, 2021. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Amendments to KIFRS 1109 Financial Instruments, KIFRS 1039 Financial Instruments: Recognition and Measurement, KIFRS 1107 Financial Instruments: Disclosure, KIFRS 1104 Insurance Contracts and KIFRS 1116 Lease – Interest Rate Benchmark Reform (Phase 2 amendments)

Regarding the reform of interest rate indicators, exceptions such as adjusting the effective interest rate, not the book amount, when replacing the interest rate index of financial instruments measured by amortized cost, and allowing hedge accounting to continue without interruption. These amendments had no impact on the consolidated financial statements of the Group.

Amendments to KIFRS 1116 Lease - Practical expedient for COVID-19 - Related Rent Concessions

As a practical expedient, a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification. A lessee that makes this election shall account for any change in lease payments resulting from the rent concession the same way it would account for the change applying this Standard if the change were not a lease modification. The amendments do not have a significant impact on the consolidated financial statements.

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. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

KIFRS 1117 Insurance contract

KIFRS 1117 will replace KIFRS 1104 Insurance Contracts that was issued in 2007. All cash flows under the insurance contract are estimated, insurance liabilities are measured using a discount rate reflecting the assumptions and risks at the time of reporting, and profits are recognized as accrual by reflecting the services (insurance coverage) provided to the contractor every fiscal year. In addition, investment factors (cancellation/expiration refund) paid to policyholders regardless of insurance cases are excluded from insurance income, and insurance gains and losses and investment gains and losses are separately marked so that information users can check the source of profits and losses. The standard will be applied from the fiscal year that begins for the first time after January 1, 2023, and companies applying IFRS 9 "financial instruments" are allowed to apply early. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

Amendments to KIFRS 1001 Presentation of Financial Statements - Classification of Liabilities as Current or Noncurrent

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability include the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

Amendments to KIFRS 1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference to the definition of assets and liabilities in the revised Conceptual Framework for Financial Reporting. The amendments added an exception to the recognition of liabilities and contingent liabilities within the scope of KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets, and KIFRS 2121 Levies. The amendments clarified that contingent assets should not be recognized at the acquisition date. The amendments applies to annual reporting periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

Amendments to KIFRS 1016 Property, Plant and Equipment - Proceeds before intended use

The amendments prohibit entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling 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. The amendments applies to annual reporting periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

Amendments to KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets - Onerous Contracts: Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendments applies to annual reporting periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

Amendments KIFRS 1008 Accounting, policies, changes in accountiong estimates and errors – Definition of Accountiong Estimates

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.

Amendments KIFRS 1001 Presentation of Financial Statements - Disclosure of Accounting Policies

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 to KIFRS 1001 are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted. This amendment is not expected to have a significant impact on the Group.

Amendments KIFRS 1012 Income Taxes - Reduction of the scope of the initial recognition exception for deferred tax

The amendments narrowed the scope of the initial recognition exemption so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary difference, thus to resolve accounting diversity in the recognizing of deferred tax assets and liabilities. Paragraphs 15 and 24 (initial recognition exemption of deterred income taxes) of KIFRS 1012 were amended to include an additional condition (3) where a deferred tax asset and liability shall be recognized for a temporary difference that arises on initial recognition of an asset or liability in a single transaction if that transaction give rise to equal amounts of taxable and deductible temporary differences. The amendments are effective for annual reporting periods beginning on or

after January 1, 2023 with earlier adoption permitted. This amendment is not expected to have a significant impact on the Group.

Annual improvements to KIFRS 2018-2020

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(1) of KIFRS 1101 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to KIFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted.

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

The amendments clarify the fees that an entity includes when assessing whether the terms of a new or changed financial liability are substantially different from those of an existing financial liability. These fees include only fees paid or received between creditors and debtors and fees paid or received on behalf of each other by creditors and debtors. The Company shall apply the amendments to financial liabilities that are changed or exchanged after the first annual period of application of the amendments.

The amendment shall be applied for annual periods beginning on or after January 1, 2022. Early application is permitted. The Company will apply the amendments to financial liabilities that are changed or exchanged after annual periods beginning on or after the effective date.

The amendment is not expected to have a significant impact on the Group.

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.

An entity applies the amendment prospectively to fair value measurements on or after the beginning of the first annual reporting period beginning on or after January 1, 2022 with earlier adoption permitted.

The amendments are not expected to have a material impact on the Group.

(3) Basis of Consolidation

The consolidated financial statements incorporate the financial statements of the parent company and entities (including structured entities) controlled by the parent company (and its subsidiaries). Control is achieved where the Group 1) has the power over the investee; 2) is exposed, or has rights, to variable returns from its involvement with the investee; and 3) has the ability to use its power to affect its returns. The Group reassesses 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 listed above.

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the relevant activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- The size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- Potential voting rights held by the Group, other vote holders or other parties;
- Rights arising from other contractual arrangements; and
- Any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time the decisions need to be made, including voting patterns at previous shareholders' meetings.

The results of subsidiaries acquired or disposed of during the year are included in profit or loss from the date the Company gains control until the date when the Company ceases to control the subsidiary. The carrying amount of a non-controlling interest is the amount that is initially recognized and reflects the proportionate share of the non-controlling interest in the capital change after acquisition. Total comprehensive income of the subsidiaries is attributed to the owners of the Company 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 intragroup transactions and related assets and liabilities, income and expenses are eliminated in full on consolidation.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to the owners of the Company.

When the Group loses control of a subsidiary, a gain or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill) and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognized in other comprehensive income and accumulated in equity, the amounts previously recognized in other comprehensive income and accumulated for as if the Company had directly disposed of the relevant assets (i.e., reclassified to profit or loss or transferred directly to retained earnings). The fair value of any investment retained in the former subsidiary at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under KIFRS 1039 – *Financial Instruments: Recognition and Measurement* or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

(4) Business combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are generally recognized in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:

- deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with KIFRS 1012 – Income Taxes and KIFRS 1019 – Employee Benefits, respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or sharebased payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with KIFRS 1102 – Share-based Payment at the acquisition date; and
- assets (or disposal groups) that are classified as held for sale in accordance with KIFRS 1105 Noncurrent Assets Held for Sale and Discontinued Operations are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held equity interest in the acquiree (if any); over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's PHI in the acquiree (if any); the excess is recognized immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at a) fair value or b) at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another KIFRS.

When the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement period adjustments are adjustments that arise from additional information obtained during the 'measurement period' (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates in accordance with KIFRS 1039 – *Financial Instruments: Recognition and Measurement*, or KIFRS 1037 – *Provisions, Contingent Liabilities and Contingent Assets*, as appropriate, with the corresponding gain or loss being recognized in profit or loss.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date and the resulting gain or loss, if any, is recognized in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

(4) Business combinations (cont'd)

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

(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.

(6) Fair value measurement

The Group measures financial instruments such as derivatives, at fair value at each balance sheet date. 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:

- Disclosures for valuation methods, significant estimates and assumptions notes 3,36
- Quantitative disclosures of fair value measurement hierarchy notes 36
- Financial instruments (including those carried at amortized cost) notes 36

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.

(6) Fair value measurement (cont'd)

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.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- 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

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.

(7) Foreign currencies

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.

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

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

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.

Exchange differences are recognized in profit or loss in the period in which they arise, except for:

- exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks
- exchange differences on monetary items receivable from, or payable to, a foreign operation for which settlement is neither planned nor likely to occur (therefore, forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the net investment.

(8) Cash and cash equivalents

Cash and short-term deposits 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. For the purpose of the consolidated statement of cash flows, cash and cash equivalents consist of cash and shortterm deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Group's cash management.

(9) Financial instruments – initial recognition and subsequent measurement

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.

1) Financial assets

- Initial recognition and measurement

Financial assets are classified, at initial recognition, as subsequently measured at amortised 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 or for which the Group has applied the practical expedient are measured at the transaction price determined under KIFRS 1115. Refer to the accounting policies in section (e) Revenue from contracts with customers.

In order for a financial asset to be classified and measured at amortised 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.

- Subsequent measurement

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

- Financial assets at amortised 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
- Financial assets at fair value through profit or loss

- Financial assets at amortised cost (debt instruments)

This category is the most relevant to the Group. The Group measures financial assets at amortised cost if both of the following conditions are met:

• The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows

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

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

(9) Financial instruments - initial recognition and subsequent measurement (cont'd)

- 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 amortised 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.

The Group's debt instruments at fair value through OCI includes investments in quoted debt instruments included under other non-current financial assets.

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: Presentation and are not held for trading. The classification is determined on an instrument-by-instrument basis.

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 elected to classify irrevocably its non-listed equity investments under this category.

- 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 amortised 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 statement of financial position at fair value with net changes in fair value recognized in the statement of profit or loss.

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.

(9) Financial instruments – initial recognition and subsequent measurement (cont'd)

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.

- Impairment of financial assets

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

- Disclosures for significant assumptions
- Debt instruments at fair value through OCI
- Trade receivables, including contract assets

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.

ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

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.

For debt instruments at fair value through OCI, the Group applies the low credit risk simplification. At every reporting date, the Group evaluates whether the debt instrument is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Group reassesses the internal credit rating of the debt instrument. In addition, the Group considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.

(9) Financial instruments - initial recognition and subsequent measurement (cont'd)

The Group's debt instruments at fair value through OCI comprise solely of quoted bonds that are graded in the top investment category (Very Good and Good) by the Good Credit Rating Agency and, therefore, are considered to be low credit risk investments. It is the Group's policy to measure ECLs on such instruments on a 12-month basis. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. The Group uses the ratings from the Good Credit Rating Agency both to determine whether the debt instrument has significantly increased in credit risk and to estimate ECLs.

The Group considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

2) Financial liabilities

- Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, 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 borrowings and payables, net of directly attributable transaction costs.

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

- 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.

- borrowings

This is the category most relevant to the Group. After initial recognition, interest-bearing 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. The EIR amortization is included as finance costs in the statement of profit or loss.

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

- 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 statement of profit or loss.

(9) Financial instruments - initial recognition and subsequent measurement (cont'd)

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.

4) Financial guarantee contracts

Financial guarantee contract (FGC) is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

Financial guarantee contract issued is a financial liability and is initially recorded at its fair value. A FGC is subsequently measured at the higher of:

- The amount recognized as a contingent (assessed in accordance with KIFRS 1109)

- The amount initially recognized less cumulative amortization

5) Derivative financial instruments

The Group enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risk, including foreign exchange forward contracts, interest rate swaps and cross-currency swaps.

Derivatives are initially recognized at fair value at the date the derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately, unless the derivative is designated and effective as a hedging instrument; in such case, the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

A derivative with a positive fair value is recognized as a financial asset; a derivative with a negative fair value is recognized as a financial liability. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realized or settled

- Hedge accounting

The Group designates certain hedging instruments, which include derivatives, embedded derivatives and non-derivatives in respect of foreign currency risk, as either fair value hedges, cash flow hedges or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

- Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognized in the line of the consolidated statements of comprehensive income relating to the hedged item.

(9) Financial instruments – initial recognition and subsequent measurement (cont'd)

Hedge accounting is discontinued when the Group revokes the hedging relationship, when the hedging instrument expires or is sold, terminated or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to profit or loss from that date.

- Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss, and is included in the 'Other gains and losses' line item.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item is recognized in profit or loss in the same line of the consolidated statements of comprehensive income as the recognized hedged item. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial liability.

Hedge accounting is discontinued when the Group revokes the hedging relationship, when the hedging instrument expires or is sold, terminated or exercised, or it no longer qualifies for hedge accounting. Any gain or loss accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

- (10) Financial liabilities and equity instruments
- 1) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement and the definitions of financial liability and an equity instrument.

2) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue, or cancellation of the Company's own equity instruments.

