HANSOL TECHNICS CO., LTD.
AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2022 AND 2021

ATTACHMENT: INDEPENDENT AUDITOR'S REPORT

HANSOL TECHNICS CO., LTD.

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INDEPENDENT AUDITOR'S REPORT

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Independent auditor's report

(English Translation of a Report Originally Issued in Korean on March 20, 2023)

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

Opinion

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

Basis for Opinion

We conducted our audit in accordance with Korean Standards on Auditing ("KSA"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

Period of sales recognition

The Group's sales are one of the Group's key financial performance evaluation indicators. As described in Note 29 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 period for which sales from export transactions are attributable as a key audit matter because it is exposed to the risk of overestimation of revenue due to errors in judgment or intention.

The primary procedures we conducted to address this key audit matter are as follows:

- We performed analytical procedures such as comparing performance with historical periods and analyzing trends in monthly performance.
- We performed detailed substantive procedure using sampling method for the export transactions that occurred during the current period.
- We compared the documents proving export transactions that occurred immediately before and after the end of the reporting period and the timing of revenue recognition.
- We made inquiry about 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 KSA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with KSA, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events

or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements, 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 Hee Kyun Shin.

Ernst & Young Han Young

March 20, 2023

This audit report is effective as of March 20, 2023, 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.

HANSOL TECHNICS CO., LTD.
AND ITS SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS
FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

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

Yoo, Kyung Joon

Chief Executive Officer
HANSOL TECHNICS CO., LTD.

Main Office Address: 100, Eulji-ro, Jung-gu, Seoul
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HANSOL TECHNICS CO., LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AS OF DECEMBER 31, 2022 AND 2021

			Korean won		
	Notes		2022		2021
ASSETS:					
Cash and cash equivalents	35	₩	92,138,812,410	₩	86,934,815,560
Short-term financial instruments	5		68,393,547,615		201,314,400
Trade receivables and other receivables	6		164,965,396,960		179,377,540,690
Inventories	7		175,348,386,162		153,063,524,153
Current tax assets			559,766		2,470,794
Other current financial assets	14,38		3,171,790,567		2,076,109,873
Other current assets	15		5,397,036,856		46,340,111,179
Current assets			509,415,530,336		467,995,886,649
Long-term financial instruments	5,38		1,042,011,554		922,011,554
Long-term other bonds	6		448,343,026		-
Financial assets measured at fair value through other comprehensive income	8,38		240,151,000		12,150,000
Financial assets measured at fair value through profit or loss	9		3,504,880,860		1,376,135,280
Property, plant and equipment	10		341,951,394,219		249,899,292,893
Investment property	11		26,731,210,638		-
Intangible assets	12		156,143,039,888		36,197,441,947
Right-of-use assets	13		16,839,413,483		17,650,691,163
Deferred tax assets	34		10,392,342,395		8,669,927,924
Other non-current financial assets	14,38		4,698,635,710		5,632,125,510
Other non-current assets	15		514,947,584		314,689,872
Non-current assets			562,506,370,357		320,674,466,143
Total assets		₩	1,071,921,900,693	₩	788,670,352,792
LIABILITIES:					
Trade payables and other payables	16,38	₩	160,006,845,375	₩	172,354,725,861
Short-term borrowings	17,22,38		155,552,843,554		114,217,392,428
Current portion of long-term debt	17,38		14,399,898,304		1,483,547,500
Current portion of long-term debentures	17,38		71,917,381,195		29,985,582,921
Current tax liabilities			4,265,811,755		712,630,303
Short-term provisions	19		3,476,162,199		2,420,368,127
Other current financial liabilities	13,20,38		1,639,194,034		634,803,368
Other current liabilities	21		13,450,623,131		11,461,295,188
Current liabilities			424,708,759,547		333,270,345,696
Trade payables and other payables	16,38		2,043,637,685		1,920,406,079
Long-term borrowings	17,38		34,140,803,642		47,325,875,291
Long-term debentures	17,38		123,913,625,004		84,438,396,959
Net defined benefit liabilities	18		27,490,327,653		32,754,378,977
Other current financial liabilities	13,20,38		9,110,436,680		7,155,956,326
Long-term provisions	19		2,119,881,588		2,714,548,343
Deferred tax liabilities	34		8,368,178,878		814,192,773
Non-current liabilities			207,186,891,130		177,123,754,748
Total liabilities		₩	631,895,650,677	₩	510,394,100,444

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AS OF DECEMBER 31, 2022 AND 2021 (CONT'D)

	Notes		Korean won 2022		Korean won 2021
EQUITY:					
Issued capital	23	₩	160,549,390,000	₩	160,549,390,000
Share premium	24		55,286,210,245		54,963,416,153
Retained earnings	25		78,434,854,411		59,385,028,268
Other components of equity	26		12,019,484,787		3,094,250,428
Equity attributable to the owners of the parent			306,289,939,443		277,992,084,849
Non-controlling interests	37		133,736,310,573		284,167,499
Total equity			440,026,250,016		278,276,252,348
Total liabilities and equity		₩	1,071,921,900,693	₩	788,670,352,792

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

HANSOL TECHNICS CO., LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

	Notes		Korean won 2022		Korean won 2021
REVENUE	4,29,39	₩	1,647,391,648,302	₩	1,490,620,987,769
COST OF SALES	30		1,464,296,748,829		1,387,169,505,685
GROSS PROFIT			183,094,899,473		103,451,482,084
Selling and administrative expenses	4,30,31		127,989,939,636		107,707,352,276
OPERATING INCOME (LOSS)	4		55,104,959,837		(4,255,870,192)
Financial income	32		60,831,193,382		24,449,962,357
Financial cost	32		72,822,992,485		28,596,018,169
Other non-operating income	33		2,683,780,212		2,810,431,886
Other non-operating expenses	4,33		9,448,487,193		979,070,750
INCOME (LOSS) BEFORE INCOME TAX			36,348,453,753		(6,570,564,868)
Income tax expense	34		3,721,252,657		2,775,285,277
NET INCOME (LOSS)		₩	32,627,201,096	₩	(9,345,850,145)
OTHER COMPREHENSIVE INCOME		₩	13,323,592,319	₩	8,216,864,480
Items not subsequently reclassified to net Remeasurements of net defined benefit			4,396,323,819		(1,157,179,051)
Items subsequently reclassified to net income: Exchange differences on translating foreign					
TOTAL COMPREHENSIVE INCOME (LOSS)		₩	45,950,793,415	₩	(1,128,985,665)

(Continued)

HANSOL TECHNICS CO., LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021 (CONT'D)

	Notes		Korean won 2022		2021
Net income (loss) attributable to:					
Owners of the parent		₩	14,717,027,946	₩	(9,330,236,944)
Non-controlling interests			17,910,173,150		(15,613,201)
Total comprehensive income (loss) attributable					
Owners of the parent			27,975,060,502		(1,114,408,345)
Non-controlling interests			17,975,732,913		(14,577,320)
Earnings per share:	27				
Basic earnings (loss) per share		₩	468	₩	(297)
Diluted earnings (loss) per share		₩	468	₩	(297)

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

HANSOL TECHNICS CO., LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

		Issued capital		Share premium		Retained earnings		Other components of equity		Non-controlling interests		Total
January 1, 2021	₩	160,549,390,000	₩	54,661,148,039	₩	69,872,444,263	₩	(6,278,757,222)	₩	298,744,819	₩	279,102,969,899
Total comprehensive income(loss)												
Net loss		-		-		(9,330,236,944)		-		(15,613,201)		(9,345,850,145)
Exchange differences on translating foreign operations, net 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)		-		-		(1,157,179,051)
Transactions with owners of the Company, recognized directly in equity:												
Stock options		-		302,268,114		-		-		-		302,268,114
December 31, 2021	₩	160,549,390,000	₩	54,963,416,153	₩	59,385,028,268	₩	3,094,250,428	₩	284,167,499	₩	278,276,252,348

		Issued capital		Share premium		Retained earnings		Other components of equity		Non-controlling interests		Total
January 1, 2022	₩	160,549,390,000	₩	54,963,416,153	₩	59,385,028,268	₩	3,094,250,428	₩	284,167,499	₩	278,276,252,348
Total comprehensive income(loss)												
Net income		-		-		14,717,027,946		-		17,910,173,150		32,627,201,096
Exchange differences on translating foreign operations, net of income tax		-		-		-		8,925,234,359		2,034,141		8,927,268,500
Remeasurements of defined benefit plans, net of income tax		-		-		4,332,798,197		-		63,525,622		4,396,323,819
Transactions with owners of the Company, recognized directly in equity:												
Stock options		-		322,794,092		-		-		155,494,998		478,289,090
Business combination		-		-		-		-		115,320,915,163		115,320,915,163
December 31, 2022	₩	160,549,390,000	₩	55,286,210,245	₩	78,434,854,411	₩	12,019,484,787	₩	133,736,310,573	₩	440,026,250,016

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

HANSOL TECHNICS CO., LTD. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

	Notes		Korean won 2022		Korean won 2021
CASH FLOWS FROM OPERATING ACTIVITIES:					
Net income (loss)		₩	32,627,201,096	₩	(9,345,850,145)
Adjustments	35		77,846,523,197		39,340,377,072
Changes in net operating assets and liabilities	35		(19,456,366,509)		(78,846,682,788)
Interest received			1,847,949,255		457,290,650
Interest paid			(9,583,958,847)		(3,802,975,962)
Income taxes paid			(16,872,667,542)		(4,030,308,163)
Net cash flows provided by (used in) operating activities			66,408,680,650		(56,228,149,336)
CASH FLOWS FROM INVESTING ACTIVITIES:					
Decrease in financial instruments			382,951,407,444		2,000,000,000
Increase in short-term financial instruments			(438,753,825,670)		-
Increase in long-term financial assets			(1,933,502,000)		(3,986,672,596)
Decrease in other financial assets			582,273,658		-
Proceeds from disposal of financial assets measured at fair value through other comprehensive income			100,000,000		105,000
Acquisition of financial assets measured at fair value through profit or loss			(2,128,745,580)		(426,135,280)
Increase in long-term loans			(160,000,000)		-
Increase in advance payments			-		(32,600,000,000)
Proceeds from disposal of property, plant and equipment			1,872,622,169		15,024,012,605
Acquisition of property, plant and equipment			(27,294,435,266)		(72,196,344,289)
Acquisition of investment property			(181,600,000)		-
Proceeds from disposal of intangible assets			-		58,960,350
Acquisition of intangible assets			(1,781,393,802)		(353,291,393)
Decrease in other financial assets			1,818,732,330		105,971,000
Increase in other financial assets			(53,463,645)		(2,840,481,000)
Business combination of subsidiaries			(37,617,870,757)		-
Decrease in other current financial liabilities			(2,253,981,000)		-
Net cash flows used in investing activities			(124,833,782,119)		(95,213,875,603)
CASH FLOWS FROM FINANCING ACTIVITIES:					
Proceeds from short-term borrowings			479,263,278,134		304,969,541,212
Payment of short-term borrowings			(486,010,928,525)		(263,566,738,576)
Issue of long-term debt			110,898,785,455		84,378,980,000
Payment of short-term debentures			(2,400,000,000)		(39,000,000,000)
Proceeds from long-term borrowings			5,000,000,000		37,993,221,302
Payment of long-term borrowings			(562,500,000)		-
Payment of current portion of long-term debentures			(30,000,000,000)		-
Payment of current portion of long-term debt			(13,233,000,000)		-
Payment of lease			(933,276,807)		(637,055,472)
Payment of stock issuance costs			(18,962,080)		-
Increase in lease deposits			5,400,000		-
Decrease in lease deposits			(4,100,000)		-
Net cash flows provided by financing activities			62,004,696,177		124,137,948,466
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS			3,579,594,708		(27,304,076,473)
CASH AND CASH EQUIVALENTS ON JANUARY 1			86,934,815,560		113,144,221,110
NET FOREGIN EXCHANGE DIFFERENCES			1,624,402,142		1,094,670,923
CASH AND CASH EQUIVALENTS ON DECEMBER 31		₩	92,138,812,410	₩	86,934,815,560

