Samyang Holdings Corporation and Subsidiaries

Consolidated Financial Statements December 31, 2022 and 2021

Page(s)

Independent Auditor's Report	1 - 4
Consolidated Financial Statements	
Consolidated Statements of Financial Position	5
Consolidated Statements of Comprehensive Income	6
Consolidated Statements of Changes in Equity	7 - 8
Consolidated Statements of Cash Flows	9
Notes to the Consolidated Financial Statements	10 - 106



Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholders of Samyang Holdings Corporation

Opinion

We have audited the accompanying consolidated financial statements of Samyang Holdings Corporation and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at 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 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 Samyang Holdings Corporation and its subsidiaries as at 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 (Korean IFRS).

Basis for Opinion

We conducted our audits in accordance with Korean Standards on Auditing. 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 of the Republic of Korea that are relevant to our audit of the consolidated financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters

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

(a) Goodwill impairment assessment of a subsidiary

Key Audit Matter

The Group's goodwill as at December 31, 2022 amounts to $\forall 237,200$ million. And goodwill related to Samyang Packaging Corporation (hereafter 'Cash Generating Units (CGUs) subject to assessment') amounts to $\forall 164,590$ million. We focused on this area due to the significance of size of goodwill balance (Note 10).

The Group engaged an independent external specialist for the impairment assessment of the CGUs subject to assessment. Based on historical performance and estimates of future period, the Group believed that the value in use of the CGUs subject to assessment is greater than their carrying amount. As a result, the Group determined that no impairment loss has to be recognized in the consolidated financial statements.

We determined the audit procedures for goodwill impairment assessment as a key audit matter because the assessment of the value in use of the Group's CGU for assessment involves management's significant judgments and estimates such as the discount rates, growth rates and future cash flow projections.

How our audit addressed the Key Audit Matter

We performed the following key audit procedures in relation to the above significant risks:

- Assessed management's review results for impairment assessment of the CGUs

- Assessed the competency and objectivity of the external specialists involved by management for estimation of recoverable amounts

- Assessed appropriateness of the valuation model used in estimating recoverable amounts

- Assessed the reasonableness of key inputs and assumptions used in estimating recoverable amounts

Other Matters

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with Korean IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations.

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 Korean Standards on Auditing 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 Korean Standards on Auditing, 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 entity'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 Yun-Seok Hwang, Certified Public Accountant.

March 16, 2023 Seoul, Korea

This report is effective as of March 16, 2023, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Samyang Holdings Corporation and Subsidiaries Consolidated Statements of Financial Position December 31, 2022 and 2021

(in Korean won)	Notes	2022	2021
Assets			
Current assets	24.25	W 004 075 444 007	W 17E 800 EE0
Cash and cash equivalents Trade and other receivables	34, 35 5, 32, 34, 35	 ₩ 231,375,111,397 368,696,730,821 	 ₩ 175,823,509,550 346,537,261,966
Financial assets at fair value through other comprehensive income (FVOCI)	4, 34, 35	653,359	2,246,427
Other current financial assets	4, 31, 34, 35	558,364,227,119	577,644,107,409
Inventories, net	6, 31	530,619,871,751	500,525,433,054
Current tax assets	-, -	4,915,772,795	474,814,646
Other current assets	7	19,455,328,649	15,548,142,959
Assets held for sale		34,471,601,242	34,471,601,242
Non-current assets		1,747,899,297,133	1,651,027,117,253
Property, plant and equipment, net	8, 9, 31, 32	1,615,969,941,666	1,616,372,063,344
Goodwill	10	237,199,909,514	237,199,909,514
Other intangible assets	10	121,548,283,943	124,282,979,299
Investment properties, net	11, 31	97,487,117,809	96,046,767,611
Investments in associates and joint ventures	12	285,013,096,098	289,842,210,802
Long-term other recievables	5, 34, 35	9,861,958,396	16,103,382,825
Financial assets at fair value through profit or loss (FVPL)	4, 34, 35	23,807,708,347	16,356,466,881
Financial assets at fair value through other comprehensive income (FVOCI)	4, 34, 35	381,374,944,832	404,965,739,912
Other non-current financial assets	31, 35	25,500,000	198,604,597
Net defined benefit assets	17	21,040,151,879	21,774,149
Deferred tax assets	29	5,711,872,054	6,796,772,172
Other non-current assets	7	840,840,435	1,374,900,322
Total assets		2,799,881,324,973 ₩ 4,547,780,622,106	2,809,561,571,428 ₩ 4,460,588,688,681
		.,,,,,	
Liabilities			
Current liabilities Trade and other payables	13, 32, 34, 35	₩ 280,385,075,236	₩ 343,248,405,372
Short-term borrowings	14, 34, 35	276,813,919,946	191,385,925,401
Current portion of long-term borrowings	14, 34, 35	75,131,501,375	126,467,021,337
Current portion of debentures	14, 34, 35		199,965,641,216
Other current financial liabilities	4, 9, 15, 34, 35	17,681,082,669	4,972,123,560
Income tax payables	, , , , , , , , , , , , , ,	12,585,417,897	45,614,945,165
Other current liabilities	16	92,379,736,101	91,108,917,155
		754,976,733,224	1,002,762,979,206
Non-current liabilities	10.04.05	0 400 505 004	0 770 000 707
Long-term other payables	13, 34, 35	8,489,535,281	8,773,636,787
Long-term borrowings	14, 34, 35	237,716,310,625	165,587,266,000 592,862,103,037
Debentures Other non-current financial liabilities	14, 34, 35 9, 15, 34, 35	772,753,487,810 80,912,426,820	81,854,294,472
Other non-current financial liabilities Defined benefit liabilities	9, 13, 34, 33 17	39,536,644	11,489,130,703
Deferred tax liabilities	29	160,895,241,262	162,783,957,094
Other non-current liabilities	16	8,486,838,260	9,068,393,800
	10	1,269,293,376,702	1,032,418,781,893
Total liabilities		₩ 2,024,270,109,926	₩ 2,035,181,761,099
Equity			
Capital stock	19	44,341,645,000	44,341,645,000
Capital surplus	19	330,531,362,847	334,668,201,127
Accumulated other comprehensive income	20	77,526,468,175	92,435,620,074
Retained earnings	21	1,351,230,997,705	1,291,583,006,401
Other components of equity	22	(11,700,350,142)	(11,466,144,145)
Equity attributable to owners of the Parent Company		1,791,930,123,585	1,751,562,328,457
Non-controlling interest		731,580,388,595	673,844,599,125
Total equity		2,523,510,512,180	2,425,406,927,582
Total liabilities and equity		₩ 4,547,780,622,106	₩ 4,460,588,688,681

The above consolidated statements of financial position should be read in conjunction with the accompanying notes.