(11) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost of inventories, except for those in in transit, are measured under the weighted-average method [on a first-in, first-out basis] and consists of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognized as an expense (cost of sales) in the period in which the related revenue is recognized. The amount of any write-down of inventories to net realizable value and all losses of inventories is recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, is recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

(12) Non-current assets held for sale

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value, less costs to sell.

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

When the Group is committed to a sale plan involving disposal of an investment, or a portion of an investment, in an associate or joint venture, the investment or the portion of the investment that will be disposed of is classified as held for sale when the criteria described above are met.

(13) Property, plant and equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to their purchase or construction, which includes any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in carrying amount of an asset or as a separate asset, if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The Group does not depreciate land. Depreciation expense is computed using the straight-line method based on the estimated useful lives of the assets as follows:

	Estimated useful lives
	(Years)
Buildings	20–40
Structures	20
Machinery	5–10
Vehicles	5
Tools and equipment	5

If each part of an item of property, plant and equipment has a cost that is significant in relation to the total cost of the item, it is depreciated separately.

The Group reviews the depreciation method; the estimated useful lives; and residual values of property, plant and equipment at the end of each annual reporting period. If expectations differ from previous estimates, the changes are accounted for as a change in an accounting estimate.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognized.

(14) Intangible assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives.

The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost, less accumulated impairment losses.

2) Internally generated intangible assets - Research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

Expenditure arising from development (or from the development phase of an internal project) is recognized as an intangible asset if, and only if, the development project is designed to produce new or substantially improved products, and the Group can demonstrate the technical and economical feasibility and measure reliably the resources attributable to the intangible asset during its development.

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognizion criteria. Where no internally generated intangible asset can be recognized, development expenditure is recognized in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost, less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

3) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost, less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

4) Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

(15) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

(16) Government grants

Government grants are not recognized until there is a reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Government grants related to assets are presented in the consolidated statements of financial position by deducting the grant from the carrying amount of the asset. The related grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

Government grants related to income are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

(17) Leases

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

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 recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

a) Right-of-use assets

The Group recognises 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 recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognised right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Right-of-use assets are subject to impairment.

b) Lease liabilities

At the commencement date of the lease, the Group recognises lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance 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 a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognised as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if 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 in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

(17) Leases (cont'd)

c) Short-term leases and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of machinery and equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value (i.e., below US\$ 5,000). Lease payments on short-term leases and leases of low-value assets are recognised as expense on a straight-line basis over the lease term.

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 revenue 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 recognised over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

(18) 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, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

Impairment losses of continuing operations, including impairment on inventories, are recognized in the statement of profit or loss and other comprehensive income in expense categories consistent with the function of the impaired asset, except for properties previously revalued with the revaluation taken to OCI. For such properties, the impairment is recognized in OCI up to the amount of any previous revaluation.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the statement of profit or loss and other comprehensive income unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

(19) 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 the Group will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material). The discount rate used is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage is recognized in profit or loss as borrowing cost.

When some, or all, of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

1) Warranties

Provisions for the expected cost of warranty obligations under local sale of goods legislation are recognized at the date of sale of the relevant products, at the directors' best estimate of the expenditure required to settle the Group's obligation.

(20) Retirement benefit costs and termination benefits

Contributions to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurements comprising actuarial gains and losses, the effect of the asset ceiling (if applicable) and the return on plan assets (excluding interest) are recognized immediately in the consolidated statement of financial position with a charge or credit to the consolidated statement of comprehensive income in the period in which they occur. Remeasurements recognized in the consolidated statement of comprehensive income are not reclassified. Past service cost is recognized in profit or loss when the plan amendment or curtailment occurs, or when the Group recognizes related restructuring costs or termination benefits, if earlier. Gains or losses on settlement of a defined benefit plan are recognized when the settlement occurs.

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset. Defined benefit costs are split into three categories:

- service costs, which include current service cost, past service cost and gains and losses on curtailments and settlements;
- net interest expense or income; and
- remeasurements.

Net interest expense or income is recognized within finance costs, and the remeasurement component in other comprehensive income. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognized in the consolidated statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognized at the earlier of when the entity can no longer withdraw the offer of the termination benefit and when the entity recognizes any related restructuring costs.

(21) Share-based payment arrangements

Equity-settled, share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value determined at the grant date of the equity-settled, share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest. At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment in other component of equity.

Equity-settled, share-based payment transactions with parties other than employees are measured at the fair value of the goods or services received, except where that fair value cannot be estimated reliably; in which case, they are measured at the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders the service.

For cash-settled, share-based payments, a liability is recognized for the goods or services acquired, measured initially at the fair value of the liability. At the end of each reporting period until the liability is settled, and at the date of settlement, the fair value of the liability is remeasured, with any changes in fair value recognized in profit or loss for the year.

(22) Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated statements of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted, or substantively enacted, by the end of the reporting period.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted, or substantively enacted, by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

(22) Taxation (cont'd)

Deferred tax assets and liabilities are offset if, and only if, the Group has a legally enforceable right to set off current tax assets against current tax liabilities, and the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities that 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.

For the purpose of measuring deferred tax liabilities and deferred tax assets for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted. The presumption is rebutted when the investment property is depreciable and is held within a business model, whose objective is to consume substantially all of the economic benefits embodied in the investment properties over time, rather than through sale.

3) Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity; in which case, the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

(23) Revenue from contracts with customers

The Group recognizes revenue from the following major sources:

- Sales of electronic components, LED wafers and sales of PV modules.
- Construction of photovoltaic power generation facilities.

Revenue is measured based on the consideration to which the Group expects to be entitled in a contract with a customer and excludes amounts collected on behalf of third parties. The Group recognizes revenue when it transfers control of a product or service to a customer.

1) Sale of goods- electronic components, LED wafers and PV module

The Group sells electronic components, such as power boards for household appliances, directly to customers. Sales-related warranties associated with electronic components cannot be purchased separately and they serve as an assurance that the products sold comply with agreed-upon specifications. Accordingly, the Group accounts for warranties in accordance with KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets.

For sales of electronic components to the customers, revenue is recognized when control of the goods has transferred, being when the goods have been shipped to the specific location (delivery) required by customer. Following delivery, the customer has full discretion over the manner of distribution and price to sell the goods, has the primary responsibility when selling the goods and bears the risks of obsolescence and loss in relation to the goods. A receivable is recognized by the Group when the goods are delivered to the customer as this represents the point in time at which the right to consideration becomes unconditional, as only the passage of time is required before payment is due.

Under the Group's standard contract terms, customers have a right of return only the reason for the quality problem of the goods supplied. Since the customer is aware of the revenue after thorough inspection of goods, the goods that are expected to be returned after the point of sale are unlikely.

(23) Revenue from contracts with customers (cont'd)

2) Construction of photovoltaic power generation equipment

The Group constructs photovoltaic power generation equipment under short-term contracts with customers. Such contracts are entered into before construction of the photovoltaic power generation equipment begins. Under the terms of the contracts, the Group has an enforceable right to payment for work done. Revenue from construction of photovoltaic power generation equipment is therefore recognized over time on a cost-to-cost method, i.e., based on the proportion of contract costs incurred for work performed to date relative to the estimated total contract costs.

The Group cannot reasonably estimate the progress of construction of photovoltaic power generation facilities. Accordingly, the directors consider that this input method recognizing revenue within the scope of cost of occurrence is an appropriate measure of the progress toward complete satisfaction of these performance obligations under KIFRS 1115. If the amount received from customer exceeds the revenue recognized to date under the cost-to-cost method then the Group recognizes a contract liability for the difference. There is not considered to be a significant financing component in construction contracts with customers as the period between the recognition of revenue under the cost-to-cost method and the amount received is always less than one year.

In accordance with KIFRS 1115, revenue recognized prior to the invoice is recognized as a contract asset.

3. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in Note 2, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The assumptions and related assumptions are based on historical experience and other factors deemed relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

(1) Impairment of financial assets

The loss allowance for a financial asset is measured on the basis of assumptions about risk of default and expected loss rates, etc. The company determines the setting of these assumptions and the selection of inputs used in the impairment model by considering the company's past experience, current market conditions, and future forecast information based on the financial reporting date.

(2) Impairment of non-financial assets

Impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation is based on available data from binding sales transactions, conducted at arm's length, for similar assets or observable market prices less incremental costs of disposing of the asset. The value in use calculation is based on a DCF model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the performance of the assets of the CGU being tested. The recoverable amount is sensitive to the discount rate used for the DCF model as well as the expected future cash-inflows and the growth rate used for extrapolation purposes. These estimates are most relevant to goodwill and other intangibles with indefinite useful lives recognised by the Group.

(3) Defined benefit plans (pension benefits)

The cost of the defined benefit pension plan and other post-employment medical benefits and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

3. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (CON'T)

The parameter most subject to change is the discount rate. In determining the appropriate discount rate, management considers the interest rates of corporate bonds in currencies consistent with the currencies of the postemployment benefit obligation with at least an 'AA' rating or above, as set by an internationally acknowledged rating agency, and extrapolated as needed along the yield curve to correspond with the expected term of the defined benefit obligation. The underlying bonds are further reviewed for quality. Those having excessive credit spreads are excluded from the analysis of bonds on which the discount rate is based, on the basis that they do not represent high quality corporate bonds.

(4) Deferred tax assets

Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies.

(5) Provisional liabilities

As of the end of the reporting period, the Group accounts for provisions related to sales guarantees. These provisions are determined on the basis of estimates based on past experience, etc.

(6) Share-based Compensation

The Group measures the compensation cost for equity-settled share-based payment transactions based on the fair value at the grant date of equity instruments, and estimates the fair value by applying the appropriate valuation model. It also determines the most appropriate pricing factors for the valuation model, including the expected life of the share option, variability, and dividend rates, and establishes assumptions about these factors.

4. OPERATING SEGMENTS

(1) General information of the reportable segments is as follows:

	Main products
Electronic components	Inverter for TV and electronic product use, Wireless charging module
Products, assembly	Solar module and mobile phone unit

(2) Segment information for the years ended December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)					
	2021					
	Electronic I					
	components	assembly	Total			
Sales	₩ 567,711,198 ₩	922,909,790	₩1,490,620,988			
Profit from operations (*)	(8,961,638)	4,705,768	(4,255,870)			
Depreciation	13,494,820	12,052,193	25,547,013			
Amortization	649,298	3,294,914	3,944,212			

(*) Operating income (loss) is calculated as gross profit, net of selling and administrative expenses allocated.

	Korean won (In thousands) 2020						
		Electronic components		oducts and assembly	Total		
Sales	₩	621,806,848	₩	573,085,299	₩1,194,892,147		
Profit from operations (*)		34,216,058		(1,755,870)	32,460,188		
Depreciation		13,030,274		11,719,131	24,749,405		
Amortization		618,321		3,317,586	3,935,907		
Impairment of tangible assets		6,633,228		-	6,633,228		

(*) Operating income (loss) is calculated as gross profit, net of selling and administrative expenses allocated.