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

HANSOL TECHNICS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2022 AND 2021

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, 2022, the share capital of the Company amounts to ₩160,549,390 thousand, and the Company issued 32,109,878 shares of common stock with a par value of ₩5,000 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, 2022 and 2021, are as follows:

	Location	Closing date	Main business	Percentage of ownership December 31,2022	Percentage of ownership December 31,2021
Hansol Technics (Thailand) Co., Ltd.	Thailand	December 31	Electronic components manufacturing	100.00%	100.00%
Hansol Technics Europe s.r.o.	Slovakia	December 31	Sale of electronic components	84.20%	84.20%
Hansol Electronics Vietnam Co., Ltd.	Vietnam	December 31	Electronic components manufacturing	100.00%	100.00%
Hansol Technics America LLC (*1)	USA	December 31	Sale of solar products	-	100.00%
Hansol Precision Materials (KunShan) Co., Ltd	China	December 31	Electronic components manufacturing	100.00%	100.00%
Hansol Electronics Vietnam Hochiminhcity Co.,Ltd.(*2)	Vietnam	December 31	Electronic components manufacturing	100.00%	100.00%
Hansol IONES Co.,Ltd. (*3,4)	Korea	December 31	Semiconductor components manufacturing	37.00%	-

1. GENERAL (CONT'D)

(2) Subsidiaries (cont'd)

(*1) The entity was excluded from subsidiaries due to the liquidation occurring for the year ended December 31, 2022.
(*2) The stake changed as Hansol Electronics Vietnam Co.,Ltd, a subsidiary for the year ended December 31, 2022, conducted a capital increase to Hansol Electronics Vietnam Hochiminhcity Co.,Ltd. The parent company has a 55% stake and Hansol Electronics Vietnam Co.,Ltd has a 45% stake.
(*3) The entity was newly acquired for the year ended December 31, 2022.
(*4) Although the Company holds less than 50% of shares in the entity, the entity is classified as a subsidiary, as the Company is deemed to have control over the entity by participating in decision making procedure of the entity and having mutual communication with management of the entity. The percentage of ownership excludes treasury shares in Hansol IONES Co., Ltd.

2) Summary of financial information of subsidiaries as of December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)				
	December 31, 2022				
Company	Assets	Liabilities	Sales	Net income(loss)	Total comprehensive income(loss)
Hansol Technics (Thailand) Co., Ltd.	₩ 130,610,199	₩ 94,645,616	₩ 473,657,134	₩ 467,942	₩ 467,942
Hansol Technics Europe s.r.o.	3,315,313	1,557,038	2,699,030	(52,362)	(52,362)
Hansol Electronics Vietnam Co., Ltd.	107,364,377	36,490,510	335,594,915	9,265,573	9,265,573
Hansol Precision Materials (KunShan) Co., Ltd.	11,097,237	10,482,565	20,115,112	(2,328,189)	(2,328,189)
Hansol Electronics Vietnam Hochiminh City Co.,Ltd.	111,059,469	119,941,112	286,621,552	(14,419,274)	(14,419,274)
Hansol IONES Co.,Ltd.	227,768,583	76,584,020	164,833,105	28,693,350	28,794,392

	Korean won (In thousands)				
	December 31, 2021				
Company	Assets	Liabilities	Sales	Net income(loss)	Total comprehensive 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 Vietnam Hochiminh City Co.,Ltd.	159,369,626	158,034,872	454,405,437	(2,731,193)	(2,731,193)

1. GENERAL (CONT'D)

(2) Subsidiaries (cont'd)

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

	Korean won (In thousands)											
	December 31, 2022											
		Hansol Technics (Thailand) Co., Ltd.		Hansol Technic Europe s.r.o		Hansol Electronics Vietnam Co., Ltd.		Hansol Precision Materials (KunShan) Co.,Ltd		Hansol Electronics Vietnam Hochiminh City Co.,Ltd		Hansol Iones Co.,Ltd.
Cash flows from operating activities	₩	(5,459,297)	₩	(811,659)	₩	22,611,263	₩	105,755	₩	22,577,688	₩	21,170,878
Cash flows from investing activities		(1,519,214)		-		(5,060,710)		(564,210)		(4,076,651)		(51,439,569)
Cash flows from financing activities		6,813,338		-		(19,379,250)		564,078		(14,258,190)		31,409,707
Net change in cash and cash equivalents		(165,173)		(811,659)		(1,828,697)		105,623		4,242,847		1,141,016
Beginning balance (cash and cash equivalents)		1,843,993		1,746,903		6,034,635		163,736		1,128,075		16,490,063
Effect of foreign exchange rate		57,269		15,225		466,010		(9,822)		(71,622)		1,216,936
Ending balance (cash and cash equivalents)		1,736,089		950,469		4,671,948		259,537		5,299,300		18,848,015

	Korean won (In thousands)											
	December 31, 2021											
		Hansol Technics (Thailand) Co., Ltd.		Hansol Technic 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 from investing activities		(18,503,760)		-		(2,663,461)		-		(1,266,780)		(37,079,568)
Cash flows from 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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(1) Basis of preparation

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

The 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, 2022, 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 or ₩) and all values are rounded to the nearest thousands, except when otherwise indicated.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

New and amended standards and interpretations

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

Amendments to KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets – Onerous Contracts – Costs of Fulfilling a Contract

An onerous contract is a contract under which the unavoidable costs of meeting the obligations under the contract costs (i.e., the costs that the Group cannot avoid because it has the contract) exceed the economic benefits expected to be received under it. The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labor and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendment has no impact on the consolidated financial statements of the Group.

Amendments to KIFRS 1103 Business Combination - the Conceptual Framework

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

Amendments to KIFRS 1016 Property, Plant and Equipment - proceeds before Intended Use

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

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 in the parent's consolidated financial statements, based on the parent's date of transition to KIFRS, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101. These amendments had no impact on the consolidated financial statements of the Group as it is not a first-time adopter.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

New and amended standards and interpretations(cont'd)

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

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

KIFRS 1041 Agriculture – Taxation in fair value measurements

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

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

KIFRS 1117 *Insurance contract*

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

The core of KIFRS 1117 is the general model, supplemented by:
- a specific adaptation for contracts with direct participation features (the variable fee approach); and
- a simplified approach (the premium allocation approach) mainly for short-duration contracts.

KIFRS 1117 is effective for reporting periods beginning on or after January 1, 2023, with comparative figures required. Early application is permitted, provided the entity also applies KIFRS 1109 and KIFRS 1115 on or before the date it first applies KIFRS 1117. The Group is currently assessing the impact of the amendments.

Amendments to KIFRS 1001 *Presentation of Financial Statements* - Classification of Liabilities as Current or Non-current

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

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

The amendments are effective for annual reporting periods beginning on or after January 1, 2024 and must be applied retrospectively. The Group is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

New and amended standards and interpretations(cont'd)

Amendments to KIFRS 1008 *Accounting policies, changes in accounting estimates and errors* - Definition of Accounting 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's financial statements.

Amendments to 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 are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted. The Group is currently revisiting their accounting policy information disclosures to ensure consistency with the amended requirements.

Amendments to KIFRS 1012 *Income taxes* – Deferred Tax related to Assets and Liabilities arising from a Single Transaction

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

(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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(3) Basis of Consolidation(cont'd)

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 in equity are accounted 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 share-based 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 – Non-current 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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(4) Business combinations(cont'd)

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.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

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 3,38
- Quantitative disclosures of fair value measurement hierarchy - notes 38
- Financial instruments (including those carried at amortized cost) - notes 38

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

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

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

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

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

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(7) Foreign currencies(cont'd)

Monetary assets and liabilities 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 short-term 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 short-term 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 amortized cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient 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 amortized cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

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

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

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

- Subsequent measurement

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

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

- Financial assets at amortized cost (debt instruments)

This category is the most relevant to the Group. The Group measures financial assets at amortized 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 amortized 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.

- Financial assets at fair value through OCI (debt instruments)

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

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

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

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

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

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

Financial assets at fair value through profit or loss are carried in the 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.

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

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

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

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(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. An 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.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

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

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 asset or 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(12) Non-current assets held for sale(cont'd)

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	20-40
Machinery	5–10
Vehicles	5
Tools and equipment	5
Facilities	15

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) Investment property

Investment properties are measured initially at cost, including transaction costs. However, other costs occurred from recurring management activities are expensed in the period in which they occur. Subsequent to initial recognition, investment properties are stated at cost, net of accumulated depreciation and accumulated impairment losses.

Investment properties are derecognized either when they are disposed of or when they are used and no future economic benefit is expected from the disposal or use. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit or loss as it incurred. The amount of consideration to be included in the gain or loss from derecognition of the investment property is determined in accordance with the requirements of KIFRS1115 for determining the transaction price.

Transfers are made to or from investment property only when there is a change in use. For a transfer from (to) investment property to (from) owner-occupied property or inventory, the transfer is stated at the carrying value of the asset before the transfer occurs.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(15) 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 economic 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 recognition 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.

(16) 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.

(17) 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(17) Government grants (CONT'D)

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.

(18) 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 recognizes 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 recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and Impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognized 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 recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including 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 recognized 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.

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 recognized as expense on a straight-line basis over the lease term.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(18) Leases(cont'd)

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

(19) 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.

(20) 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(20) Provisions(cont'd)

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.