Samyang Holdings Corporation and Subsidiaries Consolidated Statements of Comprehensive Income Years Ended December 31, 2022 and 2021

(in Korean won)	Notes		2022		2021
Sales	3, 23	₩	3,316,777,826,141	₩	3,107,313,356,762
Cost of sales	24, 28		(2,773,465,999,176)		(2,378,282,506,603)
Gross profit			543,311,826,965		729,030,850,159
Selling and administrative expenses	25, 28		(410,987,550,115)		(377,331,075,203)
Operating profit			132,324,276,850		351,699,774,956
Finance income	26, 35		66,887,788,467		30,955,749,202
Finance costs	26, 35		(54,883,976,388)		(30,135,644,894)
Share of gain on equity method	3, 12		792,009,673		2,756,321,855
Other non-operating income	27, 35		89,038,335,603		35,543,333,492
Other non-operating expenses	27, 28, 35		(107,494,863,815)		(45,948,184,798)
Profit before income tax			126,663,570,390		344,871,349,813
Income tax expense	29		(20,814,211,060)		(70,785,026,895)
Profit for the year			105,849,359,330		274,086,322,918
Other comprehensive income (loss)					
Items that will not be reclassified to profit or loss					
Remeasurements of net defined benefit liability			16,421,763,737		(5,610,318,436)
Retained earnings adjustments in equity method Gain (loss) on valuation of financial assets at fair value			1,983,534,093		(739,860,220)
through other comprehensive income (FVOCI)			(20,057,612,060)		78,494,920,826
Items that may be subsequently reclassified to profit or loss Equity adjustments in equity method			135,435,929		1,906,336,219
Loss on valuation of financial assets at fair value					.,
through other comprehensive income (FVOCI)			(87,227,943)		(31,836)
Gain on translation of foreign operations			907,900,702		3,583,550,054
Other comprehensive income for the year, net of tax			(696,205,542)		77,634,596,607
Total comprehensive income for the year		₩	105,153,153,788	₩	351,720,919,525
Profit is attributable to:					
Owners of the Parent Company		₩	71,009,173,131	₩	237,700,631,468
Non-controlling interests			34,840,186,199		36,385,691,450
		₩	105,849,359,330	₩	274,086,322,918
Total comprehensive income for the year is attributable to:					
Owners of the Parent Company		₩	67,969,684,096	₩	291,223,186,344
Non-controlling interest		1.4.1	37,183,469,692	1.47	60,497,733,181
Earnings per share		₩	105,153,153,788	₩	351,720,919,525
Basic and diluted earnings per ordinary share	30	₩	9,173	₩	30,711
Basic and diluted earnings per preferred share	30	* *	9,173	* *	30,761
שמשיל מות מותוכם במרוווישש אבו אופופוופת שומופ	30		9,223		30,701

The above consolidated statements of comprehensive income should be read in conjunction with the accompanying notes.

Samyang Holdings Corporation and Subsidiaries Consolidated Statements of Changes in Equity Years Ended December 31, 2022 and 2021

Accumulated	
Comprehensive Other Comprehensive Retained Components Non-controlling Capital stock Capital surplus Income Earnings of Equity Total Interest	Total Equity
Balance at January 1, 2021 ₩ 44,341,645,000 ₩ 376,552,487,475 ₩ 39,077,282,650 ₩ 1,070,972,876,847 ₩ (11,291,766,119) ₩ 1,519,652,525,853 ₩ 636,134,087,920 ₩	2,155,786,613,773
Total comprehensive income	
Profit for the year 237,700,631,468 - 237,700,631,468 36,385,691,450	274,086,322,918
Remeasurements of net defined benefit liability (3,482,014,633) - (3,482,014,633) (2,128,303,803)	(5,610,318,436)
Retained earnings adjustments in equity method (774,691,081) - (774,691,081) 34,830,861	(739,860,220)
Equity adjustments in equity method 2,057,468,131 - (174,378,026) 1,883,090,105 23,246,114	1,906,336,219
Gain on valuation of financial assets at fair value through other comprehensive income (FVOCI) 53,305,170,149 53,305,170,149 25,189,718,841	78,494,888,990
Gain on translation of foreign operations 2,591,000,336 2,591,000,336 992,549,718	3,583,550,054
Equity adjustments from disposal of financial assets at FVOCI - (4,595,317,950) 4,595,317,950	-
Total comprehensive income for the year - 53,358,320,666 238,039,243,704 (174,378,026) 291,223,186,344 60,497,733,181	351,720,919,525
Transactions with owners	
Dividends paid (17,429,114,150) - (17,429,114,150) (11,869,467,550)	(29,298,581,700)
Changes in the equity ownership in subsidiary - (1,157,566,290) 16,758 (1,157,549,532) (42,862,425,268)	(44,019,974,800)
Business combinations - (40,726,720,058) (40,726,720,058) 31,944,670,842	(8,782,049,216)
Total transactions with owners - (41,884,286,348) 16,758 (17,429,114,150) - (59,313,383,740) (22,787,221,976)	(82,100,605,716)
Balance at December 31, 2021 # 44,341,645,000 # 334,668,201,127 # 92,435,620,074 # 1,291,583,006,401 # (11,466,144,145) # 1,751,562,328,457 # 673,844,599,125 #	2,425,406,927,582

Samyang Holdings Corporation and Subsidiaries Consolidated Statements of Changes in Equity Years Ended December 31, 2022 and 2021

(in Korean won)								
	Capital stock	Capital surplus	Accumulated Other Comprehensive Income	Retained Earnings	Other Components of Equity	Total	Non-controlling Interest	Total Equity
Balance at January 1, 2022	₩ 44,341,645,000	₩ 334,668,201,127	₩ 92,435,620,074	₩ 1,291,583,006,401	₩ (11,466,144,145)	₩ 1,751,562,328,457	₩ 673,844,599,125	₩ 2,425,406,927,582
Total comprehensive income								
Profit for the year	-	-	-	71,009,173,131	-	71,009,173,131	34,840,186,199	105,849,359,330
Remeasurements of net defined benefit liability	-	-	-	9,966,065,539	-	9,966,065,539	6,455,698,198	16,421,763,737
Retained earnings adjustments in equity method	-	-	-	1,932,498,046	-	1,932,498,046	51,036,047	1,983,534,093
Equity adjustments in equity method	-	-	142,093,193	-	-	142,093,193	(6,657,264)	135,435,929
Loss on valuation of financial assets at fair value through other comprehensive income (FVOCI)	-	-	(16,061,095,730)	-	-	(16,061,095,730)	(4,083,744,273)	(20,144,840,003)
Gain (loss) on translation of foreign operations	-	-	980,949,917	-	-	980,949,917	(73,049,215)	907,900,702
Equity adjustments from disposal of financial assets at FVOCI	-	-	25,992,762	(25,992,762)	-	-	-	-
Total comprehensive income for the year		-	(14,912,059,858)	82,881,743,954		67,969,684,096	37,183,469,692	105,153,153,788
Transactions with owners								
Dividends paid	-	-	-	(23,233,752,650)	-	(23,233,752,650)	(10,448,490,550)	(33,682,243,200)
Changes in the equity ownership in subsidiary	-	(4,136,838,280)	2,907,959	-	-	(4,133,930,321)	31,135,193,912	27,001,263,591
Others					(234,205,997)	(234,205,997)	(134,383,584)	(368,589,581)
Total transactions with owners		(4,136,838,280)	2,907,959	(23,233,752,650)	(234,205,997)	(27,601,888,968)	20,552,319,778	(7,049,569,190)
Balance at December 31, 2022	₩ 44,341,645,000	₩ 330,531,362,847	₩ 77,526,468,175	₩ 1,351,230,997,705	₩ (11,700,350,142)	₩ 1,791,930,123,585	₩ 731,580,388,595	₩ 2,523,510,512,180

The above consolidated statements of changes in equity should be read in conjunction with the accompanying notes.