(3) General information of operating segment by geographical area for the years ended December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)					
		2021	2020			
Korea	₩	180,472,585	₩	185,183,332		
Europe		594,663,801		446,148,130		
America		188,630,589		270,002,990		
Asia		517,639,171		287,014,635		
Africa		9,214,842		6,543,060		
Total	₩	1,490,620,988	₩	1,194,892,147		

(4) The major customers who account for more than 10% of the sales for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In tho	isands)
	2021	2020
₩	1,190,648,613 ₩	932,655,836

5. FINANCIAL ASSETS

(1) Financial asset of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)	
	December 31, 2021	December 31, 2020	Note
short-term financial instruments	201,314	2,020,724	HANA BANK

(2) Restricted financial instruments as of December 31, 2021 and 2020, are as follows:

	Korean won (l		
	December 31, 2021	December 31, 2020	Note
Other long-term financial instruments	2,012	2,012	2 Deposit received
Other financial instruments	3,847,746		- Deposits received
Total	₩ 3,849,758	₩ 2,012	for guarantees

6. TRADE RECEIVABLES AND OTHER RECEIVABLES

(1) Trade receivables and other receivables as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
	Decer	<u>mber 31, 2021</u>	December 31, 2020		
		Current	Current		
Trade receivables	₩	184,446,992	₩ 121,564,396		
Less: Loss allowance		(6,884,869)	(8,419,295)		
Less. Loss anowance		177,562,123	113,145,101		
Other receivables		1,907,704	2,469,840		
Less: Loss allowance		(206.466)	(206,466)		
Less. Loss and wallee		1,701,238	2,263,374		
Accrued receivable		114,180	88,609		
Total	₩	179,377,541	₩ 115,497,084		

(2) Credit risk and allowance for doubtful accounts

The Group measures the loss allowance on trade receivables at an amount equal to the expected total ECLs. The ECLs on trade receivables are based on the experience of the debtor defaulting on defaults and factors specific to the borrower, the general economic environment, the assessment of the current situation at the end of the reporting period and the analysis of the current financial position of the debtor that has been adjusted factors, including an assessment of how the situation will change in the future. There are no estimating techniques or significant assumptions during the period.

The Group has information to indicate that the debtor is in serious financial difficulty, such as the debtor is liquidated or commenced bankruptcy proceedings, and if there is no reasonable expectation of recovery, the Group is disposing of the trade receivable. We are not in the process of collecting the receivables that were dismissed.

6. TRADE RECEIVABLES AND OTHER RECEIVABLES (CONT'D)

(1) aging analysis of trade receivables and other receivables as of December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)						
	Decemb	per 31, 2021	Decer	mber 31, 2020			
Past due, but not impaired							
Three months to six months	₩	4,719,484	₩	4,308,122			
One year or less		4,076,068		6,982,652			
Two years or less		1,128,136		574,150			
More than two years		-		-			
Total	₩	9,923,688	₩	11,864,924			
Impaired							
Less than three months	₩	1,021,371	₩	654,038			
Three months to six months		387,865		386,652			
One year or less		1,422,938		1,823,877			
Two years or less		1,169,745		1,825,290			
More than two years		3,089,415		3,935,904			
Total	₩	7,091,334	₩	8,625,761			

(2) Changes in the loss allowance for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)					
	Decemb	er 31, 2021	Decemb	per 31, 2020		
Balance as at January 1	₩	8,625,761	₩	6,669,417		
Provision		998,905		6,082,816		
Reversal		(2,533,331)		(4,122,268)		
Write-off				(4,204)		
Ending balance	₩	7,091,334	₩	8,625,761		

7. INVENTORIES

Inventories as of December 31, 2020 and 2020, are as follows:

	Korean won (In thousands)										
		December 31, 2021					December 31, 2020				
		Acquisition cost		Valuation reserve	Book v	alue		uisition cost		Valuation reserve	Book value
Merchandise	₩	10,718,576	₩	(331,661) ₩	10,38	86,915 ₩	₩ 2	2,049,568	₩	(125,493) ₩	1,924,075
Finished goods		43,994,254		(301,182)	43,69	93,072	20	0,439,426		(1,562,653)	18,876,773
Work in process		2,381,991		(135,225)	2,24	6,766	2	2,020,964		(195,356)	1,825,608
Raw materials		64,153,691		(1,216,893)	62,93	86,798	3	1,231,376		(1,206,174)	30,025,202
Supplies		1,988,622		-	1,98	8,622		-		-	-
Materials in transit		31,811,351				1,351		4,276,890			14,276,890
Total	₩	155,048,485	₩	<u>(1,984,961)</u> ₩	153,06	53,524 ₩	∀ 7	0,018,224	₩	(3,089,676) ₩	66,928,548

Reversal of loss on valuation of inventories of $\underline{\underline{W}}1,095,479$ thousand due to increase in net realizable value is included in the cost of inventories recognized as expenses for the year ended December 31, 2021. Reversal on valuation of inventories of $\underline{\underline{W}}1,688,323$ thousand due to increase in net realizable value is included in the cost of inventories recognized as expenses for the year ended December 31, 2020.

8. FVTOCI AND AFS FINANCIAL ASSETS

		Korean won (In thousands)							
		D	ecember 31, 2021		De	ecember 31, 2020			
	Site	Number of Percentage of shares ownership Book value				Book value			
HMD USA LLC. (*1,2)	USA	1,000,000	16.7%	₩	- ₩	-			
Jazz Multimedia Inc. (*1,2)	USA	320,000	2.8%		-	-			
DS Asia Holdings Company Limited (*1,2)	HONGKONG	247,145	0.1%		-	-			
Beoti Co., Ltd.(*3)	KOREA	2,430	8.1%	12,1	50	12,150			
Happy energy Co., Ltd.(*3)	KOREA	-	-		-	105			
Total				₩ 12,1	<u>50</u> ₩	12,255			

(1) FVTOCI and AFS financial assets as of December 31, 2021 and 2020, are as follows:

(*1) The Group has applied the irrevocable option designated as FVTOCI at the date of initial application to equity instruments held for strategic investment, not for short-term trading.

(*2) Total acquisition cost is recorded as impairment loss because the investment amount is not likely to be recovered.

(*3) There was no clear evidence of changes in the value of these financial assets in the prior and current periods, and thus they were not valued at fair value.

(2) Changes in FVTOCI and AFS financial assets for the years ended December 31, 2021 and 2020, are as follows:

		Korean won (l	In thousa	ands)
		2021		2020
Beginning balance	₩	12,255	₩	12,255
Disposal		(105)		-
Ending balance	₩	12,150	₩	12,255

9. Financial Assets Measured at Fair Value Through Profit or Loss

(1) Financial Assets Measured at Fair Value Through Profit or Loss as of December 31, 2021 and 2020, are as follows:

		Korean won	In tho	usands)
		2021		2020
NH- uonInvestment Association No. 1 (*1)	\overline{W}	950,000	₩	950,000
Walden Cataly st Ventures (*1)		426,135		
Total		1,376,135		950,000

(*1) It was not evaluated at fair value because there was no clear evidence of changes in the value of financial assets as of December 31, 2021 and 2020, are as follows

(2) Financial Assets Measured at Fair Value Through Profit or Loss as of December 31, 2021 and 2020, are as follows:

		Korean won (I	n thou	isands)
		2021		2020
Beginning balance	₩	950,000	₩	-
Acquisition		426,135		950,000
Ending balance		1,376,135		950,000

10. PROPERTY, PLANT AND EQUIPMENT

				Korean won (In t	housands)			
				December 31.	, 2021			
	Land	Buildings	Structures	Machinery	Vehicles	Tools and equipment	Construction in progress	Total
Acquisition costs Accumulated	₩ 13,582,857 ₩	£ 244,147,682	₩ 20,221,641	₩ 168,109,819 ₩	439,788	₩ 52,491,957	₩ 4,566,452	₩ 503,560,196
depreciation Accumulated	-	(68,945,436)	(14,299,011)	(102,523,561)	(410,175)	(40,446,846)	-	(226,625,029)
impairment loss Net book		(2,970,687)	(1,379,205)	(20,347,381)		(2,338,601)		(27,035,874)
amounts	₩ 13,582,857 ₩	<u>+ 172,231,559</u>	₩ 4,543,425	₩ 45,238,877 ₩	29,613	<u>₩ 9,706,510</u>	₩ 4,566,452	₩ 249,899,293
				Korean won (In t	housands)			
				December 31	, 2020			
	Land	Buildings	Structures	Machinery	Vehicles	Tools and equipment	Construction in progress	Total
Acquisition costs Accumulated	₩ 14,136,451 ₩	₹ 216,702,645	₩ 20,282,699	₩ 161,674,919 ₩	474,885	₩ 50,316,503	₩ 4,125,366	₩ 467,713,468
depreciation Accumulated	-	(62,226,960)	(13,795,419)	(97,316,394)	(429,194)	(36,031,476)	-	(209,799,443)
impairment loss Net book		(2,970,687)	(1,379,206)	(23,400,094)		(2,390,688)		(30,140,675)
amounts	₩ 14,136,451 ₩	₹ 151,504,998	₩ 5,108,074	₩ 40,958,431 ₩	45,691	<u>₩ 11,894,339</u>	₩ 4,125,366	₩ 227,773,350

(1) Property, plant and equipment as of December 31, 2021 and 2020, are as follows:

10. PROPERTY, PLANT AND EQUIPMENT (CONT'D)

(2) Changes in property, plant and equipment for the years ended December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)													
					2021										
						Tools	Construction								
	Land	Buildings	Structures	Machinery	Vehicles	and equipment	in progress	Total							
Beginning															
balance	₩ 14,136,451	₩151,504,998 ₩	5,108,074	₩ 40,958,431 ₩	45,691	₩ 11,894,339	₩ 4,125,366 ₩	₹ 227,773,350							
Acquisition	-	20,964,748	-	26,137,919	4,667	1,050,479	7,378,555	55,536,368							
Disposal	(538,377)	(57,767)	(10,213)	(13,413,680)	-	(20,324)	-	(14,040,361)							
Depreciation	(4,050)	(5,927,871)	(522,320)	(14,216,024)	(19,884)	(4,856,864)	-	(25,547,013)							
Transfer	-	-	4,945	5,850,715	-	1,013,766	(6,961,176)	(91,750)							
Other	(11,167)	5,747,450	(37,061)	(78,484)	(860)	625,114	23,707	6,268,699							
Ending balance	₩ 13,582,857	₩172,231,559 ₩	4,543,425	₩ 45,238,877 ₩	29,613	₩ 9,706,510	₩ 4,566,452 ₩	<u>₹ 249,899,293</u>							

				Korean w	on (In thous	ands)		
					2020			
	Land	Buildings	Structures	Machinery	Vehicles	Tools and equipment	Construction in progress	Total
Beginning								
balance	₩ 14,174,643	₩151,654,653 ₩	5,246,710	₩ 39,344,616 ₩	56,672	₩ 14,818,694 \	₩ 6,696,352 ₩	₹ 231,992,340
Acquisition	-	6,156,970	921,311	18,261,620	33,126	530,126	8,430,372	34,333,525
Disposal	-	-	-	(863,856)	(311)	(12,708)	-	(876,875)
Depreciation	(4,359)	(5,545,626)	(531,462)	(13,755,210)	(40,753)	(4,871,995)	-	(24,749,405)
Impairment								
loss (*1)	-	-	(450,717)	(6,182,507)	-	(4)	-	(6,633,228)
Transfer	-	3,115,914	15,500	5,748,451	-	1,971,904	(10,851,769)	-
Other (*2)	(33,833)	(3,876,913)	(93,268)	(1,594,682)	(3,043)	(541,678)	(149,589)	(6,293,006)
Ending balance	₩ 14,136,451	₩151,504,998 ₩	5,108,074	<u>₩ 40,958,431</u> <u>₩</u>	45,691	₩ 11,894,339	₩ 4,125,366 ₩	<u>₩ 227,773,350</u>

(*1) Impairment loss on tangible assets of the business unit is recognized because the value-in-use of the LED wafer business unit (cash-generating unit) is less than the book value due to the decrease in sales and market price of LED wafer during the year ended December 31, 2020. These assets are used in the electronic component reporting of the Group and are estimated using the discounted cash flow method to estimate the recoverable amount. The impairment loss is included in other non-operating items in the consolidated statements of comprehensive income.

The profit margin is calculated based on the past performance and the expected level of future market fluctuations, and the growth rate of sales is calculated based on the predicted economic growth rate. The management has determined pre-tax cash flow estimates based on the forecasts of the past performance and market growth, and the pre-tax discount rate used is the pre-tax discount rate that reflects the special risks of the relevant sector. The main assumptions are as follows.