(21) 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.

(22) 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(22) Share-based payment arrangements(cont'd)

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.

(23) 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.

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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONT'D)

(23) Taxation(cont'd)

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.

(24) Revenue from contracts with customers

The Group recognizes revenue from the following major sources:

- Sales of electronic components, LED wafers and sales of photovoltaic ("PV") modules.
- Construction of photovoltaic power generation facilities.
- Processing semiconductor equipment parts, cleaning/coating.

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, PV module and semiconductor equipment and parts

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.

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 recognized 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.

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 post-employment 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 l.

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
Semiconductor components	Processing semiconductor equipment parts, cleaning/coating

(2) Segment information for the years ended December 31, 2022 and 2021 is as follows:

	Korean won (In thousands)			
	2022			
	Electronic components	Products and assembly	Semiconductor components	Total
Sales	₩ 629,404,498	₩ 853,176,536	₩ 164,810,614	₩ 1,647,391,648
Profit from operations (*)	4,382,194	20,704,372	30,018,394	55,104,960
Depreciation	13,250,809	13,811,530	6,562,247	33,624,586
Amortization	335,840	3,369,624	6,597,326	10,302,790
Depreciation of right-of-use asset	521,771	1,695,122	368,949	2,585,842
Impairment of property, plant and equipment	-	4,777,187	-	4,777,187
Impairment of right-of-use asset	-	2,117,419	-	2,117,419
Impairment of intangible assets	-	739,026	-	739,026

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

	Korean won (In thousands)		
	2021		
	Electronic components	Products and 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 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, 2022 and 2021 is as follows:

	Korean won (In thousands)	
	2022	2021
Korea	₩ 346,935,635	₩ 180,472,585
Europe	439,440,172	594,663,801
America	267,352,282	188,630,589
Asia	583,114,406	517,639,171
Africa	10,549,153	9,214,842
Total	₩ 1,647,391,648	₩ 1,490,620,988

(4) The major customers who account for more than 10% of the sales for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	2022	2021
Company A	₩ 1,174,502,905	₩ 1,190,648,613

5. FINANCIAL ASSETS

(1) Financial asset of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	December 31, 2022	December 31, 2021
Short-term financial instruments	68,393,548	201,314

(2) Restricted financial instruments as of December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)		
	December 31, 2022	December 31,	Note
Other long-term financial instruments	2,012	2,012	Deposit received
Other financial instruments	-	3,847,746	Guarantee deposit received
Total	₩ 2,012	₩ 3,849,758	

6. TRADE RECEIVABLES AND OTHER RECEIVABLES

(1) Trade receivables and other receivables as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Trade receivables	₩ 171,366,311	₩ -	₩ 184,446,992	₩ -
Less: Loss allowance	(9,490,145)	-	(6,884,869)	-
	161,876,166	-	177,562,123	-
Other receivables	3,388,656	3,638,028	1,907,704	-
Less: loss allowance	(548,034)	(3,079,181)	(206,466)	-
Present value discounts	(120,534)	(110,504)	-	-
	2,720,088	448,343	1,701,238	-
Accrued receivable	369,143	-	114,180	-
Total	₩ 164,965,397	₩ 448,343	₩ 179,377,541	₩ -

(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, 2022 and 2021 is as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
Past due, but not impaired				
Three months to six months	₩	1,676,124	₩	4,719,484
One year or less		1,833,349		4,076,068
Two years or less		741,586		1,128,136
More than two years		1,059,641		-
Total	₩	5,310,700	₩	9,923,688
Impaired				
Less than three months	₩	1,424,503	₩	1,021,371
Three months to six months		89,668		387,865
One year or less		978,374		1,422,938
Two years or less		1,453,633		1,169,745
More than two years		9,171,181		3,089,415
Total	₩	13,117,359	₩	7,091,334

(2) Changes in the loss allowance for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
Balance as of January 1	₩	7,091,334	₩	8,625,761
Variation in the range of connections		8,972,427		-
Provision		932,186		998,905
Reversal		(3,878,587)		(2,533,331)
Ending balance	₩	13,117,360	₩	7,091,334

7. INVENTORIES

(1) Inventories as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)											
	December 31, 2022						December 31, 2021					
		Acquisition cost		Valuation reserve		Book value		Acquisition cost		Valuation reserve		Book value
Merchandise	₩	7,035,246	₩	(156,880)	₩	6,878,366	₩	10,718,576	₩	(331,661)	₩	10,386,915
Finished goods		46,077,873		(1,848,597)		44,229,276		43,994,254		(301,182)		43,693,072
Work in process		12,306,508		(1,139,705)		11,166,803		2,381,991		(135,225)		2,246,766
Raw materials		104,190,753		(3,857,853)		100,332,900		64,153,691		(1,216,893)		62,936,798
Supplies		1,250,588		-		1,250,588		1,988,622		-		1,988,622
Materials in transit		11,490,453		-		11,490,453		31,811,351		-		31,811,351
Total	₩	182,351,421	₩	(7,003,035)	₩	175,348,386	₩	155,048,485	₩	(1,984,961)	₩	153,063,524

Reversal of loss on valuation of inventories of ₩1,645,817 thousand due to increase in net realizable value is included in the cost of inventories recognized as expenses for the year ended December 31, 2022. Reversal on valuation of inventories of ₩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.

(2) Assets pledged as collateral for borrowings of the Group as of December 31, 2022 are as follows:

Pledged assets	Carrying amount	Amount	Borrowings amount	Pledged organization
Finished goods, Work in process, Raw materials (Hansol IONES)	20,126,370	6,500,000	4,000,000	Korea EX-IM

8. FINANCIAL ASSETS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

(1) Financial assets at fair value through other comprehensive income ("FVTOCI") as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)				
	December 31, 2022				December 31, 2021
	Site	Number of shares	Percentage of 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%	12,150	12,150
Taeguang tech Co., Ltd.(*3)	KOREA	9,414	8.2%	1	-
CTLA Co., Ltd.(*3)	KOREA	369,360	19.0%	228,000	-
Total				₩ 240,151	₩ 12,150

(*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 financial assets at FVTOCI for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	2022	2021
Beginning balance	₩ 12,150	₩ 12,255
Changes in the scope of consolidation	328,001	-
Disposal	(100,000)	(105)
Ending balance	₩ 240,151	₩ 12,150

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, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	2022	2021
NH- uon Investment Association No. 1 (*1)	₩ 950,000	₩ 950,000
Walden Catalyst Ventures (*1)	754,881	426,135
Partners No. 10 Investment Association (*1)	800,000	-
SKS-Mford New Technology Investment Association (*1)	1,000,000	-
Total	3,504,881	1,376,135

(*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, 2022 and 2021.

(2) Financial assets measured at fair value through profit or loss as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	2022	2021
Beginning balance	₩ 1,376,135	₩ 950,000
Acquisition	2,128,746	426,135
Ending balance	3,504,881	1,376,135

10. PROPERTY, PLANT AND EQUIPMENT

(1) Property, plant and equipment as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)								
	December 31, 2022								
	Land	Buildings	Structures	Machinery	Vehicles	Facilities	Tools And equipment	Construction in progress	Total
Acquisition costs	₩ 41,169,541	₩ 306,009,493	₩ 24,506,785	₩ 198,808,054	₩ 1,509,499	₩ 14,155,630	₩ 67,956,734	₩ 15,414,989	₩ 669,530,725
Accumulated Depreciation	-	(85,273,263)	(15,906,249)	(127,969,782)	(882,760)	(7,457,244)	(56,766,347)	-	(294,255,645)
Accumulated Impairment loss	-	(2,970,687)	(1,826,346)	(24,961,315)	-	(169,372)	(3,186,395)	-	(33,114,115)
Government subsidies	-	-	(209,571)	-	-	-	-	-	(209,571)
Net book amounts	₩ 41,169,541	₩ 217,765,543	₩ 6,564,619	₩ 45,876,957	₩ 626,739	₩ 6,529,014	₩ 8,003,992	₩ 15,414,989	₩ 341,951,394

	Korean won (In thousands)							
	December 31, 2021							
	Land	Buildings	Structures	Machinery	Vehicles	Tools And equipment	Construction in progress	Total
Acquisition costs	₩ 13,582,857	₩ 244,147,682	₩ 20,221,641	₩ 168,109,819	₩ 439,788	₩ 52,491,957	₩ 4,566,452	₩ 503,560,196
Accumulated Depreciation	-	(68,945,436	(14,299,011)	(102,523,561)	(410,175)	(40,446,846)	-	(226,625,029)
Accumulated Impairment loss	-	(2,970,687)	(1,379,205)	(20,347,381)	-	(2,338,601)	-	(27,035,874)
Net book amounts	₩ 13,582,857	₩ 172,231,559	₩ 4,543,425	₩ 45,238,877	₩ 29,613	₩ 9,706,510	₩ 4,566,452	₩ 249,899,293

(2) Changes in property, plant and equipment for the years ended December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)								
	December 31, 2022								
	Land	Buildings	Structures	Machinery	Vehicles	Facilities	Tools And equipment	Construction in progress	Total
Beginning balance	₩ 13,582,857	₩ 172,231,559	₩ 4,543,425	₩ 45,238,877	₩ 29,613	₩ -	₩ 9,706,510	₩ 4,566,452	₩ 249,899,293
Changes in the scope of consolidation	27,575,099	48,730,174	26,700	11,172,536	328,183	7,485,203	2,181,080	2,837,308	100,336,283
Acquisition	-	-	54,140	1,774,835	240,898	-	451,273	22,549,133	25,070,279
Disposal	-	-	-	(914,420)	(97,106)	(22,234)	(18,365)	-	(1,052,125)
Depreciation	(4,155)	(8,077,473)	(594,165)	(17,917,914)	(177,141)	(933,955)	(5,919,783)	-	(33,624,586)
Impairment loss(*1)	-	-	-	(3,948,445)	-	-	(828,742)	-	(4,777,187)
Transfer	-	-	2,494,653	9,525,335	301,350	-	1,819,811	(14,549,539)	(408,390)
Other (*2)	15,740	4,881,283	39,866	946,153	942	-	612,208	11,635	6,507,827
Ending balance	₩ 41,169,541	₩ 217,765,543	₩ 6,564,619	₩ 45,876,957	₩ 626,739	₩ 6,529,014	₩ 8,003,992	₩ 15,414,989	₩ 341,951,394

(*1) For the year ended December 31, 2022, as a result of impairment testing conducted on Hansol Electronics Vietnam Hochiminhcity Co.,Ltd., a subsidiary, due to indications of impairment such as decrease in sales and market prices, the impairment loss is recognized for property, plant and equipment, right-of-use assets, and intangible assets of the subsidiary. These assets are used for products and component assembly reporting segment of the Group and the recoverable amounts are estimated using the discounted cash flow method. The impairment loss is included in other non-operating items in the consolidated statements of comprehensive income.

