Gaon Cable Co., Ltd. and its subsidiaries

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

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Ernst & Young Han Young
Taeyoung Building, 111, Yeouigongwon-ro,
Yeongdeungpo-gu, Seoul 150-777 Korea

Tel: +82 2 3787 6600
Fax: +82 2 783 5890
ey.com/kr

Independent auditor's report

(English Translation of a Report Originally Issued in Korean)

The Shareholders and Board of Directors
Gaon Cable Co., Ltd.

Opinion

We have audited the consolidated financial statements of Gaon Cable Co., Ltd. (the "Company") 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 equity and consolidated statements of cash flows for the years then ended, and the notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 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 matter

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 the matter below, our description of how our audit addressed the matter is provided in that context.

(1) Overseas sales cut-off

Reasons to be determined as a key audit matter
As explained in Note 20 (Sales and contracts with customers) to the consolidated financial statements, overseas sales in 2022 are KRW 157,421,630 thousand, which is significant in terms of amount. In addition, in the case of overseas sales, it takes several months depending on the means of transportation and the timing of transfer of control varies depending on the contract terms, and thus the potential risk of incurring error in cut-off for revenue recognition is relatively high. Therefore, we selected the overseas sales cut-off as a key audit matter.

Our main audit procedures performed in response to the key audit matter are as follows:

- ✓ Review of transaction terms in major sales contracts and consistency with the previous period to check whether the timing of transfer of control at which revenue is recognized by the Group conforms with the accounting standards
- ✓ Document inspection of samples extracted from sales cancellation and returns after the reporting period
- ✓ Review the transaction amounts for accuracy and the sales cut-off for revenue recognition by comparing the sources of transaction evidence for the samples extracted from the overseas sales transactions recognized before and after the end of the reporting period

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with KIFRS, and for such internal control as management determines is necessary to enable the preparation of 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 regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is *Oh, Jae Young*.

March 15, 2023

This audit report is effective as of March 15, 2023, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

Gaon Cable Co., Ltd. and its subsidiaries

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

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

Jae In Yoon
Chief Executive Officer
Gaon Cable Co., Ltd.

120, LS-ro 45beon-gil, Gunpo-si, Gyeonggi-do, Republic of Korea
+82 31-8068-3928

Gaon Cable Co., Ltd. and its subsidiaries
Consolidated statements of financial position
as of December 31, 2022 and 2021

(Korean won)

	Notes		2022		2021
Assets					
Current assets					
Cash and cash equivalents	6, 30, 31	₩	55,693,314,415	₩	26,713,367,880
Short-term financial instruments	31		34,528,417,578		28,573,893,163
Trade receivables, net	7, 20, 28, 30, 31		252,797,446,736		229,277,143,312
Short-term loans	31		1,240,850,000		1,019,950,000
Short-term deposits provided	28, 31		1,526,571,585		1,058,182,564
Other receivables	7, 28, 31		1,279,708,495		1,831,568,467
Prepayments			75,180		1,204,600
Prepaid expenses			703,651,868		870,726,548
Prepaid value-added tax			2,176,543,478		918,099,020
Current derivative assets	18, 31		7,263,727,307		4,156,230,401
Current firm commitment assets	18		7,949,578,719		490,630,391
Inventories, net	8		126,607,484,184		107,032,910,089
			491,767,369,545		401,943,906,435
Non-current assets					
Long-term financial instruments	6, 31		70,826,502		71,826,502
Financial assets at fair value through profit or loss	9, 31		89,720,000		71,820,000
Financial assets at fair value through OCI	9, 31		973,944,115		991,855,215
Investments in an associate	10		7,610,061,552		13,055,169,697
Long-term accrued income	31		9,310,526		8,772,258
Long-term loans	31		660,720,000		914,320,000
Property, plant and equipment, net	11, 14, 28		235,335,436,372		232,885,163,948
Investment properties, net	12		773,364,116		51,743,463
Intangible assets, net	13		2,168,596,433		3,097,754,973
Long-term guarantee deposits	28, 31		5,547,840,529		5,518,298,548
Deferred tax assets	25		39,483,333		33,685,912
Non-current derivative assets	18, 31		1,625,077,104		54,001,091
Net defined benefit assets	16		5,660,694,883		268,110,774
			260,565,075,465		257,022,522,381
Total assets		₩	**752,332,445,010**	₩	**658,966,428,816**

(Continued)

Gaon Cable Co., Ltd. and its subsidiaries
Consolidated statements of financial position
as of December 31, 2022 and 2021 (cont'd)
(Korean won)

	Notes		2022		2021
Liabilities					
Current liabilities					
Trade payables	28, 30, 31	₩	200,327,471,840	₩	159,133,234,461
Short-term borrowings	14, 30, 31, 32		31,136,498,131		55,203,212,996
Current portion of borrowings	14, 30, 31, 32		45,855,500,000		7,223,875,000
Current portion of lease liabilities	15, 32		1,992,881,598		1,919,578,166
Other payables	28, 30, 31		10,394,142,752		9,586,821,024
Advances received			1,502,525,309		2,413,307,181
Withholdings			416,310,492		337,853,280
Accrued expenses	30, 31		10,773,166,758		5,438,334,139
Dividends payable	31		3,041,532		2,541,312
Income tax payables	25		5,043,450,562		350,154,532
Value-added tax withheld			384,217,466		161,318,327
Current derivative liabilities	18, 30, 31		8,398,272,402		755,196,993
Current firm commitment liabilities	18		3,078,664,984		3,797,619,786
Current contract liabilities	20		17,550,367		221,245,902
			319,323,694,193		246,544,293,099
Non-current liabilities					
Long-term borrowings	14, 30, 31, 32		66,205,140,000		82,423,088,000
Corporate bonds	14, 30, 31, 32		29,953,892,264		29,914,727,168
Non-current lease liabilities	15, 32		4,573,139,504		1,066,761,545
Deferred tax liabilities	25		27,117,965,111		29,089,792,542
Leasehold deposits received	30, 31		102,400,000		102,400,000
Provisions	17		86,043,561		85,497,266
Non-current derivative liabilities	18, 30, 31		1,430,319,407		1,142,500,831
Long-term employee benefit liabilities			469,295,151		475,330,473
Non-current firm commitment liabilities	18		-		6,747,570
			129,938,194,998		144,306,845,395
Total liabilities			449,261,889,191		390,851,138,494
Equity					
Issued capital	19		31,794,630,000		20,801,735,000
Capital surplus	19		36,477,933,227		24,255,399,887
Capital adjustments	19		(1,574,879,457)		(1,574,879,457)
Accumulated other comprehensive loss	19		(3,784,482,125)		(4,658,353,417)
Retained earnings	19		240,157,354,174		229,291,388,309
Equity attributable to owners of the parent			303,070,555,819		268,115,290,322
Non-controlling interests			-		-
Total equity			303,070,555,819		268,115,290,322
Total liabilities and equity		₩	**752,332,445,010**	₩	**658,966,428,816**

Gaon Cable Co., Ltd. and its subsidiaries
Consolidated statements of comprehensive income
for the years ended December 31, 2022 and 2021

(Korean won)

	Notes		2022		2021
Sales	5, 20, 28	₩	**1,416,454,404,337**	₩	**1,070,383,204,799**
Cost of sales	20, 28		(1,327,920,806,471)		(1,008,608,967,466)
Gross profit	5		**88,533,597,866**		**61,774,237,333**
Selling and administrative expenses	21		(60,071,029,175)		(45,202,459,445)
Operating profit	5		**28,462,568,691**		**16,571,777,888**
Other income	23, 28		46,544,562,913		32,880,394,121
Other expenses	23, 28		(48,726,010,850)		(36,578,253,954)
Finance income	24		32,542,725,758		9,630,288,385
Finance expenses	24		(39,185,955,334)		(12,516,013,709)
Loss on investments in an associate	10		(6,341,016,309)		(1,229,220,267)
Profit before income taxes	25		**13,296,874,869**		**8,758,972,464**
Income tax expenses	25		(2,832,985,534)		(2,904,543,552)
Profit for the year	5, 27		**10,463,889,335**		**5,854,428,912**
Items to be subsequently reclassified to profit or loss:					
Gain on valuation of derivatives	18, 26		57,015,439		284,434,250
Equity adjustments of investments in an associate	10, 26		895,908,164		1,162,765,421
			952,923,603		1,447,199,671
Items not to be subsequently reclassified to profit or loss:					
Gain (loss) on valuation of financial assets at fair value through OCI	26		(79,052,311)		147,797,598
Remeasurement loss on defined benefit plans	16, 26		2,053,117,110		(537,722,141)
			1,974,064,799		(389,924,543)
Other comprehensive income			**2,926,988,402**		**1,057,275,128**
Total comprehensive income for the year		₩	**13,390,877,737**	₩	**6,911,704,040**
Profit for the year attributable to:					
Owners of the parent		₩	10,463,889,335	₩	5,854,428,912
Non-controlling interests		₩	-	₩	-
Total comprehensive income attributable to:					
Owners of the parent		₩	13,390,877,737	₩	6,911,704,040
Non-controlling interests		₩	-	₩	-
Earnings per share	27				
Basic & diluted earnings per share		₩	2,458	₩	1,489

Gaon Cable Co., Ltd. and its subsidiaries
Consolidated statements of changes in equity
for the years ended December 31, 2022 and 2021
(Korean won)

	Equity attributable to owners of the parent							
	Issued capital	Capital surplus	Capital adjustments	Accumulated other comprehensive loss	Retained earnings	Equity attributable to owners of the parent	Non-controlling interests	Total
As of January 1, 2021	₩ 20,801,735,000	₩ 24,255,399,887	₩ (1,574,879,457)	₩ (6,253,350,686)	₩ 226,333,310,938	₩ 263,562,215,682	₩ -	₩ 263,562,215,682
Profit for the year	-	-	-	-	5,854,428,912	5,854,428,912	-	5,854,428,912
Remeasurement loss on defined benefit plans	-	-	-	-	(537,722,141)	(537,722,141)	-	(537,722,141)
Income on valuation of financial assets at fair value through OCI	-	-	-	147,797,598	-	147,797,598	-	147,797,598
Gain on valuation of derivatives	-	-	-	284,434,250	-	284,434,250	-	284,434,250
Equity adjustments of investments in an associate	-	-	-	1,162,765,421	-	1,162,765,421	-	1,162,765,421
Total comprehensive income	-	-	-	1,594,997,269	5,316,706,771	6,911,704,040	-	6,911,704,040
Dividends	-	-	-	-	(2,358,629,400)	(2,358,629,400)	-	(2,358,629,400)
As of December 31, 2021	**₩ 20,801,735,000**	**₩ 24,255,399,887**	**₩ (1,574,879,457)**	**₩ (4,658,353,417)**	**₩ 229,291,388,309**	**₩ 268,115,290,322**	**₩ -**	**₩ 268,115,290,322**
As of January 1, 2022	₩ 20,801,735,000	₩ 24,255,399,887	₩ (1,574,879,457)	₩ (4,658,353,417)	₩ 229,291,388,309	₩ 268,115,290,322	₩ -	₩ 268,115,290,322
Profit for the year	-	-	-	-	10,463,889,335	10,463,889,335	-	10,463,889,335
Remeasurement gain on defined benefit plans	-	-	-	-	2,053,117,110	2,053,117,110	-	2,053,117,110
Loss on valuation of financial assets at fair value through OCI	-	-	-	(79,052,311)	-	(79,052,311)	-	(79,052,311)
Gain on valuation of derivatives	-	-	-	57,015,439	-	57,015,439	-	57,015,439
Equity adjustments of investments in an associate	-	-	-	895,908,164	-	895,908,164	-	895,908,164
Total comprehensive income	-	-	-	873,871,292	12,517,006,445	13,390,877,737	-	13,390,877,737
Capital Increase	10,992,895,000	12,222,533,340	-	-	-	23,215,428,340	-	23,215,428,340
Dividends	-	-	-	-	(1,651,040,580)	(1,651,040,580)	-	(1,651,040,580)
As of December 31, 2022	**₩ 31,794,630,000**	**₩ 36,477,933,227**	**₩ (1,574,879,457)**	**₩ (3,784,482,125)**	**₩ 240,157,354,174**	**₩ 303,070,555,819**	**₩ -**	**₩ 303,070,555,819**

Gaon Cable Co., Ltd. and its subsidiaries
Consolidated statements of cash flows
for the years ended December 31, 2022 and 2021
(Korean won)

		2022		2021
Operating activities:				
Profit for the year	₩	10,463,889,335	₩	5,854,428,912
Adjustments to reconcile profit for the year to net cash flows provided by (used in) operating activities:		14,420,935,722		36,653,917,483
Income tax expenses		2,832,985,534		2,904,543,552
Retirement benefits		2,626,171,778		2,470,068,519
Depreciation and amortization expenses (property, plant and equipment intangible assets, and investment properties)		8,388,157,768		8,069,297,171
Bad debt expenses		2,151,890,865		1,696,925,887
Other bad debt expenses		(5,440)		(165,862,346)
Loss on disposal of trade receivables		1,237,807,183		742,307,035
Loss on valuation of discount on trade receivables		58,386,377		(5,262,571)
Gain on foreign currency translation		(4,617,947,321)		(962,104,917)
Loss on foreign currency translation		6,685,657,166		4,271,059,217
Gain on disposal of property, plant and equipment		(22,131,190)		(108,356,333)
Loss on disposal of property, plant and equipment		49,983,804		14,117,112
Impairment loss on property, plant and equipment		689,132,771		-
Loss on disposal of intangible assets		20,180,760		-
Impairment loss on intangible assets		-		3,171,772,782
Loss on investments in an associate		6,341,016,309		1,229,220,267
Gain on valuation of derivative instruments		(18,046,091,905)		(7,849,016,356)
Loss on valuation of derivative instruments		15,139,655,034		654,791,647
Gain on valuation of firm commitments		(21,772,070,031)		(3,726,619,442)
Loss on valuation of firm commitments		7,164,862,301		21,619,866,148
Loss (reversal) on valuation of inventories		165,160,125		(38,538,225)
Provisions for sales warranty		546,295		1,185,562
Increase in provision for restoration		-		(1,400,000,000)
Miscellaneous gains		(18,757,349)		(519,352,208)
Miscellaneous losses		-		836,701,670
Dividend income		(48,836,450)		(38,816,000)
Interest income		(242,617,697)		(103,023,824)
Interest expenses		5,637,799,035		3,889,013,136
Working capital adjustments		1,357,808,472		(52,362,061,481)
Short-term financial instruments		(5,954,524,415)		(7,178,624,989)
Trade receivables		(28,843,877,748)		(63,180,921,822)
Other receivables		551,865,411		1,471,723,642
Guarantee deposits		(381,173,178)		(1,058,182,564)
Advanced payments		1,129,420		15,571,100
Prepaid expenses		119,537,969		(349,583,265)
Prepaid value-added tax		(1,258,444,458)		(505,772,879)
Inventories		(19,739,734,220)		(36,683,644,485)
Trade payables		44,410,555,874		77,892,378,776
Other payables		787,236,958		(1,374,451,067)
Advances received		(910,781,872)		1,982,342,113
Withholdings		78,457,212		(62,043,087)
Accrued expenses		5,212,759,835		1,005,937,641
Value-added tax withheld		222,899,139		(2,167,191,274)
Derivative assets and liabilities		6,234,245,088		11,538,409,167
Firm commitment assets and liabilities		6,422,557,030		(25,997,535,493)
Contract liabilities		(203,695,535)		195,091,648
Provisions		-		(4,276,701,670)
Benefits paid		(465,168,716)		(328,862,973)
Contribution to plan assets		(4,920,000,000)		(3,300,000,000)
Long-term employee liability		(6,035,322)		-
Income tax paid		(777,997,340)		(1,428,800,811)
Net cash flows provided by (used in) operating activities	₩	**25,464,636,189**	₩	**(11,282,515,897)**