Samyang Holdings Corporation and Subsidiaries Consolidated Statements of Cash Flows Years Ended December 31, 2022 and 2021

(in Korean won)	Notes	2022	2021
Cash flows from operating activities			
Cash generated from operations	33	₩ 140,653,503,627	₩ 281,611,598,335
Interest paid		(29,523,018,578)	(24,580,203,419)
Interest received		10,822,453,327	8,972,904,300
Dividends received		30,877,374,945	16,342,896,712
Income taxes paid		(57,556,958,275)	(44,466,831,778)
Income tax refund received		380,448,578	3,547,305,816
Net cash inflow from operating activities		95,653,803,624	241,427,669,966
Cash flows from investing activities			
Proceeds from disposal of financial assets at FVPL		38,802,865	-
Proceeds from disposal of financial assets at FVOCI		40,037,000	9,791,285,808
Decrease in short-term loans		294,432,765	215,885,720
Decrease in long-term loans		573,301,358	950,162,000
Decrease in other current financial assets		820,370,086,388	616,996,082,800
Decrease in other non-current financial asssets		3,900,000	-
Decrease in guarantee deposits		2,726,912,538	3,178,134,961
Proceeds from disposal of property, plant and equipment		1,062,878,174	1,464,667,897
Proceeds from disposal of intangible asset		1,291,976,560	20,001,000
Proceeds from disposal of investment properties		146,807,500	1,174,423,980
Proceeds from disposal of assets held for sale		-	333,600,000
Proceeds from government grants		9,085,094,991	1,827,742,299
Purchase of investments in associates		-	(2,156,365,103)
Purchase of financial assets at FVPL		(5,532,554,085)	(6,405,090,376)
Purchase of financial assets at FVOCI		(4,183,896,331)	(19,030,573,980)
Increase in long-term loans		(862,829,055)	(1,759,998,620)
Increase in other current financial assets		(797,211,276,000)	(584,298,248,495)
Increase in guarantee deposits		(1,936,664,328)	(2,696,886,240)
Purchase of property, plant and equipment		(136,700,558,631)	(181,939,240,063)
Purchase of intangible assets		(11,281,999,304)	(19,700,552,236)
Purchase of investment properties		(128,004,000)	-
Usage of government grants		(1,526,064,319)	(1,499,427,980)
Net cash flow due to business combinations			(70,872,208,535)
Net cash outflow from investing activities		(123,729,615,914)	(254,406,605,163)
Cash flows from financing activities	33		
Proceeds from short-term borrowings		547,126,697,318	403,538,200,353
Proceeds from long-term borrowings		143,286,900,000	61,550,839,094
Proceeds from debentures		180,000,000,000	94,000,000,000
Refund of debentures issuance cost		8,347,301	15,877,801
Cash inflow due to changes in ownership in subsidiaries		38,050,694,700	-
Cash inflows from repayable government grants		57,679,390	48,767,010
Repayment of short-term borrowings		(450,720,429,424)	(294,274,459,535)
Repayment of current portion of long-term borrowings		(120,262,709,000)	(42,800,000,000)
Repayment of long-term borrowings		(1,033,333,000)	-
Repayment of current portion of debentures		(200,000,000,000)	(140,000,000,000)
Repayment of lease liabilities		(5,333,724,644)	(8,318,800,463)
Payment of dividends		(33,682,243,200)	(29,298,581,700)
Debentures issuance cost		(581,940,000)	(300,820,000)
Cash outflow due to changes in ownership in subsidiaries		(11,213,733,400)	(43,987,487,540)
Cash outflows from repayable government grants		(233,759,875)	-
Cash outflow due to other financing activities		95 469 446 166	(32,487,260)
Net cash inflow from financing activities		85,468,446,166	141,047,760
Effects of exchange rate fluctuations on cash and cash equivalents		(2,158,412,908)	(19,198,129)
Exchange differences on translating foreign operations		152,819,720	1,380,970,450
Net increase (decrease) in cash and cash equivalents	~ -	55,387,040,688	(11,476,115,116)
Cash and cash equivalents at the beginning of the year	35	176,378,806,323	<u>187,854,921,439</u>
Cash and cash equivalents at the end of the year	35	₩ 231,765,847,011	₩ 176,378,806,323

The above consolidated statements of cash flows should be read in conjunction with the accompanying notes.

1. The Group Information

1.1 The Company

Samyang Holdings Corporation (the "Company" or the "Parent Company") was established on October 1, 1924 and has been listed on the KOSPI market of the Korea Exchange since December 1968. The Company is primarily engaged in the manufacture and sale of sugar, engineering plastics and other items. On November 1, 2011, the Company completed the spin-off of its food, and chemicals business segments, and the split-off of its pharmaceutical business segment. The Company changed its former name, Samyang Corporation, to Samyang Holdings Corporation. Meanwhile, the Company merged with Samyang Entech Co., Ltd., a subsidiary, on December 1, 2014, and with Samyang Biopharmaceuticals Corporation, a subsidiary, on April 1, 2021, and the Company changed its legal entity to a holding company for the purpose of managing investments, trading, leasing, pharmaceutical business and other related activities.

The Company has capital stock amounting to $\forall 44,342$ million through the several capital increases, the split in 2011 and the merger in 2014. As at December 31, 2022, the total number of shares of which the Company is authorized to issue, the number of issued shares and the amount per share for the Company are 30,000,000 shares, 8,868,329 shares and $\forall 5,000$, respectively.

1.2 Subsidiaries

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

				Percentage of ownership					
					2022			2021	
Name of subsidiary	Domicile	Reporting period	Key business	Parent Company	Subsidiaries	Non- controlling interests	Parent Company	Subsidiaries	Non- controlling interests
Samyang Corporation	Korea	Dec. 31	Manufacture and sale of sugar and engineering plastics	61.83	-	38.17	61.83	-	38.17
Samyang Data Systems, Inc.	Korea	Dec. 31	Computer service	100.00	-	-	100.00	-	-
Samyang F&B Co., Ltd.	Korea	Dec. 31	Food service	100.00	-	-	100.00	-	-
Samyang Innochem Corporation ¹	Korea	Dec. 31	Manufacture and sale of BPA	100.00	-	-	97.68	-	2.32
Samyang Packaging Corporation ²	Korea	Dec. 31	Manufacture and sale of PET bottle	-	59.40	40.60	-	66.00	34.00
Samyang EcoTech Corporation ³	Korea	Dec. 31	Manufacture and sale of recycled PET chip	-	100.00	-	-	-	-
KCI Co., Ltd.	Korea	Dec. 31	Manufacture and sale of raw materials for household goods	-	50.02	49.98	-	50.02	49.98
NC Chem Corporation ⁴	Korea	Dec. 31	Manufacture and sale of chemicals	66.56	-	33.34	60.27	-	39.73
CT Chemical Corporation ⁴	Korea	Dec. 31	Manufacture and sale of chemicals	-	-	-	100.00	-	-
Samyang Engineering Plastics (Shanghai) Co., Ltd.	China	Dec. 31	Manufacture and sale of engineering plastics	-	100.00	-	-	100.00	-
Samyang Engineering Plastics (Hungary) Co., Ltd.	Hungary	Dec. 31	Manufacture and sale of engineering plastics	-	100.00	-	-	100.00	-
Samyang Engineering Plastics (Vietnam) Co., Ltd.	Vietnam	Dec. 31	Manufacture and sale of engineering plastics	-	100.00	-	-	100.00	-
Samyang Biopharm USA ⁵	USA	Dec. 31	Research	-	100.00	-	100.00	-	-

				Percentage of ownership						
					2022			2021		
Name of subsidiary	Domicile	Reporting period	Key business	Parent Company	Subsidiaries	Non- controlling interests	Parent Company	Subsidiaries	Non- controlling interests	
Samyang Biopharm Hungary	Hungary	Dec. 31	Manufacture and sale of pharmaceuticals	-	100.00	-	-	100.00	-	
Samyang Holdings USA, LLC	USA	Dec. 31	Holding Company	100.00	-	-	100.00	-	-	

¹ For the year ended December 31, 2022, Samyang Holdings Corporation additionally acquired remaining shares of 2.32% in Samyang Innochem Corporation. As a result, the ownership changed to 100%.

² For the year ended December 31, 2022, Samyang Packaging Corporation, which is a subsidiary, issued 1,578,867 ordinary shares in capital increase through third party allocation. As a result, the ownership changed to 59.40%.

³ For the year ended December 31, 2022, Samyang Packaging Corporation, which is a subsidiary, established Samyang EcoTech Corporation, a newly established corporation, by dividing recycling business division through split-off on December 1, 2022.