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

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

(2) Changes in property, plant and equipment for the years ended December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)							
	December 31, 2021							
	Land	Buildings	Structures	Machinery	Vehicles	Tools And equipment	Construction 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 (*1)	(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	₩ 249,899,293

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

(3) Assets pledged as collateral for borrowings of the Group as of December 31, 2022, are as follows:

	Korean won (In thousands) December 31, 2022			
Pledged assets	Carrying amount	Insured assets	Borrowings amount	Pledged organization
Land, buildings, machinery and others (Ochang factory)	₩ 49,009,475	₩ 71,000,000	₩ 30,000,000	Korea Development Bank (KDB)
Land, buildings, machinery and others (Jincheon factory)	₩ 24,799,456	₩ 30,000,000 USD 9,500,000		Korea Development Bank (KDB)
Land and buildings (Hansol Technics Thailand Co., Ltd.)	THB 182,061,197	THB 795,000,000	THB 695,017,335	KASIKORN BANK
Land, buildings, machinery and others (Hansol IONES)	₩ 63,272,892	₩ 79,900,000	₩ 34,900,000	Korea Development Bank (KDB) Woori Bank

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 ₩288,928,421 thousand, ₩81,604,516 thousand and ₩1,014,000 thousand as of December 31, 2022.the pledged as collateral was ₩152,855,125 thousand, ₩69,238,495 thousand and ₩364,000 thousand as of December 31, 2022.

11. INVESTMENT PROPERTY

(1) Investment property as of December 31, 2022 is as follows:
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	Korean won (In thousands)			
	December 31, 2022			
	Acquisition cost	Accumulated Amortization	Accumulated Impairment loss	Book value
Land	₩ 26,175,254	₩ -	₩ -	₩ 26,175,254
Buildings	966,738	(267,141)	(143,640)	555,957
Total	27,141,992	(267,141)	(143,640)	26,731,211

11. INVESTMENT PROPERTY(CONT'D)

(2) Changes in investment property for the year December 31, 2022 are as follows:

	Korean won (In thousands)					
	December 31, 2022					
	Beginning balance	Changes in the scope of consolidation	Acquisition	Capitalization	Depreciation	Ending balance
Land	-	25,549,113	181,600	444,542	-	26,175,254
Buildings	-	580,127	-	-	(24,169)	555,958
Total	-	26,129,239	181,600	444,542	(24,169)	26,731,211

(3) ₩173,225 thousand of rental income was generated from investment properties for the year ended December 31, 2022.

(4) As of December 31, 2022, the fair value of the Group's investment properties is not significantly different from the carrying amount stated in the consolidated financial statement.

12. INTANGIBLE ASSETS

(1) Intangible assets as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022			
	Acquisition cost	Accumulated Amortization	Accumulated Impairment loss	Book value
Goodwill	₩ 124,918,104	₩ -	₩ (31,972,430)	₩ 92,945,674
Customer value	95,290,707	(33,496,893)	(2,455,073)	59,338,741
Membership	2,382,663	-	(1,235,314)	1,147,349
Development cost	16,933,943	(6,737,497)	(10,196,446)	-
Software	5,793,326	(2,899,947)	(739,025)	2,154,354
Patents	3,006,474	(2,244,35	(735,596)	26,521
Construction in progress	530,400	-	-	530,400
Total	₩ 248,855,617	₩ (45,378,694)	₩ (47,333,884)	₩ 156,143,039

	Korean won (In thousands)			
	December 31, 2021			
	Acquisition cost	Accumulated Amortization	Accumulated Impairment loss	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

12. INTANGIBLE ASSETS (CONT'D)

(2) Changes in intangible assets for the years December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)							
	2022							
	Goodwill	Customer value	Membership	Development cost	Software	Patents	Construction in progress	Total
Beginning balance	₩ 29,059,568	₩ 4,817,727	₩ 483,240	₩ 147,223	₩ 1,689,683	₩ -	₩ -	₩ 36,197,441
Changes in the scope of consolidation	61,880,984	63,937,378	663,302	-	167,998	856	-	126,650,518
Acquisition	-	-	-	-	365,672	28,613	1,401,973	1,796,258
Amortization	-	(9,489,126)	-	(147,223)	(663,492)	(2,948)	-	(10,302,789)
Impairment loss(*1)	-	-	-	-	(739,026)	-	-	(739,026)
Others(*2)	2,005,122	72,762	807	-	53,556	-	-	2,132,247
Transfer	-	-	-	-	1,279,963	-	(871,573)	408,390
Ending balance	₩ 92,945,674	₩ 59,338,741	₩ 1,147,349	₩ -	₩ 2,154,354	₩ 26,521	₩ 530,400	₩ 156,143,039

(*1) For the year ended December 31, 2022, as a result of impairment testing conducted on Hansol Electronics Vietnam Hochiminhcity Co.,Ltd., a subsidiary, due to indications of impairment such as decrease in sales and market prices, the impairment loss is recognized for property, plant and equipment, right-of-use assets, and intangible assets of the subsidiary. These assets are used for products and component assembly reporting segment of the Group and the recoverable amounts are estimated using the discounted cash flow method. The impairment loss is included in other non-operating items in the consolidated statements of comprehensive income. These assets are used in the products and assembly 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.

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

	Korean won (In thousands)						
	2021						
	Goodwill	Customer value	Membership	Development 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

(*1) It was judged that there was no value in use for the extinction of unnecessary patents during the previous 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.

(3) The Group recognized ordinary research and development expenses amounting to ₩22,275,826 thousand and ₩18,937,925 thousand for the years ended December 31, 2022 and 2021, respectively.

13. CAPITAL LEASE ASSETS

(1) Capital lease assets as of December 31, 2022 and 2021, are as follows:

		Korean won (In thousands)		Korean won (In thousands)
		December 31, 2022		December 31, 2021
Right-of-use asset				
Land		10,709,051		10,548,722
Buildings		1,437,135		527,062
Vehicles		562,522		399,627
Machinery		4,130,706		6,175,280
Total	₩	16,839,414	₩	17,650,691
Lease Liabilities				
Current		963,673		423,389
Non-current		9,098,337		7,055,956
Total	₩	10,062,010	₩	7,479,345

(2) Changes in capital lease assets for the years December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)							
	December 31, 2022							
	Beginning Balance	Changes in the scope of consolidation	Acquisition	Disposal	Depreciation	Impairment loss(*1)	Other	Ending balance
Land	10,548,722	-	-	-	(266,696)	-	427,025	10,709,051
Buildings	527,062	164,541	1,370,378	(22,766)	(549,159)	-	(52,921)	1,437,135
Vehicles	399,627	79,751	529,910	(142,666)	(341,560)	-	37,460	562,522
Machinery	6,175,280	-	1,253,378	-	(1,428,427)	(2,117,419)	247,894	4,130,706
Total	₩ 17,650,691	₩ 244,292	₩ 3,153,666	₩ (165,432)	₩ (2,585,842)	₩ (2,117,419)	₩ 659,458	₩ 16,839,414

(*1) Hansol Electronics Vietnam Hochiminhcity Co.,Ltd. recognized the impairment loss of tangible, licensed, and intangible assets of the subsidiary as a result of the impairment test due to signs of impairment due to a drop in sales and market prices. These assets are used in the products and assembly 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. These assets are used in the products and assembly 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.

	Korean won (In thousands)					
	December 31, 2021					
	Beginning balance	Acquisition	Disposal	Depreciation	Other	Ending balance
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

(3) Changes in lease liabilities for the years December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)							
	December 31, 2022							
	Beginning Balance	Changes in the scope of consolidation	Disposal	Acquisition	Lease interest	Payments	Other	Ending balance
Lease Liabilities	₩ 7,479,345	₩ 177,735	₩ (115,073)	₩ 3,140,793	₩ 142,155	₩ (933,276)	₩ 170,331	₩ 10,062,010

	Korean won (In thousands)						
	December 31, 2021						
	Beginning Balance	Disposal	Acquisition	Lease interest	Payments	Other	Ending balance
Lease Liabilities	₩ 1,147,644	₩ (44,431)	₩ 6,678,617	₩ 53,700	₩ (637,055)	₩ 280,869	₩ 7,479,345

13. CAPITAL LEASE ASSETS (CONT'D)

(4) Capital lease expenses for the years ended December 31, 2022 and 2021 are as follows:

		Korean won (In thousands) December 31, 2022		Korean won (In thousands) December 31, 2021
Right-of-use asset				
Land		266,696		207,445
Buildings		549,159		280,034
Vehicles		341,560		268,940
Machinery		1,428,427		41,829
Total	₩	2,585,842	₩	798,248
Lease Liabilities				
Interest expenses		142,155		53,700
Short-term lease		2,263,722		2,223,234
Low expenses lease		32,369		31,799
Total	₩	5,024,088	₩	3,106,981

(5) The Group had a total cash outflow of ₩ 3,229,368 thousand for leases for the year ended December 31, 2022 (2021: ₩ 2,892,088 thousand).

14. OTHER FINANCIAL ASSETS

Other financial assets as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Derivative assets for trading not designated as a hedging instrument				
Derivative assets	₩ 1,433,274	₩ -	₩ 76,110	₩ -
Financial assets measured at amortized cost				
Security deposit	1,689,000	4,573,296	2,000,000	5,632,126
Allowance for loss	-	(110,000)	-	-
Present value discounts	-	(10,444)	-	-
Short and long term loan	49,517	370,504	-	-
Allowance for debts	-	(124,721)	-	-
Total	₩ 3,171,791	₩ 4,698,635	₩ 2,076,110	₩ 5,632,126

15. OTHER ASSETS

Other assets as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Advance payments	₩ 1,880,462	₩ 48,738	₩ 36,962,862	₩ -
Loss allowance (Advance payments)	(612,460)	(15,368)	(493,750)	-
Prepaid expenses	1,183,511	481,578	959,690	314,690
Prepaid value-added tax	2,945,523	-	8,911,310	-
Total	₩ 5,397,036	₩ 514,948	₩ 46,340,112	₩ 314,690

16. TRADE PAYABLES AND OTHER PAYABLES

Trade payables and other payables as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Trade payables	₩ 114,270,223	₩ -	₩ 142,016,132	₩ -
Other payables	14,997,595	2,043,638	8,611,510	1,920,406
Accrued expenses	30,739,027	-	21,727,084	-
Total	₩ 160,006,845	₩ 2,043,638	₩ 172,354,726	₩ 1,920,406

17. BORROWINGS AND DEBENTURES

(1) Borrowings and debentures as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Short-term borrowings	₩ 155,552,844	₩ -	₩ 114,217,392	₩ -
long-term borrowings	14,399,898	34,140,804	1,483,548	47,325,875
Long-term debentures	71,917,381	123,913,625	29,985,583	84,438,397
Total	₩ 241,870,123	₩ 158,054,429	₩ 145,686,523	₩ 131,764,272

(2) Short-term borrowings as of December 31, 2022 and 2021 are as follows:

			Korean won (In thousands)	
	Financial institutions	Interest rate (%)	December 31, 2022	December 31, 2021
General loans	KDB and others	0.00~5.88(*1)	₩ 37,000,000	₩ 35,000,000
	Hana Bank	7.30	6,318,285	5,937,689
	KASIKORN BANK	6.03	25,479,336	10,993,574
	Export-Import Bank of Korea and other	1.40~5.98	48,155,223	62,286,129
	KDB	4.46~5.16	29,900,000	-
	Industrial Bank	3.79~3.99	4,700,000	-
	Export-Import Bank of Korea	5.17	4,000,000	-
	Total		₩ 155,552,844	₩ 114,217,392

(*1) In case of Hana bank Corporate fund loan, the program is non-interest fund as a purchase-support fund provided to partnership of Samsung Electronics Co., Ltd.