(Continued)

Gaon Cable Co., Ltd. and its subsidiaries
Consolidated statements of cash flows
for the years ended December 31, 2022 and 2021 (cont'd)
(Korean won)

		2022		2021
Investing activities:				
Net decrease (increase) in long-term and short-term financial instruments	₩	1,000,000	₩	-
Increase in loans		(225,000,000)		(1,380,000,000)
Decrease in loans		257,700,000		313,184,245
Disposal of financial assets at fair value through OCI		600,000		-
Acquisition of investments in an associate		-		(555,150,000)
Acquisition of property, plant and equipment		(6,659,144,610)		(9,376,266,241)
Proceeds from disposal of property, plant and equipment		22,759,400		230,115,551
Acquisition of intangible assests		(32,800,000)		(42,500,000)
Proceeds from disposal of intangible assests		932,000,000		-
Increase in guarantee deposits		(63,789,000)		(765,004,500)
Decrease in guarantee deposits		50,546,000		235,000,000
Increase in leasehold deposits received		-		100,000,000
Dividends received		48,836,450		38,816,000
Interest received		240,024,880		66,311,621
Redemption of government subsidies		-		(31,819,095)
Net cash flows used in investing activities	₩	**(5,427,266,880)**	₩	**(11,167,312,419)**
Financing activities:				
Proceeds from short-term borrowings	₩	437,069,603,368	₩	385,680,767,448
Repayments of short-term borrowings		(461,077,174,931)		(365,379,532,725)
Proceeds from long-term borrowings		25,032,000,000		39,611,314,000
Repayments of current portion of long-term borrowings		(6,223,875,000)		(22,616,000,000)
Issuance of corporate bonds		-		29,882,088,400
Repayments of corporate bonds		-		(20,000,000,000)
Repayments of lease liabilities		(1,995,663,403)		(2,034,093,379)
Dividends paid		(1,650,540,360)		(2,357,917,000)
Interest paid		(5,418,006,207)		(3,752,436,155)
Capital Increase		23,215,428,340		-
Net cash flows provided by (used in) financing activities	₩	**8,951,771,807**	₩	**39,034,190,589**
Net increase (decrease) in cash and cash equivalents	₩	28,989,141,116	₩	16,584,362,273
Net foreign exchange differences		(9,194,581)		(361)
Cash and cash equivalents as of January 1		26,713,367,880		10,129,005,968
Cash and cash equivalents as of December 31	₩	**55,693,314,415**	₩	**26,713,367,880**

1. General information

1.1 Corporate information

Gaon Cable Co., Ltd. (the "Company") was established in September 1947 and primarily engages in the business of manufacturing and selling various electric wires and cables, and owns manufacturing facilities located in Gunpo, Gyeonggi-do and Jeon-ju, Jeollabuk-do.

The Company has listed its shares on the Korea Exchange since June 1987 and changed its name from KUKJE ELECTRIC WIRE IND. CO., LTD. to Heesung Cable Co., Ltd. on March 1, 1996. In August 20, 2004, the Company changed its name to Gaon Cable Co., Ltd. and became a related party of LS Corp.. On March 31, 2015, the Company merged with WEDUSS CO.,LTD., a subsidiary of the Company. In addition, the Company's largest shareholder was changed to LS Cable & System Ltd. as of August 21, 2018.

As of December 31, 2022, the Company's issued capital is ₩ 31,795 million.

1.2 Information about consolidated subsidiaries

(1) Information about consolidated subsidiaries included in the consolidated financial statements as of December 31, 2022 are as follows. (Korean won in thousands):

	Issued capital	Total stocks issued	Equity ownership (%)	Principal business	Country of domicile	Fiscal year-end
Mobo Co., Ltd.	₩ 12,726,136	25,452,272	100.00	manufacturing industry	Republic of Korea	Dec 31
EG Cable Co., Ltd.	4,201,000	4,201,000	100.00	manufacturing industry	Republic of Korea	Dec 31
DKC CO., LTD.	950,000	190,000	100.00	manufacturing industry	Republic of Korea	Dec 31

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

	Dec 31, 2022			Dec 31, 2021		
	Assets	Liabilities	Equity	Assets	Liabilities	Equity
Mobo Co., Ltd.	₩ 65,500,460	₩ 49,961,529	₩ 15,538,931	₩ 58,803,570	₩ 44,877,822	₩ 13,925,748
EG Cable Co., Ltd.	6,990,488	2,148,569	4,841,919	6,509,530	2,164,055	4,345,475
DKC CO.LTD.	26,912,494	18,968,118	7,944,376	23,975,556	16,313,193	7,662,363

	2022			2021		
	Sales	Profit for the year	Comprehensive income for the year	Sales	Profit (loss) for the year	Comprehensive income (loss) for the year
Mobo Co., Ltd.	₩ 252,422,704	₩ 1,489,067	₩ 1,613,183	₩ 174,814,360	₩ 969,401	₩ 1,091,743
EG Cable Co., Ltd.	3,525,399	483,577	496,444	3,107,782	405,670	405,670
DKC CO.LTD.	114,488,068	161,365	282,013	93,278,223	6,422	80,012

2. Basis of preparation and summary of significant accounting policies

2.1 Basis of preparation

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

The consolidated financial statements have been prepared on a historical cost basis, except for financial instrument, defined benefit plan and externally established assets measured at fair value. The consolidated financial statements are presented in Korean won in thousands (KRW).

KIFRS permits to use significant accounting estimation when preparing financial statements and management judgement are required when electing the accounting policy. The part needed judgement of high and complicated level or significant assumption and estimation is explained on Note 3.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

2.2 Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries (collectively referred to as the "Group") as of December 31, 2022. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee
- The ability to use its power over the investee to affect its returns

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

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

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

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

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it derecognizes the related assets (including goodwill), liabilities, non-controlling interest and other components of equity, while any resultant gain or loss is recognized in profit or loss. Any investment retained is recognized at fair value.

2.3 Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as of the acquisition date.

In a staged business combination, the Group remeasures the previously held equity interest in the acquiree to its fair value at the acquisition date and, if any, the result is recognized in profit or loss.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of KIFRS 1109 *Financial Instruments,* is measured at fair value with the changes in fair value recognized in profit or loss in accordance with KIFRS 1109. Contingent consideration classified as equity is not remeasured and its subsequent settlement is accounted for within equity. Other contingent consideration that is not within the scope of KIFRS 1109 is measured at fair value at each reporting date with changes in fair value recognized in profit or loss.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests, and any previous interest held over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognized at the acquisition date. If the re-assessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognized in profit or loss.

After initial recognition, goodwill is measured at acquisition cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a cash-generating unit (CGU) and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the CGU retained.

2.4 Investment in associates

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

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

The statement of profit or loss and other comprehensive income reflects the Group's share of the results of operations of the associate. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognized directly in the equity of the associate, the Group recognizes its share of any changes, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the associate are eliminated to the extent of the interest in the associate.

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

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

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

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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

2.5 Revenue from contracts with customers

The Group primarily engages in the business of manufacturing and selling various electric wires and cables to customers. Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that it is the principal in its revenue arrangements because it typically controls the goods or services before transferring them to the customer.

The Group identifies separate performance obligations, such as (1) sale of cables, (2) overseas transportation and others when selling electric cables and wires to its customers. The Group also determines the period of which to satisfy its performance obligations upon delivering the promised goods or rendering services to its customers. Revenue from contracts with customers is recognized either at a point in time or over time depending on when the Group satisfies the performance obligations of the promised goods or services.

The Group allocates transaction prices based on relative individual selling prices to the performance obligations identified in a contract. The Group uses a 'market valuation adjustment approach' to estimate the individual selling price of each performance obligation, with the exception of some of the transactions using an 'anticipated cost profit addition approach' that predicts expected costs and adds appropriate profits. However, 'remaining approach' is used in limited circumstances in which both of the previous estimation methods are difficult to use.

(1) Variable consideration

If the consideration in a contract includes a variable amount, the Group estimates the amount of consideration to which it will be entitled in exchange for transferring the goods to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

(2) Significant financing component

The Group applies the practical expedient for short-term advances received from customers. That is, the promised amount of consideration is not adjusted for the effects of a significant financing component if the period between the transfer of the promised good or service and the payment is one year or less.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

(3) Warranty obligations

The Group typically provides warranties for general repairs of defects that existed at the time of sale, as required by law. These assurance-type warranties are accounted for under KIFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*. Refer to the Note 2.17 on warranty provisions.

These warranties are intended to provide the customer with protection against any defects that exist and will not be identified as a separate performance obligation because the Group does not provide any additional services. Providing any guarantees will not have a material impact on the financial statements.

(4) Contract balances

Contract assets
A contract asset is initially recognized for revenue earned from installation services because the receipt of consideration is conditional on successful completion of the installation. Upon completion of the installation and acceptance by the customer, the amount recognized as contract assets is reclassified to trade receivables.

Trade receivables
A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Refer to accounting policies of financial assets in the Note 2.9.

Contract liabilities
A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognized when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Group performs under the contract.

2.6 Foreign currencies

The Group's consolidated financial statements are presented in Korean won in thousands. Transactions in foreign currencies are initially recorded by the Group's entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rates of exchange at the reporting date. Differences arising on settlement or translation of monetary items are recognized in profit or loss.

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.

2.7 Cash and cash equivalents

Cash and cash equivalents in the Group statement of financial position comprise cash at banks and on hand and short-term deposits with a maturity of three months or less. For the purpose of the Group statement of cash flows, cash and cash equivalents consist of cash and cash equivalents.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

2.8 Inventories

Inventories are valued at the lower of cost and net realizable value.

Initial cost of inventories includes acquisition of inventories, production or conversion costs and other costs incurred in bringing each product to its present location and conditions. The cost of inventories is calculated using the gross average method, except for goods to arrive subject to the specific identification method. For other inventories, cost is determined using the moving weighted-average method. A perpetual inventory system is used to record inventories, in which inventories are adjusted to physical counts that are performed at the end of the year.

Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale. The Group makes adjustments by performing physical count at the end of every reporting period.

2.9 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.

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.

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

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

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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 rate (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

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

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling, and

- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

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 comprehensive income (loss) when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

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

2. Basis of preparation and summary of significant accounting policies. (cont'd)

Financial assets at fair value through profit or loss

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

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

This category includes listed equity instruments that are not irrevocably elected to account for changes in derivatives and fair value in other comprehensive income.
Dividends on listed equity instruments are recognized in profit or loss when the right is determined.

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 Group statement of financial position) when:

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

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

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

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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

- Note 3 - Disclosures for significant assumptions
- Note 7 - Trade receivables, including contract assets

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

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

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

The Group considers a financial asset in default when contractual payments are 365 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, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

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

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

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 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.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the statement of comprehensive income (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 profit or loss.

(3) Offsetting of financial instruments

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

2.10 Derivative financial instruments and hedge accounting

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

Changes in the fair value of derivatives are directly reflected in the consolidated statement of comprehensive income (loss), and the effective portion of cash flow hedge is reflected in other comprehensive income.

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

- Fair value hedges when hedging the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognized firm commitment
- Hedges of a net investment in a foreign operation: the documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group will assess whether the hedging relationship meets the hedge effectiveness requirements. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

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

Fair value hedges
The change in the fair value of a hedging derivative is recognized in profit or loss. The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognized in profit or loss. For fair value hedges relating to items carried at amortized cost, any adjustment to carrying value is amortized through profit or loss over the remaining term of the hedge using the EIR method. EIR amortization may begin as soon as an adjustment exists and no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged. If the hedged item is derecognized, the unamortized fair value is recognized immediately in profit or loss.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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

Cash flow hedges
The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in profit or loss. The valuation gains and losses directly reflected in other comprehensive income are reclassified from other comprehensive income to profit or loss during the accounting period in which the hedged transaction affects profit or loss. If a non-financial asset or non-financial liability is a hedged item, the relevant valuation gains and losses recognized directly in equity are included in the initial carrying amount of the non-financial asset or liability.

If a firm commitment or forecast transaction is expected to no longer occur, the cumulative gain or loss recognized directly in equity is immediately recognized in profit or loss, but if the hedging instrument is extinguished, sold, liquidated, exercised, or revoked without replacement or extension of maturity, the cumulative gain or loss recognized in equity continues to be counted in equity until the firm commitment or expected transaction occurs.

Hedges of a net investment
Hedges of a net investment in a foreign operation are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized as OCI while any gains or losses relating to the ineffective portion are recognized in profit or loss. The cumulative value of gains or losses recognized in OCI are transferred to profit or loss upon disposal of the foreign operation or part of the foreign operation.

2.11 Property, plant and equipment

Construction in progress is stated at cost, net of accumulated impairment losses, and property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the property, plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced at intervals, the Group depreciates them separately based on their specific useful lives.

Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

The property, plant and equipment transferred from the customer is measured at fair value at the date of acquisition of the control when the instrument is initially measured.

Depreciation is calculated on a straight-line basis over the estimated useful life of the assets, as follows:

	Useful life
Buildings	9 ~ 50 years
Structures	4 ~ 40 years
Machinery and equipment	3 ~ 12 years
Vehicles	4 ~ 10 years
Other fixed assets	2 ~ 15 years

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

An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of profit or loss when the asset is derecognized.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

2.12 Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated at fair value, which reflects market conditions at the reporting date. Gains or losses arising from changes in the fair values of investment properties are included in profit or loss in the period in which they arise, including the corresponding tax effect.

Transfers are made to (or from) investment property only when there is a change in use. For a transfer from investment property to owner-occupied property, the deemed cost for subsequent accounting is the fair value at the date of change in use. If owner-occupied property becomes an investment property, the Group accounts for such property in accordance with the policy stated under property, plant and equipment up to the date of change in use. Investment property is depreciated on a straight-line basis, which best reflects the expected pattern of consumption of future economic benefits embodied in the asset, over the useful life of the assets, as follows:

	Useful life
Buildings	40 years
Structures	10 ~ 40 years

2.13 Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangibles, excluding capitalized development costs, are not capitalized and the related expenditure is reflected in profit or loss in the period in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite. Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in profit or loss and other comprehensive income in the expense category that is consistent with the function of the intangible assets.

Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually, either individually or at the CGU level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the asset is expected to be utilized. Amortization is calculated on a straight-line basis over the estimated useful life of the assets, as follows:

	Useful life
Industrial property rights	10 years
Software	5 years
Other intangible assets	3 ~ 20 years

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in profit or loss when the asset is derecognized.

2. Basis of preparation and summary of significant accounting policies (cont'd)

Greenhouse gas emissions rights and obligations
With Enforcement of Allocation and Trading of Greenhouse Gas Emissions Allowances, allowances that are received free of charge from the government are measured at zero while allowances purchased are measured at acquisition cost and stated net of accumulated impairment loss.
Emissions obligations are measured as the sum of the carrying amount of the allocated allowances that will be submitted to the government and the best estimate of expenditure required to settle the obligation at the end of reporting period for any excess emission. Emission rights and liabilities are classified as 'intangible assets' and 'provisions,' respectively, in the consolidated statement of financial positions.

2.14 Leases

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

Group as a lessee
The Group applied a single recognition and measurement approach for all leases for which it is the lessee, except for short-term leases and leases of low-value assets. The Group recognized lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(1) Right-of-use assets

The Group recognizes a right-of-use assets on the lease's commencement date (i.e., the day when the underlying asset is available). Right-of-use assets are measured at cost less accumulated depreciation and accumulated impairment losses and adjusted for remeasurement of lease liabilities. The cost of a 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 it is reasonably expected that the Group will acquire ownership of the leased asset at the end of the lease term, the right-of-use asset is depreciated on a straight-line basis over the shorter of the estimated useful life and the lease term.