Major assumptions	LED Wafer
Permanent growth rate(*)	1%
Pre-tax discount rate	12.72%
(*) A permanent growth rate expected after five years	

(*) A permanent growth rate expected after five years.

(*2) Includes foreign currency translation adjustments for tangible assets at overseas operations.

10. PROPERTY, PLANT AND EQUIPMENT (CONT'D)

	Korean won (In thousands) December 31, 2021										
Pledged assets	Carr	ying amount		Insured assets	Borrowings amount	Pledged organization					
Land, buildings, machinery and others (Ochang factory)	₩	50,611,991	₩	71,000,000	20,000,000	Korea Development					
Land, buildings, machinery and others (Jincheon factory)	₩	26,119,301	₩ USD	₩ 30,000,000 9,500,000	30,000,000	Bank (KDB) NH Bank					
Land and buildings (Hansol Technics (Thailand) Co., Ltd.)	THB	193,302,256	THB	795,000,000 TH	HB 309,068,712	KASIKORNBANK					

(3) Assets pledged as collateral for borrowings of the Group as of December 31, 2021, are as follows:

Meanwhile, the amount of insurance coverage at KDB, with regard to fire and other insurance for buildings and others with Samsung Fire & Marine Insurance Co, Ltd. and Hanwha General Insurance Co., Ltd., pledged as collateral was W260,326,049 thousand and W18,451,201 thousand as of December 31, 2021.the pledged as collateral was W152,855,125 thousand and W15,853,512 thousand as of December 31, 2021

11. INTANGIBLE ASSETS

(1) Intangible assets as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands) December 31, 2021										
	Acquisition cost			Accumulated Amortization		ccumulated]	Book value			
Goodwill	₩	61,031,998	₩	-	₩	(31,972,430)	₩	29,059,568			
Customer value		31,280,567		(24,007,767)		(2,455,073)		4,817,727			
Membership		1,718,554		-		(1,235,314)		483,240			
Development cost		16,933,943		(6,590,274)		(10,196,446)		147,223			
Software		3,926,138		(2,236,455)		-		1,689,683			
Patents		2,977,005		(2,241,408)		(735,597)					
Total	₩	117,868,205	₩	(35,075,904)	₩	(46,594,860)	₩	36,197,441			

				December 3	1, 202	0			
	A	equisition cost		Accumulated Amortization		ccumulated	Book value		
Goodwill	₩	58,642,029	₩	-	₩	(31,972,430)	₩	26,669,599	
Customer value		30,686,885		(21,013,981)		(2,455,073)		7,217,831	
Membership		1,794,970		-		(1,235,314)		559,656	
Development cost		16,933,943		(6,429,666)		(10,196,446)		307,831	
Software		3,426,206		(1,871,922)		-		1,554,284	
Patents		2,977,005		(1,816,122)		-		1,160,883	
Total	₩	114,461,038	₩	(31,131,691)	₩	(45,859,263)	₩	37,470,084	

Korean won (In thousands)

11. INTANGIBLE ASSETS (CONT'D)

		Korean won (In thousands)												
		2021												
		Customer Development												
		Goodwill		value	Μ	lembership		cost		Software	Patents			Total
Beginning balance	₩	26,669,599	₩	7,217,831	₩	559,656	₩	307,831	₩	1,554,284	₩	1,160,883	₩	37,470,084
Acquisition		-		-		-		-		353,291		-		353,291
Disposal		-		-		(75,846)		-		-		-		(75,846)
Amortization		-		(2,993,785)		-		(160,607)		(364,534)		(425,286)		(3,944,212)
Impairment loss(*1)		-		-		-		-		-		(735,597)		(735,597)
Others(*2)		2,389,969		593,681		(570)		-		54,891		-		3,037,971
Transfer						-		-		91,750		-		91,750
Ending balance	₩	29,059,568	₩	4,817,727	₩	483,240	₩	147,223	₩	1,689,683	₩		₩	36,197,441

(2) Changes in intangible assets for the years December 31, 2021 and 2020, are as follows:

(*1) It was judged that there was no value in use for the extinction of unnecessary patents during the current period, so damage losses on the patent rights were recognized. Impairment losses are included in other non-operating expenses items in the statement of comprehensive income.

(*2) Includes foreign currency translation adjustments for intangible assets at overseas operations.

		Korean won (In thousands)												
		2020												
		Customer Development												
		Goodwill		value	Μ	embership		cost		Software		Patents		Total
Beginning balance	₩	28,380,572	₩	10,650,015	₩	621,373	₩	468,438	₩	1,195,735	₩	1,586,169	₩	42,902,302
Acquisition		-		-		-		-		808,350		-		808,350
Disposal		-		-		(60,000)		-		-		-		(60,000)
Amortization		-		(2,993,785)		-		(160,607)		(356,229)		(425,286)		(3,935,907)
Others(*1)		(1,710,973)		(438,399)		(1,717)		-		(93,572)		-		(2,244,661)
Ending balance	₩	26,669,599	₩	7,217,831	₩	559,656	₩	307,831	₩	1,554,284	₩	1,160,883	₩	37,470,084

(*1) Includes foreign currency translation adjustments for intangible assets at overseas operations.

(3) The Group recognized ordinary research and development expenses amounting to ₩18,937,925 thousand and ₩19,984,200 thousand for the years ended December 31, 2021 and 2020, respectively.

12. CAPITAL LEASE ASSETS

(1)	Capital	lease assets	as of	December	31,	2021	and	2020,	are as follow	ws:
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	Korean	won (In thousands)	Korean	won (In thousands)
	Dece	mber 31, 2021	Dece	ember 31, 2020
Right-of-use asset				
Land		10,548,722		2,373,137
Buildings		527,062		695,368
Vehicles		399,627		422,566
Machinery		6,175,280		-
Total	₩	17,650,691	₩	3,491,071
Lease Liabilities				
Current		423,389		512,369
Non-current		7,055,956		635,275
Total	₩	7,479,345	₩	1,147,644

(2) Changes in capital lease assets for the years December 31, 2021 and 2020, are as follows:

		Korean won (In thousands) December 31, 2021											
	Beginning					Ending							
	Balance Acquisition Disposal Depreciation Other												
Land	2,373,137	7,833,663	-	(207,445)	549,367	10,548,722							
Buildings	695,368	110,818	-	(280,034)	909	527,062							
Vehicles	422,566	339,174	(43,503)	(268,940)	(49,670)	399,627							
Machinery		5,956,349		(41,829)	260,760	6,175,280							
Total	₩ 3,491,071	₩14,240,004	₩ (43,503)	₩ (798,248)	₩ 761,366	₩17,650,691							

]	Korean won (In 1			
			December 31,	2020		
	Beginning					Ending
	Balance	Acquisition	Transfer (*1)	Depreciation	Other	balance
Land	-	-	2,633,900	(59,984)	(200,779)	2,373,137
Buildings	579,713	329,951	-	(214,296)	-	695,368
Vehicles	337,232	353,684		(264,161)	(4,189)	422,566
Total	₩ 916,945	₩683,635	₩ 2,633,900	₩ (538,441)	₩ (204,968)	₩ 3,491,071
$(\Psi 1) T (1 1)$	1 11 1	1				

(*1) It has been replaced by long-term prepaid expenses.

(3) Changes in lease liabilities for the years December 31, 2021 and 2020, are as follows:

	Korean won (In thousands) December 31, 2021											
Lease Liabilities	Beginning Balance ₩ 1,147,644		<u>Disposal</u> (44,431)	Acquisition 6,678,617	Lease interest 53,700	Payments (637,055)	<u>Other</u> 280,869	<u>Ending</u> <u>balance</u> 7,479,345				
	<u>Korean won (In thousands)</u> December 31, 2020											
I	0	inning lance	Acquisition	Lease interest	Payments	Other	End	ling balance				
Lease Liabilities	₩	936,586	683,635	36,69	3 (512,456	5) 3,	186	1,147,644				

12. CAPITAL LEASE ASSETS(CON'T)

	Kore	ean won (In thousands)		Korean won (In thousands)
		December 31, 2021		December 31, 2020
Right-of-use asset				
Land		207,445		59,984
Buildings		280,034		214,296
Vehicles		268,940		264,161
Machinery		41,829		
Total	₩	798,248	₩	538,441
Lease Liabilities				
Interest expenses		53,700		36,693
Short-term lease		2,223,234		2,054,210
Low expenses lease		31,799		29,882
Total	₩	3,106,981	₩	2,659,226

(4) Capital lease expenses for the years ended December 31, 2021 and 2020 are as follows:

(5) The Group had a total cash outflow of # 2,892,088 thousand (Previous year: # 2,596,548 thousand) for the lease during the current year.

13. OTHER FINANCIAL ASSETS

Other financial assets as of December 31, 2021 and 2020, are as follows:

Other financial assets as of Decemb	Other financial assets as of December 31, 2021 and 2020, are as follows:								
		Korean won (In thousands)							
		December	021		Decembe)20			
	(Current	N	on-current	Current		Non-current		
Derivative assets for trading not designated as a hedging instrument Derivative assets Financial assets measured at amortized cost	₩	76,110	₩	-	₩	286,108	₩	-	
Security deposit Total	₩	2,000,000 2,076,110	₩	5,632,126 5,632,126	₩	286,108	₩	649,879 649,879	

14. OTHER ASSETS

Other assets as of December 31, 2021 and 2020, are as follows:

Other assets as of December 31, 2021 and 2020, are as follows.									
		Korean won (In thousands)							
		December 31, 2021				December 31, 2020			
	(Current	No	n-current		Current	Non-current		
Advance payments	₩	36,962,862	₩	-	₩	10,745,604	₩	-	
Loss allowance									
(Advance Payments)		(493,750)		-		(500,000)		-	
Prepaid expenses		959,690		314,690		1,987,441		1,132,983	
Prepaid value-added tax (VAT)		8,911,310		_		1,004,670			
Total	₩	46,340,112	₩	314,690	₩	13,237,715	₩	1,132,983	

15. TRADE PAYABLES AND OTHER PAYABLES

Trade payables and other payables as of December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)								
		December 31, 2021				December 31, 2020				
		Current Non-curre				Current	Non-current			
Trade payables	₩	142,016,132	₩	-	₩	80,169,003	₩	-		
Other payables		8,611,510		1,920,406		16,519,945		1,877,214		
Accrued expenses		21,727,084				18,296,794				
Total	₩	172,354,726	₩	1,920,406	₩	114,985,742	₩	1,877,214		

16. BORROWINGS AND DEBENTURES

(1) Borrowings and debentures as of December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)									
	December 31, 2021					December 31, 2020					
	(Current	Non-current		Current		No	on-current			
Short-term borrowings	₩	114,217,392	₩	-	₩	68,478,457	₩	-			
long-term borrowings		1,483,548		47,325,875		682,361		9,560,558			
Short-term debentures		-		-		39,000,000		-			
Long-term debentures		29,985,583		84,438,397				29,928,804			
Total	₩	145,686,523	₩	131,764,272	₩	108,160,818	₩	39,489,362			

(2) Short-term borrowings as of December 31, 2021 and 2020, are as follows:

			Korean won	(In thousands)
	Financial institutions	Interest rate (%)	December 31, 202	December 31, 2020
	KDB and others	2.20~2.58	₩ 35,000,00	0 ₩ 35,000,000
General loans	Hana Bank	1.97	5,937,68	9 5,455,835
	KASIKORN BANK	1.95~2.14	10,993,57	4 18,123,646
	Koreaexim and other	1.40~2.22	62,286,12	9 9,898,976
	Total		₩ 114,217,39	2 ₩ 68,478,457

(3) Short-term debentures as of December 31, 2021 and 2020, are as follows:

				Korean won	(In thousands)		
	Date of	Date of	Interest	December 31,	D	ecember 31,	
Classification	issuance	maturity	rate (%)	2021		2020	
62st (Unguaranteed, private offering)	2020.05.12	2021.05.12	3.90	-		4,000,000	
63st (Unguaranteed, private offering)	2020.05.20	2021.05.20	4.00	-		5,000,000	
64st (Unguaranteed, private offering)	2020.06.10	2021.06.10	4.00	-		10,000,000	
65 st (Unguaranteed, private offering)	2020.06.18	2021.06.18	4.00	-		10,000,000	
66st (Unguaranteed, private offering)	2020.06.25	2021.06.25	4.00	-		10,000,000	
Total				₩ -	₩	39,000,000	

(4) Long-term borrowings as of December 31, 2021 and 2020, are as follows:

	Financial Institutions	Interest rate(%)		December 31, 2021	De	cember 31, 2020
Facilities loan	Koreaexim BANK	2.18	₩	34,863,366	₩	5,442,405
	KASIKORNBANK	2.37		13,946,057		4,800,514
Less: 1	Reclassification of current po	ortion		(1,483,548)		(682,361)
	Total		₩	47,325,875	₩	9,560,558

16. BORROWINGS AND DEBENTURES(CON'T)

					Korean won	(In thousands)		
	Date of	Date of	Interest	C	December 31,	D	ecember 31,	
Classification	issuance	maturity	rate (%)		2021		2020	
67th (Unguaranteed, public offering)	2020.10.06	2022.04.06	3.30	₩	30,000,000	₩	30,000,000	
68 th (Unguaranteed, public offering)	2021.03.09	2023.03.09	1.95		10,000,000		-	
69 th (Unguaranteed, public offering)	2021.05.27	2023.04.21	1.95		10,000,000		-	
70 th (Unguaranteed, public offering)	2021.05.27	2023.05.26	1.95		20,000,000		-	
71 th (Unguaranteed, public offering)	2021.11.12	2023.05.12	3.00		5,000,000		-	
72 th (Unguaranteed, public offering)	2021.11.29	2024.11.29	3.02		30,000,000		-	
73 th (Unguaranteed, public offering)	2021.12.23	2023.06.23	3.20		10,000,000		-	
Discount					(576,020)		(71,196)	
Less: Reclassification	n of current por	tion			(29,985,583)			
Tot	al			₩	84,438,397	₩	29,928,804	

(5) Long-term debentures as of December 31, 2021 and 2020, are as follows:

(6) Repayment schedule of borrowings and debentures as of December 31, 2021, is as follows:

		Korean won (In thousands)					
	Long-ter	m borrowing		Debenture			
Within 1 year	$\overline{\mathbb{W}}$	1,483,548	₩	29,985,583			
1 year to 5 years		47,325,875		84,438,397			
Total	\overline{W}	48,809,423	₩	114,423,980			

17. NET DEFINED BENEFIT LIABILITIES

(1) Key actuarial assumptions as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
	December 31, 2021 Dec					
Discount rate	2.57%	1.81%				
Expected salary growth rate	4.35%	4.41%				

(2) Net defined benefit liabilities as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)					
	Dece	mber 31, 2021	Decer	mber 31, 2020		
Present value of defined benefit obligation	\mathbb{W}	36,674,070	₩	33,946,683		
Fair value of plan assets(*)		(3,919,691)		(3,852,730)		
Net defined benefit liabilities	₩	32,754,379	₩	30,093,953		

(*) Fair value of plan assets includes the existing National Pension Fund contributions as of December 31, 2021, amounting to ₩5,382 thousand (December 31, 2020: ₩6,865 thousand).

17. NET DEFINED BENEFIT LIABILITIES (CONT'D)

(3) Changes in net defined benefit liabilities for the years ended December 31, 2021 and 2020, are as follows:

		K	Corea	n won (In thousand	ls)	
				2021		
	I	Defined benefit obligation Plan assets				Total
Beginning balance	₩	33,946,683	₩	(3,852,730)	₩	30,093,953
Current service cost(*1)		3,754,163		-		3,754,163
Interest expense (income)		570,038		(64,585)		505,453
Remeasurements:						
Revenue from plan assets (excluding amount included in above interest) Actuarial losses due to changes in		-		(3,859)		(3,859)
financial assumptions		(1,485,159)		-		(1,485,159)
Actuarial losses due to empirical						
adjustments		2,972,582		-		2,972,582
Benefits paid		(3,078,970)		1,483		(3,077,487)
Transfers to related companies		(5,267)	_	-	_	(5,267)
Ending balance	₩	36,674,070	₩	(3,919,691)	₩	32,754,379

(*1) The retirement bonus of KRW 379,556 thousand are not included in the current service cost.

	Korean won (In thousands)									
				2020						
	Γ	Defined benefit								
		obligation		Plan assets		Total				
Beginning balance	₩	33,194,813	₩	(3,785,761)	₩	29,409,052				
Current service cost(*1)		3,790,479		-		3,790,479				
Interest expense (income)		614,050		(69,750)		544,300				
Remeasurements:										
Revenue from plan assets (excluding										
amount included in above interest)		-		(6,246)		(6,246)				
Actuarial losses due to changes in										
financial assumptions		330,176		-		330,176				
Actuarial losses due to empirical										
adjustments		(1,675,166)		-		(1,675,166)				
Benefits paid		(2,307,669)		9,027		(2,298,642)				
Ending balance	₩	33,946,683	₩	(3,852,730)	₩	30,093,953				

(*1) The retirement bonus of KRW 298,881 thousand are not included in the current service cost.

(4) Plan assets as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)						
	Decer	mber 31, 2021	Dece	ember 31, 2020			
Deposits	₩	3,268,000	₩	3,199,522			
Securities		646,309		646,343			
Other (including contributions to the National Pension Fund)		5,382		6,865			
Total	₩	3,919,691	₩	3,852,730			

17. NET DEFINED BENEFIT LIABILITIES (CONT'D)

(5) The effect on the defined benefit obligation of a significant actuarial assumption, when all other assumptions are maintained at the end of the reporting period, fluctuates within a reasonable range of possible outcomes, which are as follows:

		Korean won (In thousands)									
		December 3	31, 20	21	December 31, 2020						
]	Increase Decrease		Increase		Decrease					
1% change in discount rate	₩	(1,797,398)	₩	1,983,892	₩	(1,767,645)	₩	1,960,817			
1% change in expected wage growth rate		1,978,607		(1,826,475)		1,940,162		(1,783,429)			

18. PROVISION LIABILITIES:

(1) Provision liabilities as of December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)								
		December	31, 2	021		December	31, 20	020		
	(Current Current		Current		No	on-current			
Provision for product										
warranties	₩	2,420,368	₩	2,714,548	₩	2,681,893	₩	4,469,261		

(2) Changes in provision for product warranties for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)								
	Decem	ber 31, 2021	December 31, 2020						
Beginning balance	₩	7,151,154 ₩	4,181,619						
Transfer		653,620	7,677,894						
Used		(2,669,858)	(4,708,359)						
Ending balance	₩	<u>5,134,916</u> ₩	7,151,154						

19. OTHER FINANCIAL LIABILITIES

Other financial liabilities as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)									
		December	2021	December 31,			, 2020			
		Current	urrent Non-current			Current No		Non-current		
Lease liabilities	₩	423,389	₩	7,055,956	₩	512,369	₩	635,275		
Security deposit		30,000		100,000		-		238,000		
Derivative assets for										
trading not designated										
as a hedging instrument										
Derivatives liabilities		181,414		-		241,168		-		
Total	₩	634,803	₩	7,155,956	₩	753,537	₩	873,275		

20. OTHER LIABILITIES

Other liabilities as of December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)					
		December 31, 2021		December 31, 2020			
		Current	Non-current			Current	Non-current
Advances from customers	₩	10,282,995	\mathbf{W}	-	₩	4,102,399	₩ -
Withholdings		1,178,300		_		2,568,819	
Total	₩	11,461,295	₩	_	₩	6,671,218	₩

21. COMMITMENTS AND CONTINGENCIES

(1) Commitments with financial institutions as December 31, 2021 and 2020, are as follows:

	2021	Limit		Amount	
		Korean won (In thousands),			
	Financial institution	except for USD and THB			
General loan	Nonghyup Bank	₩	25,000,000	₩	-
	KDB		40,000,000		30,000,000
	KEB Hana Bank		5,000,000		5,000,000
	Vietnam International Bank	USD	10,000,000		-
	Shinhan Bank(Vietnam)	USD	5,000,000		-
	KEB Hana Bank(Vietnam)	USD	17,500,000	USD	2,000,000
	KEB Hana Bank(China)	USD	5,000,000	USD	5,000,000
	KASIKORN BANK(Thailand)	THB	795,000,000	THB	309,068,712
	Vietcom Bank(Vietnam)	USD	80,000,000	USD	50,480,734
Opening an import credit	KDB	USD	5,000,000	USD	3,830,060
	Nonghyup Bank	USD	12,000,000	USD	5,934,939
Facilities loan	KASIKORN BANK(Thailand)	THB	500,579,784	THB	392,073,560
	Koreaexim Bank(Vietnam)	USD	30,000,000	USD	29,375,000

	2020	Limit		Amount	
		Korean won (In thousands),			ands),
	Financial institution		except for U	SD and	I THB
General loan	Nonghyup Bank	₩	25,000,000	₩	-
	KDB		40,000,000		30,000,000
	KEB Hana Bank		5,000,000		5,000,000
	Vietnam International Bank	USD	10,000,000		-
	Shinhan Bank(Vietnam)	USD	10,000,000		-
	KEB Hana Bank(Vietnam)	USD	17,500,000	USD	7,098,240
	KEB Hana Bank(China)	USD	5,000,000	USD	5,000,000
	Koreaexim Bank(Vietnam)	USD	2,000,000	USD	2,000,000
	KASIKORN BANK(Thailand)	THB	595,000,000	THB	498,724,424
Opening an import credit	KDB	USD	5,000,000	USD	4,210,250
	Nonghyup Bank	USD	12,000,000	USD	5,514,064
Facilities loan	Koreaexim Bank(Vietnam)	USD	5,000,000	USD	5,000,000
	KASIKORN BANK(Thailand)	THB	140,000,000	THB	132,100,000

(2) Guarantees provided by others for the Group as of December 31, 2021 and 2020, are as follows

	2021			
			Korean won	
	Financial institution	Description	(In thousands)	
, ,	Seoul Guarantee Insurance	Licensing guarantee	W 7.017.075	
	Co., Ltd.	and others	₩ 7,917,975	
	KDB	Usance	USD 3,830,060	
	Nonghyup Bank 46	Usance	USD 5,934,939	

	2020		Amount		
	Financial institution	Description	(In thousands)		
Payment guarantee	Seoul Guarantee Insurance	Licensing guarantee	W 0 144 217		
	Co., Ltd.	and others	₩ 9,144,317		
	KDB	Usance	USD 4,210,250		
	Nonghyup Bank	Usance	USD 5,514,064		

(3) The details of important litigation case are as follows.

As of December 31, 2021, the Group is a defendant in 1 legal case (litigation value: KRW 2,000,000 thousand), which is related to patent infringement. The final outcomes cannot be predicted as of December 31, 2021.

(4) As of December 31, 2021, the Group is obligated to provide guarantees for the construction of solar power plant and repair of defects to 25 companies, including GSPVE 2st Taekwang LLC. (FY21: KRW 1,506,720 thousand), (FY20: KRW 2,459,491 thousand).