⁴ For the year ended December 31, 2022, NC Chem Corporation, a subsidiary, retired its 10,891 treasury shares. In addition, the entity merged with CT Chemical Corporation, another subsidiary, on April 1, 2022 to enhance management efficiency and strengthen competitiveness. As 34,667 shares were issued as new shares for the merger and all of them were allocated to Samyang Holdings Corporation, which owns 100% of the total number of issued CT chemical corporation shares, Samyang Holdings Corporation 's ownership ratio in NC Chem Corporation changed to 66.56%.

⁵ For the year ended December 31, 2022, Samyang Holdings Corporation contributed all of its shares in Samyang Biopharm USA held by the Company, in kind, to Samyang Holdings USA, LLC.

Summarized financial information of the subsidiaries as at and for the years ended December 31, 2022 and 2021, is as follows:

(in millions of

Korean won)	2022								
Name of subsidiary	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	Total comprehensive income (loss)			
Samyang Corporation	₩ 2,278,458	₩ 1,056,955	₩ 1,221,503	₩ 1,998,768	₩ 55,711	₩ 55,524			
Samyang Data Systems, Inc.	24,232	10,063	14,169	79,066	2,326	2,826			
Samyang F&B Co., Ltd.	6,416	25,161	(18,745)	2,013	(394)	(394)			
Samyang Innochem Corporation	344,211	186,029	158,182	385,876	23,371	23,647			
Samyang Packaging Corporation	642,309	281,204	361,105	407,353	12,162	16,085			
KCI Co., Ltd.	123,130	24,944	98,186	109,605	17,816	17,766			
Samyang Engineering Plastics (Shanghai) Co., Ltd.	23,252	8,787	14,465	80,008	1,398	975			
Samyang Engineering Plastics (Hungary) Co., Ltd.	43,395	35,783	7,612	70,377	(4,117)	(4,021)			
Samyang Biopharm USA	3,941	812	3,129	-	(5,610)	(5,053)			
Samyang Engineering Plastics (Vietnam) Co., Ltd.	38,578	23,872	14,706	44,295	740	1,138			
Samyang Biopharm Hungary	25,612	15,901	9,711	73	(3,845)	(3,739)			
Samyang Holdings USA, LLC	33,327	-	33,327	-	(504)	(59)			
NC Chem Corporation	132,704	62,752	69,952	95,316	1,050	1,050			
CT Chemical Corporation ¹	-	-	-	2,818	42	42			
Samyang EcoTech Corporation	68,830	314	68,516	-	(72)	(4)			

The above financial information is based on the separate or standalone financial statements.

¹ On April 1, 2022, CT Chemical Corporation, a subsidiary, was merged into NC Chem Corporation, another subsidiary. CT Chemical Corporation's sales and profit for the year, presented, are the management performance results prior to its merger.

(in millions of

Korean won)	2021								
Name of subsidiary	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	Total comprehensive income (loss)			
Samyang Corporation	₩ 2,188,296	₩ 1,009,385	₩ 1,178,911	₩ 1,784,425	₩ 28,905	₩ 95,986			
Samyang Data Systems, Inc.	24,760	13,418	11,342	84,259	2,956	3,374			
Samyang F&B Co., Ltd.	7,546	25,897	(18,351)	1,545	(353)	(353)			
Samyang Innochem Corporation Samyang	441,080	176,607	264,473	561,382	231,745	231,934			
Biopharmaceuticals Corporation ¹	-	-	-	21,574	682	686			
Samyang Packaging Corporation	612,487	291,246	321,241	391,946	30,302	27,709			
KCI Co., Ltd.	97,369	14,796	82,573	81,501	10,155	10,147			
Samyang Engineering Plastics (Shanghai) Co., Ltd.	27,835	14,345	13,490	98,818	1,182	2,811			
Samyang Engineering Plastics (Hungary) Co.,									
Ltd.	50,533	38,899	11,634	82,485	3,113	3,115			
Samyang Biopharm USA	19,408	2,665	16,743	-	(17,184)	(17,040)			
Samyang Engineering Plastics (Vietnam) Co.,									
Ltd.	42,347	28,778	13,569	29,891	(43)	1,261			
Samyang Biopharm Hungary	29,023	15,574	13,449	-	(1,139)	(1,277)			
Samyang Holdings USA, LLC	10,612	-	10,612	-	357	1,212			
NC Chem Corporation ² CT Chemical	102,106	48,410	53,696	-	-	-			
Corporation ²	16,616	13,079	3,537	-	-	-			

The above financial information is based on the separate or standalone financial statements.

¹ On April 1, 2021, Samyang Biopharmaceuticals Corporation, a subsidiary, was merged into Samyang Holdings Corporation, the parent company. Samyang Biopharmaceuticals Corporation's sales and profit for the year, presented, are the management performance results prior to its merger.

² Profit or loss was not included in the consolidated financial statements as the control was acquired at the end of December 2021.

Financial information of non-controlling interests as at and for the years ended December 31, 2022 and 2021, is as follows:

(in millions of Korean won)	2022							
		amyang rporation ¹		C Chem poration		Others		Total
Current assets	₩	1,105,796	₩	55,731				
Non-current assets		1,843,853		76,973				
Current liabilities		503,591		42,509				
Non-current liabilities		915,068		20,243				
Equity		1,530,990		69,952				
Equity attributable to non- controlling interests		689,632		24,076	₩	17,872	₩	731,580
Sales		2,652,439		95,316				
Profit for the year		82,247		1,050				
Total comprehensive income Profit for the year		85,878		1,050				
attributable to non- controlling interests Total comprehensive		13,253		389		21,198		34,840
income attributable to non-controlling interests		14,858		389		21,936		37,183
Dividends for non- controlling interests		(10,448)		-		-		(10,448)
Cash flow from operating activities		84,939		2,139				
Cash flow from investing activities		(142,192)		(3,631)				
Cash flow from financing activities		116,355		5,945				

¹ Consolidated financial information of Samyang Corporation and its subsidiaries.

(in millions of Korean won)		20	021	
	Samyang Corporation	Samyang Innochem ¹ Corporation	Others	Total
Current assets	₩ 985,17	76 ₩ 295,123		
Non-current assets	1,816,87	145,957		
Current liabilities	749,24	118,220		
Non-current liabilities	626,86	58,387		
Equity	1,425,93	37 264,473		
Equity attributable to non- controlling interests	622,93	39 7,123	₩ 43,783	₩ 673,845
Sales	2,384,45	54 561,382		
Profit for the year	56,39	93 231,745		
Total comprehensive income Profit for the year	124,06	60,466		
attributable to non- controlling interests	15,23	37 1,644	19,505	36,386
Total comprehensive income attributable to non-controlling interests	14,35	50 1,637	44,511	60,498
Dividends for non- controlling interests	(11,86	9) -	-	(11,869)
Cash flow from operating activities	(17,94	3) 269,985	i	
Cash flow from investing activities	(15,66	0) (237,799)		
Cash flow from financing activities	47,85	53 (40,497))	

¹ Consolidated financial information of Samyang Corporation and its subsidiaries.

1.3 Changes in Scope for Consolidation

Subsidiaries newly included in the consolidation for the year ended December 31, 2022:

Name of subsidiary	Reason
Samyang Ecotech Corporation	Established by dividing recycling business division of Samyang Packaging Corporation through split-off.

Subsidiaries excluded from the consolidation for the year ended December 31, 2022:

Name of subsidiary	Reason
CT Chemical Corporation	Merged into NC Chem Corporation, a subsidiary of the Group

2. Summary of Significant Accounting Policies

2.1 Basis of Preparation

The Group maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS). The accompanying consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

Certain information attached to the Korean language financial statements, but not required for a fair presentation of the Group's financial position, financial performance or cash flows, is not presented in the accompanying consolidated financial statements.

The consolidated financial statements of the Group have been prepared in accordance with Korean IFRS enacted by the Act on External Audit of Stock Companies. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board (IASB) that have been adopted by the Republic of Korea.