(3) Long-term borrowings as of December 31, 2022 and 2021 are as follows:

			Korean won (In thousands)	
	Financial Institutions	Interest rate(%)	December 31, 2022	December 31, 2021
Facilities loan	Export-Import Bank of Korea	5.89~5.98	₩ 35,784,273	₩ 34,863,366
Operating funds	KASIKORNBANK	2.45~2.87	7,006,429	13,946,057
	Woori BANK	5.69	5,000,000	-
	Industrial BANK	4.52	750,000	-
Less: Reclassification of current portion			(14,399,898)	(1,483,548)
Total			₩ 34,140,804	₩ 47,325,875

17. BORROWINGS AND DEBENTURES(CON'T)

(4) Long-term debentures as of December 31, 2022 and 2021 are as follows:

Classification	Date of issuance	Date of maturity	Interest rate (%)	Korean won (In thousands) December 31, 2022	December 31, 2021
67th (Unguaranteed, public offering)	2020.10.06	2022.04.06	-	₩ -	₩ 30,000,000
68th (Unguaranteed, private offering)	2021.03.09	2023.03.09	1.95	10,000,000	10,000,000
69th (Unguaranteed, private offering)	2021.05.27	2023.04.21	1.95	10,000,000	10,000,000
70th (Unguaranteed, private offering)	2021.05.27	2023.05.26	1.95	20,000,000	20,000,000
71th (Unguaranteed, private offering)	2021.11.12	2023.05.12	3.00	5,000,000	5,000,000
72th (Unguaranteed, private offering)	2021.11.29	2024.11.29	3.02	30,000,000	30,000,000
73th (Unguaranteed, private offering)	2021.12.23	2023.06.23	3.20	10,000,000	10,000,000
74th (Unguaranteed, private offering)	2022.01.07	2023.07.07	2.90	7,000,000	-
75th (Unguaranteed, public offering)	2022.02.18	2024.02.18	3.70	20,000,000	-
76th (Unguaranteed, private offering)	2022.03.18	2023.09.18	3.30	10,000,000	-
77th (Unguaranteed, private offering)	2022.03.29	2025.03.29	4.02	30,000,000	-
78th (Unguaranteed, private offering)	2022.04.29	2024.04.29	4.00	10,000,000	-
79th (Unguaranteed, private offering)	2022.05.26	2025.05.22	3.99	10,000,000	-
80th (Unguaranteed, private offering)	2022.06.30	2024.06.26	4.10	5,000,000	-
81th (Unguaranteed, private offering)	2022.11.24	2025.11.24	6.50	20,000,000	-
Discount				(1,168,994)	(576,020)
Less: Reclassification of current portion				(71,917,381)	(29,985,583)
Total				₩ 123,913,625	₩ 84,438,397

(5) Repayment schedule of borrowings and debentures as of December 31, 2022 is as follows:

	Korean won (In thousands) Long-term borrowing	Debenture
Within 1 year	₩ 14,399,898	₩ 71,917,381
1 year to 5 years	34,140,804	123,913,625
Total	₩ 48,540,702	₩ 195,831,006

18. NET DEFINED BENEFIT LIABILITIES

(1) Key actuarial assumptions as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands) December 31, 2022	December 31, 2021
Discount rate	5.30%	2.57%
Expected salary growth rate	4.43%	4.35%

(2) Net defined benefit liabilities as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands) December 31, 2022	December 31, 2021
Present value of defined benefit obligation	₩ 40,358,202	₩ 36,674,070
Fair value of plan assets(*)	(12,867,874)	(3,919,691)
Net defined benefit liabilities	₩ 27,490,328	₩ 32,754,379

(*) Fair value of plan assets includes the existing National Pension Fund contributions as of December 31, 2022, amounting to ₩3,372 thousand (December 31, 2021: ₩5,382 thousand).

18. NET DEFINED BENEFIT LIABILITIES (CONT'D)

(3) Changes in net defined benefit liabilities for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)		
	2022		
	Defined benefit obligation	Plan assets	Total
Beginning balance	₩ 36,674,071	₩ (3,919,692)	₩ 32,754,379
Variation	9,304,528	(5,776,897)	3,527,631
Current service cost(*1)	6,025,756	-	6,025,756
Interest expense (income)	1,096,270	(233,075)	863,195
Remeasurements:			
Revenue from plan assets (excluding amount included in above interest)	-	42,783	42,783
Actuarial loss due to changes in demographic assumptions	921,783	-	921,783
Actuarial losses due to changes in financial assumptions	(6,619,037)	-	(6,619,037)
Actuarial losses due to empirical adjustments	95,088	-	95,088
Benefits paid	(7,166,858)	1,668,434	(5,498,424)
Transfers to related companies	26,601	(36,427)	(9,826)
Employer's contributions	-	(4,613,000)	(4,613,000)
Ending balance	₩ 40,358,202	₩ (12,867,874)	₩ 27,490,328

(*1) The retirement bonus of KRW 93,187 thousand are not included in the current service cost.

	Korean won (In thousands)		
	2021		
	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)	-	(3,859)	(3,859)
Actuarial losses due to changes in 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.

(4) Plan assets as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	December 31, 2022	December 31, 2021
Deposits	₩ 12,215,206	₩ 3,268,000
Securities	649,296	646,309
Other (including contributions to the National Pension Fund)	3,372	5,382
Total	₩ 12,867,874	₩ 3,919,691

18. 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 31, 2022		December 31, 2021	
	Increase	Decrease	Increase	Decrease
1% change in discount rate	₩ (1,723,498)	₩ 1,915,452	₩ (1,797,398)	₩ 1,983,892
1% change in expected wage growth rate	1,954,569	(1,787,726)	1,978,607	(1,826,475)

19. PROVISION LIABILITIES:

(1) Provision liabilities as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022		December 31, 2021	
Provision for product warranties	₩ 2,808,672	₩ 2,119,882	₩ 2,420,368	₩ 2,714,548
Provision for restoration	627,490	-	-	-
Other provisions	40,000	-	-	-
	₩ 3,476,162	₩ 2,119,882	₩ 2,420,368	₩ 2,714,548

(2) Changes in provision for product warranties for the years ended December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)			
	December 31, 2022			
	Provision for product warranties	Provision for restoration	Other provisions	Total
Beginning	₩ 5,134,916	₩ -	₩ -	₩ 5,134,916
Changes in the scope of consolidation	193,906	627,490	-	821,396
Transfer	2,134,267	-	40,000	2,174,267
Used	(2,534,535)	-	-	(2,534,535)
Ending balance	₩ 4,928,554	₩ 627,490	₩ 40,000	₩ 5,596,044

	Korean won (In thousands)
	December 31, 2021
	Provision for product warranties
Beginning balance	7,151,153
Changes in the scope of consolidation	-
Transfer	653,621
Used	(2,669,858)
Ending balance	5,134,916

20. OTHER FINANCIAL LIABILITIES

Other financial liabilities as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)							
	December 31, 2022				December 31, 2021			
		Current		Non-current		Current		Non-current
Lease liabilities	₩	963,673	₩	9,098,337	₩	423,389	₩	7,055,956
Security deposit		161,000		12,100		30,000		100,000
Derivative assets for trading not designated as a hedging								
Derivatives liabilities		514,521		-		181,414		-
Total	₩	1,639,194	₩	9,110,437	₩	634,803	₩	7,155,956

21. OTHER LIABILITIES

Other liabilities as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)							
	December 31, 2022				December 31, 2021			
		Current		Non-current		Current		Non-current
Advances from customers	₩	10,547,998	₩	-	₩	10,282,995	₩	-
Withholdings		2,220,339		-		1,178,300		-
Contract liabilities		682,286		-		-		-
Total	₩	13,450,623	₩	-	₩	11,461,295	₩	-

22. COMMITMENTS AND CONTINGENCIES

(1) Commitments with financial institutions as December 31, 2022 and 2021 are as follows:

	2022		Limit		Amount
	Financial institution		Korean won (In thousands)		
General loan	Nonghyup Bank	₩	25,000,000	₩	-
	KDB		40,000,000		30,000,000
	KEB Hana Bank		7,000,000		7,000,000
	Vietnam International	USD	20,000,000		-
	Shinhan Bank(Vietnam)	USD	5,000,000		-
	KEB Hana Bank(Vietnam)	USD	17,500,000	USD	17,500,000
	KEB Hana Bank(China)	USD	5,000,000	USD	5,000,000
	KASIKORN BANK(Thailand)	THB	795,000,000	THB	695,017,335
	Vietcom Bank(Vietnam)	USD	110,000,000	USD	20,688,044
Opening an import credit	KDB	USD	5,000,000	USD	4,784,356
	Nonghyup Bank	USD	12,000,000	USD	7,220,594
Facilities loan	Export-Import Bank of Korea (Vietnam)	USD	5,000,000	USD	3,125,000
	KASIKORN	THB	140,000,000	THB	29,000,000
	KASIKORN BANK(Thailand)	THB	251,380,260	THB	162,119,179
	Export-Import Bank of Korea (Vietnam)	USD	25,000,000	USD	25,000,000
Industrial facilities and operating loan	KDB	₩	31,400,000	₩	29,900,000
Woori CUBE loan	Woori Bank	₩	5,000,000	₩	5,000,000
Overseas on-lending operating loan	Industrial Bank	₩	3,000,000	₩	750,000
Small and medium-sized business fund loan	Industrial Bank	₩	4,700,000	₩	4,700,000
Export growth loan	Export-Import Bank of Korea	₩	4,000,000	₩	4,000,000

	2021		Limit		Amount
	Financial institution		Korean won (In thousands)		
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	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	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
	Export-Import Bank of Korea (Vietnam)	USD	30,000,000	USD	29,375,000

22. COMMITMENTS AND CONTINGENCIES (CONTD)

(2) Guarantees provided by others for the Group as of December 31, 2022 and 2021 are as follows:

	2022			Amount
	Financial institution	Description		Korean won (In thousands)
Payment guarantee	Seoul Guarantee Insurance Co., Ltd.	Licensing guarantee and others	₩	56,882,705
	KDB	Usance	U	4,784,356
	Nonghyup Bank	Usance	U	7,220,594
	Seoul Guarantee Insurance Co., Ltd. (*1)	Guarantee of contract	₩	4,309,399

(*1) As of December 31, 2022, the Group subscribes guarantee insurance for CTLA Co., Ltd. based on performance prepayment due to defense industry product supply subcontract with Korea Aerospace Industries Ltd(KRW 7,299,000 thousand).