22. ISSUED CAPITAL

Issued capital as of December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)						
Common stock	Number of Authorized shares	Number of shares outstanding	Par value	December 31, 2021 ₩ 160,549,390	December 31, 2020 ₩ 160,549,390		
Common stock	100,000,000	32,109,878	W 5,000	W 160,549,590	W 100,549,590		

23. SHARE PREMIUM

(1) Share premium as of December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)				
	Dece	ember 31, 2021	December 31, 2020		
Additional paid-in capital	₩	₩ 75,252,061		75,252,061	
Treasury stock		(27,256,348)		(27,256,348)	
Gains on capital reduction		3,739,041		3,739,041	
Stock option		809,672		507,404	
Other share premium		2,418,990		2,418,990	
Total	₩	54,963,416	₩	54,661,148	

(2) Changes in Share premium for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
		2021		2020	
Beginning balance	₩	54,661,148	₩	56,106,300	
Preservation of accumulated deficit		-		(1,746,697)	
Share-based payments		302,268		301,545	
Ending balance	$\overline{\mathbb{W}}$	54,963,416	₩	54,661,148	

24. RETAINED EARNINGS

(1) Retained earnings as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
	Decemb	per 31, 2021	December 31, 2020		
Undisposed retained earnings	₩	59,385,028	₩	69,872,444	

(2) Changes in retained earnings for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
	2021		2	020	
Beginning balance	₩	69,872,444	₩	40,859,427	
Net income (loss)		(9,330,237)		26,212,356	
Remeasurements of defined benefit plans		(1,157,179)		1,053,964	
Deficit recovery				1,746,697	
Ending balance	\overline{W}	59,385,028	₩	69,872,444	

25. OTHER COMPONENTS OF EQUITY

(1) Other components of equity as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)			
	December 31, 2021		December 31, 2020	
Foreign currency translation reserve	₩	3,094,250	₩	(6,278,757)

26. EARNINGS PER SHARE

(1) Basic earnings per share for the years ended December 31, 2021 and 2020, is computed as follows:

	Korean won				
	2021			2020	
Profit attributable to owners of the controlling company	₩	(9,330,236,944)	₩	26,212,356,903	
Weighted-average number of common stocks outstanding		31,417,517		31,417,517	
Basic earnings(loss) per share	₩	(297)	₩	834	

(2) Weighted-average number of common shares for the years ended December 31, 2021 and 2020, is computed as follows:

		2021	
			Number of common
			stocks
	Number of shares	Days	outstanding
Beginning and ending (*)	31,417,517		365 31,417,517

(*) 692,361 shares of treasury stocks were excluded.

	2020		
			Number of common
			stocks
Number of shares	Days		outstanding
31,417,517		366	31,417,517

2021

Beginning and ending(*)

(*) 692,361 shares of treasury stocks were excluded.

⁽³⁾ Diluted earnings (loss) per share matches with basic earnings (loss) per share for the year ended December 31, 2021 and 2020, because there is no dilution for potential common stock.

27. SHARE-BASED PAYMENTS

(1)	Stock options that the Group granted to its directors and employees are as follows:	

	Korean won				
	2019	2020	2021		
Date of grant	2019-03-26	2020-03-23	2021-03-24		
Total number of granted	345,600 shares	78,000 shares	54,400 shares		
shares					
Grant method	Issues on new stocks,	issues on treasury stocks ar	nd stock appreciation		
Exercise price per share	7,677	8,839	10,330		
Vesting period		Three years			
Exercise period	Two years since the termination of vesting period				

(2) During 2021, changes in the number of outstanding stock options are as follows:

	Granted in 2019	Granted in 2020	Granted in 2021	Total
Previous granted shares	345,600	78,000	-	423,600
Previous canceled shares	(51,200)	-	-	(51,200)
granted shares	-	-	54,400	54,400
Cancellation (*1)	(32,000)			(32,000)
Ending	262,400	78,000	54,400	394,800

(*1) Part of the grant in 2019 canceled the donation stock option due to the resignation of the grantee.

(3) The price of stock options is estimated based on the Black-Scholes formula, and all assumptions and variables used to calculate compensation cost are as follows:

	Granted in 2019	Granted in 2020	Granted in 2021
Expected volatility of the share price	43.20%	64.90%	46.50%
Risk-free interest rate applied	1.80%	1.50%	1.49%

In relation to the above stock option, the Group recognized stock compensation expenses of #302,268 thousand and #301,545 thousand during the year ended December 31, 2021 and 2020, respectively.

28. REVENUE

Continuing revenue from the Group for the years ended December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)			usands)
		2021		2020
Goods and services transferred at a point in time				
Revenue of goods	₩	1,022,230,987	₩	713,667,600
Revenue of merchandise		126,415,486		164,240,139
Revenue of services		326,134,448		311,124,255
Goods and services transferred over time				
Revenue of construction contracts		15,840,066		5,860,153
Total	₩	1,490,620,988	₩	1,194,892,147

Among the revenue recognized by the Group during the current period, domestic sales are KRW 180,472,585 thousand (FY20: KRW 185,183,332 thousand) and export sales are KRW 1,310,148,403 thousand (FY20: KRW 1,009,708,815 thousand).

29. EXPENSES BY NATURE

Expenses classified by nature for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands) (*)		
		2021	2020
Raw materials and merchandise goods used	₩	1,368,142,946	₩ 925,126,737
Changes in inventories		(173,853,081)	(49,207,393)
Salaries		119,748,346	119,981,066
Retirement benefits		4,608,918	4,633,660
Employee benefit expenses		26,697,872	24,841,475
Rental expenses		2,178,588	2,059,112
Transportation expenses		29,903,635	25,345,368
Service charge		40,966,229	36,549,654
Depreciation		25,547,013	24,749,405
Processing costs paid to subcontractor		14,418,569	7,747,832
Others		36,517,823	40,605,044
Total	₩	1,494,876,858	₩ 1,162,431,960

(*) Total amount is the sum of cost of sales, selling and administrative expenses in the consolidated statements of comprehensive income (loss).

30. SELLING AND ADMINISTRATIVE EXPENSES

Selling and administrative expenses for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)		
		2021	2020
Salaries	\mathbb{W}	27,080,956 ₩	29,826,889
Retirement benefits		1,815,363	1,844,623
Employee benefit expenses		5,159,826	4,319,044
Travel expenses		28,718,358	24,526,457
Rental expense		641,155	402,717
Service charge		9,412,181	11,499,295
Research and development expenses		18,937,925	19,984,200
Bad debt expenses		(1,501,645)	1,960,548
Depreciation		3,668,377	3,447,385
Customer relationship value depreciation		2,993,785	2,993,785
After service Expenses		1,724,592	7,448,757
Repairs and Maintenance Expenses		707,611	1,302,007
Data Processing Expenses		1,048,744	1,148,337
Orhers		7,300,124	7,822,779
Total	₩	<u>107,707,352</u> ₩	118,526,823

31. OTHER INCOME AND OTHER EXPENSES

(1) Other income for the years ended December 31, 2021 and 2020, is as follows:

		Korean won (In thousands)		
		2021	2020	
Gain on disposal of property, plant and equipment	₩	993,911 ₩	281,635	
Rental revenues		330,700	191,164	
Gains on disposal of intangible assets		-	120,000	
Miscellaneous income		1,479,571	978,322	
Other Expenses of Allowance for Doubtful Accounts	and			
Returns		6,250		
Total	₩	2,810,432 ₩	1,571,121	

(2) Other expenses for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)		
		2021	2020
Loss on disposal of property, plant and equipment	₩	70,034 ₩	728,716
Impairment loss on property, plant and equipment		-	6,633,228
Losses on Disposal of Intangible Assets		16,886	-
Impairment Losses on Intangible Assets		735,596	-
Loss on disposition of assets scheduled for sale		-	92,679
Donation		79,464	110,653
Miscellaneous non-operating losses		77,091	84,285
Total	₩	979,071 ₩	7,649,561

32. FINANCE INCOME AND FINANCE COSTS

(1) Finance income for the years ended December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)		
		2021	2020
Interest income - effective interest method(*1)	₩	29,933 ₩	27,751
Interest income - other		315,444	593,173
Gain on foreign currency transactions		16,567,869	18,459,744
Gain on foreign currency conversion		2,898,971	908,280
Gain on derivative transactions		4,561,635	8,695,904
Gain on valuation of derivatives		76,110	286,108
Total	₩	24,449,962 ₩	28,970,960

(*1) All interest income recognized in accordance with the effective interest rate method is interest income from the financial assets measured at amortized cost.

(2) Finance costs for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
		2021	2020		
Interest expenses	₩	4,686,706 ₩	4,013,999		
Loss on foreign currency transactions		14,962,819	16,786,488		
Loss on foreign currency conversion		1,908,591	1,957,177		
Loss on derivative transactions		6,856,487	6,996,632		
Loss on valuation of derivatives		181,415	241,168		
Total	\underline{W}	28,596,018 ₩	29,995,464		

33. INCOME TAX EXPENSE AND DEFERRED INCOME TAX

(1) The component of income tax expense for the years ended December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)				
	2021			2020	
Current income tax expense:					
Current income taxes	₩	3,541,359	₩	3,637,841	
income tax charged directly to equity		326,384		(297,272)	
Deferred income tax expense:					
Changes of temporary differences and		(1,092,458)		(4,169,143)	
Income tax expense (benefit)	₩	2,775,285	₩	(828,574)	

(2) Reconciliation of effective tax rate for the years ended December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)				
		2021	2021		
Income before income tax (loss)	\overline{W}	(6,570,565)	₩ 25,357,244		
Statutory tax rate		22%	22%		
Income tax based on statutory tax rate		(1,445,524)	5,578,594		
Adjustments:					
Effects due to non-taxable expense		245,073	122,986		
Effects due to tax credit and tax abatement		(513,478)	(2,068,589)		
Use of carryforward deficits		-	(4,439,906)		
Unrecognized deferred income tax		(468,165)	1,682,931		
Tax rate differences that apply to subsidiaries		(351,477)	(341,765)		
Others		5,308,856	(1,362,825)		
Subtotal		4,220,809	(6,407,168)		
Income tax expense(income)	\overline{W}	2,775,285	₩ (828,574)		
Average effective tax rate		(*1)	(*2)		

(*1) It was not calculated due to the occurrence of net loss before deduction of corporate tax expenses

(*2) Effective tax rate was not calculated as the loss before tax was posted.

(3) The component of income tax recognized in other comprehensive income for the years ended December 31, 2021 and 2020, is as follows:

	Korean won (In thousands)				
	2021			2020	
Remeasurements from plan assets	₩	326,383	₩	(297,272)	

33. INCOME TAX EXPENSE AND DEFERRED INCOME TAX (CONT'D)

(4) Changes in deferred income tax for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)						
	2021						
	Beginning		Profit or loss	comp	ther chensive come		Ending
Retirement benefit provision liability	₩	7,466,760	₩ (587,181)	₩	326,384	₩	7,205,963
Loss on valuation of inventories		429,568	(209,969)		-		219,599
Impairment loss on intangible assets		1,857,162	(1,654,812)		-		202,350
Accrued expenses		1,906,967	(898,065)		-		1,008,902
Property, plant and equipment		1,092,409	268,634		-		1,361,043
Depreciation		1,152	-		-		1,152
Intangible asset (Customer values)		(1,229,345)	415,153		-		(814,192)
Treasury stock		(1,272,460)	-		-		(1,272,460)
Changes in net assets of subsidiaries		(9,658,192)	2,204,588		-		(7,453,605)
Others		1,256,191	1,883,282		-		3,139,473
Tax carryforwards		4,913,066	(690,699)		-		4,222,367
Tax loss carryforwards		-	39,143		-		39,143
Deferred tax assets	₩	6,763,277	₩ 766,074	₩	326,384	₩	7,855,735