	Useful life
Buildings	2 ~ 4 years
Vehicles	2 ~ 4 years

If the ownership of the underlying asset is transferred to the Group at the end of the lease term or the cost of the right-of-use asset reflects the Group's exercise of a purchase option, the depreciation is calculated using the estimated useful life of the underlying asset.

Right-of-use assets are also subject to impairment and described in note 2.20 accounting policies for impairment of non-financial assets.

The Group's right-of-use assets are included in the property, plant and equipment (see Note 11).

(2) Lease liabilities

The Group measured the acquired lease liabilities using the present value of the remaining lease payments at the date of acquisition. The lease consists of fixed lease payments (including actual fixed lease payments and deductions on lease incentives to be received), variable leases that vary according to the index or rate, and the amount expected to be paid out. The lease also includes the price paid to terminate the lease if the exercise price of the option and the lease term reflect the exercise of the termination option in the event that it is fairly certain that the Group will exercise the purchase option.

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

The Group uses the incremental borrowing rate at the lease commencement date when calculating the present value of the lease payments. 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 the lease liabilities is remeasured if there are changes in the lease term, changes in the lease payments (for example, changes in future lease payments resulting from changes in an index or rate used to determine such lease payments) or changes in the assessment of an option to purchase the underlying asset.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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

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

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.

2.15 Borrowing costs

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

2.16 Pension benefits and other post-employment benefits

The Group operates the defined benefit plan (DB) and the defined contribution plan (DC) and makes contributions to a separately administered fund for the defined benefit system. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method, and the contributions made to the defined contribution plan is accounted for as retirement benefits in the period in which they occur. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets, are recognized immediately in OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognized in profit or loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Group recognizes related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognizes the following changes in the net defined benefit obligation under 'cost of sales' and 'selling and administrative expenses' in the Group's statement of comprehensive income (loss).

2.17 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement of comprehensive income (loss) net of any reimbursement.

2.18 Treasury shares

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

2. Basis of preparation and summary of significant accounting policies. (cont'd)

2.19 Taxes

(1) Current income tax

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

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

(2) Deferred tax

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

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

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

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

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

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.
Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

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

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

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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

(3) Sales tax

Expenses and assets are recognized net of the amount of sales tax, except when the sales tax incurred on a purchase of assets or services is not recoverable from the taxation authority, in which case, the sales tax is recognized as part of the cost of acquisition of the asset or as part of the expense item, as applicable, and the related receivables and payables are stated with the amount of sales tax included.
The net amount of sales tax recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the consolidated statement of financial position.

2.20 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 are recognized in profit or loss in expense categories consistent with the function of the impaired asset.

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 profit or loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

2.21 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 assets.

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

All other liabilities are classified as non-current liabilities.

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

2.22 Fair value measurement

The Group measures financial instruments such as derivatives at fair value at each balance sheet date. The fair value of financial instruments measured at amortized cost is disclosed in the notes. 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

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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.

2.23 New and amended standards and interpretations

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

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

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 labour 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.

These amendments had no impact on the consolidated financial statements of the Group as the Group does not have onerous contracts that are in the scope of application of the amendments.

Reference to the Conceptual Framework – Amendments to KIFRS 1103

The amendments replace a reference to a previous version of the International Accounting Standards Board (IASB)'s *Conceptual Framework* with a reference to the current version issued in March 2018 without significantly changing its requirements. The amendments add an exception to the recognition principle of KIFRS 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.

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

The amendment prohibits entities from deducting from the cost of an item of property, plant and equipment, any proceeds of the sale of items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the costs of producing those items, in profit or loss.

2. Basis of preparation and summary of significant accounting policies. (cont'd)

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.

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.

3. Significant accounting judgments estimates and assumptions

The preparation of the Group's consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Other disclosures relating to the Group's exposure to risks and uncertainties includes 'Financial instruments risk management and policies' and 'Sensitivity analyses disclosures' (see Note 30).

3.1 Judgments

In the process of applying the Group's accounting policies, management has made the following judgments, which have the most significant effect on the amounts recognized in the consolidated financial statements:

Determining the lease term of contracts with renewal and termination options – Group as lessee

The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised.

The Group has several lease contracts that include extension and termination options. The Group applies judgement in evaluating whether it is reasonably certain whether or not to exercise the option to renew or terminate the lease. That is, it considers all relevant factors that create an economic incentive for it to exercise either the renewal or termination. After the commencement date, the Group reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise or not to exercise the option to renew or to terminate (e.g., construction of significant leasehold improvements or significant customization to the leased asset).

The Group included the renewal period as part of the lease term for leases of plant and machinery with shorter non-cancellable period (i.e., 3 to 5 years). The Group typically exercises its option to renew for these leases because there will be a significant negative effect on production if a replacement asset is not readily available. The renewal periods for leases of plant and machinery with longer non-cancellable periods (i.e., 10 to 15 years) are not included as part of the lease term as these are not reasonably certain to be exercised. In addition, the renewal options for leases of motor vehicles are not included as part of the lease term because the Group typically leases motor vehicles for not more than five years and, hence, is not exercising any renewal options. Furthermore, the periods covered by termination options are included as part of the lease term only when they are reasonably certain not to be exercised.

Property lease classification – Group as lessor

The Group has entered into commercial property leases on its investment property portfolio. The Group has determined, based on an evaluation of the terms and conditions of the arrangements, such as the lease term not constituting a major part of the economic life of the commercial property and the present value of the minimum lease payments not amounting to substantially all of the fair value of the commercial property, that it retains substantially all the risks and rewards incidental to ownership of these properties and accounts for the contracts as operating leases.

3. Significant accounting judgments estimates and assumptions (cont'd)

3.2 Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

(1) Impairment of non-financial assets

The Group assesses the presence of impairment signs on all non-financial assets at the end of each reporting period. Goodwill and intangible assets with indefinite useful lives are tested for impairment annually or when the asset is impaired. Other non-financial assets are tested for impairment when there is an indication that their carrying amount will not be recoverable. To calculate the value in use, the management shall estimate future cash flows arising from the asset or cash-generating unit and select an appropriate discount rate to calculate the present value of the cash flows.

(2) Defined benefit plans (pension benefits)

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

(3) Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the discounted cash flow (DCF) model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the reported fair value of financial instruments.

(4) Provision for expected credit losses of trade receivables and contract assets

The Group uses a provision matrix to calculate ECLs for trade receivables and contract assets. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns (i.e., by geography, product type, customer type and rating, and coverage by letters of credit and other forms of credit insurance).

The provision matrix is initially based on the Group's historical observed default rates. The Group will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic product) are expected to deteriorate over the next year which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Group's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future.

3. Significant accounting judgments estimates and assumptions (cont'd)

(5) Leases - Estimating the incremental borrowing rate

The Group cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Group would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Group 'would have to pay', which requires estimation when no observable rates are available (such as for subsidiaries that do not enter into financing transactions) or when they need to be adjusted to reflect the terms and conditions of the lease (for example, when leases are not in the subsidiary's functional currency).

The Group estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

The Group reviews the IBR using observable inputs at fiscal year-end.

4. Accounting standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

4.1 KIFRS 1117 *Insurance Contracts*

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

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

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

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

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

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

The amendments are effective for annual reporting periods beginning on or after January 1, 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.

4.3 Definition of Accounting Estimates - Amendments to KIFRS 1008

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

4. Accounting standards issued but not yet effective (cont'd)

4.4 Disclosure of Accounting Policies - Amendments to KIFRS 1001

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

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

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

5. Operating segments

(1) General information on the operating segments

The Group classifies its operating segments based on the goods or services provided. The financial information of each operating segment is for internal management purposes, and the information on two operating segments are as follows:

Operating segment	Main goods	Main clients
Power Line segment	Power cable, etc.	Korea Electric Power Corporation Samsung Engineering Co., Ltd. etc.
Telecommunications Line segment	Telecommunications cable, etc.	KT Corporation, LG Uplus Corp. etc.

(2) The financial performance of each operating segment for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Dec. 31, 2022			
	Power Line segment	Telecommunications Line segment	Internal transaction adjustment	Total
Sales	₩ 1,361,178,617	₩ 195,936,305	₩ (140,660,518)	₩ 1,416,454,404
Gross profit on sales	56,433,583	32,231,218	(131,203)	88,533,598
Operating profit	16,815,380	11,721,206	(74,017)	28,462,569
Profit for the year	5,426,182	3,734,804	1,302,903	10,463,889

	Dec. 31, 2021			
	Power Line segment	Telecommunications Line segment	Internal transaction adjustment	Total
Sales	₩ 1,011,357,838	₩ 165,864,885	₩ (106,839,518)	₩ 1,070,383,205
Gross profit on sales	40,135,259	21,782,320	(143,342)	61,774,237
Operating profit	9,556,220	7,144,071	(128,513)	16,571,778
Profit for the year	5,461,401	4,694,500	(4,301,472)	5,854,429

(3) Details of the total assets of each operating segments as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Power Line segment	Telecommunications Line segment	Common Business segment	Internal transaction adjustment	Total
Dec. 31, 2022	₩ 336,959,024	₩ 69,659,880	₩ 385,525,196	₩ (39,811,655)	₩ 752,332,445
Dec. 31, 2021	₩ 318,672,855	₩ 56,264,953	₩ 318,373,457	₩ (34,344,836)	₩ 658,966,429

At closing date, the Group reports the information on profit or loss and total assets of each operating segment to the Chief Operating Decision Maker.

(4) Information on geographical area of operation

As the Group's principal place of business is domiciled in the Republic of Korea, there is no information on geographical area of operation to be disclosed.

(5) Information about main client

Details of a single major customer, which accounts for more than 10% of the Group's total sale for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Dec. 31, 2022	Dec. 31, 2021
LS Cable & System Ltd..	₩ 167,027,324	₩ 150,898,391

6. Cash and cash equivalents

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

	Dec. 31, 2022	Dec. 31, 2021
Cash	₩ 19,677	₩ 17,605
Checking account deposits	2,415,238	606,576
Deposits on demand	3,208,516	1,378,285
Deposits in foreign currency	648,096	825,264
Other	49,401,787	23,885,638
	₩ 55,693,314	₩ 26,713,368

(2) Details of restricted financial assets as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

Title of account	Financial institutions	Dec. 31, 2022	Dec. 31, 2021	Restriction
Long-term financial instruments	Shinhan Bank etc.	₩ 17,000	₩ 18,000	Current account opening deposit
	Industrial Bank	53,827	53,827	Guarantee insurance opening collateral
		₩ 70,827	₩ 71,827	

7. Trade and other receivables

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

	Dec. 31, 2022		
	Book value	ECLs	Net book value
Trade receivables	₩ 265,656,756	₩ (12,859,309)	₩ 252,797,447
Other receivables	1,450,746	(171,038)	1,279,708
Long-term trade receivables	18,171	(18,171)	-
	₩ 267,125,673	₩ (13,048,518)	₩ 254,077,155

	Dec. 31, 2021		
	Book value	ECLs	Net book value
Trade receivables	₩ 241,380,371	₩ (12,103,228)	₩ 229,277,143
Other receivables	2,002,611	(171,043)	1,831,568
Long-term trade receivables	18,171	(18,171)	-
	₩ 243,401,153	₩ (12,292,442)	₩ 231,108,711

7. Trade and other receivables (cont'd)

(2) Changes in ECLs of trade and other receivables for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022			
	Trade receivable	Other receivables	Long-term trade receivables	Total
As of Jan 1.	₩ 12,103,228	₩ 171,043	₩ 18,171	₩ 12,292,442
Provision for expected credit losses	4,811,426	-	-	4,811,426
Reversal of expected credit losses	2,659,535	(5)	-	(2,659,540)
Write-off	(1,395,810)	-	-	(1,395,810)
As of Dec 31.	₩ 12,859,309	₩ 171,038	₩ 18,171	₩ 13,048,518

	2021			
	Trade receivable	Other receivables	Long-term trade receivables	Total
As of Jan 1.	₩ 12,021,229	₩ 336,905	₩ 18,171	₩ 12,376,305
Provision for expected credit losses	4,687,782	4,844	-	4,692,626
Reversal of expected credit losses	(2,990,857)	(170,706)	-	(3,161,563)
Write-off	(1,614,926)	-	-	(1,614,926)
As of Dec 31.	₩ 12,103,228	₩ 171,043	₩ 18,171	₩ 12,292,442

8. Inventories

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

	Dec. 31, 2022		
	Acquisition costs	Allowance for inventory valuation	Net book value
Merchandise	₩ 16,391,954	₩ (60,128)	₩ 16,331,826
Finished goods	31,505,236	(535,879)	30,969,357
Work in process	32,389,064	-	32,389,064
Raw materials	27,851,209	(227,380)	27,623,829
Supplemental materials	5,146,831	-	5,146,831
Auxiliary materials	577,420	-	577,420
Goods to arrive	13,067,983	-	13,067,983
By-product	501,174	-	501,174
	₩ 127,430,871	₩ (823,387)	₩ 126,607,484

	Dec. 31, 2021		
	Acquisition costs	Allowance for inventory valuation	Net book value
Merchandise	₩ 7,276,666	₩ (54,424)	₩ 7,222,242
Finished goods	25,684,129	(326,397)	25,357,732
Work in process	35,938,743	-	35,938,743
Raw materials	7,555,743	(277,405)	7,278,338
Supplemental materials	4,092,320	-	4,092,320
Auxiliary materials	401,908	-	401,908
Goods to arrive	26,439,743	-	26,439,743
By-product	301,884	-	301,884
	₩ 107,691,136	₩ (658,226)	₩ 107,032,910

8. Inventories (cont'd)

During the year ended December 31, 2022, ₩165,160 thousand (2021: reversal ₩38,538 thousand) was recognized as an expense for inventories carried at net realizable value. This is recognized in cost of sales.

9. Financial assets measured at fair value

(1) Details of financial assets measured at fair value as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

		Dec. 31, 2022	Dec. 31, 2021
Financial assets at fair value through profit or loss	Investment in partnership etc.	₩ 89,720	₩ 71,820
	Trade receivables(*)	14,999,751	11,346,031
Financial assets at fair value through OCI	Equity securities	973,944	991,855
Total		₩ 16,063,415	₩ 12,409,706

(*) Classified as financial assets at fair value through profit or loss as the Group realizes cash flows of trade receivables from relative parties by factoring receivables.

(2) Details of financial assets investment in equity and equity securities etc. of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022					
Name of the investee	Number of shares	Percentage of shares	Acquisition costs	Unrealized gain (loss)(*)	Book value	Fair value
Listed equity securities						
KT Corporation	20,000	0.01%	₩ 881,381	₩ (205,381)	₩ 676,000	₩ 676,000
SK TELECOM CO., LTD.	2,563	-	128,180	(6,694)	121,486	121,486
SK SQUARE CO., LTD.	1,656	-	82,820	(27,261)	55,559	55,559
Sub-total			1,092,381	(239,336)	853,045	853,045
Unlisted equity securities and investment in partnership						
Network Cable Co., Ltd.	20,000	11%	100,000	-	100,000	100,000
LS Cable & System U.S.A., Inc.	5,400,000	18.00%	6,149,520	(6,149,520)	-	-
Other	-	-	276,729	(166,110)	110,619	110,619
Sub-total			6,526,249	(6,315,630)	210,619	210,619
Total			₩ 7,618,630	₩ (6,554,966)	₩ 1,063,664	₩ 1,063,664

(*) The amounts exclude tax effects

9. Financial assets measured at fair value (cont'd)

	2021					
Name of the investee	Number of shares	Percentage of shares	Acquisition costs	Unrealized gain (loss)(*)	Book value	Fair value
Listed equity securities						
KT Corporation	20,000	0.01%	₩ 881,381	₩ (269,381)	₩ 612,000	₩ 612,000
SK TELECOM CO., LTD.	2,563	-	128,180	20,218	148,398	148,398
SK SQUARE CO., LTD.	1,656	-	82,820	27,138	109,958	109,958
Sub-total			1,092,381	(222,025)	870,356	870,356
Unlisted equity securities and investment in partnership						
Network Cable Co., Ltd.	20,000	11.11%	100,000	-	100,000	100,000
LS Cable & System U.S.A., Inc.	5,400,000	18.00%	6,149,520	(6,149,520)	-	-
Other	-	-	259,429	(166,110)	93,319	93,319
Sub-total			6,508,949	(6,315,630)	193,319	193,319
Total			₩ 7,601,330	₩ (6,537,655)	₩ 1,063,675	₩ 1,063,675

(*) The amounts exclude tax effects

10. Investments in an associate

(1) Information about investments in an associate as of December 31, 2022 and 2021 are as follows. (Korean won in thousands):

	Country of domicile	Fiscal year-end	Dec 31, 2022			Dec 31, 2021		
			Equity ownership (%)	Book value		Equity ownership (%)	Book value	
LS-Gaon Cable Myanmar Co., Ltd.	Myanmar	September 30	49.99	₩	7,610,062	49.99	₩	13,055,170

(2) Changes in investments in an associate for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022							
	As of Jan. 1		Share of loss of an associate (*1)		Others (*2)		As of Dec. 31	
LS-Gaon Cable Myanmar Co., Ltd.	₩	13,055,170	₩	(6,341,016)	₩	895,908	₩	7,610,062

(*1) This amount contains impairment loss amounting to KRW 5,889,135 thousand.
(*2) Others represent changes in other comprehensive income due to equity changes in the associate.