	2021			Amount
	Financial institution	Description		Korean won
Payment guarantee	Seoul Guarantee Insurance Co., Ltd.	Licensing guarantee and others	₩	7,917,975
	KDB	Usance	USD	3,830,060
	Nonghyup Bank	Usance	USD	5,934,939

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(3) Details of joint guarantees provided by the Group to others as of December 31, 2022 are as follows.

Korean won (In thousands)					
Receiving company	Provider of guarantee		Guaranteed amounts	Warranty period	Details of guarantees
CTLA Co.,Ltd.	Seoul Guarantee Insurance Co., Ltd.	₩	1,233,419	2026-06-30	Joint guarantee

(4) The details of important litigation cases are as follows.
As of December 31, 2022, there are three litigations pending against the Group as a defendant. One lawsuit (litigation amount: KRW 2,000,000 thousand) is related to patent infringement, and the final result of the lawsuit is unpredictable. Other than the one stated above, there is one case of litigation amounting to KRW 36,000 thousand, which is closed by the Court’s forced adjustment on March 3, 2023, after the reporting period. The other one is litigation on provisional seizure cancellation, which has no impact on the consolidate financials statements of the Group.

(5) As of December 31, 2022, the Group is obligated to provide guarantees for the construction of solar power plant and repair of defects to 16 companies, including Munkyung energy 2st (2022: KRW 904,152 thousand, 2021: KRW 1,506,720 thousand).

(6) As of December 31, 2022, The Group holds a contract on supplement commitment of solar-power generation capacity under which the obligation to supplement fund occur if actual generation volume cannot reach guaranteed generation volume in accordance with minimum generation capacity. This commitment period is different from case by case and the longest obligation period of the Group is 2046, currently. For the year ended December 31, 2022, there is no obligation having incurred for this commitment.

23. ISSUED CAPITAL

Issued capital as of December 31, 2022 and 2021, is as follows:

	Korean won (In thousands)							
	Number of Authorized shares	Number of shares outstanding		Par value		December 31, 2022		December 31, 2021
Common stock	100,000,000	32,109,878	₩	5,000	₩	160,549,390	₩	160,549,390

24. SHARE PREMIUM

(1) Share premium as of December 31, 2022 and 2021, is as follows:

	Korean won (In thousands)			
		December 31, 2022		December 31, 2021
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		1,132,466		809,672
Other share premium		2,418,990		2,418,990
Total	₩	55,286,210	₩	54,963,416

(2) Changes in Share premium for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
		2022		2021
Beginning balance	₩	54,963,416	₩	54,661,148
Share-based payments		322,794		302,268
Ending balance	₩	55,286,210	₩	54,963,416

25. RETAINED EARNINGS

(1) Retained earnings as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
		December 31, 2022		December 31, 2021
Undisposed retained earnings	₩	78,434,854	₩	59,385,028

(2) Changes in retained earnings for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
		2022		2021
Beginning balance	₩	59,385,028	₩	69,872,444
Net income (loss)		14,717,028		(9,330,237)
Remeasurements of defined benefit plans		4,332,798		(1,157,179)
Ending balance	₩	78,434,854	₩	59,385,028

26. OTHER COMPONENTS OF EQUITY

(1) Other components of equity as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
		December 31, 2022		December 31, 2021
Foreign currency translation reserve	₩	12,019,485	₩	3,094,250

27. EARNINGS PER SHARE

(1) Basic earnings per share for the years ended December 31, 2022 and 2021 is computed as follows:

	Korean won (In thousands)			
		2022		2021
Profit attributable to owners of the controlling company	₩	14,717,027,946	₩	(9,330,236,944)
Weighted-average number of common stocks outstanding		31,417,517		31,417,517
Basic earnings (loss) per share	₩	468	₩	(297)

27. EARNINGS PER SHARE (CONT'D)

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

	2022		
	Number of shares	Days	Number of common stocks outstanding
Beginning and ending (*)	31,417,517	365	31,417,517

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

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

(*) 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, 2022 and 2021, because there is no dilution for potential common stock.

28. SHARE-BASED PAYMENTS

(1) Stock options that the parent granted

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

	Korean won			
	2019	2020	2021	2022
Date of grant	2019-03-26	2020-03-23	2021-03-24	2022-03-23
Total number of granted shares	345,600 shares	78,000 shares	54,400 shares	302,500 shares
Grant method	Issues on new stocks, issues on treasury stocks and stock appreciation			
Exercise price per share	7,677	8,839	10,330	6,700
Vesting period	Three years			
Exercise period	Two years since the termination of vesting period			

2) For the year ended December 31, 2022, changes in the number of outstanding stock options are as follows:

	Granted in 2019	Granted in 2020	Granted in 2021	Granted in 2022	Total
Previous granted shares	345,600	78,000	54,400	-	478,000
Previous canceled shares	(83,200)	-	-	-	(83,200)
granted shares	-	-	-	302,500	302,500
Cancellation(*1)	-	(26,000)	-	-	(26,000)
Ending	262,400	52,000	54,400	302,500	671,300

(*1) Part of the grant in 2020 canceled the donation stock option due to the resignation of the grantee.

28. SHARE-BASED PAYMENTS(CON'T)

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

	Granted in 2019	Granted in 2020	Granted in 2021	Granted in 2022
Expected volatility of the share price	43.20%	64.90%	46.50%	31.20%
Risk-free interest rate applied	1.80%	1.50%	1.49%	2.65%

In relation to the above stock option, the parent recognized stock compensation expenses of ₩231,432 thousand and ₩302,268 thousand during the year ended December 31, 2022 and 2021, respectively.

(2) Stock options that the subsidiary granted

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

	1st Stock options	2nd Stock options	3rd Stock options
Date of grant	2020-03-30	2021-03-29	2022-08-18
Grant method	Issues on new stocks	Issues on new stocks	Issues on new stocks
Total number of granted shares	100,000	100,000	457,000
Exercise price per share	2,450	7,790	7,800
Exercise period	2023.03.30~2026.03.29	2024.03.29~2027.03.28	2025.08.18~2028.08.17
Application method	Equity-settled shared-based transactions	Equity-settled shared-based transactions	Equity-settled shared-based transactions

2) For the year ended December 31, 2022, changes in the number of outstanding stock options are as follows:

	1st Stock options	2nd Stock options	3rd Stock options
Previous granted shares	100,000	100,000	-
Previous canceled shares	-	6,000	-
granted shares	-	-	457,000
Cancellation	26,000	44,000	18,000
Ending	74,000	50,000	439,000

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

	Granted in 2020	Granted in 2021	Granted in 2022
Expected volatility of the share price	22.25%	33.29%	41.90%
Risk-free interest rate applied	1.41%	1.75%	3.14%

In relation to the above stock option, the Group recognized stock compensation expenses of ₩246,857 thousand and ₩172,922 thousand during the year ended December 31, 2022 and 2021, respectively

29. REVENUE

Continuing revenue from the Group for the years ended December 31, 2022 and 2021 is as follows:

	Korean won(In thousands)	
	2022	2021
Goods and services transferred at a point in time		
Revenue of goods	₩ 1,178,374,630	₩ 1,022,230,987
Revenue of merchandise	124,101,591	126,415,486
Revenue of services	344,915,427	326,134,448
Goods and services transferred over time		
Revenue of construction contracts	-	15,840,066
Total	₩ 1,647,391,648	₩ 1,490,620,988

Among the revenue recognized by the Group for the year ended December 31, 2022, domestic sales are KRW 346,935,635 thousand (2021: KRW 180,472,585 thousand) and export sales are KRW 1,300,456,013 thousand (2021: KRW 1,310,148,403 thousand).

30. EXPENSES BY NATURE

Expenses classified by nature for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands) (*)	
	2022	2021
Raw materials and merchandise goods used	₩ 1,251,130,224	₩ 1,368,142,946
Changes in inventories	(85,285,511)	(173,853,081)
Salaries	162,983,217	119,748,346
Retirement benefits	6,445,077	4,608,918
Employee benefit expenses	33,662,770	26,697,872
Rental expenses	2,241,130	2,178,588
Transportation expenses	13,884,070	29,903,635
Service charge	58,392,655	40,966,229
Depreciation	33,624,586	25,547,013
Processing costs paid to subcontractor	45,300,829	14,418,569
Others	69,907,640	36,517,823
Total	₩ 1,592,286,687	₩ 1,494,876,858

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

31. SELLING AND ADMINISTRATIVE EXPENSES

Selling and administrative expenses for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
		2022		2021
Salaries	₩	35,743,331	₩	27,080,956
Retirement benefits		2,860,730		1,815,363
Employee benefit expenses		6,237,130		5,159,826
Travel expenses		13,020,180		28,718,358
Rental expense		574,307		641,155
Service charge		20,969,879		9,412,181
Research and development expenses		22,275,826		18,937,925
Reversal of bad debt expenses		(2,946,402)		(1,501,645)
Depreciation		4,271,879		3,668,377
Customer relationship value depreciation		2,993,785		2,993,785
After service Expenses		3,593,559		1,724,592
Repairs and Maintenance Expenses		937,423		707,611
Data Processing Expenses		1,284,730		1,048,744
Others		16,173,583		7,300,124
Total	₩	127,989,940	₩	107,707,352

32. FINANCE INCOME AND FINANCE COSTS

(1) Finance income for the years ended December 31, 2022 and 2021 is as follows:

	Korean won (In thousands)			
		2022		2021
Interest income - effective interest method(*1)	₩	194,287	₩	29,933
Interest income - other		2,195,393		315,444
Gain on foreign currency transactions		42,030,602		16,567,869
Gain on foreign currency conversion		3,285,150		2,898,971
Gain on derivative transactions		11,692,486		4,561,635
Gain on valuation of derivatives		1,433,274		76,110
Total	₩	60,831,192	₩	24,449,962