	Korean won (In thousands)							
	2020							
	Beginning Pr		Profit or loss		com	Other omprehensive income		Ending
Retirement benefit provision liability	₩	7,299,362	₩	464,670	₩	(297,272)	₩	7,466,760
Loss on valuation of inventories		676,260		(246,692)		-		429,568
Impairment loss on intangible assets		1,857,162		-		-		1,857,162
Accrued expenses		1,299,760		607,207		-		1,906,967
Impairment loss on property, plant and equipment		1,092,409		-		-		1,092,409
Depreciation		1,152		-		-		1,152
Intangible asset (Customer values)		(1,562,606)		333,261		-		(1,229,345)
Treasury stock		(1,272,460)		-		-		(1,272,460)
Changes in net assets of subsidiaries	((13,122,278)		3,464,085		-		(9,658,192)
Others		2,284,963		(1,028,772)		-		1,256,191
Tax loss carryforwards		4,040,410		872,656		-		4,913,066
Deferred tax assets	₩	2,594,134	₩	4,466,415	₩	(297,272)	₩	6,763,277

			Korean won (In thousands)			
			December 31, 2021	Dece	ember 31, 2020	
Deferred tax assets		\mathbb{W}	8,669,928	₩	7,982,443	
Deferred tax liabilities			(814,193)		(1,219,166)	
	Total	₩	7,855,735	₩	6,763,277	

(5) Deductible temporary differences, tax loss carryforwards and unused tax credits not recognized as deferred tax assets as of December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)				
	<u> </u>	December 31, 2021	D	December 31, 2020		
Deductible temporary differences	\mathbb{W}	29,185,607	₩	34,631,104		
Tax accumulated deficit		127,863,855		123,103,424		
Total	\overline{W}	157,049,462	₩	157,734,528		

33. INCOME TAX EXPENSE AND DEFERRED INCOME TAX (CONT'D)

(6) Due date of tax loss carryforwards and unused tax credits not recognized as deferred tax assets as of December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)							
		2021	2020						
		Tax loss carryforwards	Tax loss carryfor`wards						
			$\overline{\mathbb{W}}$						
One year or less	₩	44,529,184	-						
One year to two years		31,169,539	44,607,313						
Two years to three years		3,279,507	31,169,539						
More than three years		48,885,625	47,326,572						
Total	₩	127,863,855	₩ 123,103,424						

(7) Temporary differences to be added, but not recognized as deferred tax liabilities as of December 31, 2021 and 2020, are as follows:

		Korean won (In thousands)			
		December 31, 2021 December 31, 20			
Foreign subsidiaries	₩	43,862,412 ₩	43,862,412		

34. CASH GENERATED FROM OPERATIONS

(1) Adjustments for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
		2021		2020	
Adjustments:					
Income tax expense(Income)	₩	2,775,285	₩	(828,574)	
Interest expenses		4,686,706		4,013,999	
Depreciation of property, plant and equipment		25,547,013		24,749,405	
Amortization		3,944,212		3,935,907	
Depreciation of capital lease assets		798,248		538,441	
Bad debt expenses(Reversal)		(1,501,645)		1,960,548	
Other Bad debt expenses(Reversal)		(6,250)		-	
Retirement benefits		4,639,172		4,633,660	
Reversal of provision for product warranties		653,620		7,677,894	
Stock compensation benefits		302,268		301,545	
Loss on foreign currency conversion		1,908,591		1,957,177	
Loss on valuation of derivatives		181,415		241,168	
Reversal of Loss on valuation of inventories		(1,095,479)		(1,688,323)	
Loss on disposal of property, plant and equipment		70,034		728,716	
Losses on Disposal of Intangible Assets		16,886		-	
Impairment of property, plant and equipment		-		6,633,228	
Impairment of intangible assets		735,596		-	
Other income		(927)		-	
Loss on disposition of assets scheduled for sale		-		92,679	
Interest income		(345,377)		(620,924)	
Gain on foreign currency conversion		(2,898,971)		(908,280)	
Gain on valuation of derivatives		(76,110)		(286,108)	
Gain on disposal of property, plant and equipment		(993,911)		(281,635)	
Gain on disposal of intangible assets		-		(120,000)	
Total	₩	39,340,376	₩	52,730,523	

34. CASH GENERATED FROM OPERATIONS (CONT'D)

(2) Changes in operating assets and liabilities for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)			
		2021	2020	
Changes in operating assets and liabilities:				
Increase in trade receivables	₩	(60,136,929) ₩	(34,772,077)	
Decrease(Increase) in other receivables		232,189	(369,879)	
Decrease in derivatives assets		286,108	279,596	
Increase in inventories		(81,832,312)	(29,308,120)	
Decrease(Increase) in advance payments		9,081,898	(6,487,449)	
Decrease(Increase) in prepaid expenses		1,969,576	(698,070)	
Increase in trade payables		53,045,420	38,653,449	
Increase(decrease) in other payables		(1,652,918)	2,188,440	
Increase in accrued expenses		2,482,716	5,059,654	
Decrease in derivatives liabilities		(241,168)	(201,383)	
Increase in advances from customers		6,183,123	2,650,519	
Increase(decrease) in withholdings		(1,398,764)	1,464,304	
Increase in deposit received		42,800	78,502	
Increase in VAT payables		-	54,717	
Decrease in receivables of income tax refund		156,673	559,190	
Increase in Income Taxes Payable		6,024,568	-	
Decrease in present value of retirement benefit				
obligation		(3,463,793)	(2,606,550)	
Decrease in fair value of plan assets		1,483	9,028	
Decrease(increade) in long-term other payables		43,193	(42,026)	
Decrease in prepaid VAT		(6,920,593)	(806,297)	
Decrease in long-term prepaid expenses		(80,417)	(701,695)	
Decrease in short-term provision for product				
warranties		(2,669,857)	(4,708,359)	
Decrease in Accrued Income		321		
Total	₩	(78,846,683) ₩	(29,704,506)	

(3) Significant transactions not affecting cash flows for the years ended December 31, 2021 and 2020, are as follows:

		Korean won ((In thousa	nds)
		2021		2020
Transfer of construction in progress	₩	6,961,176	₩	10,851,769
Transfer of long-term borrowings to current				
portion of borrowings		31,469,130		682,361
Transfer of property, plant and equipment to				
other payables		(16,659,976)		97,520
Increase of capital lease assets and capital lease				
liabilities		6,678,617		683,635
Transfer of provision for product warranties to				
current portion of liabilities		1,754,712		-

34. CASH GENERATED FROM OPERATIONS (CONT'D)

(4) Changes in liabilities generated in financing activities for the year ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)											
	2021											
				Changes in								
				financing	No	t affecting						
]	Beginning		activities	ca	ish flows	Ending					
Loans from financial institutions	₩	78,721,376	₩	79,396,024	₩	4,909,415	₩ 163,026,815					
Debentures		68,928,804		45,378,980		116,196	114,423,980					
Lease Liabilities		1,147,644		(637,055)		6,968,756	7,479,345					
Total debts from financing												
activities	₩	148,797,824	₩	124,137,949	₩	11,994,367	₩ 284,930,140					

		Korean won (In thousands)										
		2020										
				Changes in financing	N	ot affecting						
		Beginning		activities	(cash flows		Ending				
Loans from financial institutions	₩	39,623,073	₩	41,414,506	₩	(2,316,203)	₩	78,721,376				
Debentures		78,000,000		(9,084,000)		12,804		68,928,804				
Lease Liabilities		936,586		(512,456)		723,514		1,147,644				
Total debts from financing activities	₩	<u>118,559,659</u>	₩	31,818,050	₩	(1,579,885)	₩	148,797,824				

35. RELATED-PARTY TRANSACTIONS

(1) The details of related parties as of December 31, 2021, are as follows:

Relation	Company name
Entities with significant influence over the Group	Hansol Holdings Co., Ltd.
Others (*1,2)	Hansol EME Co., Ltd., Hansol Papertech Co., Ltd.,
	Hansol PNS Co., Ltd., etc.

(*1) The Company was included as an associate of Hansol Holdings Co., Ltd. before the previous year, through the additional acquisition of the Company's ownership interest by Hansol Holdings Co., Ltd. Accordingly, the Company was included as a related party of Hansol Holdings Co., Ltd.'s subsidiaries—Hansol EME Co., Ltd., Hansol Papertech Co., Ltd., Hansol PNS Co., Ltd., etc.

(*2) Others include some Hansol Group associates that do not have an ownership interest. Although these companies are not applicable to related parties as defined in KIFRS 1024 Paragraph 9, a group of large-sized affiliates designated by the Korea Fair Trade Commission are classified as related parties according to the resolution by the Securities & Futures Commission, in accordance with substantial relationship defined in KIFRS 1024 Paragraph 10.

35. RELATED-PARTY TRANSACTIONS (CONT'D)

(2)	Transactions with the related parties during the years ended December 31, 2021 and 2020 are as follows:

	Korean won (In thousands) 2021									
· · · · · ·	Sal	les and othe	er trans			Purchases and other transactions				
		ales	Other	Purchase of property, plant and equipment			Other			
Entities with significant										
influence over the entity	117		117	501	117		117	5 0 (0, 100		
Hansol Holdings Co., Ltd.	₩	-	₩	531	₩	-	₩	5,360,408		
Others related parties								-		
Hansol Homedeco Co., Ltd.		-		5,024		-		-		
HDC Resort co., Ltd.		-		-		-		100,330		
Hansol Logistics Co., Ltd.		-		6,984		-		4,135,096		
Hansol EME Co., Ltd.		-		3,617		-		-		
Hansol Inticube Co., Ltd.		-		1,062		-		-		
Hansol Paper Co., Ltd.		-		30,046		-		13,408		
Hansol Papertech Co., Ltd.		-		2,035		-		-		
Hansol PNS Co., Ltd.		-		4,962		268,089		2,900,384		
Hansol Chemical Co., Ltd.		59,500		-		-		-		
Hansol Cultural Foundation		-		-		-		22,543		
tapex		-				-		109,479		
Total	₩	59,500	₩	54,225	\underline{W}	268,089	₩	12,641,648		

	Korean won (In thousands)										
	2020										
	S	ales and othe	r trans	actions	Purchases	and other	transa	ctions			
						Purchase of property, plant and					
Entities with significant		Sales		Other	<u>equip</u>	nent		Other			
Entities with significant											
influence over the entity Hansol Holdings Co., Ltd.	₩		₩	887	₩		₩	4,406,957			
Others related parties	**	_	**	007	**	_	**	4,400,757			
Hansol Homedeco Co., Ltd.		-		8,643		-		-			
HDC Resort co., Ltd.		-				-		265,591			
Hansol Logistics Co., Ltd.		-		10,978		-		1,546,893			
Hansol EME Co., Ltd.		-		6,905		-		-			
Hansol Inticube Co., Ltd.		-		1,986		-		-			
Hansol Paper Co., Ltd.		-		55,206		-		13,615			
Hansol Papertech Co., Ltd.		-		3,351		-		-			
Hansol PNS Co., Ltd.		-		7,873	1	,241,336		2,970,077			
Hansol Chemical Co., Ltd.		27,500		-		-		-			
Hansol Cultural Foundation						_		27,630			
Total	₩	27,500	₩	95,829	₩ 1.	,241,336	₩	9,230,763			

35. RELATED-PARTY TRANSACTIONS (CONT'D)

(3) Significant receivables and payables with related parties as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)								
	December 31, 2021								
		Recei	vable	s	Pay	ables			
	(Other			Trade	Other			
	rec	eivables		Other	Payables		Payables		
Entities with significant									
influence over the entity									
Hansol Holdings Co., Ltd.	₩	145	₩	130,641	₩ -	₩	642,762		
Others related parties									
Hansol Homedeco Co., Ltd.		1,376		-	-		-		
HDC Resort co., Ltd.		-		230,000	-		-		
Hansol Logistics Co., Ltd.		1,904		-	439		345,518		
Hansol EME Co., Ltd.		992		-	-		-		
Hansol Inticube Co., Ltd.		292		-	-		-		
Hansol Paper Co., Ltd.		8,232		-	-		58		
Hansol Papertech Co., Ltd.		558		-	-		-		
Hansol PNS Co., Ltd.		1,360		-	-		650,405		
Hansol Cultural Foundation				_			24,797		
Total	₩	14,859	₩	360,641	₩ 439	₩	<u>1,663,540</u>		

	Korean won (In thousands)									
	December 31, 2020									
		Recei	vable	s	Payables					
		Other				Trade		Other		
	rec	eivables		Other	Payables		Payables			
Entities with significant										
influence over the entity										
Hansol Holdings Co., Ltd.	\mathbb{W}	143	₩	103,971	₩	-	₩	571,759		
Others related parties										
Hansol Homedeco Co., Ltd.		1,391		-		-		-		
HDC Resort co., Ltd.		-		230,000		-		-		
Hansol Logistics Co., Ltd.		1,766		-		4,129		309,855		
Hansol EME Co., Ltd.		1,110		-		-		-		
Hansol Inticube Co., Ltd.		319		-		-		-		
Hansol Paper Co., Ltd.		8,878		-		-		-		
Hansol Papertech Co., Ltd.		539		-		-		-		
Hansol PNS Co., Ltd.		1,266		-		-		849,897		
Hansol Cultural Foundation		-				_		30,393		
Total	₩	15,412	₩	333,971	₩	4,129	₩	1,761,904		

(4) Details of compensation for key executives for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)						
		2021		2020			
Short-term employee benefits	\mathbb{W}	2,344,287	₩	1,604,446			
Retirement benefits		184,846		133,502			
Stock compensation expenses		184,975		184,975			
Total	₩	2,714,108	₩	1,922,923			

Key executives of the Group include the registered officers of directors (including outside directors) and an auditor.