The accompanying consolidated financial statements have been prepared on a historical cost basis, except when otherwise indicated. The consolidated financial statements are presented in Korean won (KRW) and all values are rounded to the nearest million, except when otherwise indicated.

2.2 Basis of Consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as at 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

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 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 consolidated 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, 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 assets including goodwill and liabilities of the subsidiary
- · Derecognizes the carrying amount of any non-controlling interests
- · Derecognizes the cumulative translation differences recognized in equity
- · Recognizes the fair value of the consideration received
- · Recognizes the fair value of any investment retained
- · Recognizes any gains or losses resulting from above accounting treatment in profit or loss
- · Reclassifies the parent's share of subsidiaries previously recognized in OCI to profit or loss or

retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities.

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 acquirer measures the non-controlling interests in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed 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.

If the business combination is achieved in stages, any previously held equity interest is remeasured at its acquisition date fair value and any resulting gain or loss is recognized in profit or loss.

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 Korean IFRS 1109, is measured at fair value with the changes in fair value recognized in the consolidated statement of comprehensive income in accordance with Korean IFRS 1109. Other contingent consideration that is not within the scope of Korean IFRS 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 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 Investments in Associates and Joint Ventures

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

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

The Group's investments in its associate and joint venture are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture 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 or joint venture since the acquisition date.

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

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

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

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

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

2.5 Current versus Non-current Classification

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

An asset is current when it is:

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

All other assets are classified as non-current.

A liability is current when:

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

The Group classifies all other liabilities as non-current.

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

2.6 Foreign Currency Translation

The Group's consolidated financial statements are presented in Korean won, which is also the Parent Company's functional currency. For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency.

(a) Transactions and balances

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

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

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.

In determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to

advance consideration, the date of the transaction is the date on which the Group initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of advance consideration.

(b) Translation of foreign operations

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

2.7 Cash and Cash Equivalents

Cash and cash equivalents in the consolidated statement of financial position comprise cash at banks and on hand and short-term deposits with a maturity of three months or less.

2.8 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.

(a) Financial assets

a) Initial recognition and measurement

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

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 FVPL, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient or for which the Group has applied the practical expedient are measured at the transaction price determined under Korean IFRS 1115.

In order for a financial asset to be classified and measured at amortized cost or FVOCI, 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.

b) Subsequent measurement

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

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

Financial assets at amortized cost (debt instruments)

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

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

Financial assets 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

Korean IFRS 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 finance income in the consolidated statement of comprehensive income 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.

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.

Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortized cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

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

c) Derecognition

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognized 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 the Group's 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.

d) Impairment of financial assets

The Group assesses expected credit losses on debt instruments measured at amortized cost or at fair value through other comprehensive income on the basis of forward-looking information. The impairment method depends on whether there is a significant increase in credit risk. However, for trade receivables, the Group applies a simplified method for recognizing lifetime expected credit losses from the date of initial recognition of the receivables.

(b) Financial liabilities

a) Initial recognition and measurement

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

The Group's financial liabilities include trade and other payables, borrowings, and debentures.

b) 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 at 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 Korean IFRS 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.

Borrowings

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

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

c) 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.

(c) Offsetting of financial instruments

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

2.9 Derivative Financial Instruments

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

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

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

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. 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 the consolidated statement of comprehensive income as finance costs. 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.

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the consolidated statement of comprehensive income. Amounts recognized as OCI are transferred to profit or loss when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognized or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognized as OCI are transferred to the initial carrying amount of the non-financial asset or liability.

Hedges of a net investment

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, 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 the consolidated statement of comprehensive income. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is transferred to the consolidated statement of comprehensive income.

2.10 Fair Value Measurement

The Group measures financial instruments, at fair value at each balance sheet date. Fair value related disclosures for financial instruments that are measured at fair value or where fair values are disclosed, are summarized in the following notes:

- · Quantitative Disclosures of Fair Value Measurement Hierarchy: Note 4
- Investment in Unquoted Equity Shares: Note 4
- · Financial Instruments (including those carried at amortized cost): Note 35
- Investment Properties: Note 11

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 consolidated financial statement are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

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

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

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

2.11 Inventories

Inventories are valued at the lower of cost and net realizable value. Purchase costs, transfer costs and costs incurred in bringing each product to its present location and conditions are accounted for initial cost of inventories. Unit costs of inventories are measured by total average method by month, except merchandise-in-transit, whose cost is determined using the specific identification method. 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.

2.12 Property, plant and equipment

Property, plant and equipment is 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 recognizes such parts as individual assets with specific useful lives and depreciates them accordingly. Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the property, plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are expensed in the consolidated statement of comprehensive income as incurred.

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

	Useful lives
Buildings	9 – 60 years
Structures	7 - 50
Machinery	2 - 20
Vehicles	2 - 6
Right-of-use assets	1 - 50
Others	2 - 20

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

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

2.13 Leases

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

The Group determines the lease term as the non-cancellable period of a lease, together with both (a) periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and (b) periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. When the lessee and the lessor each has the right to terminate the lease without permission from the other party, the Group should consider a termination penalty in determining the period for which the contract is enforceable.

(a) Right-of-use assets

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

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

(b) Lease liabilities

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

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

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

underlying asset.

(c) Short-term leases, leases of low-value assets and variable lease payments

The Group applies the short-term lease recognition exemption to its short-term leases (i.e. those leases have a lease term of less than 12 months from the commencement date of the lease and do not contain a purchase option). It also applies the leases of low-value assets and variable lease payments recognition exemptions to leases of office supplies that are considered to be low value. Lease payments on short-term leases, leases of low-value and variable lease payments assets are recognized as expenses 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 consolidated statement of comprehensive income 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.

2.14 Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the respective assets. All other borrowing costs are expensed in the period they occur.

2.15 Investment Properties

Investment properties are measured initially at cost, including transaction costs. Such cost includes the cost of replacing part of the asset if the recognition criteria are met. All other administration costs are expensed as incurred.

Investment properties are derecognized either when they have been disposed of or when they are permanently withdrawn from use and no future economic benefit is expected from their disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in profit of loss in the period of derecognition.

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.

2.16 Intangible Assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as of the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditure is reflected in the consolidated statement of comprehensive income in the year 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 is reviewed at least at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing 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 the consolidated statement of comprehensive income in the expense category consistent with the function of the intangible asset.

Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually, either individually or at the cash generating unit 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.

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 the consolidated statement of comprehensive income when the asset is derecognized.

Amortization is calculated on a straight-line basis over the estimated useful lives of the assets as follows:

	Useful lives
Industrial property rights	3 - 10 years
Development costs	3 - 5
Software	3 - 5
Other intangible assets	3 - 17
Memberships	Indefinite

2.17 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 cash-generating unit's (CGU) fair value less costs of disposal and its value in use. 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.

Impairment losses of continuing operations are recognized in the consolidated statement of comprehensive income in expense categories consistent with the function of the impaired asset.

For assets excluding goodwill, an assessment is made at the end of each reporting period 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 and loss.

Intangible assets with indefinite useful lives are tested for impairment annually, either individually or at the CGU level, as appropriate.

2.18 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 any provision is presented in the consolidated statement of comprehensive income net of any reimbursement.

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

Greenhouse gas emission rights and emission liabilities

The Group receives free emission rights as a result of emission trading schemes. The rights are received on an annual basis and, in return, the Group is required to remit rights equal to its actual emissions.

The Group has adopted the net liability approach to the emission rights granted. Where emission rights are purchased from other parties, they are recorded at cost. The Group derecognizes the emission rights from the consolidated statements of financial position at the timing of remittance or disposal.

A provision is recognized only when actual emissions exceed the emission rights granted and still held. The emission costs are recognized as cost of sales. Emission provision is measured by adding the following (a) and (b):

(a) The carrying value of the emission rights to be remitted for this year.

(b) The best estimate of the expenditure required to settle the present obligation for the actual emissions that exceed the emission rights granted at the end of the reporting period.