	2021									
	As of Jan. 1		Acquisition		Share of loss of an associate		Others (*1)		As of Dec. 31	
LS-Gaon Cable Myanmar Co., Ltd.	₩	12,566,475	₩	555,150	₩	(1,229,220)	₩	1,162,765	₩	13,055,170

(*1) Others represents changes in other comprehensive income due from equity changes in the associate.

(3) A summary of financial information of an associate as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022									
	Assets		Liabilities		Equity		Sales		Loss for the year	
LS-Gaon Cable Myanmar Co., Ltd.	₩	36,798,311	₩	9,759,766	₩	27,038,545	₩	21,016,808	₩	(883,763)

	2021									
	Assets		Liabilities		Equity		Sales		Loss for the year	
LS-Gaon Cable Myanmar Co., Ltd.	₩	35,591,643	₩	9,461,151	₩	26,130,492	₩	15,635,738	₩	(2,458,441)

(4) The adjustment from associate's net asset to its equity carrying amount of associate as of December 31, 2022 and 2021 are as follows. (Korean won in thousands):

	2022							
	Associate net asset		Net asset equity amount		Other		Carrying amount	
LS-Gaon Cable Myanmar Co., Ltd.	₩	27,038,545	₩	13,519,271	₩	(5,909,209)	₩	7,610,062

	2021							
	Associate net asset		Net asset equity amount		Other		Carrying amount	
LS-Gaon Cable Myanmar Co., Ltd.	₩	26,130,492	₩	13,065,246	₩	(10,076)	₩	13,055,170

10. Investments in an associate(cont'd)

(5) Impairment test
The Group reviews for any indicators of impairment at the end of every reporting period, and if there are any indicators, the Group performs impairment test by estimating recoverable amount.

As of December 31, 2022, the recoverable amount of investments in associates was determined based on value-in-use calculations. Value in use is determined by discounting future cash flows expected from continued use of the asset. The recoverable amounts of investments in associates have been determined based on the value in use calculations.

The assumptions used for value-in-use calculation of investments in an associate as follows:

	LS-Gaon Cable Myanmar Co., Ltd.
Discount rate	24.55%
Projection period of cash flows	5 years
Permanent growth rate	1%

As of December 31, 2022, the calculation of value-in-use is based on below significant assumptions.

- Discount rate was calculated by weight-averaging equity and liability and estimated by applying corporate bond interest rate considering credit rating and cost of equity using the beta of company in the same industry and risk-free rate including the country's credit rating as of the valuation date.

- Future cash flows were estimated based on past experience, actual operation result, and business plan. Inflation rate and investment plan are included in the cash flows.
- The sensitive analysis of investments in an associate based on changes in significant assumptions are as follows (Korean won in thousands):

	Effect on Value-in-use				
	Assumption change	Value for Increase		Value for Decrease	
Discount rate	1.00%	₩	(584,447)	₩	652,165
Permanent growth rate	1.00%	₩	426,359	₩	(391,627)

As of December 31, 2022, as a result of performing impairment test on investment in an associate, the Group recognized impairment loss of KRW 5,899,135 thousand, as the book value of investment in an associate exceeded the recoverable amount.

11. Property, plant and equipment

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

	2022						
	As of Jan.1	Acquisitions	Transfers	Disposals	impairment	Depreciation	As of Dec. 31
Land	₩ 185,610,974	₩ 99	₩ -	₩ -	₩ -	₩ -	₩ 185,611,073
Government grants	(76,130)	-	-	-	-	-	(76,130)
Buildings	46,345,126	-	(253,614)	-	-	-	46,091,512
Accumulated depreciation	(23,291,768)	-	193,570	-	-	(1,408,418)	(24,506,616)
Government grants	(121,323)	-	-	-	-	4,534	(116,789)
Structures	8,006,519	78,073	(664,733)	(79,497)	-	-	7,340,362
Accumulated depreciation	(4,294,332)	-	15,793	53,873	(99,370)	(185,295)	(4,509,331)
Government grants	(8,031)	-	-	-	-	1,417	(6,614)
Machinery	99,426,213	69,307	6,491,352	(1,052,119)	-	-	104,934,753
Accumulated depreciation	(87,329,490)	-	-	1,027,411	(539,892)	(3,217,826)	(90,059,797)
Government grants	(16,135)	-	-	-	-	6,497	(9,638)
Vehicles	1,777,462	21,900	-	-	-	-	1,799,362
Accumulated depreciation	(1,591,329)	-	-	-	-	(67,550)	(1,658,879)
Other P.P.E.	16,658,103	735,646	1,597,647	(309,618)	-	-	18,681,778
Accumulated depreciation	(14,196,271)	-	-	309,337	(49,871)	(1,422,137)	(15,358,942)
Right-of-use assets	8,129,627	5,612,287	-	(58,301)	-	-	13,683,613
Accumulated depreciation	(5,246,175)	-	-	55,511	-	(2,070,240)	(7,260,904)
Construction in progress	3,102,124	5,775,498	(8,120,999)	-	-	-	756,623
Book Value							
Land	185,534,844	99	-	-	-	-	185,534,943
Buildings	22,932,035	-	(60,044)	-	-	(1,403,884)	21,468,107
Structures	3,704,156	78,073	(648,940)	(25,624)	(99,370)	(183,878)	2,824,417
Machinery	12,080,588	69,307	6,491,352	(24,708)	(539,892)	(3,211,329)	14,865,318
Vehicles	186,133	21,900	-	-	-	(67,550)	140,483
Other P.P.E	2,461,832	735,646	1,597,647	(281)	(49,871)	(1,422,137)	3,322,836
Right-of-use assets	2,883,452	5,612,287	-	(2,790)	-	(2,070,240)	6,422,709
Construction in progress	3,102,124	5,775,498	(8,120,999)	-	-	-	756,623
	₩ 232,885,164	₩ 12,292,810	₩ (740,984)	₩ (53,403)	₩ (689,133)	₩ (8,359,018)	₩ 235,335,436

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

	2021					
	As of Jan. 1	Acquisitions	Transfers	Disposals	Depreciation	As of Dec. 31
Land	₩ 181,134,514	₩ 52,800	₩ 4,437,028	₩ (13,368)	₩ -	₩ 185,610,974
Government grants	(605,052)	-	-	528,922	-	(76,130)
Buildings	41,741,946	11,500	4,658,465	(66,785)	-	46,345,126
Accumulated depreciation	(20,285,246)	-	(1,726,169)	18,328	(1,298,681)	(23,291,768)
Government grants	(125,857)	-	-	-	4,534	(121,323)
Structures	6,930,391	36,510	1,258,835	(219,217)	-	8,006,519
Accumulated depreciation	(4,134,847)	-	(211,402)	216,946	(165,029)	(4,294,332)
Government grants	(9,448)	-	-	-	1,417	(8,031)
Machinery	100,415,316	896,910	3,854,178	(5,740,191)	-	99,426,213
Accumulated depreciation	(89,923,013)	-	-	5,710,125	(3,116,602)	(87,329,490)
Government grants	(27,680)	-	-	-	11,545	(16,135)
Vehicles	1,878,528	175,654	-	(276,720)	-	1,777,462
Accumulated depreciation	(1,753,633)	-	-	235,005	(72,701)	(1,591,329)
Other P.P.E.	25,010,091	383,088	460,528	(9,195,604)	-	16,658,103
Accumulated depreciation	(22,234,427)	-	-	9,195,604	(1,157,448)	(14,196,271)
Right-of-use assets	7,872,621	396,137	-	(139,131)	-	8,129,627
Accumulated depreciation	(3,208,109)	-	-	100,406	(2,138,472)	(5,246,175)
Construction in progress	564,940	7,679,950	(5,142,766)	-	-	3,102,124
Book Value						
Land	180,529,462	52,800	4,437,028	515,554	-	185,534,844
Buildings	21,330,843	11,500	2,932,296	(48,457)	(1,294,147)	22,932,035
Structures	2,786,096	36,510	1,047,433	(2,271)	(163,612)	3,704,156
Machinery	10,464,623	896,910	3,854,178	(30,066)	(3,105,057)	12,080,588
Vehicles	124,895	175,654	-	(41,715)	(72,701)	186,133
Other P.P.E	2,775,664	383,088	460,528	-	(1,157,448)	2,461,832
Right-of-use assets	4,664,512	396,137	-	(38,725)	(2,138,472)	2,883,452
Construction in progress	564,940	7,679,950	(5,142,766)	-	-	3,102,124
	₩ 223,241,035	₩ 9,632,549	₩ 7,588,697	₩ 354,320	₩ (7,931,437)	₩ 232,885,164

12. Investment properties

(1) Changes in investment properties for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands in thousands):

	2022			
	As of Jan. 1	Transfers	Depreciation	As of Dec. 31
Buildings	₩ 83,141	₩ 253,614	₩ -	₩ 336,755
Accumulated depreciation and impairment	(31,398)	(193,570)	(7,519)	(232,487)
Structures	-	696,733	-	696,733
Accumulated depreciation and impairment	-	(15,793)	(11,844)	(27,637)
Book Value				
Buildings	51,743	60,044	(7,519)	104,268
Structures	-	680,940	(11,844)	669,096
	₩ 51,743	₩ 740,984	₩ (19,363)	₩ 773,364

	2021			
	As of Jan. 1	Transfers	Depreciation	As of Dec. 31
Land	₩ 4,437,028	₩ (4,437,028)	₩ -	₩ -
Buildings	4,738,879	(4,655,738)	-	83,141
Accumulated depreciation	(1,638,346)	1,726,169	(119,221)	(31,398)
Structures	433,502	(433,502)	-	-
Accumulated depreciation	(202,540)	211,402	(8,862)	-
Book Value				
Land	4,437,028	(4,437,028)	-	-
Buildings	3,100,533	(2,929,569)	(119,221)	51,743
Structures	230,962	(222,100)	(8,862)	-
	₩ 7,768,523	₩ (7,588,697)	₩ (128,083)	₩ 51,743

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

	2022	2021
Rental income derived from investment properties	₩ 469,569	₩ 178,386
Direct operating expenses (including repairs and maintenance)	(19,363)	(128,083)
Total	₩ 450,206	₩ 50,303

(3) As of December 31, 2022, the Group did not measure investment properties at fair value due to lack of market transactions, and the fair value of investment properties cannot be reliably measured by using an alternative estimation method.

13. Intangible assets

(1) Changes in the book values of intangible assets for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022				
	As of Jan. 1	Acquisitions	Disposal	Amortization	As of Dec. 31
Membership	₩ 3,029,311	₩ 32,800	₩ (952,181)	₩ -	2,109,930
Others	68,444	-	-	(9,778)	58,666
Total	₩ 3,097,755	₩ 32,800	₩ (952,181)	₩ (9,778)	2,168,596

	2021				
	As of Jan. 1	Acquisitions	Impairment loss	Amortization	As of Dec. 31
Membership	₩ 2,986,811	₩ 42,500	₩ -	₩ -	3,029,311
Goodwill	3,171,773	-	(3,171,773)	-	-
Others	78,222	-	-	(9,778)	68,444
Total	₩ 6,236,806	₩ 42,500	₩ (3,171,773)	₩ (9,778)	3,097,755

(2) Impairment testing of intangible assets with indefinite lives

The recoverable amount of membership is the higher an asset’s net fair value and its value in use. If the net fair and value in use are not available, they are reliably calculated.

14. Borrowings and Corporate bonds

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

Type	Description	Creditors	Annual interest rate in 2022 (%)	Dec. 31, 2022	Dec. 31, 2021
Borrowings denominated in foreign currency	Usance (*1)	Korea Development Bank, etc	4.12 ~ 5.00	12,853,626	17,250,493
Borrowings in Korean won	Commercial Paper	Samsung Securities	-	-	25,000,000
Borrowings in Korean won	Normal Borrowings	Hana Bank	6.54	1,200,000	1,500,000
Borrowings in Korean won	Normal Borrowings	Shinhan Bank	4.25 ~ 4.9	4,850,000	4,850,000
Borrowings in Korean won	Normal Borrowings	Shinhan Bank	7.57	1,000,000	-
Borrowings in Korean won	Borrowings secured by trade receivables (*2)	Shinhan Bank	5.69 ~ 6.33	₩ 11,232,872	₩ 6,602,720
	Total			₩ 31,136,498	₩ 55,203,213

(*1) The Group entered into usance agreements with financial institutions such as Korea Development Bank.
(*2) Trade receivables factored with repayment claims that have not been fully matured are recognized as short-term borrowings.

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

Type	Creditors	Maturity date	Annual interest rate in 2022 (%)	Dec. 31, 2022	Dec. 31, 2021
Borrowings denominated in foreign currency	Hana Bank	2023.02.28	2.30	₩ 22,811,400	₩ 21,339,000
Borrowings in Korean won		2025.05.21	3.27	26,613,300	-
Borrowings in Korean won	Kookmin Bank	2022.12.15	-	-	1,000,000
Borrowings denominated in foreign currency		2023.02.21	2.15	21,544,100	20,153,500
Borrowings in Korean won	Korea Development Bank	2022.09.29	-	-	6,223,875
Borrowings denominated in foreign currency	Shinhan Bank	2024.10.24	2.53	24,591,840	24,430,588
Borrowings in Korean won		2023.07.21	2.71	1,500,000	1,500,000
Borrowings in Korean won		2024.04.12	4.46	15,000,000	15,000,000
Sub-total				₩ 112,060,640	₩ 89,646,963
Less: Current portion				(45,855,500)	(7,223,875)
Total				₩ 66,205,140	₩ 82,423,088

14. Borrowings and Corporate bonds (cont'd)

(3) Details of the Group's non-registered bonds as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

Type	Issue date	Maturity date	Interest rate(%)	Dec. 31, 2022	Dec. 31, 2021
56th Unsecured corporate bond	2021.02.25	2024.02.23	1.80	₩ 30,000,000	₩ 30,000,000
	Less: Discount on bond			₩ (46,108)	₩ (85,273)
	Less: Current portion			-	-
	Total			₩ 29,953,892	₩ 29,914,727

Under the terms and conditions of the above corporate bond, the interests are paid 3 months after the redemption date. As the corporate bond was issued at a discount, the discount on corporate bond is amortized over the life of the bond using the effective interest rate and recognized as financing expenses.