(*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, 2022 and 2021 are as follows:

	Korean won (In thousands)			
		2022		2021
Interest expenses	₩	12,192,197	₩	4,686,706
Loss on foreign currency transactions		37,408,982		14,962,819
Loss on foreign currency conversion		5,451,154		1,908,591
Loss on derivative transactions		17,256,138		6,856,487
Loss on valuation of derivatives		514,521		181,415
Total	₩	72,822,992	₩	28,596,018

33. OTHER INCOME AND OTHER EXPENSES

(1) Other income for the years ended December 31, 2022 and 2021 is as follows:

	Korean won (In thousands)			
		2022		2021
Gain on disposal of property, plant and equipment	₩	1,160,771	₩	993,911
Rental revenues		386,573		330,700
Miscellaneous income		1,132,936		1,479,571
Reversal of allowance for other doubtful accounts		3,500		6,250
Total	₩	2,683,780	₩	2,810,432

(2) Other expenses for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
		2022		2021
Loss on disposal of property, plant and equipment	₩	341,654	₩	70,034
Impairment loss on property, plant and equipment		4,777,186		-
Impairment of right-of-use asset		2,117,419		-
Losses on disposal of intangible assets		-		16,886
Impairment losses on intangible assets		739,026		735,596
Donation		65,830		79,464
Miscellaneous non-operating losses		1,407,372		77,091
Total	₩	9,448,487	₩	979,071

34. INCOME TAX EXPENSE AND DEFERRED INCOME TAX

(1) The component of income tax expense for the years ended December 31, 2022 and 2021 is as follows:

	Korean won (In thousands)			
		2022		2021
Current income tax expense:				
Current income taxes	₩	(1,326,490)	₩	3,541,359
Adjustment of income taxes for the prior years		358,006		-
Income tax charged directly to equity		(1,141,835)		326,384
Deferred income tax expense:				
Changes of temporary differences		5,831,572		(1,092,458)
Income tax expense	₩	3,721,253	₩	2,775,285

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

(2) Reconciliation of effective tax rate for the years ended December 31, 2022 and 2021 is as follows:

	Korean won (In thousands)	
	2022	2021
Income before income tax (loss)	₩ 36,348,454	₩ (6,570,565)
Statutory tax rate	22%	22%
Income tax based on statutory tax rate	7,996,660	(1,445,524)
Adjustments:		
Effects due to non-taxable expense	835,518	245,073
Effects due to tax credit and tax abatement	(2,512,708)	(513,478)
Unrecognized deferred income tax	(895,267)	(468,165)
Effect of changes in tax for the prior years	358,006	-
Others	(2,060,956)	4,957,379
Subtotal	(4,275,407)	4,220,809
Income tax expense	₩ 3,721,253	₩ 2,775,285
Average effective tax rate	10.24%	(*1)

(*1) 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, 2022 and 2021 is as follows:

	Korean won (In thousands)	
	2022	2021
Remeasurements from plan assets	₩ (1,141,835)	₩ 326,383

(4) Changes in deferred income tax for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)				
	2022				
	Beginning	Changes in the scope of consolidation	Profit or loss	Other comprehensive income	Ending
Retirement benefit provision liability	₩ 7,205,963	₩ 853,687	₩ (1,125,562)	₩ (1,141,835)	₩ 5,792,253
Loss on valuation of inventories	219,599	619,292	353,264	-	1,192,155
Impairment loss on intangible assets	202,350	67,608	(39,088)	-	230,870
Accrued expenses	1,008,902	324,359	(67,097)	-	1,266,164
Property, plant and equipment	1,361,043	-	(363,445)	-	997,598
Depreciation	1,152	-	182,257	-	183,409
Intangible asset (Customer values)	(814,192)	-	496,486	-	(317,706)
Treasury stock	(1,272,460)	-	57,839	-	(1,214,621)
Changes in net assets of subsidiaries	(7,453,605)	-	6,966,382	-	(487,223)
Provision for product warranties	1,129,681	198,778	(137,001)		1,191,458
Loss allowance	1,428,385	1,962,431	(737,780)		2,653,036
Business combination	-	-	(17,186,179)		(17,186,179)
Others	577,407	3,834,662	(569,686)	-	3,842,383
Tax carryforwards	4,222,367		(419,511)	-	3,802,856
Tax loss carryforwards	39,143	-	38,567	-	77,710
Deferred tax assets	₩ 7,855,735	₩ 7,860,817	₩ (12,550,554)	₩ (1,141,835)	₩ 2,024,163

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

	Korean won (In thousands)				
	2021				
	Beginning	Variation	Profit or loss	Other comprehensive income	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

(5) Deferred tax assets (liabilities) for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	December 31, 2022	December 31, 2021
Deferred tax assets	₩ 10,392,342	₩ 8,669,928
Deferred tax liabilities	(8,368,179)	(814,193)
Total	₩ 2,024,163	₩ 7,855,735

(6) Deductible temporary differences, tax loss carryforwards and unused tax credits not recognized as deferred tax assets as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	December 31, 2022	December 31, 2021
Deductible temporary differences	₩ 93,249,075	₩ 29,185,607
Tax accumulated deficit	81,780,913	127,863,855
Total	₩ 175,029,988	₩ 157,049,462

(7) Due date of tax loss carryforwards and unused tax credits not recognized as deferred tax assets as of December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)	
	2022	2021
	Tax loss carryforwards	Tax loss carryforwards
One year or less	₩ 31,169,539	₩ 44,529,184
One year to two years	-	31,169,539
Two years to three years	10,870,638	3,279,507
More than three years	39,740,736	48,885,625
Total	₩ 81,780,913	₩ 127,863,855

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

(8) Temporary differences to be added, but not recognized as deferred tax liabilities as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	December 31, 2022	December 31, 2021
Foreign subsidiaries	₩ -	₩ 43,862,412

35. CASH GENERATED FROM OPERATIONS

(1) Adjustments for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	2022	2021
Adjustments:		
Income tax expense	₩ 3,721,253	₩ 2,775,285
Interest expenses	12,192,197	4,686,706
Depreciation of property, plant and equipment	33,624,586	25,547,013
Depreciation of investment properties	24,169	-
Amortization	10,302,789	3,944,212
Depreciation of capital lease assets	2,585,842	798,248
Bad debt expenses(Reversal)	(2,946,402)	(1,501,645)
Other Bad debt expenses(Reversal)	(3,500)	(6,250)
Retirement benefits	6,982,138	4,639,172
Reversal of provision for product warranties	2,134,267	653,620
Stock compensation benefits	478,289	302,268
Loss on foreign currency conversion	5,451,154	1,908,591
Loss on valuation of derivatives	514,521	181,415
Loss on foreign exchange forward transaction	1,378,457	-
Reversal of loss on valuation of inventories	1,645,817	(1,095,479)
Loss on disposal of property, plant and	341,654	70,034
Losses on disposal of intangible assets	-	16,886
Impairment of property, plant and equipment	4,777,186	-
Impairment of right-of-use asset	2,117,419	-
Impairment of intangible assets	739,025	735,596
Interest income	(2,389,681)	(345,377)
Gain on foreign currency conversion	(3,285,150)	(2,898,971)
Gain on valuation of derivatives	(1,433,274)	(76,110)
Gain on disposal of property, plant and	(1,160,771)	(993,911)
Others	54,538	(927)
Total	₩ 77,846,523	₩ 39,340,376

35. CASH GENERATED FROM OPERATIONS (CONT'D)

(2) Changes in operating assets and liabilities for the years ended December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)			
		2022		2021
Changes in operating assets and liabilities:				
Decrease (Increase) in trade receivables	₩	30,353,414	₩	(60,136,929)
Decrease in other receivables		681,272		232,189
Decrease in derivatives assets		76,110		286,108
Increase in inventories		(3,223,983)		(81,832,312)
Decrease in advance payments		3,092,482		9,081,898
Decrease in prepaid expenses		397,976		1,969,576
Increase (decrease) in trade payables		(42,257,167)		53,045,420
Increase (decrease) in other payables		4,007,957		(1,652,918)
Increase (decrease) in accrued expenses		(1,200,139)		2,482,716
Decrease in derivatives liabilities		(181,415)		(241,168)
Increase (decrease) in advances from customers		(8,645,344)		6,183,123
Increase in unearned revenues		67,357		-
Increase (decrease) in withholdings		939,486		(1,398,764)
Increase (decrease) in deposit received		(63,390)		42,800
Increase in contract liabilities		2,386,348		-
Decrease in VAT payables		(50,417)		-
Decrease in receivables of income tax refund		-		156,673
Increase(decrease) in income tax payable		(26,714)		6,024,568
Decrease in present value of retirement benefit obligation		(10,216,447)		(3,463,793)
Decrease in fair value of plan assets		2,010		1,483
Decrease (increase) in long-term other payables		95,871		43,193
Decrease (increase) in prepaid VAT		6,419,367		(6,920,593)
Decrease (increase) in long-term prepaid expenses		300,713		(80,417)
Decrease in provision for product warranties		(2,534,535)		(2,669,857)
Decrease in accrued income		122,822		321
Total	₩	(19,456,366)	₩	(78,846,683)

35. CASH GENERATED FROM OPERATIONS (CONT'D)

(3) Significant transactions not affecting cash flows for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	2022	2021
Transfer of construction in progress to property, plant and equipment	₩ 15,421,112	₩ 6,961,176
Transfer of long-term debentures to current portion of debentures	71,917,381	31,469,130
Transfer of long-term borrowings to current portion of borrowings	14,399,898	-
Transfer of property, plant and equipment to other payables	(2,334,156)	(16,659,976)
Increase of capital lease assets and capital lease liabilities	3,140,793	6,678,617
Transfer of advance payments to investment in subsidiaries	32,600,000	-
Transfer of deposits received for guarantees to investment in subsidiaries	2,000,000	-
Transfer of advance payments to construction in progress	110,000	-

(4) Changes in liabilities generated in financing activities for the year ended December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)				
	2022				
	Beginning	Changes in the scope of consolidation	Changes in financing activities	Not affecting cash flows	Ending
Loans from financial institutions	₩ 163,026,815	₩ 51,145,500	₩ (15,543,150)	₩ 5,464,381	₩ 204,093,546
Debentures	114,423,98	2,310,036	78,498,785	598,205	195,831,006
Lease Liabilities	7,479,345	177,735	(933,277)	3,338,206	10,062,009
Guarantee deposits for leases	-	10,800	1,300	-	12,100
Total debts from financing activities	₩ 284,930,140	₩ 53,644,071	₩ 62,023,658	₩ 9,400,792	₩ 409,998,661

	Korean won (In thousands)			
	2021			
	Beginning	Changes in financing activities	Not affecting cash 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

36. RELATED-PARTY TRANSACTIONS

(1) The details of related parties as of December 31, 2022, are as follows:

Relation	Company name
Entities with significant influence over the group	Hansol Holdings Co., Ltd.
Others (*1,2)	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 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.