2.19 Pensions Benefits and Other Post-Employment Benefits

The Group operates a defined benefit plan and defined contribution plan.

Defined benefit plan

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding net interest and the return on plan assets, are recognized immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements 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 restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognizes service cost or net interest expense in the net defined benefit obligation under 'cost of sales' or 'selling and administrative expenses' in the consolidated statement of comprehensive income.

Defined contribution plan

For the employees under the defined contribution plan, the Group makes contributions of required funding amount regardless of the operating results of the defined contribution plan, and contributions are expensed in the period they are incurred.

2.20 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 is recognized in capital surplus.

2.21 Revenue from Contracts with 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.

(a) Sale of Goods

Revenue from sale of goods is recognized at the point in time when control of the asset is transferred to the customer, generally on delivery. The Group considers whether there are other promises in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated. In determining the transaction price for the sale of goods, the Group considers the effects of variable consideration.

a) 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. The Group is required to deduct the incentive provided to the customer from the transaction price unless it is consideration paid in exchange for the distinct goods or services transferred to the Group.

b) Right of return

Certain contracts provide a customer with a right to return the goods within a specified period. The Group uses the expected value method to estimate the goods that will not be returned because this method best predicts the amount of variable consideration to which the Group will be entitled. For goods that are expected to be returned, instead of revenue, the Group recognizes a refund liability (other current liability). A right of return asset (and corresponding adjustment to cost of sales) is also recognized for the right to recover products from a customer (other current asset).

c) Principal versus agent

If the Group sells the product in accordance with the contract with the customer and performs the transportation service, the Group is primarily an 'agent' in such transaction. Revenue from the shipping lane service is recognized as a net amount.

(b) Construction contract

If the outcome of a construction contract can be estimated reliably, contract revenue and contract cost associated with the construction contract are recognized by reference to the stage of completion of the contract activity at the end of the reporting period. The contract revenue consists of the amount agreed upon in the original contract, the amount estimated reliably and probable to result in revenue from a change construction with probable to result in revenue, compensation and incentives. The stage of completion of the contract is assessed by reference to the proportion of the actual contract costs incurred to the costs to complete the contract.

The stage of completion is assessed by reference to surveys of work performed. When the outcome of a construction contract cannot be estimated reliable, contract revenue is recognized only to the extent of contract costs incurred that are likely to be recoverable. Contract expenses are recognized as incurred unless they create an asset related to future contract activity. An expected loss on a

contract is recognized immediately in profit or loss.

The Group provides IT services to its customers. These services are sold on their own or with their facilities. Currently, the Group accounts for the facilities and services as a combined deliverable of a bundle of sales and recognizes revenue on a percentage of completion.

The IT service facilities and services provided by the Group are recognized as revenue over time since there is no alternative use within the Group and the Group has the enforceable right to payment for performance fulfilled. The IT service facilities and services provided by the Group are created or enhanced by the Group, thereby creating or increasing the value of the assets controlled by the customer, and thus the control of the goods and services is transferred to the customer over time. Therefore, revenue from construction contracts is recognized over time in accordance with the costbased input method (i.e., proportionate to the cost incurred for the performance of work relative to the expected cost).

(c) Commissions

If the Group acts in the capacity of an agent rather than as the principal in a transaction, the revenue recognized is the net amount of commission made by the Group.

2.22 Taxes

(a) Current income tax

Current income tax assets and liabilities for the current and prior periods 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 profit or 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.

(b) 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 ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable

future.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and unused tax losses, 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 ventures, 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.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

2.23 Government Grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. On the other hand, when the grant relates to an asset, it is presented as a deductible account of the related assets and offset with the depreciation expense of the related assets over the useful life of the related assets.

2.24 Earnings per Share

The Group presents basic and diluted earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares.

2.25 Cash Dividends

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

2.26 Changes in Accounting Policies and Disclosures

2.26.1 New and amended standards adopted by the Group

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing January 1, 2022.

(a) Amendment to Korean IFRS 1116 Leases - Covid-19 - Related Rent Concessions beyond June 30, 2021.

The application of the practical expedient, a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification, is extended to lease payments originally due on or before June 30, 2022. A lessee shall apply the practical expedient consistently to eligible contracts with similar characteristics and in similar circumstances. The amendment does not have a significant impact on the financial statements.

(b) Amendments to Korean IFRS 1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities to be recognized in a business combination in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of Korea IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*, and Korean IFRS 2121 *Levies*. The amendments also clarify that contingent assets should not be recognized at the acquisition date. The amendment does not have a significant impact on the financial statements.

(c) Amendments to Korean IFRS 1016 Property, Plant and Equipment - Proceeds before intended use

The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, the entity will recognize the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendment does not have a significant impact on the financial statements.

(d) Amendments to Korean IFRS 1037 Provisions, Contingent Liabilities and Contingent Assets -Onerous Contracts : Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendment does not have a significant impact on the financial statements.

(e) Annual improvements to Korean IFRS 2018-2020

Annual improvements of Korean IFRS 2018-2020 Cycle should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The amendment does not have a significant impact on the financial statements.

- Korean IFRS 1101 First time Adoption of Korean International Financial Reporting Standards
 Subsidiaries that are first-time adopters
- Korean IFRS 1109 *Financial Instruments* Fees related to the 10% test for derecognition of financial liabilities
- · Korean IFRS 1041 Agriculture Measuring fair value

2.2.2 New standards and interpretations not yet adopted by the Group

The following new accounting standards and interpretations have been published that are not mandatory for December 31, 2022 reporting periods and have not been early adopted by the Group.

(a) Amendments to Korean IFRS 1001 Presentation of Financial Statements - Classification of Liabilities as Current or Non-current

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability includes the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted. The Group is in review for the impact of these amendments on the financial statements.

(b) Korean IFRS 1001 Presentation of Financial Statements - Disclosure of Accounting Policies

The amendments to Korean IFRS 1001 define and require entities to disclose their material accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group is in review for the impact of these amendments on the financial statements.

(c) Korean IFRS 1008 Accounting policies, changes in accounting estimates and errors - Definition of Accounting Estimates

The amendments define accounting estimates and clarify how to distinguish them from changes in accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(d) Korean IFRS 1012 Income Taxes - Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments include an additional condition to the exemption to initial recognition of an asset or liability that a transaction does not give rise to equal taxable and deductible temporary differences at the time of the transaction. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(e) New Standard: Korean IFRS 1117 Insurance Contract

Korean IFRS 1117 *Insurance Contracts* will replace Korean IFRS 1104 *Insurance Contracts*. This Standard estimates future cash flows of an insurance contract and measures insurance liabilities using discount rates applied with assumptions and risks at the measurement date. The entity recognizes insurance revenue on an accrual basis including services (insurance coverage) provided to the policyholder by each annual period. In addition, investment components (Refunds due to termination/maturity) repaid to a policyholder even if an insured event does not occur, are excluded from insurance revenue, and insurance financial income or expense and the investment income or expense are presented separately to enable users of the information to understand the sources of income or expenses. This Standard should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted for entities that applied Korean IFRS 1109 *Financial Instruments*. The Group does not expect that these amendments have a significant impact on the financial statements.

Further amendments made in December 2021 added a transition option that permits an entity to apply an optional classification overlay in the comparative period(s) presented on initial application of Korean IFRS 1117. The classification overlay applies to all financial assets, including those held in respect of activities not connected to contracts within the scope of Korean IFRS 1117. It allows those assets to be classified in the comparative period(s) in a way that aligns with how the entity expects those assets to be classified on initial application of Korean IFRS 1109. The classification can be applied on an instrument-by-instrument basis.