(4) Collaterals that the Group has provided to financial institutions for borrowings of the Group as of December 31, 2022 are as follows (Korean won in thousands and USD):

Mortgage holder	Assets provided	Currency	Amount of collateral
Kookmin Bank and Hana Bank, etc	Land, buildings and Machinery	KRW	84,608,000
		USD	6,124,000

15. Lease liabilities

(1) Set out below are the carrying amounts of lease liabilities and the movements during the year ended December 31, 2022 and 2021 (Korean won in thousands):

		2022
As of January 1, 2022	₩	2,986,340
Additions		5,578,933
Accretion of interest		54,411
Payments		(2,050,075)
Others		(3,587)
As of December 31, 2022	₩	6,566,022

		2021
As of January 1, 2021	₩	4,734,125
Increase due to business combination		324,392
Additions		96,699
Accretion of interest		(2,130,791)
Payments		(38,085)
As of December 31, 2021	₩	2,986,340

(2) Details of total minimum lease payments to be paid in the future by maturities , its present value, and current portion classification as of December 31, 2022 are as follows (Korean won in thousands):

	2022
Less than 1 year	2,047,537
More than 1 year and less than 5 year	5,296,422
Lease liabilities not discounted as of December 31	7,343,959
Lease liabilities recognized in the financial statements	6,566,022
Current lease liabilities	1,992,882
Non-current lease liabilities	4,573,140

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

		2022
Depreciation expense on right-of-use assets	₩	2,070,240
Interest expense on lease liabilities		54,411
Expense relating to short-term leases (included in cost of sales)		56,324
Expense relating to leases of low-value assets (included in administrative expenses)		24,951

		2021
Depreciation expense on right-of-use assets	₩	2,138,472
Interest expense on lease liabilities		96,699
Expense relating to short-term leases (included in cost of sales)		52,691
Expense relating to leases of low-value assets (included in administrative expenses)		18,706

16. Retirement benefits

The Group operates a defined benefit plan for its employees, and actuarial evaluation of net defined benefit liabilities is performed by independent actuaries who are eligible using the projected unit credit method.

(1) Details of the retirement benefit liabilities as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

		Dec. 31, 2022		Dec. 31, 2021
Present value of defined benefit obligation	₩	18,729,943	₩	20,949,748
Fair value of plan assets		(24,390,638)		(21,217,859)
Net defined benefit liabilities	₩	(5,660,695)	₩	(268,111)

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

2022		Net defined benefit liabilities(assets)		Defined benefit obligation		Plan assets
As of January 1	₩	(268,111)	₩	20,949,748	₩	21,217,859
Service cost		2,611,746		2,611,746		-
Interest expenses		792,951		792,951		-
Interest income		(778,524)		-		778,524
Benefits paid		(465,169)		(2,658,530)		(2,193,361)
Remeasurement loss in OCI:		(2,633,588)		(2,965,972)		(332,384)
Contributions to plan assets		(4,920,000)		-		4,920,000
As of December 31	₩	(5,660,695)	₩	18,729,943	₩	24,390,638

2021		Net defined benefit liabilities(assets)		Defined benefit obligation		Plan assets
As of January 1	₩	199,075	₩	19,596,284	₩	19,397,209
Service cost		2,440,312		2,440,312		-
Interest expenses		647,562		647,562		-
Interest income		(617,805)		-		617,805
Benefits paid		(328,864)		(2,094,720)		(1,765,856)
Remeasurement loss in OCI:		691,609		360,310		(331,299)
Contributions to plan assets		(3,300,000)		-		3,300,000
As of December 31	₩	(268,111)	₩	20,949,748	₩	21,217,859

16. Retirement benefits (cont'd)

(3) The amounts recognized in comprehensive income for the years ended December 31, 2022 and 2021 in relation to the defined benefit plan are as follows (Korean won in thousands):

		2022		2021
Service cost	₩	2,534,401	₩	2,440,312
Interest income		91,771		29,757
Subtotal		2,626,172		2,470,069
Contributions to plan assets		358,948		352,195
Total		2,985,120		2,822,264
Re-measurement loss (gain) in OCI:				
Changes in demographic assumptions		-		-
Changes in financial assumptions		(2,818,261)		(794,090)
Adjustments		(147,711)		1,154,400
Re-measurement of plan assets(*)		332,384		331,299
Subtotal		(2,633,588)		691,609
Total	₩	351,532	₩	3,513,873

(*) The amount of actual returns on plan assets for the year ended December 31 2022 is ₩446,146 thousand (2021: ₩286,506 thousand)

(4) The major categories of plan assets of the fair value of the total plan assets, as of December 31, 2022 and 2021, are as follows (Korean won in thousands):

		2022		2021
Deposits and cash and cash equivalents	₩	24,390,638	₩	21,217,859

(5) The following payments are expected contributions to the defined benefit plan in future years for the years ended December 31, 2022 and 2021 (Korean won in thousands in thousands):

		2022		2021
Within the next 12 months (next annual reporting period)	₩	2,149,556	₩	2,302,668

(6) The principal actuarial assumptions as of December 31, 2022 and 2021 are as follows:

	Dec. 31, 2022	Dec. 31, 2021
Expected increase rate in salaries	2.92~4.50%	2.93~4.00%
Discount rate	5.99~6.25%	3.51~3.91%

16. Retirement benefits (cont'd)

(7) Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts as below (Korean won in thousands in thousands):

	Dec. 31, 2022			
	1% Increase		1% Decrease	
Discount rate	₩	(1,203,062)	₩	1,370,991
Expected increase rate in salaries		1,385,407		(1,236,076)

The decrease in the yield of high-quality bonds, a discount rate, offsets some of the value of the debt securities held by the system, but is exposed to the most significant risk through an increase in defined benefit obligations.

The sensitivity analyses above have been determined based on the assumption that other assumptions are constant, but in practice, assumptions are related and fluctuate. The sensitivity of the defined benefit obligation to changes in major actuarial assumptions was calculated using the same methodology used to estimate the defined benefit obligation recognized in the statement of financial position. The methods and assumptions used for sensitivity analyses are the same as those of December 31, 2021.

(8) The impact of defined benefit plans on future cash flows

The Group has a policy to review the fund's accumulation level every year and to compensate for any loss of funds.

The maturity analysis of pension benefit payments that are not discounted as of December 31, 2022 is as follows (Korean won in thousands):

	1 year		2 year		3 year		4 year		5 year		6~10 year	
Benefit payments	₩	1,302,421	₩	1,739,902	₩	1,472,281	₩	1,566,448	₩	1,887,259	₩	11,692,025

The weighted average maturity of the defined benefit obligation is 6.2 ~ 8.9 years.

17. Provisions

Changes in provision for sales warranty for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022					
	Provision for restoration		Provision for sales warranty (*)		Total	
As of January 1	₩	80,000	₩	5,497	₩	85,497
Transfers		-		547		547
As of December 31	₩	80,000	₩	6,044	₩	86,044

(*) Provision for sales warranty is recognized based on the past experience and expected rate of return on products sold during the past five years.

	2021							
	Provision for restoration		Provision for sales warranty (*1)		Other provision(*2)		Total	
As of January 1	₩	80,000	₩	4,312	₩	4,840,000	₩	4,924,312
Used		-		-		(3,440,000)		(3,440,000)
Transfers		-		1,185		-		1,185
Reversal		-		-		(1,400,000)		(1,400,000)
As of December 31	₩	80,000	₩	5,497	₩	-	₩	85,497

(*1) Provision for sales warranty is recognized based on the past experience and expected rate of return on products sold during the past five years.

(*2) The amount reflects the amount of loss that is reasonably estimated in relation to the lawsuit pending against the Group as a defendant.

18. Derivatives and firm commitments

The Group enters into futures contracts on raw materials to avoid the risk of fluctuations in raw materials prices, and enters foreign currency futures contracts to avoid the risk of exchange rates of expected transactions that are likely to occur. In addition, the Group has currency swap contracts and interest rate swap contracts to hedge the foreign currency risks and interest rate risks of overseas borrowings. The expected longest period of exposure to risk of cash flow fluctuations by applying the cash flow hedge accounting for interest rate swap contracts is until February 21, 2025.

(1) Details of derivatives as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	December 31, 2022			December 31, 2021		
	Current	Non-current	Total	Current	Non-current	Total
Assets:	₩	₩	₩	₩	₩	₩
Copper futures	3,137,142	43,777	3,180,919	3,797,620	6,748	3,804,368
Foreign currency forward	1,557,243	-	1,557,243	72,485	-	72,485
Currency swap	2,182,500	1,581,300	3,763,800	286,125	-	286,125
Interest swap	386,842	-	386,842	-	47,253	47,253
Subtotal	₩ 7,263,727	₩ 1,625,077	₩ 8,888,804	₩ 4,156,230	₩ 54,001	₩ 4,210,231
Liabilities:	₩	₩	₩	₩	₩	₩
Copper futures	7,838,756	41,897	7,880,653	490,630	-	490,630
Foreign currency forward	559,516	-	559,516	260,321	-	260,321
Currency swap	-	1,388,422	1,388,422	-	1,142,501	1,142,501
Interest swap	-	-	-	4,246	-	4,246
Subtotal	₩ 8,398,272	₩ 1,430,319	₩ 9,828,591	₩ 755,197	₩ 1,142,501	₩ 1,897,698

(2) Details of gain (loss) on derivatives for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Gain on valuation of derivatives (Profit or loss)	₩ 18,046,092	₩ 7,849,016
Gain on valuation of derivatives (OCI) (*)	2,715,328	1,142,285
Loss on valuation of derivatives (Profit or loss)	15,139,655	654,792
Loss on valuation of derivatives (OCI) (*)	2,639,841	803,678
Gain on derivatives transaction	21,857,612	23,605,112
Loss on derivatives transaction	33,627,338	7,260,248

(*)The amounts are before net of tax.

18. Derivatives and firm commitments (cont'd)

(3) Details of the Group's firm commitment assets and liabilities as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021		
	Current	Current	Non-current	Total
Firm commitment assets	₩ 7,949,579	₩ 490,630	₩ -	₩ 490,630
Firm commitment liabilities	3,078,665	3,797,620	6,748	3,804,368

(4) A gain or loss on valuation of firm commitments for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Type	2022	2021
Gain on valuation of firm commitments	Profit or loss for the year	₩ 21,772,070	₩ 3,726,619
Loss on valuation of firm commitments	Profit or loss for the year	7,164,862	21,619,866

(5) Details of the unsettled derivatives as of December 31, 2022 and 2021 are as follows (Korean won in thousands and USD, EUR, AUD):

Dec. 31, 2022

Purpose of the instruments	Amounts in short positions	Amounts in long positions
Held for trading (Foreign currency forward)	USD 4,640,000	₩ 5,994,692
Held for trading (Foreign currency forward)	AUD 1,810,000	₩ 1,577,325
Held for trading (Foreign currency forward)	EUR 700,000	₩ 946,330
Held for trading (Foreign currency forward)	₩ 22,304,480	USD 17,600,000
Held for hedging (Foreign currency forward)	USD 32,087,000	₩ 41,851,817
Held for hedging (Foreign currency forward)	₩ 14,948,470	USD 11,382,000
Held for hedging (Foreign currency swap)	₩ 67,205,000	USD 56,000,000
Held for hedging (Foreign currency swap)	₩ 24,611,314	EUR 18,200,000
Held for hedging (Coopers futures)	USD 2,565,571	USD 88,682,829
Held for hedging (Aluminum futures)	-	USD 3,001,689

Dec. 31, 2021

Purpose of the instruments	Amounts in short positions	Amounts in long positions
Held for trading (Foreign currency forward)	USD 4,350,000	₩ 5,004,969
Held for trading (Foreign currency forward)	₩ 44,486,250	USD 37,500,000
Held for trading (Foreign currency forward)	EUR 1,100,000	₩ 1,477,124
Held for trading (Foreign currency forward)	AUD 2,350,000	₩ 2,018,392
Held for hedging (Foreign currency forward)	₩ 13,441,049	USD 11,383,000
Held for hedging (Foreign currency forward)	AUD 2,500,000	₩ 2,212,700
Held for hedging (Foreign currency swap)	₩ 48,110,750	USD 40,250,000
Held for hedging (Foreign currency swap)	₩ 24,611,314	EUR 18,200,000
Held for hedging (Coopers futures)	USD 1,902,062	USD 61,951,095
Held for hedging (Aluminum futures)	-	USD 776,162

18. Derivatives and firm commitments (cont'd)

(6) Details of the unsettled interest swap contracts as of December 31, 2022 and 2021 are as follows (Korean won in thousands and USD):

Dec. 31, 2022

	Contract amounts	Maturity date	Conditions of Interest swap		Total accumulated gains (losses) on valuation
Hana Bank	USD 18,000,000	2023.02.28	Receipts of 3-month USD LIBOR + 1.6% Payments of fixed rate of 2.30%	₩	202,032
Kookmin Bank	USD 17,000,000	2023.02.21	Receipts of 3-month USD LIBOR + 1.30% Payments of fixed rate of 2.15%		184,810
Total				₩	386,842

Dec. 31, 2021

	Contract amounts	Maturity date	Conditions of Interest swap		Total accumulated gains (losses) on valuation
Hana Bank	USD 18,000,000	2023.02.28	Receipts of 3-month USD LIBOR + 1.6% Payments of fixed rate of 2.30%	₩	41,698
Kookmin Bank	USD 17,000,000	2023.02.21	Receipts of 3-month USD LIBOR + 1.30% Payments of fixed rate of 2.15%		5,556
Shinhan Bank	USD 5,250,000	2022.09.29	Receipts of 3-month USD LIBOR + 1.98% Payments of fixed rate of 3.13%		(4,246)
Total				₩	43,008

19. Issued capital and retained earnings

(1) Details of issued capital as of December 31, 2022 and 2021 are as follows (Share, Korean won):

		Dec. 31, 2022		Dec. 31, 2021
Number of shares authorized		15,600,000		15,600,000
Number of shares issued (ordinary share)		6,358,926		4,160,347
Par value	₩	5,000	₩	5,000
Issued capital (ordinary share)		31,794,630,000		20,801,735,000

(2) Changes in the number of the Company's shares issued for the years ended December 31, 2022 and 2021 are as follows (Shares):

		Dec. 31, 2022	Dec. 31, 2021
As of January 1	₩	4,160,347	4,160,347
Paid-in capital increase		2,198,579	-
As of December 31		6,358,926	4,160,347

(3) Details of capital surplus as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

		Dec. 31, 2022		Dec. 31, 2021
Additional paid-in capital (*)	₩	36,424,533	₩	24,202,000
Gains on sales of treasury stock		52,541		52,541
Other		859		859
	₩	36,477,933	₩	24,255,400

(*) Increased due to paid-in capital increased during 2022.

(4) Details of capital adjustments as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

Type		2022		2021
Treasury stock	₩	(1,509,027)	₩	(1,509,027)
Other		(65,852)		(65,852)
	₩	(1,574,879)	₩	(1,574,879)

19. Issued capital and retained earnings (cont'd)

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

		Dec. 31, 2022		Dec. 31, 2021
Loss on valuation of financial assets at fair value through OCI	₩	(5,178,423)	₩	(5,099,370)
Loss on valuation of derivatives		(147,299)		(204,314)
Equity adjustments of investments in an associate		1,541,240		645,331
Total	₩	(3,784,482)	₩	(4,658,353)

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

		Dec. 31, 2022		Dec. 31, 2021	Note
Legal reserve(*)	₩	10,047,000	₩	9,747,000	Legal reserve
Business rationalization reserve		3,900,000		3,900,000	Discretionary reserve
Reserve for financial structure improvement		1,485,000		1,485,000	Discretionary reserve
Voluntary reserve		3,100,000		3,100,000	Discretionary reserve
Reserve for research and manpower development		573,533		573,533	Discretionary reserve
Reserve for facilities		76,950,000		70,450,000	Discretionary reserve
Revaluation surplus		131,053,994		131,053,994	
Unappropriated retained earnings		13,047,827		8,981,861	
	₩	240,157,354	₩	229,291,388	

(*) The Commercial Code of the Republic of Korea requires the Company to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its issued share capital. The reserve is not available for cash dividends payment, but may be transferred to share capital or used to reduce accumulated deficit.