36. FINANCIAL RISK MANAGEMENT

(1) Capital risk management

The Group's capital management objective is to sustain the ability, as a going concern, to consistently deliver profits to shareholders and other stakeholders, and to maintain a robust capital structure to reduce the cost of capital. The overall strategy of the Group is not changed compared to December 31, 2020.

		Korean won (In thousands)							
	D	ecember 31, 2021	December 31, 2020						
Liabilities	\overline{W}	510,394,100 ₩	312,289,415						
Assets		278,276,252	279,102,970						
Debt ratio		183.4%	111.9%						

(2) Financial risk management

1) Financial risk factors

The Group's financial segment manages operations, organizes access to domestic and international financial markets and monitors and manages financial risks associated with the Group's operations through an internal risk report that analyzes the extent and magnitude of each risk These risks include market (including currency, fair value interest rate and price), credit, liquidity and cash flow interest rate.

There are no changes in the Group's financial risk management objectives and risk management policies since December 31, 2020.

2) Risk hedging activities

The Group's activities are mainly exposed to financial risk due to fluctuations in exchange rates. Derivative contracts are entered into to manage foreign currency risk. The Group has entered into forward foreign exchange contracts with financial institutions during the year ended December 31, 2021, to hedge foreign exchange rate risk of foreign currency receivables and liabilities.

3) Credit risk

Note 6 (Trade receivables and other receivables) and Note 13 (Other financial assets) describe the measurement basis used to determine the maximum exposure to credit risk and expected credit loss for the Group.

Credit risk is managed at the company level. The Group is exposed to credit risk from its operating activities (primarily for trade accounts receivable) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and derivative financial instruments. In order to manage credit risk, the Group maintains business relationship with customers with a certain level of credit rate or higher, and periodically re-evaluates the credit rating of the customer and review the credit limit. During the current period, there were no transitions with exceeding credit limits, and the Group does not expect significant losses from trades with a single party or similar group of party due to defaults.

4) Liquidity risk

There is no significant change in the non-discounted contractual cash flows of financial liabilities compared to December 31, 2020.

The ultimate responsibility for liquidity risk management lies with the board of directors, which establishes a basic policy to properly manage the short-, medium- and long-term funding and liquidity management provisions of the Group. The Group maintains sufficient reserves and borrowing limits, continues to monitor forecast cash flows and actual cash flows and manages liquidity risk by matching the maturity structure of financial assets and financial liabilities.

36. FINANCIAL RISK MANAGEMENT (CONT'D)

(2) Financial risk management (cont'd)

(a) Liquidity and interest rate risk

Liquidity risk refers to the risk that the Group will have difficulty meeting its obligations related to financial liabilities. The Group's liquidity management approach is to ensure that there is sufficient liquidity to repay the debt at maturity, without incurring unacceptable losses even in difficult financial situations, or risking damage to the Group's reputation.

The following table details the remaining contractual maturity of the Group's non-derivative financial liabilities. The table is based on the earliest expiration date the Group is required to pay based on the non-discounted cash flows of the financial liabilities. The table includes both principal and interest cash flows. The contractual maturity is based on the earliest date on which a meeting can be requested.

	Korean won (In thousands)									
			December 3	1, 2021						
		Contractual	Less than	Less than	Less than					
	Book value	cash flows	three months	one year	three years					
Derivative liabilities:										
Derivative liabilities	₩ 181,414	₩ 181,414	₩ 181,414	₩ -	₩ -					
Non-derivative liabilities:										
Trade payables and										
other payables	174,275,132	174,275,132	172,354,726	-	1,920,406					
Borrowings	163,026,815	167,072,460	12,160,018	106,246,406	48,666,036					
Debentures	114,423,980	119,609,860	775,726	31,640,658	87,193,477					
Capital Lease Liabilities	7,479,345	7,584,955	485,545	1,080,212	6,019,197					
Total	₩ 459,386,687	₩ 468,723,821	₩ 185,957,429	₩ 138,967,276	₩ 143,799,116					

	Korean won (In thousands)										
-		December 31, 2020									
			Contractual		Less than		Less than			Less than	
<u>.</u>	Book value		cash flows		three months		one year		three years		
Derivative liabilities:											
Derivative liabilities	₩	241,168	₩	241,168	₩	241,168	₩	-	₩	-	
Non-derivative liabilities:											
Trade payables and											
other payables		116,862,955		116,862,955		114,985,742		-		1,877,214	
Borrowings		78,721,376		80,219,817		18,552,782		51,477,276		10,189,759	
Debentures		68,928,804		70,869,723		604,849		39,979,800		30,285,074	
Capital Lease Liabilities		1,147,644		1,181,079		152,867		333,611		694,601	
Total	\mathbb{W}	265,901,947	₩	269,374,742	₩	134,537,408	₩	91,790,687	₩	43,046,648	

(3) Fair value of financial instruments

The fair value of financial instruments traded in an active market is determined based on market prices announced at the end of the reporting period.

The Group establishes its hypothetical assumptions based on market conditions as of December 31, 2021, and uses various valuation techniques, such as the discounted cash flow method to estimate fair value.

In the case of trade receivables and trade payables, the book value, less impairment loss, is treated as an approximate fair value. For disclosure purposes, the fair value of financial liabilities is estimated by discounting the contractual future cash flows to the current market interest rate applied to similar financial instruments.

36. FINANCIAL RISK MANAGEMENT (CONT'D)

(3) Fair value of financial instruments (cont'd)

1) The Group classifies the financial instruments measured at fair value in the consolidated statements of financial position into the following fair value hierarchy according to the input variables used in the fair value measurement:

	Significance of inputs
Level 1	Quoted prices in active markets for identical assets or liabilities
Level 2	Inputs that are observable for the asset or liability, either directly or indirectly
Level 3	Unobservable inputs for the asset or liability.

The following table is an analysis of financial instruments measured at fair value after initial recognition, which are classified as Level 1 to Level 3 according to the extent to which fair value is observable in the market:

		Korean won (In thousands)								
		December 31, 2021								
		Level 1			Level 2		Level 3			Total
Derivative assets	₩		-	₩	76,110	₩		-	₩	76,110
Derivative liabilities			-		181,414			-		181,414

		Korean won (In thousands)									
		December 31, 2020									
		Level 1		Level 2		Level 3		Total			
Derivative assets	₩		- ₩	286,108	₩	-	-₩	286,108			
Derivative liabilities			-	241,168		-	-	241,168			

There is no significant movement between Level 1 and Level 2 for the year ended December 31, 2021.

2) There are no significant changes in the business environment or economic environment for the year ended December 31, 2021, that impact the fair value of financial assets and financial liabilities held by the Group.

3) The following table describes the valuation techniques used in level 2 fair value measurement, the level of the fair value hierarchy, the relation with significant unobservable inputs, and the correlation between unobservable inputs and fair value measurements.

	Korean won (In thousands)							
Derivative assets Derivative	<u>Fair V</u> December <u>31, 2021</u> 76,110 181,414		<u>Level</u>	Valuation <u>Method</u> The fair value of foreign exchange forward is measured principally on the basis of the forward	Significant non- observable inputs and <u>Ranges</u> Not applicable	Association between unobservable inputs and fair value <u>measurements</u> Not applicable		
liabilities			2	exchange rate disclosed in the market at the end of the reporting period for the period in which it meets the remaining period of the currency forward.				

36. FINANCIAL RISK MANAGEMENT: (CONT'D)

(4) Reclassification of financial assets

There are no financial assets reclassified due to changes in purpose or use for the year ended December 31, 2021.

37. CONSTRUCTION CONTRACT

(1) Changes in balances of major construction contracts for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)							
		December 31, 2021		December 31, 2020				
Beginning	₩	3,819,449	₩	2,744,094				
Changes in balances of construction								
Contracts (*1)		12,020,617		6,935,508				
Construction income		(15,840,066)		(5,860,153)				
Ending	₩		₩	3,819,449				

Since the Group cannot reliably estimate the outcome of a construction contract, the Group recognizes revenue only within the scope of contract costs incurred in accordance with paragraph 32 of KIFRS 1011 that are highly probable to be recovered.

(*1) This is the amount that includes the new contract and the additional contract amount.

(2) Details of cumulative income and losses for the years ended December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)					
		2021		2020		
Cumulative income	\mathbf{W}		- ₩	1,245,578		
Cumulative losses				(1,245,578)		
Total	₩		<u>-</u> ₩			

(3) Details of advanced construction billing-associated constructions in progress as of December 31, 2021 and 2020, are as follows:

	Korean won (In thousands)				
		2021		2020	
Advances received (*1)	₩		- ₩	3,080,447	

(*1) This is included in other current liability in the consolidated statements of financial position.

(4) The estimation of total contract revenue and cost is not changed for the year ended December 31, 2021.

(5) There is no construction contract occupied more than 5% of sales as of December 31, 2021.

38. Uncertainty of COVID-19 impact

A variety of prevention and control measures are being implemented around the world, including movement restrictions, to prevent the spread of COVID-19, and as a result, the global economy is widely affected. In addition, various forms of government support policies are being announced to cope with COVID-19.

The Group's sales depend on company A. The items affected by COVID-19 are recoverability of trade receivables and impairment of property, plant and equipment. The Group has prepared the consolidated financial statements by reasonably estimating the impact of COVID-19. However, there is a significant uncertainty in estimating the ultimate impact therefrom and the termination of COVID-19.

The impact of COVID-19 and the future impact of government support policies on the Group's consolidated financial statements are not reasonably estimable as of December 31, 2021, and have not been reflected on the accompanying consolidated financial statements.

39. APPROVAL OF CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements have been approved by the board of directors on February 8, 2022, and will be finally approved at the shareholders' meeting on March 23, 2022.

40. EVENT OF AFTER REPORTING PERIOD

(1) The Group acquired the shares of IONES Co., Ltd. by resolution of the board of directors on December 3, 2021, and as of January 14, 2022, a total of KRW 127,490,266 thousands was paid and the stock transfer was completed.

(2) After the reporting period, the Group has issued commercial papers (CP) of KRW 20,000,000 thousands to secure operating funds.

(3) The Group issued 74th private equity bond and 75th public offering bond with a total face value of KRW 7,000,000 thousands and KRW 20,000,000 thousands to secure operating funds.