(f) Korean IFRS 1001 Presentation of Financial Statements - Disclosure of gain or loss on valuation of financial liabilities subject to adjustment of exercise price

If the entire or a part of financial instrument, whose exercise price is subject to change due to the issuer's share price, is classified as a financial liability, the carrying amount of the financial liability and related gains and losses shall be disclosed. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect

that these amendments have a significant impact on the financial statements.

2.27 Business Combination of Entities under a Common Control

The Group applies the book amount method to account for business combinations of entities under a common control. Identifiable assets acquired and liabilities assumed in a business combination are measured at their book amounts on the consolidated financial statements of the Ultimate Parent Company. However, if the consolidated financial statements are not available, the Group applies the carrying amount of assets and liabilities accounted on acquiree's financial statements. In addition, the difference between the sum of consolidated book amounts of the assets and liabilities transferred and accumulated other comprehensive income; and the consideration paid is recognized as reserves.

2.28 Significant Accounting Judgments, Estimates and Assumptions

The preparation of the 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 are summarized in the following note:

	Notes
Capital management	34
Financial risk management and policies	34
Sensitivity analysis and disclosure	34

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing material adjustments 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 statement was 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.

(a) Impairment of non-financial assets

The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. Goodwill and intangible assets with indefinite useful lives are tested for impairment annually, or when circumstances indicate that the carrying value may be impaired. Other non-financial assets are tested for impairment when circumstances indicate that its carrying amount may not be recoverable. In determining a value in use, management estimates future cash flows to be derived from the asset or CGU, and applies the appropriate discount rate to those future cash flows.

2.29 Approval of Issuance of the Financial Statements

The consolidated financial statements for the year ended December 31, 2022 were approved by the Board of Directors on February 8, 2023 and will be submitted to the general shareholders' meeting to be held on March 24, 2023.

3. Operating Segments

The Group has three reportable segments, as described below, whose financial information is regularly reported to the Group's chief operating decision maker, and details are as follows:

Segment	Product or services	Customer information
Food	Sugar, cooking oil, flour, and processed foods	Distributors
Chemicals	Engineering plastic, PET flake, resins and BPA, raw materials for cosmetics and household products.	Manufacturers
Others	Biopharmaceutical and leasing	Distributors and manufacturers

Financial performance for each segment for the years ended December 31, 2022 and 2021, is as follows:

(in millions of Korean won)						20	22					
		Foods	c	Chemicals		Others		Sub-total		nsolidation ljustments		Total
Sales:	₩	1,493,814	₩	1,701,503	₩	291,219	₩	3,486,536	₩	(169,758)	₩	3,316,778
External sales		1,489,192		1,643,388		184,198		3,316,778		-		3,316,778
Inter-segment sales		4,622		58,115		107,021		169,758		(169,758)		-
Depreciation and amortization		34,673		61,125		20,716		116,514		(2,482)		114,032
Impairment loss		-		4,003		-		4,003		-		4,003
Interest income		2,099		6,251		5,061		13,411		(112)		13,299
Interest expenses		11,338		13,243		4,048		28,629		(285)		28,344
Profit (loss) for the year ¹	₩	5,534	₩	87,077	₩	52,581	₩	145,192	₩	(35,837)		109,355
Finance income not allocated to segment												16,517
Gain on equity method investments												792
Profit before income tax											₩	126,664

¹ It represents net profit (loss) before income tax, excluding finance income and cost not allocated to the segment and gain on equity method investments.

(in millions of Korean

won)	2021											
	Foods		С	Chemicals		Others		Sub-total		Consolidation adjustments		Total
											₩	
Sales:	₩	1,240,323	₩	1,790,793	₩	458,856	₩	3,489,972	₩	(382,659)		3,107,313
External sales		1,237,754		1,707,239		162,320		3,107,313		-		3,107,313
Inter-segment sales		2,569		83,554		296,536		382,659		(382,659)		-
Depreciation and amortization		32,076		48,934		14,701		95,711		(3,447)		92,264
Impairment loss		-		6,710		-		6,710		-		6,710
Interest income		121		1,984		3,478		5,583		(159)		5,424
Interest expenses		945		8,620		4,894		14,459		(243)		14,216
Profit (loss) for the year ¹	₩	26,943	₩	330,282	₩	5,745	₩	362,970	₩	(21,580)		341,390
Finance income not allocated to segment												725
Gain on equity method investments												2,756
Profit before income tax											₩	344,871

¹ It represents net profit (loss) before income tax, excluding finance income and cost not allocated to the segment and gain on equity method investments.

Details of geographical sales by each region for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2021		
Korea	₩	2,612,072	₩	1,950,071
China		156,778		123,752
Japan		112,933		545,260
Other Asian countries		192,801		185,289
Europe		114,367		127,167
Others		127,827		175,774
	₩	3,316,778	₩	3,107,313

The revenue information above is based on customers' locations.

Details of non-current assets by each region as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		
Korea	₩	2,015,802	₩	2,015,062	
China		5,217		5,079	
Hungary		29,807		31,929	
Vietnam		20,191		20,428	
USA		777		1,314	
Japan		411		90	
	$\forall \forall$	2,072,205	₩	2,073,902	

The non-current asset information above is based on the geographical locations of the assets. The non-current assets above consist of property, plant and equipment, intangible assets and investment properties.

4. Fair Value

There are no significant changes in business and economic environment which affect fair value of financial assets and financial liabilities for the year ended December 31, 2022. Financial instruments whose carrying amount is a reasonable approximation of fair value are excluded from the fair value disclosures.

4.1 Fair Value of Financial Instruments by Category

Details of the carrying amount and fair value of financial instruments as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		20	22	2021				
		Carrying amount F		Fair value		Carrying amount		ir value
Financial assets								
Financial assets at FVOCI	₩	381,376	₩	381,376	₩	404,968	₩	404,968
Financial assets at FVPL		23,808		23,808		16,356		16,356
Derivative financial assets		5,153		5,153		1,274		1,274
	₩	410,337	₩	410,337	₩	422,598	₩	422,598
Financial liabilities								
Derivative financial liabilities	₩	12,591	₩	12,591	₩	230	₩	230

4.2 Fair Value Hierarchy

To provide an indication about the reliability of the inputs used in determining fair value, the Group classifies its financial instruments into the three levels prescribed under the accounting standards. Items that are measured at fair value are categorized by the fair value hierarchy levels, and the defined levels are as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities that an entity can access at the measurement date (Level 1).
- All inputs other than quoted prices included in level 1 that are observable (either directly that is, prices, or indirectly that is, derived from prices) for the asset or liability (Level 2).
- Unobservable inputs for the asset or liability (Level 3).

Fair value hierarchy classifications of the financial instruments that are measured at fair value as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	n) <u>2022</u>							
		Level 1		vel 2	Level 3		Total	
Recurring fair value measurements								
Financial assets at FVOCI								
Listed equity instruments	₩	307,710	₩	-	₩	-	₩	307,710
Unlisted equity instruments		-		2,260	69,	999		72,259
Debt instruments		-		1,407		-		1,407
Financial assets at FVPL								
Beneficiary certificates		-		-	18,	164		18,164
Compound financial instruments		-		-	5,	244		5,244
Capital contribution		-		-		168		168
Saving insurance		-		232		-		232
Derivatives								
Derivative assets		-		5,153		-		5,153
Derivative liabilities		-		12,591		-		12,591

(in millions of Korean won)	2021								
	L	Level 1 Level 2		Level 3		Total			
Recurring fair value measurements Financial assets at FVOCI									
Listed equity instruments	₩	355,258	₩	-	₩ -	₩	355,258		
Unlisted equity instruments		-		2,260	47,447		49,707		
Debt instruments		-		3	-		3		
Financial assets at FVPL									
Beneficiary certificates		-		-	12,444		12,444		
Compound financial instruments		-		-	3,744		3,744		
Capital contribution		-		-	168		168		
Derivatives									
Derivative assets		-		1,274	-		1,274		
Derivative liabilities		-		230	-		230		

The Group recognizes transfers between levels of the fair value at the end of the reporting period.