(7) Details of cash dividends paid for the years ended December 31, 2022 and 2021 are as follows (Korean won):

		2022		2021
Dividend per share	₩	420	₩	600
Total dividend		1,651,040,580		2,358,629,400

(8) Dividends on ordinary shares proposed for an approval of the general shareholders' meeting during the years ended December 31, 2022 and 2021 are as follows (Korean won):

		2022		2021
Dividend per share	₩	50	₩	420
Total dividend	₩	155,421,750	₩	1,651,040,580

20. Sales and contracts with customers

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

		2022		2021
Sales:				
Finished goods	₩	1,115,051,378	₩	881,502,710
Merchandise		293,660,274		179,748,199
Construction		585,704		184,250
Others		7,157,048		8,948,046
	₩	1,416,454,404	₩	1,070,383,205
Cost of sales:				
Finished goods	₩	1,060,913,434	₩	843,039,832
Merchandise		259,805,253		156,803,380
Construction		392,540		132,000
Others		6,809,579		8,633,755
	₩	1,327,920,806	₩	1,008,608,967

(2) Details of the disaggregation of the Group's revenue from contracts with customers for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022					
Segments		Power cable division		Communication cable division		Total
Geographical markets:						
Republic of Korea	₩	1,135,899,756	₩	123,133,018	₩	1,259,032,774
Europe		5,015,544		5,386,358		10,401,902
North America		22,935,838		59,418,024		82,353,862
Asia		44,228,830		725,849		44,954,679
Other		15,299,626		4,411,561		19,711,187
Total revenue from contracts with customers	₩	1,223,379,594	₩	193,074,810	₩	1,416,454,404
Timing of revenue recognition:						
Goods and services transferred at a point in time	₩	1,222,793,890	₩	193,074,810	₩	1,415,868,700
Goods and services transferred over time		585,704		-		585,704
Total revenue from contracts with customers	₩	1,223,379,594	₩	193,074,810	₩	1,416,454,404

	2021					
Segments		Power cable division		Communication cable division		Total
Geographical markets:						
Republic of Korea	₩	859,302,239	₩	104,995,454	₩	964,297,693
Europe		99,988		6,880,450		6,980,438
North America		16,978,966		46,717,363		63,696,329
Asia		19,002,724		1,193,204		20,195,928
Other		11,686,829		3,525,988		15,212,817
Total revenue from contracts with customers	₩	907,070,746	₩	163,312,459	₩	1,070,383,205
Timing of revenue recognition:						
Goods and services transferred at a point in time	₩	906,886,496	₩	163,312,459	₩	1,070,198,955
Goods and services transferred over time		184,250		-		184,250

Total revenue from contracts with customers	₩	907,070,746	₩	163,312,459	₩	1,070,383,205

20. Sales and contracts with customers (cont'd)

(3) Set out below, is the reconciliation of the revenue from contracts with customers with the amounts disclosed in the segment information for the years ended December 31, 2022 and 2021 (Korean won in thousands):

	2022							
	Power cable division		Communication cable division		Adjustments		Total	
Revenue:								
External customer	₩	1,223,379,594	₩	193,074,810	₩	–	₩	1,416,454,404
Inter-segment		137,799,022		2,861,495		(140,660,517)		-
Total revenue from contracts with customers	₩	1,361,178,616	₩	195,936,305	₩	(140,660,517)	₩	1,416,454,404

	2021							
	Power cable division		Communication cable division		Adjustments		Total	
Revenue:								
External customer	₩	907,070,746	₩	163,312,459	₩	-	₩	1,070,383,205
Inter-segment		104,287,092		2,552,426		(106,839,518)		-
Total revenue from contracts with customers	₩	1,011,357,838	₩	165,864,885	₩	(106,839,518)	₩	1,070,383,205

(4) Details of contract balance as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Dec. 31, 2022		Dec. 31, 2021	
Trade receivables	₩	252,797,447	₩	229,277,143
Contract liabilities		17,550		221,246

Trade receivables are non-interest bearing and are generally on collection terms of 30 to 90 days. As of December 31, 2022, ₩ 12,877,480 (2021: ₩12,121,399) was recognized as provision for expected credit losses on trade receivables. (See Note 7)

Contract liabilities are advances received in relation to sales of power cables and communication cables. Changes in contract liabilities for the year are resulted from the increase in the number of customers of the Group and the sale of goods.

(5) Performance obligations

Finished goods, Merchandises and transport service
The performance obligation is satisfied upon delivery of the equipment and payment is generally due within 30 to 90 days from delivery.

21. Selling and administrative expenses

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

		2022		2021
Salaries	₩	14,972,807	₩	12,527,051
Retirement benefits		1,096,530		990,225
Employee welfare benefits		2,902,441		2,388,217
Travel		914,809		829,539
Rental		371,137		218,164
Depreciation		3,055,139		3,164,842
Service fees		6,691,095		3,986,510
Entertainment		1,424,765		1,279,506
Freight		5,491,536		4,281,979
Export costs		17,452,270		10,876,452
Bad debt expenses		2,151,891		1,696,926
Training		365,026		308,381
Others		3,181,583		2,654,667
	₩	60,071,029	₩	45,202,459

22. Adjusted operating profit and expenses classified by nature of expense

(1) Classification of expenses (cost of sales and selling and administrative expenses) based on the nature of expense for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

		2022		2021
Raw materials utilized	₩	988,950,484	₩	811,119,028
Changes in finished goods and work-in-process		(2,061,946)		(21,596,888)
Cost of merchandise		259,805,253		156,803,380
Employee related costs		52,602,160		46,895,482
Supplies		6,091,097		5,368,898
Rental		629,830		461,977
Depreciation and amortization		8,388,158		8,069,297
Service fees		12,177,268		9,369,275
Repairs and maintenance		3,575,554		3,125,860
Freight		5,606,851		4,401,302
Export costs		17,452,270		10,876,452
Bad debt expenses		2,151,891		1,696,926
Electric power charge		7,386,874		6,266,064
Fuel expenses		2,749,755		1,352,258
Outsource costs		14,028,023		2,206,592
Others		8,458,314		7,395,524
	₩	1,387,991,836	₩	1,053,811,427

(2) Employee related costs

		2022		2021
Salaries and bonuses	₩	40,990,715	₩	36,446,694
Retirement benefits		2,985,120		2,822,264
Employee welfare		8,626,325		7,626,525
	₩	52,602,160	₩	46,895,483

23. Other income and expenses

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

		2022		2021
Other income:				
Gain on foreign currency transaction	₩	9,933,435	₩	2,772,984
Gain on foreign exchange translation		3,558,804		732,386
Gain on derivatives transaction		9,259,539		18,951,037
Gain on valuation of derivatives		716,690		3,804,368
Gain on valuation of firm commitments		21,772,070		3,726,619
Gain on disposal of property, plant, and equipment		22,131		108,356
Rental income		479,769		188,586
Miscellaneous gains		802,120		2,430,196
Reversal other bad debt expenses		5		165,862
	₩	46,544,563	₩	32,880,394
Other expenses:				
Loss on foreign currency transaction	₩	11,578,900	₩	5,562,917
Loss on foreign exchange translation		2,080,105		255,587
Loss on derivatives transaction		24,498,659		4,055,700
Loss on valuation of derivatives		2,085,668		652,109
Loss on valuation of firm commitments		7,164,862		21,619,866
Loss on disposal of property, plant, and equipment		49,984		14,117
Loss on impairment of tangible assets		689,133		-
Loss on disposal of intangible assets		20,181		-
Loss on impairment of intangible assets		-		3,171,773
Donations		75,342		53,911
Miscellaneous loss		483,177		1,192,274
	₩	48,726,011	₩	36,578,254

24. Finance income and expenses

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

		2022		2021
Finance income:				
Interest income	₩	242,618	₩	103,024
Dividends income		48,836		38,816
Gain on foreign currency transaction		1,264,654		554,743
Gain on foreign exchange translation		1,059,143		229,719
Gain on derivatives transaction		12,598,073		4,654,075
Gain on valuation of derivatives		17,329,402		4,044,648
Gain on Reversal of trade receivables valuation allowance		-		5,263
	₩	32,542,726	₩	9,630,288
Finance expenses:				
Interest expense (including interest from corporate bonds and finance leases)		5,637,799		3,889,013
Loss on disposal of trade receivables		1,237,807		742,307
Loss on foreign currency transaction		5,463,097		649,881
Loss on foreign exchange translation		4,605,552		4,015,472
Loss on derivatives transaction		9,128,679		3,204,548
Loss on valuation of derivatives		13,053,987		2,683
Loss on discount valuation of trade receivables		58,386		-
Others		648		12,110
	₩	39,185,955	₩	12,516,014

25. Income taxes

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

		2022		2021
Current income taxes	₩	5,438,301	₩	873,373
Tax effect of temporary differences		(1,977,625)		1,973,143
Income taxes recognized directly to equity (gain)		(627,690)		58,028
Income tax expenses	₩	2,832,986	₩	2,904,544

(2) Details of income taxes recognized directly to equity for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

		2022		2021
Gain (loss) on valuation of derivatives	₩	(18,472)	₩	(54,173)
Gain (loss) on valuation of financial assets at FVOCI		(61,741)		(41,686)
Remeasurements of defined benefit plans		(547,477)		153,887
	₩	(627,690)	₩	58,028

25. Income taxes (cont'd)

(3) A reconciliation of profit before income taxes to income tax expenses for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Profit before income taxes	₩ 13,296,875	₩ 8,758,972
Taxes at the statutory income tax rate	2,535,572	1,926,974
Adjustments:		
Non-taxable income	(7,150)	(7,804)
Non-deductible expenses for tax purposes	533,415	416,019
Effect of tax credits	(131,601)	(146,084)
Unrecognition of DTA	1,634,441	-
Change of income tax rate	(1,180,966)	-
Others	(550,725)	715,439
Income tax expenses	₩ 2,832,986	₩ 2,904,544
Effective tax rate	21.31%	33.16%

(4) Details of temporary differences, changes in deferred tax assets and liabilities and changes in the aggregate deferred tax assets and liabilities before offset as of and for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

2022	As of Jan. 1	Increase and decrease	As of Dec. 31	Beginning balance of income tax assets (liabilities)	Ending balance of income tax assets (liabilities)	Income tax expenses
Deductible temporary difference:						
Depreciation	₩ 3,394,080	₩ 763,746	₩ 4,157,826	₩ 379,958	₩ 873,144	₩ (493,186)
Provision for bad debts	12,998,324	(141,205)	12,857,119	2,846,684	2,699,995	146,689
Retirement benefit liabilities	19,952,551	(2,193,899)	17,758,652	3,739,808	3,353,672	386,136
Financial assets at fair value through OCI	6,537,654	17,311	6,554,965	1,438,284	1,376,543	61,741
Inventories	1,537,495	136,345	1,673,840	337,338	351,506	(14,168)
Derivatives	4,580,518	7,287,736	11,868,254	980,669	2,492,333	(1,511,664)
Investment in an associate and subsidiaries	222,043	7,659,797	7,881,840	-	-	-
Others	11,600,874	9,221,601	20,822,475	2,151,581	4,075,153	(1,923,572)
	₩ 60,823,539	₩ 22,751,432	₩ 83,574,971	₩ 11,874,322	₩ 15,222,346	₩ (3,348,024)
Taxable temporary difference:						
Plan assets	₩ (20,873,016)	₩ (2,762,689)	₩ (23,635,705)	₩ (4,335,125)	₩ (4,900,230)	₩ 565,105
Advanced depreciation provision	(139,267,960)	-	(139,267,960)	(30,622,203)	(29,230,284)	(1,391,919)
Derivatives	(4,342,251)	(6,715,077)	(11,057,328)	(928,251)	(2,322,039)	1,393,788
Surplus from revaluation	(17,408,413)	-	(17,408,413)	(4,213,078)	(4,213,078)	-
Others	(6,006,364)	(3,831,604)	(9,837,968)	(831,772)	(1,657,632)	825,860
	₩ (187,898,004)	₩ (13,309,370)	₩ (201,207,374)	₩ (40,930,429)	₩ (42,323,263)	₩ 1,392,834
Tax loss carry-forward	41,557,645	(41,450,810)	106,835	-	22,435	(22,435)
		Deferred tax assets		₩ 11,874,322	₩ 15,244,781	₩ (3,370,459)
		Deferred tax liabilities		(40,930,429)	(42,323,263)	1,392,834
		Total		₩ (29,056,107)	₩ (27,078,482)	₩ (1,977,625)

25. Income taxes (cont'd)

	2021											
	As of Jan. 1		Increase and decrease		As of Dec. 31		Beginning balance of income tax assets (liabilities)		Ending balance of income tax assets (liabilities)		Income tax expenses	
Deductible temporary difference:												
Depreciation	₩	1,793,105	₩	1,600,975	₩	3,394,080	₩	394,483	₩	379,958	₩	14,525
Provision for bad debts		14,595,883		(1,597,559)		12,998,324		3,211,094		2,846,684		364,410
Retirement benefit liabilities		17,700,203		2,252,348		19,952,551		3,894,044		3,739,808		154,236
Financial assets at fair value through OCI		6,727,138		(189,484)		6,537,654		1,479,970		1,438,284		41,686
Inventories		2,252,889		(715,394)		1,537,495		495,636		337,338		158,298
Derivatives		12,237,626		(7,657,108)		4,580,518		2,692,278		980,669		1,711,609
Others		18,724,151		(6,901,234)		11,822,917		4,119,314		2,151,581		1,967,733
	₩	74,030,995	₩	(13,207,456)	₩	60,823,539	₩	16,286,819	₩	11,874,322	₩	4,412,497
Taxable temporary difference:												
Plan assets	₩	(18,040,675)	₩	(2,832,341)	₩	(20,873,016)	₩	(3,968,948)	₩	(4,335,125)	₩	366,177
Advanced depreciation provision		(139,267,960)		-		(139,267,960)		(30,638,952)		(30,622,203)		(16,749)
Derivatives		(11,503,107)		7,160,856		(4,342,251)		(2,530,684)		(928,251)		(1,602,433)
Surplus from revaluation		(17,672,307)		263,894		(17,408,413)		(4,213,078)		(4,213,078)		-
Others		(8,575,517)		2,569,153		(6,006,364)		(2,018,121)		(831,772)		(1,186,349)
	₩	(195,059,566)	₩	7,161,562	₩	(187,898,004)	₩	(43,369,783)	₩	(40,930,429)	₩	(2,439,354)
			Deferred tax assets				₩	16,286,819	₩	11,874,322	₩	4,412,497
			Deferred tax liabilities					(43,369,783)		(40,930,429)		(2,439,354)
			Total				₩	(27,082,964)	₩	(29,056,107)	₩	1,973,143

(5) The Group applies the tax rate at the time when the temporary difference is expected to be extinguished as the expected future tax rate applied to the temporary difference.

(6) The details of temporary differences not recognized as deferred tax assets (liabilities) for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		2021		Reason
Subsidiary investment, etc.	₩	3,852,479	₩	(1,256,047)	No feasibility.
Loss carried forward and tax credit		994,718		42,658,858	Taxable income unlikely to be realized.