(2) Transactions with the related parties during the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	2022			
	Sales and other transactions		Purchases and other transactions	
	Sales	Other	Purchase of property, plant and equipment	Other
Entities with significant influence over the entity				
Hansol Holdings Co., Ltd.	₩ -	₩ 541	₩ -	₩ 6,037,647
Others related parties				
Hansol Homedeco Co., Ltd.	-	4,756	-	-
HDC Resort co., Ltd.	-	-	-	109,299
Hansol Logistics Co., Ltd.	-	9,507	-	4,695,509
Hansol EME Co., Ltd.	-	909	-	-
Hansol Inticube Co., Ltd.	-	1,076	-	-
Hansol Paper Co., Ltd.	-	32,386	-	16,332
Hansol Papertech Co., Ltd.	-	2,489	-	-
Hansol PNS Co., Ltd.	-	4,754	-	3,397,363
Hansol Cultural Foundation	-	-	-	31,026
Tapex	-	-	-	153,576
Loismile Co.,Ltd.	-	-	-	121,287
Total	₩ -	₩ 56,418	₩ -	₩ 14,562,039

36. RELATED-PARTY TRANSACTIONS (CONT'D)

	Korean won (In thousands)			
	2021			
	Sales and other transactions		Purchases and other transactions	
	Sales	Other	Purchase of property, plant and equipment	Other
Entities with significant influence over the entity				
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	₩ 268,089	₩ 12,641,648

(3) Significant receivables and payables with related parties as of December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)			
	December 31, 2022			
	Sales and other transactions		Purchases and other transactions	
	Receivables		Payables	
	Other receivables	Other	Trade Payables	Other Payables
Entities with significant influence over the entity				
Hansol Holdings Co., Ltd.	₩ -	₩ 114,132	₩ 792,046	₩ -
Others related parties				
Hansol Homedeco Co., Ltd.	1,305	-	-	-
Hansol Logistics Co., Ltd.	-	-	314,879	-
Hansol Inticube Co., Ltd.	295	-	-	-
Hansol Paper Co., Ltd.	9,133	-	54	-
Hansol PNS Co., Ltd.	1,305	-	542,483	-
Hansol Cultural Foundation	-	-	32,670	-
Loismile Co.,Ltd.	-	-	17,006	-
Tapex	-	-	-	19,499
Total	₩ 12,038	₩ 114,132	₩ 1,699,138	₩ 19,499

36. RELATED-PARTY TRANSACTIONS (CONT'D)

	Korean won (In thousands)			
	December 31, 2021			
	Sales and other transactions		Purchases and other transactions	
	Receivables		Payables	
	Other receivables	Other	Trade Payables	Other 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	₩ 1,663,540

(4) Details of compensation for key executives for the years ended December 31, 2022 and 2021 are as follows:

	Korean won (In thousands)	
	2022	2021
Short-term employee benefits	₩ 2,372,618	₩ 2,344,287
Retirement benefits	166,521	184,846
Stock compensation expenses	139,058	184,975
Total	₩ 2,678,197	₩ 2,714,108

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

37. NON-CONTROLLING INTERESTS

Net profit or loss and equity of subsidiaries in the scope of consolidation that is allocated to non-controlling interests is as follows.

	Non-controlling interest rate(%)		Net profit or loss allocated to non-controlling interests		Accumulated non-controlling interests
			December 31, 2022		
Hansol Technics Europe s.r.o	15.8		(8,273)		277,808
Hansol Iones Co.,Ltd.	63		17,918,446		133,458,503
Total		₩	17,910,173	₩	133,736,311

	Non-controlling interest rate(%)	Net profit or loss allocated to non-controlling interests	Accumulated non-controlling interests
		December 31, 2021	
Hansol Technics Europe s.r.o	15.8	(15,613)	284,167

38. 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, 2021.

	Korean won (In thousands)			
		December 31, 2022		December 31, 2021
Liabilities	₩	631,895,651	₩	510,394,100
Assets		440,026,250		278,276,252
Debt ratio		143.6%		183.4%

(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, 2021.

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, 2022, to hedge foreign exchange rate risk of foreign currency receivables and liabilities.

38. FINANCIAL RISK MANAGEMENT (CONT'D)

3) Credit risk

Note 6 (Trade receivables and other receivables) and Note 14 (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, 2021.

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.

(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 31, 2022					
	Book value	Contractual cash flows	Less than three months	Less than one year	Less than two year	More than two years
Derivative liabilities:						
Derivative liabilities	₩ 514,521	₩ 514,521	₩ 514,521	₩ -	₩ -	₩ -
Non-derivative liabilities:						
Trade payables and other payables	162,050,483	162,050,483	160,034,206	-	2,016,277	-
Borrowings	204,093,546	213,334,579	2,411,978	171,140,299	7,799,689	31,982,613
Debentures	195,831,005	208,644,218	11,699,481	66,256,479	69,065,876	61,622,382
Capital Lease Liabilities	10,062,010	10,367,345	589,705	2,175,686	2,255,911	5,346,043
Total	₩ 572,551,565	₩ 594,911,146	₩ 175,249,891	₩ 239,572,464	₩ 81,137,753	₩ 98,951,038

38. FINANCIAL RISK MANAGEMENT (CONT'D)

	Korean won (In thousands)					
	December 31, 2021					
	Book value	Contractual cash flows	Less than three months	Less than one year	Less than two year	More than two 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	174,354,726	-	1,920,406	-
Borrowings	163,026,815	167,072,460	12,160,018	106,246,406	1,454,977	47,211,059
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	1,630,143	4,389,054
Total	₩ 459,386,687	₩ 468,723,821	₩ 185,957,429	₩ 138,967,276	₩ 92,199,003	₩ 51,600,113

(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, 2022, 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.

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, 2022			
	Level 1	Level 2	Level 3	Level 4
Derivative assets	₩ -	₩ 1,433,274	₩ -	₩ 1,433,274
Derivative liabilities	-	514,521	-	514,521

	Korean won (In thousands)			
	December 31, 2021			
	Level 1	Level 2	Level 3	Level 4
Derivative assets	₩ -	₩ 76,110	₩ -	₩ 76,110
Derivative liabilities	-	181,414	-	181,414

There is no significant movement between Level 1 and Level 2 for the year ended December 31, 2022.

38. FINANCIAL RISK MANAGEMENT (CONT'D)

2) There are no significant changes in the business environment or economic environment for the year ended December 31, 2022, 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)					
	Fair Value		Level	Valuation Method	Significant non-observable inputs and Ranges	Association between unobservable inputs and fair value measurements
	December 31, 2022	December 31, 2021				
Derivative assets	1,433,274	76,110	2	The fair value of foreign exchange forward is measured principally on the basis of the forward 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.	Not applicable	Not applicable
Derivative liabilities	514,521	181,414				

(4) Reclassification of financial assets

There are no financial assets reclassified due to changes in purpose or use for the year ended December 31, 2022.

39. CONSTRUCTION CONTRACT

(1) Changes in balances of major construction contracts for the years ended December 31, 2022 and 2021, are as follows:

	Korean won (In thousands)	
	December 31, 2022	December 31, 2021
Beginning	₩ -	₩ 3,819,449
Changes in balances of construction Contracts(*1)	-	12,020,617
Construction income	-	(15,840,066)
Ending	₩ -	₩ -

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) Does not exist cumulative income and losses for the years ended December 31, 2022 and 2021.

(3) Does not exist advanced construction billing-associated constructions in progress as of December 31, 2022 and 2021.

(4) The estimation of total contract revenue and cost is not changed for the year ended December 31, 2022.

(5) There is no construction contract occupied more than 5% of sales as of December 31, 2022.

40. BUSINESS COMBINATION

(1) The overview of business combination as of December 31, 2022 is as follows:

	Korean won (In thousands)
	Company
Company	HansolIones Co.,Ltd
Major operating activities	Processing semiconductor equipment parts
Address	Anseong-daero 2061, Gosam-myeon, Anseong-si, Gyeonggi-do
Acquisition date	2022-01-25
Acquisition Equity	37%
The transfer price	129,638,200

(2) The consideration transferred and assets acquired and liabilities assumed from the business combination as of December 31, 2022 are as follows:

	Korean won (In thousands)
	HansolIiones Co.,Ltd
The transfer price	
Cash	129,638,200
Total	129,638,200
The amount of assets acquired and liabilities assumed	
Current assets	
Cash and cash equivalents	57,401,367
Trade receivables	11,664,237
Other current financial assets	12,440,326
Inventories	16,434,093
Other current assets	1,185,293
Total	99,125,316
Non-current assets	
Other non-current financial assets	1,389,511
Property, plant and equipment	100,580,575
Intangible assets	64,769,535
Investment properties	26,129,238
Other non-current assets	1,040,145
Total	193,909,004
Current liabilities	
Trade payables	20,313,197
Short-term borrowings	52,018,036
Other current financial liabilities	905,523
Other current liabilities	19,782,757
Total	93,019,513
Non-current liabilities	
Long-term borrowings	1,437,500
Net defined benefit liabilities	3,527,632
Other non-current liabilities	48,031
Deferred tax liabilities	11,923,513
Total	16,936,676
Total net assets acquired	183,078,131
Non-controlling interests	115,320,915
Goodwill	61,880,984
Total	129,638,200

41. 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.

42. INTRODUCTION AND IMPACT OF THE GLOBAL MINIMUM INCOME TAX

The Organization for Economic Co-operation and Development (OECD)/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) addresses the tax challenges arising from the digitalization of the global economy. Global Minimum Tax (Pillar Two) were released and they apply to Multinational Enterprises (MNEs) with revenue in excess of 750 million Euros per their consolidated financial statements. National Assembly of South Korea passed into law new Global Minimum Tax rules to align with the OECD BEPS Pillar Two in December 2022.

The regulation will be included in the Adjustment of International Taxes Act and will be effective for fiscal years beginning on or after January 1, 2024. However, the Enforcement Decrees that provide further detail on the application of the legislation has not been amended at the end of the reporting period. As the global minimum income tax in Korea has not been substantially enacted for financial reporting purposes, there is no related tax effect recognized in the consolidated financial statements as of and for the year ended December 31, 2022.

43. APPROVAL OF CONSOLIDATED FINANCIAL STATEMENTS

The consolidated financial statements have been approved by the Board of Directors on March 20, 2023 and will be finally approved at the shareholders' meeting on March 28, 2023.