26. Components of other comprehensive income

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

			2022	2021
Other comprehensive income to be reclassified to profit or loss in subsequent periods	Gain(loss) on valuation of derivatives	Before the tax effect	₩ 75,487	₩ 338,607
		Tax effect	(18,472)	(54,173)
		After the tax effect	57,015	284,434
	Equity adjustments of investments in an associate	Before the tax effect	895,908	1,162,765
		Tax effect	-	-
		After the tax effect	895,908	1,162,765
	Subtotal		952,923	(1,119,747)
Other comprehensive income (loss) not to be reclassified to profit or loss in subsequent periods	Gain(loss) on valuation of financial assets at fair value through OCI	Before the tax effect	(17,311)	189,484
		Tax effect	(61,741)	(41,686)
		After the tax effect	(79,052)	147,798
	Re-measurement of defined benefit plans	Before the tax effect	2,600,594	(691,609)
		Tax effect	(547,477)	153,887
		After the tax effect	2,053,117	(537,722)
	Subtotal		1,974,065	(389,924)
	Total		₩ 2,926,988	₩ 1,057,275

27. Earnings per share

(1) Basic earnings per share attributable to owners of the parent for the years ended December 31, 2022 and 2021 are as follows (Share, Korean won):

	2022	2021
Profit for the year attributable to owners of the parent	₩ 10,463,889,335	₩ 5,854,428,912
Weighted-average number of ordinary shares outstanding	4,256,318	3,931,049
Basic earnings per share	₩ 2,458	₩ 1,489

(2) The weighted-average number of ordinary shares outstanding as of December 31, 2022 and 2021 is as follows (Shares)

	2022		2021	
	Number of shares	Weighted average amount	Number of shares	Weighted average amount
Number of ordinary shares issued and outstanding(beginning)	3,931,049	1,434,832,885	3,931,049	1,434,832,885
Days		365		365
Paid-in-capital increase	2,198,579	118,723,266	-	-
Days		54		-
subtotal		1,553,556,151		1,434,832,885
Weighted average number of ordinary shares		4,256,318		3,931,049

(3) Diluted earnings per share for the years ended December 31, 2022 and 2021 equal basic earnings per share as the Company has not issued any dilutive potential ordinary shares.

28. Related party transactions

(1) Related parties of the Group as of December 31, 2022 and 2021, are as follows:

Related parties	December 31, 2022	December 31, 2021
Ultimate parent company	LS Corporation (“LS”)	LS Corporation (“LS”)
Parent company	LS Cable & System Ltd.	LS Cable & System Ltd.
Associate	LS-Gaon Cable Myanmar Co., Ltd.	LS-Gaon Cable Myanmar Co., Ltd.
Subsidiaries of the ultimate parent company	LS Electric Co., Ltd., LS I&D LS ITC, LS Global Inc, LS Sauter LS MnM Inc.**(*1)**, Etc.	LS Electric Co., Ltd., LS I&D LS ITC, LS Sauter, LS Global Inc Etc.
Joint Company of the ultimate parent company	-	LS MnM Inc.**(*1)**
Subsidiaries of the parent company	G&P Co., Ltd, G&P Wood, JS Electronic wire Co., Ltd, Sejong Electronic wire Co., Ltd, LS Buildwin Ltd. LS-Gaon Cable Myanmar Trading etc.	G&P Co., Ltd, G&P Wood, JS Electronic wire Co., Ltd, Sejong Electronic wire Co., Ltd, LS Buildwin Ltd. LS-Gaon Cable Myanmar Trading etc.
Joint company of the parent company	LS Alsco Co., Ltd., LS materials Ltd.	LS Alsco Co., Ltd., LS materials Ltd.
Large conglomerates group(*2)	E1 Corporation and other entities in the LS Group	E1 Corporation and other entities in the LS Group

(*1) LS-Nikko Copper Co., Ltd. became subsidiary of the ultimate parent company as LS Corporation acquired 49.9% of the shares held by Japan Korea Joint Smelting Co., Ltd., and the name was changed to LS MnM Inc. in 2022.

(*2) Although the entities are not the related parties of the Group in accordance with the article 9 of KIFRS 1024, those entities are considered as relative parties in accordance with the resolution of the Securities and Futures Commission that the Large conglomerates group designated by the Fair Trade Commission are related parties considering substantive relationships stipulated in the article 10 of KIFRS 1024.

(2) Transactions with related companies for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

2022

	Name	Sales	Other income	Purchase	Other expenses
Ultimate parent company	LS Corp.	₩ -	₩ -	₩ -	₩ 464,300
Parent company	LS Cable & System Ltd.	167,027,324	-	9,543,853	521,855
Subsidiaries of the ultimate parent company	LS Electric Co., Ltd.	3,265,793	-	-	-
	LS I&D	-	-	-	1,724,488
	LS ITC	-	-	-	1,170,172
	LS Sauter	266,241	-	-	-
	LS Global Inc	-	-	-	6,769
	LS MnM Inc	-	-	291,957,666	-
Subsidiaries of the parent company	G&P Co., Ltd.	3,250,478	8,942	1,924,892	13,285
	G&P Wood	-	-	6,693,523	87,881
	JS Electric Wire Co., Ltd	-	-	-	15,573
	LS Build win Co., Ltd.	338,812	-	-	-
	LS-Gaon Cable Myanmar Trading Co., Ltd.	824,408	-	-	-
Joint company of the parent company	LS Alsco Co., Ltd.	-	-	658,955	-
Large conglomerates	LS materials Ltd.	-	362,040	-	-
		₩ 174,973,056	₩ 370,982	₩ 310,778,889	₩ 4,004,323

28. Related party transactions (cont'd)

	2021					
	Name	Sales	Acquisition of property, plant and equipment	Other income	Purchase	Other expenses
Ultimate parent company	LS Corp.	₩ -	₩ -	₩ -	₩ -	₩ 406,900
Parent company	LS Cable & System Ltd.	150,898,391	-	-	5,977,082	948,951
Subsidiaries of the ultimate parent company	LS Electric Co., Ltd.	1,899,339	-	-	-	-
	LS I&D	-	-	-	-	1,659,255
	LS ITC	-	349,623	-	-	1,418,439
	LS Global Inc	-	-	-	123,975	8,880
Ultimate parent company's joint venture	LS MnM Inc	-	-	-	177,294,309	-
Subsidiaries of the parent company	G&P Co., Ltd.	806,827	-	-	2,506,362	19,830
	G&P Wood	-	-	-	4,465,180	20,961
	Sejong Electric Wire Co., Ltd	-	-	-	4,000	-
	JS Electric Wire Co., Ltd	-	-	-	-	11,886
Joint company of the parent company	LS Alsco Co., Ltd.	-	-	-	1,270,381	-
Large conglomerates	Hansung flange Co., Ltd. (*1)	3,016	-	-	1,179,574	3,640
		₩ 153,607,573	₩ 349,623	₩ -	₩ 192,820,863	₩ 4,498,742

(3) The details of fund transactions with related parties for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

		2022		
	Name	Capital investment	Dividend Payment	Others
Parent company	LS Cable & System Ltd.(*1)	11,545,580	813,582	-
Other related parties	LS I&D (*2)	-	-	6,178,714

(*1) LS Cable & System Ltd., the parent company, acquired 1,084,092 shares by participating in capital increase of the Group in 2022.
(*2) Lease liabilities, ₩ 6,178,714 thousand, are recognized for the lease transaction with other related party, 'LS I&D'. In this transaction, lease payments, ₩ 1,640,774 thousand, were paid and interest expenses, ₩ 40,817 thousand, were recognized.

		2021		
	Name	Capital investment	Dividend Payment	Others
Parent company	LS Cable & System Ltd.	-	1,162,261	-
Associates	LS-Gaon Cable Myanmar co., Ltd	555,150	-	-
Other related parties	LS I&D (*1)	-	-	2,434,421

(*1) Lease liabilities of ₩ 2,434,421 thousand are recognized through lease transactions with LS I&D, other related parties, and lease fees of is ₩ 1,640,774 thousand are paid through the transaction, and interest expenses of ₩ 78,459 thousand are recognized.

28. Related party transactions (cont'd)

(4) Outstanding balances in connection to transactions with related parties as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

2022

		Receivables			Payables	
	Name	Trade receivables	Other receivables	Guarantees provided	Trade payables	Other payables
Ultimate parent company	LS Corp.	₩ -	₩ -	₩ 2,860,000	₩ -	₩ 54,885
Parent company	LS Cable & System Ltd.	20,146,082	14,837	-	1,957,723	-
Subsidiaries of the ultimate parent company	LS Electric Co., Ltd.	386,890	-	-	-	-
	LS I&D	-	-	843,835	-	-
	LS ITC	-	-	-	-	219,637
	LS Global Inc	-	-	-	-	473
	LS MnM Inc	-	394,604	-	88,458,469	-
Subsidiaries of the parent company	G&P Co., Ltd.	1,263,186	-	-	503,844	-
	G&P Wood	-	-	-	1,622,252	17,709
	JS Electric Wire Co., Ltd	-	-	-	-	1,428
	LS-Gaon Cable Myanmar Trading	822,212	-	-	-	-
Joint company of the parent company	LS Alsco Co., Ltd.	-	-	-	98,324	-
Large conglomerates	Hansung flange Co., Ltd.	-	75,427	-	-	-
		₩ 22,618,370	₩ 484,868	₩ 3,703,835	₩ 92,640,612	₩ 294,132

2021

		Receivables			Payables	
	Name	Trade receivables	Other receivables	Guarantees provided	Trade payables	Other payables
Ultimate parent company	LS Corp.	₩ -	₩ -	₩ 2,860,000	₩ -	₩ 25,541
Parent company	LS Cable & System Ltd.	26,075,907	14,837	-	401,133	202,307
Subsidiaries of the ultimate parent company	LS Electric Co., Ltd.	41,413	-	-	-	-
	LS I&D	-	-	843,835	-	-
	LS ITC	-	-	-	-	434,344
	LS Global Inc	-	-	-	-	1,126
Joint venture of Ultimate parent company	LS MnM Inc	-	453,547	-	42,256,720	-
Subsidiaries of the parent company	G&P Co., Ltd.	-	-	-	713,486	159
	G&P Wood	-	-	-	1,303,821	8,827
	JS Cable Co., Ltd.	-	-	-	-	1,428
	LS Alsco Co., Ltd.	-	-	-	156,439	-
		₩ 26,117,320	₩ 468,384	₩ 3,703,835	₩ 44,831,599	₩ 673,732

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

	2022	2021
Short-term employee benefits	₩ 3,752,034	₩ 3,566,964
Retirement benefits	317,273	313,245
	₩ 4,069,307	₩ 3,880,209

29. Commitments and contingencies

(1) Details of the Group's commitments with financial institutions as of December 31, 2022 are as follows (Korean won in thousands, USD):

Financial institutions		Credit limit	Description
KEB Hana Bank		USD 7,600,000	Comprehensive Foreign currency payment guarantee
		USD 6,000,000	Comprehensive Foreign currency payment guarantee
	₩	5,000,000	Korean won payment guarantee
	₩	40,500,000	Trade receivables loan
	₩	11,000,000	Checking loan
	₩	1,200,000	Working capital
Kookmin Bank		USD 18,000,000	Comprehensive Foreign currency payment guarantee
		USD 20,000,000	Import Letter of Credit
	₩	10,000,000	Export finance loan
	₩	8,000,000	Checking loan
Shinhan Bank		USD 2,000,000	Separate Foreign currency payment guarantee
		USD 13,000,000	Import Letter of Credit
	₩	88,000,000	Trade receivables loan
	₩	2,000,000	Export financing loan
	₩	10,000,000	Korean won payment guarantee
	₩	14,000,000	Checking loan
	₩	24,350,000	Working capital
Nonghyup Bank		USD 30,000,000	Import Letter of Credit
	₩	20,000,000	Trade receivables loan
KDB		USD 20,000,000	Import Letter of Credit
IBK		USD 30,000,000	Import Letter of Credit
	₩	5,000,000	Trade receivables loan
	₩	7,000,000	Checking loan
Total	₩	246,050,000	
		USD 146,600,000	

29. Commitments and contingencies (cont'd)

(2) Details of guarantees provided to the Group as of December 31, 2022 are as follows (Korean won in thousands):

Provider	Guarantee	Amount
Seoul Guarantee Insurance Co., Ltd.	Performance guarantee	40,618,643
KEB Hana Bank	Performance guarantee	5,069,200
Kookmin Bank	Performance guarantee	5,722,829
Shinhan Bank	Payment guarantee	4,272,537

(3) There are 2 litigations, amounting to KRW 143 Million as an amount of controversy, pending by the Group as defendant as of December 31, 2022 and currently the management can't estimate final result of these litigations.

(4) The bond collection contract issued by the Company includes a debt ratio of less than 300% based on the Group's consolidated financial statements, a limit on the establishment of collateral rights within 500% of equity capital, and a limit on asset disposal of less than 50%. Accordingly, the Company may lose its due benefit if the above provisions are violated. Meanwhile, out of the bonds held by the Company, the bonds issued under the above regulations are ₩30,000 million as of the end of the current term, and there is no violation of the regulations as of the end of the current term.

30. Financial risk management objectives and policies

The Group's principal financial liabilities comprise borrowings, trade and other payables. The main purpose of these financial liabilities is to finance the Group's operations. The Group's principal financial assets include trade receivables, and cash and short-term deposits that derive directly from its operations.

The Group is exposed to market risk, credit risk and liquidity risk. The Group's senior management oversees the management of these risks. The Group's senior management reviews and agrees policies for managing each of these risks, which are summarized below. It is the Group's policy that no trading in derivatives for speculative purposes may be undertaken.

30. Financial risk management objectives and policies (cont'd)

(1) Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: interest rate risk, currency risk and other price risk, such as equity price risk and commodity risk. Financial instruments affected by market risk include borrowings, deposits.

The sensitivity analyses in the following sections relate to the position as of December 31, 2022 and 2021. The sensitivity analyses have been prepared on the basis that the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives and the proportion of financial instruments in foreign currencies are all constant and on the basis of the hedge designations in place.

The analyses exclude the impact of movements in market variables on: the carrying values of pension and other post-retirement obligations; provisions; and the non-financial assets and liabilities of foreign operations.

Interest rate risk
Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with floating interest rates.

Accordingly, the Group has established a policy to manage interest rate risk by mixing fixed-rate and floating-rate borrowings, and the interest rates are periodically reviewed to properly balance the fixed-rate and floating-rate borrowings.

Meanwhile, the borrowings subject to variable interest rates are ₩ 85,642 million as of December 31, 2022 (2021: ₩89,070 million), and there is no significant interest rate risk borne by the Group by signing an interest rate swap derivative contract ₩ 44,356 million as of December 31, 2022 (2021: ₩ 47,716 million).

When all other variables are constant and the interest rate of variable interest borrowings fluctuates by 100bp, the effect of the change in interest costs on net income before tax expense is as follows(Korean won in thousand):

	2022	
	100bp increase	100bp decrease
Profit before income taxes	₩ (412,865)	₩ 412,865

Foreign currency risk
Foreign currency risk is the risk that the fair value or future cash flows of an exposure will fluctuate because of changes in foreign exchange rates. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities when revenue or expense is denominated in a foreign currency. If all other variables are assumed to be constant and a currency rate is changed by 5% for the years ended December 31, 2022 and 2021, profit for the year before tax is changed as follows (Korean won in thousands):

	2022		2021	
	5% increase	5% decrease	5% increase	5% decrease
USD	₩ (5,153,825)	₩ 5,153,825	₩ (4,560,263)	₩ 4,560,263
EUR	(1,182,441)	1,182,441	(1,193,100)	1,193,100
AUD	74,273	(74,273)	210,245	(210,245)
Others	(1,372)	1,372	(1,428)	1,428
	₩ (6,263,365)	₩ 6,263,365	₩ (5,544,546)	₩ 5,544,546

30. Financial risk management objectives and policies (cont'd)

Other price risk
The quoted and unquoted equity instruments of the Group are exposed to market price risk arising from uncertainty in future value. As of December 31, 2022, the fair value of the quoted equity instruments is ₩ 853 million. If other variables are constant and the price of quoted equity instruments fluctuates by 10%, the effect of price fluctuations on the financial statements is ₩ 85 million (before the tax effect is subtracted).

(2) Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities, including deposits with banks and financial institutions. In the case of financial institutions, credit risk from financial institutions is limited because they are dealing with customers with excellent credit ratings.

In the case of general customers, credit is evaluated by considering other factors such as the customer's financial condition and past experience. Customer credit risk is managed by each business unit that must comply with the Group's policies, procedures and customer credit risk management related controls. The credit limit is set for all customers based on internal rating criteria. Customer credit evaluation is based on a credit rating evaluation that is prepared by considering various factors. Trade receivables are monitored regularly.

Set out below is the information about the credit risk exposure on the Group's trade receivables using a provision matrix as of December 31, 2022 is as follows (Korean won in thousands):

	Dec. 31, 2022				
	Days past due of trade receivables				
	Less than 3 months	More than 3 months and less than 6 months	More than 6 months and less than 1 year	More than 12 months	Total
Expected credit loss rate	0%	0.7%	14.7%	100%	2.20%
Book value	₩ 211,394,308	₩ 15,331,584	₩ 30,712,695	₩ 1,062,275	₩ 258,500,862
Expected credit loss	-	113,397	4,527,743	1,062,275	5,703,415

Allowance for doubtful accounts that recognized impairment through individual valuation of trade receivables as of December 31, 2022 is ₩ 7,174,065 thousand.

Other assets
Credit risk arising from other assets consisting of short-term deposits and loans, etc. arises from the default of the counterparty. In this case, the Group's credit risk exposure will be the same as the maximum carrying amount of the financial instrument. On the other hand, since the Group deposits cash equivalents at financial institutions and deals with financial institutions with excellent credit ratings, credit risk from financial institutions is limited.

30. Financial risk management objectives and policies (cont'd)

(3) Liquidity risk

Liquidity risk is the risk of not being able to raise funds to fulfill all the terms and conditions of a financial contract until maturity.

The Group manages risks due to lack of funds through liquidity strategies and plans. The Group responds to maturities of financial assets and financial liabilities by considering the maturity of financial instruments and estimates of operating cash flows.

The Group's repayment plans for each major financial liability as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Dec. 31, 2022			
	Less than 3 months	More than 3 months and less than 1 year	More than 1 year	Total
Trade and other payables	₩ 210,721,615	₩ 10,776,208	₩ 102,400	₩ 221,600,223
Derivatives liabilities	3,200,691	5,197,581	1,430,319	9,828,592
Borrowings	73,291,998	3,700,000	66,205,140	143,197,138
Corporate bonds	-	-	30,000,000	30,000,000
	₩ 287,214,304	₩ 19,673,789	₩ 97,737,859	₩ 404,625,953

	Dec. 31, 2021			
	Less than 3 months	More than 3 months and less than 1 year	More than 1 year	Total
Trade and other payables	₩ 168,720,055	₩ 5,440,875	₩ 102,400	₩ 174,263,330
Derivatives liabilities	315,335	439,862	1,142,501	1,897,698
Borrowings	55,777,838	6,649,250	82,423,088	144,850,176
Corporate bonds	-	-	30,000,000	30,000,000
	₩ 224,813,228	₩ 12,529,987	₩ 113,667,989	₩ 351,011,204

Cash flows by remaining maturity of the above financial liabilities are nominal discounts that have not been discounted and were prepared based on the earliest date of the period in which payment can be requested.

(4) Raw material price risk

The Group is affected by the price volatility of raw materials. Power line segment's operating activities require ongoing purchase and manufacturing and therefore require a continuous supply of copper. The Group is exposed to changes in the price of copper on its forecast copper purchases. Risk management of raw material prices is carried out using futures trading.

30. Financial risk management objectives and policies (cont'd)

(5) Capital management

The main purpose of capital management is to maintain a high credit rating and sound capital ratio in order to maintain the Group's business activities and maximize shareholder value.

The Group revises its capital structure according to changes in the economic environment. The dividend policy is revised or capital reduction or new share issuance is reviewed. On the other hand, no changes have been made to the objectives, policies and procedures for the management of the capital for the year ended December 31, 2022.

The Group manages its debt ratio calculation based on the net debt divided by the total equity. Debt ratios as of December 31, 2022 and 2021 are as follows (Korean won in thousands in thousands):

	Dec. 31, 2022	Dec. 31, 2021
Liabilities (A)	₩ 449,261,889	₩ 390,851,138
Equity (B)	303,070,556	268,115,290
Cash and cash equivalents (C)	55,693,314	26,713,368
Debt ratio (A/B)	148.24%	145.78%
Net debt ratio ((A-C)/B)	129.86%	135.81%

31. Financial instruments by category

(1) Fair value and book value of financial assets and liabilities as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Dec. 31, 2022			
	Book value		Fair value	
Financial assets:				
Financial assets at amortized cost:				
Cash and cash equivalents	₩	55,693,314	₩	55,693,314
Trade receivables		237,797,696		237,797,696
Financial instruments		34,599,244		34,599,244
Loans		1,901,570		1,901,570
Other receivables		1,279,708		1,279,708
Accrued income		9,311		9,311
Guarantee deposits		7,074,412		7,074,412
Financial assets at fair value through profit or loss:				
Investment in capital		89,720		89,720
Trade receivables		14,999,751		14,999,751
Financial assets at fair value through OCI:				
Quoted equity shares		853,045		853,045
Unquoted equity shares		120,899		120,899
Derivative assets:				
Held for hedging instruments		8,878,118		8,878,118
Held for trading instruments		10,686		10,686
	₩	363,307,474	₩	363,307,474
Financial liabilities:				
Financial assets at amortized cost:				
Trade payables	₩	200,327,472	₩	200,327,472
Other payables		10,394,143		10,394,143
Accrued expenses		10,773,167		10,773,167
Dividends payable		3,042		3,042
Borrowings		143,197,138		143,197,138
Corporate bonds		29,953,892		29,953,892
Leasehold deposits		102,400		102,400
Derivatives liabilities:				
Held for hedging instruments		9,434,175		9,434,175
Held for trading instruments		394,416		394,416
	₩	404,579,845	₩	404,579,845

31. Financial instruments by category (cont'd)

	Dec. 31, 2021			
		Book value		Fair value
Financial assets:				
Financial assets at amortized cost:				
Cash and cash equivalents	₩	26,713,368	₩	26,713,368
Trade receivables		229,277,143		229,277,143
Financial instruments		28,645,720		28,645,720
Loans		1,934,270		1,934,270
Other receivables		1,831,568		1,831,568
Accrued income		8,772		8,772
Guarantee deposits		6,576,481		6,576,481
Financial assets at fair value through profit or loss:				
Investment in capital		71,820		71,820
Trade receivables		11,346,031		11,346,031
Financial assets at fair value through OCI:				
Quoted equity shares		870,356		870,356
Unquoted equity shares		121,499		121,499
Derivative assets:				
Held for hedging instruments		4,210,231		4,210,231
Held for trading instruments		-		-
	₩	311,607,259	₩	311,607,259
Financial liabilities:				
Financial assets at amortized cost:				
Trade payables	₩	159,133,234	₩	159,133,234
Other payables		9,586,821		9,586,821
Accrued expenses		5,438,334		5,438,334
Dividends payable		2,541		2,541
Borrowings		144,850,176		144,850,176
Corporate bonds		29,914,727		29,914,727
Leasehold deposits		102,400		102,400
Derivatives liabilities:				
Held for hedging instruments		1,733,537		1,733,537
Held for trading instruments		164,161		164,161
	₩	350,925,931	₩	350,925,931

31. Financial instruments by category (cont'd)

(2) Fair value hierarchy

In order to determine and disclose the fair value of financial instruments, the Group used a fair value hierarchy that reflects the significance of input variables used in fair value measurement.

Quantitative disclosures of fair value measurement hierarchy for financial instruments as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Dec. 31, 2022			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:				
Financial assets at fair value through profit or loss (Including Trading receivables)	₩ -	₩ 14,999,751	₩ 89,720	₩ 15,089,471
Financial assets at fair value through OCI	853,045	-	120,899	973,944
Derivatives	-	8,888,804	-	8,888,804
Financial liabilities measured at fair value:				
Derivatives	-	9,828,591	-	9,828,591

	Dec. 31, 2021			
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:				
Financial assets at fair value through profit or loss (Including Trading receivables)	₩ -	₩ 11,346,031	₩ 71,820	₩ 11,417,851
Financial assets at fair value through OCI	870,356	-	121,499	991,855
Derivatives	-	4,210,231	-	4,210,231
Financial liabilities measured at fair value:				
Derivatives	-	1,897,698	-	1,897,698

The fair value of financial instruments traded in an active market is calculated based on the market price announced at the end of the reporting period. If published prices are readily and regularly available through exchanges, sellers, brokers, industry groups, valuation agencies or supervisory authorities, those prices represent actual market transactions that occur regularly between independent parties and are considered active markets. The published market price of financial assets held by the Group is the purchase price.

31. Financial instruments by category (cont'd)

The fair value of financial instruments (e.g. over-the-counter derivatives) that are not traded in an active market is determined using valuation techniques. These evaluation techniques use market information as observable as possible and company-specific information to a minimum. At this time, if all significant input variables required to measure the fair value of the product are observable, the instruments is included in level 2. If one or more significant inputs are not based on observable market information, the instruments is included in level 3.

Valuation techniques used to measure the fair value of financial instruments include:

- Public market price or dealer price of similar instruments
- The fair value of the interest rate swap is calculated as the present value of the estimated cash flows in the future according to the observable yield curve
- The fair value of the forward exchange is measured by discounting the amount to the present value using the forward exchange rate as of the reporting period
- For other financial instruments, other techniques such as discounting cash flows are used

31. Financial instruments by category (cont'd)

(3) The gain or loss on financial instruments by category for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022					
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial Assets/liabilities at amortized cost	Held for hedging derivative assets/liabilities	Held for trading derivative assets/liabilities	Total
Profit or loss						
Bad debt expenses	₩ -	₩ -	₩ 2,151,891	₩ -	₩ -	₩ 2,151,891
Interest income	-	-	242,618	-	-	242,618
Dividend	-	48,836	-	-	-	48,836
Gain on foreign currency transaction	-	-	11,198,088	-	-	11,198,088
Gain on foreign exchange translation	-	-	4,617,947	-	-	4,617,947
Gain on derivatives transaction	-	-	-	9,259,539	12,598,073	21,857,612
Gain on valuation of derivatives	-	-	-	18,010,406	35,686	18,046,092
Interest expenses (Including interest from corporate bond)	-	-	5,637,799	-	-	5,637,799
Loss on foreign currency transaction	-	-	17,041,997	-	-	17,041,997
Loss on foreign exchange translation	-	-	6,685,657	-	-	6,685,657
Loss on disposal of trade receivables	1,237,807	-	-	-	-	1,237,807
Loss on derivatives transaction	-	-	-	24,498,659	9,128,679	33,627,338
Loss on valuation of derivatives	-	-	-	15,059,957	79,698	15,139,655
Other comprehensive income(loss)						
Gain(loss) on valuation of financial assets	-	(85,607)	-	-	-	(85,607)
Gain(loss) on valuation of derivatives	-	-	-	56,829	-	56,829

31. Financial instruments by category (cont'd)

	2021						
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial assets at amortized cost	Financial liabilities at amortized cost	Held for hedging derivative assets/liabilities	Held for trading derivative assets/liabilities	Total
Profit or loss							
Bad debt expenses	₩ -	₩ -	₩ 1,696,926	₩ -	₩ -	₩	₩ 1,696,926
Interest income	-	-	103,024	-	-		103,024
Dividend	-	38,816	-	-	-		38,816
Gain on foreign currency transaction	-	-	2,772,984	554,743	-		3,327,727
Gain on foreign exchange translation	-	-	643,302	318,803	-		962,105
Gain on derivatives transaction	-	-	-	-	18,951,037	4,654,075	23,605,112
Gain on valuation of derivatives	-	-	-	-	7,849,016	-	7,849,016
Reversal of trade receivables valuation allowance	5,263	-	-	-	-	-	5,263
Interest expenses (Including interest from corporate bond)	-	-	-	3,889,013	-	-	3,889,013
Loss on foreign currency transaction	-	-	5,562,917	649,881	-	-	6,212,798
Loss on foreign exchange translation	-	-	44,749	4,226,310	-	-	4,271,059
Loss on disposal of trade receivables	742,307	-	-	-	-	-	742,307
Loss on derivatives transaction	-	-	-	-	4,055,700	3,204,548	7,260,248
Loss on valuation of derivatives	-	-	-	-	652,109	2,683	654,792
Other comprehensive income(loss)							
Gain(loss) on valuation of financial assets	-	147,798	-	-	-	-	147,798
Gain(loss) on valuation of derivatives	-	-	-	-	284,434	-	284,434

32. Statements of cash flows

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

	2022	2021
Transfer of long-term borrowings to current portion	₩ 42,992,500	₩ 6,712,000
Transfer of construction-in-process to property, plant and equipment	8,120,999	5,142,766
Changes in other payables related to acquisition of property, plant and equipment	21,378	(139,854)
Increase of right-of-use asset	5,612,287	396,137

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

2022

	As of Jan. 1	Cash flows from financing activities	Effect on change of exchange rate	Discount on bond	Transfer	Non-cash transactions	As of Dec. 31
Short-term borrowings	₩ 55,203,213	₩ (24,007,572)	₩ (1,059,143)	₩ -	₩ -	₩ 1,000,000	₩ 31,136,498
Current portion of long-term borrowings	7,223,875	(6,223,875)	2,863,000	-	42,992,500	(1,000,000)	45,855,500
Long-term borrowings	82,423,088	25,032,000	1,742,552	-	(42,992,500)	-	66,205,140
Corporate bond	29,914,727	-	-	39,165	-	-	29,953,892
Lease liabilities	2,986,340	(2,050,075)	-	54,411	-	5,575,345	6,566,021

2021

	As of Jan. 1	Cash flows from financing activities	Effect on change of exchange rate	Discount on bond	Transfer	Non-cash transactions	As of Dec. 31
Short-term borrowings	₩ 30,009,875	₩ 20,301,235	₩ 42,103	₩ -	₩ -	₩ 4,850,000	₩ 55,203,213
Current portion of long-term borrowings	27,466,000	(22,616,000)	511,875	-	6,712,000	(4,850,000)	7,223,875
Long-term borrowings	46,292,000	39,611,314	3,231,774	-	(6,712,000)	-	82,423,088
Current portion of corporate bond	19,995,104	(20,000,000)	-	4,896	-	-	-
Corporate bond	-	29,882,088	-	32,639	-	-	29,914,727
Lease liabilities	4,734,125	(2,130,791)	-	96,699	-	286,307	2,986,340

33. Uncertainties arising from the impact of COVID-19

The global economy is being affected due to the preventative and control measures being implemented worldwide, which include restrictions on movement, in order to contain the spread of COVID-19. In addition, various government support policies are being announced in order to cope with the impact of COVID-

Items mainly affected by COVID-19 are the recoverability of trade receivables (see Note 7), inventories (see Note 8) and impairment of property, plant and equipment, intangible assets (see Notes 11, 13), and impairment of investments in an associate (see Note 10), etc. The Group prepared the consolidated financial statements by reasonably estimating the future impact of COVID-19 on the Group.

However, under current circumstances, significant uncertainties continue to exist on determining the duration and ultimate impact off COVID-19.

34. Adoption and effect of Global minimum level of 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. The global minimum level of tax of BEPS Pillar Two is adopted for Multination company(MNC) that its sales is over than EUR 750 Million.

In Korea, Global minimum level of tax was included in amendment of *'Adjustment of International Taxes Act'* of 2022 and the Act was passed. The effective date of this is January 1, 2024, and *‘Enforcement degree’* was not enacted.

Global minimum level of tax in Republic of Korea isn’t regarded significantly modified as of the end of the reporting period for the purpose of financial reporting, there are no material relevant tax effects recognized in the consolidated financial statements.