4.3 Valuation Techniques and the Inputs

The valuation techniques used to measure the fair value of Level 2 and the input variables that are significant but not observable are as follows:

(in millions of Korean won)	Valuation techniques	Fair value	Inputs		
Debt instruments	Discount cash flows method	₩ 1,407	Market interest rate		
Derivative assets	Discount cash flows method	5,153	Discount rate		
Derivative liabilities	Discount cash flows method	12,591	Discount rate		
Saving insurance and others	Cancellation refund	232	Crediting rate and others		
Unlisted equity instruments	Market approach	2,260	3 rd party transaction price		

The valuation techniques used to measure the fair value of Level 3 and the input variables that are significant but not observable are as follows:

(in millions of Korean won)	Valuation techniques	Fair value	Inputs	Effects of input variables on fair value
Unlisted equity instruments	Discount cash flows method	₩ 69,999	Discount rate 7.40% ~ 14.07% Perpetual growth rate 0%	Reduced fair value when discount rate rises Increase in fair value when permanent growth rate increases
Beneficiary certificates	Asset value approach method	18,164	-	-
Compound financial instruments	Asset value approach method	5,244	-	-
Capital contribution	Asset value approach method	168	-	-

Changes in the fair value of Level 3 for the year ended December 31, 2022, are as follows:

(in millions of Korean won)	Financial assets at FVOCI		Financial assets a FVPL		
Beginning balance	₩	47,447	₩	16,356	
Acquisitions		2,620		5,423	
Valuation		19,902		1,797	
Disposals		(92)		-	
Others		122		-	
Ending balance	₩	69,999	₩	23,576	

If other input variables remain constant for fair values that are currently classified as Level 3 as at December 31, 2022, the impact of a significant but not observable input variable that is reasonably fluctuating at the reporting date is as follows:

(in millions of Korean won)	Inputs	1% decre	ease	1% increase		
Unlisted equity instruments	Discount rate	₩	8,744	₩	(6,736)	

5. Trade and Other Receivables

Details of trade and other receivables as at December 31, 2022 and 2021, are as follows:

(in millions of Korean				2022						2021		
won)	all for	mounts before owance doubtful ccounts	Allowance for doubtful accounts		Carrying amount		Amounts before allowance for doubtful accounts		Allowance for doubtful accounts			arrying mount
Current assets:												
Trade receivables	₩	342,418	₩	(1,353)	₩	341,065	₩	336,790	₩	(1,345)	₩	335,445
Other receivables Due from customers		17,455		-		17,455		6,426		-		6,426
for contract work Other loans and		2,390		-		2,390		2,083		-		2,083
receivables		7,829	_	(42)		7,787		2,625		(42)		2,583
		370,092		(1,395)		368,697		347,924		(1,387)		346,537
Non-current assets: Non-current portion of												
other receivables		3,788		-		3,788		4,747		-		4,747
Long-term loans		3,020		-		3,020		3,112		-		3,112
Guarantee deposits		3,054		-		3,054		8,244		-		8,244
		9,862		-		9,862		16,103		-		16,103
		379,954		(1,395)		378,559		364,027		(1,387)		362,640

Changes in allowance for doubtful accounts on trade and other receivables for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	20	022	:	2021
Beginning balance	₩	1,387	₩	1,003
Write-offs		(221)		-
Impairment loss		229		149
Business combinations		-		340
Others		-		(105)
Ending balance	₩	1,395	₩	1,387

6. Inventories

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

(in millions of Korean

won)				2022			2021								
	Ace	quisition cost	Allowance for valuation loss			Carrying amount	Ac	cquisition cost		llowance valuation loss	Carrying amount				
Merchandise	₩	49,068	₩	(652)	₩	48,416	₩	41,876	₩	(398)	₩	41,478			
Finished goods		156,204		(9,111)		147,093		133,926		(13,029)		120,897			
Semi-finished goods		57,268		(5,223)		52,045		44,489		(2,271)		42,218			
By-product		451		-		451		318		-		318			
Work-in-process		10,209		-		10,209		8,318		-		8,318			
Raw materials		121,014		(672)		120,342		134,612		(1,408)		133,204			
Supplementary materials		26,148		(853)		25,295		26,427		(756)		25,671			
Supplies		11,204		(202)		11,002		8,890		(96)		8,794			
Materials-in-transit		115,767		-		115,767		119,627		-		119,627			
	₩	547,333	₩	(16,713)	₩	530,620	₩	518,483	₩	(17,958)	₩	500,525			

Gain and loss on valuation of inventories for the years ended December 31, 2022 and 2021, is as follows:

(in millions of Korean won)	2022			2021	
Loss on valuation of inventories (reversal)	₩	8,061	₩		(3,578)

The Group's inventories have been provided as collateral for the borrowings and commitments, and details are explained in Note 31.

7. Other Assets

Details of other assets as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	20	2022					
Current							
Prepaid expenses	W	2,259	₩	3,198			
Advance payments		8,015		6,882			
Accrued income		5,888		2,948			
Prepaid value added tax		2,763		1,865			
Return expected assets		530		655			
		19,455		15,548			
Non-current							
Long-term prepaid expenses		814		1,375			
Long-term accrued income		27		-			
		841		1,375			
	\mathbf{W}	20,296	₩	16,923			

8. Property, Plant and Equipment

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

(in millions of Korean

И	10)/	7

(in millions of Korean won)									2	2022								
wony		Land	в	Buildings	St	ructures	Ν	Aachinery	Ve	hicles		ht-of-use assets		Others		nstruction- -progress		Total
Acquisition cost				Ū														
Beginning balance	₩	558,133	₩		₩	113,178	₩	1,156,324	₩	3,702	₩	31,431	₩	,	₩	230,057	₩2	744,205
Acquisitions		11		44		-		2,653		15		5,323		528		109,165		117,739
Disposals Foreign currency translation		(682)		(1,536)		(7,445)		(15,098)		(255)		(1,868)		(1,981)		(929)		(29,794)
differences		(6)		(31)		108		47		(1)		225		22		284		648
Others ¹		4,579		55,190		10,578		151,909		205		(43)		11,360		(240,538)		(6,760)
Ending balance	₩	562,035	₩	557,968	₩	116,419	₩	1,295,835	₩	3,666	₩	35,068	₩	157,008	₩	98,039	₩2	826,038
Accumulated																		
depreciation																		
Beginning balance	₩	-	₩	156,689	₩	57,098	₩	749,890	₩	2,171	₩	8,769	₩	,	₩	-	₩1	093,751
Disposals		-		(1,189)		(3,448)		(13,637)		(255)		(1,561)		(1,886)		-		(21,976)
Depreciation Foreign currency translation		-		16,143		3,923		63,261		415		4,828		10,732		-		99,302
differences		-		(84)		8		(193)		(1)		32		9		-		(229)
Others ¹		-		(702)		(67)		-		-		(146)		-		-		(915)
Ending balance	₩	-	₩	170,857	₩	57,514	₩	799,321	₩	2,330	₩	11,922	₩	127,989	₩	-	₩1	169,933
Accumulated impairment loss																		
Beginning balance	₩	-	₩	2,860	₩	8,708	₩	14,086	₩	-	₩	461	₩	60	₩	912	₩	27,087
Impairment loss ²		-		-		-		3,914		-		-		33		-		3,947
Disposals		-		-		(1,119)		(1,322)		-		-		-		(912)		(3,353)
Ending balance	₩	-	₩	2,860	₩	7,589	₩	16,678	₩	-	₩	461	₩	93	₩	-	₩	27,681
Government grants																		
Beginning balance	₩	-	₩	-	₩	7	₩	0,0	₩	-	₩	-	₩	1,812	₩	-	₩	6,995
Acquisitions		-		2,816		299		3,182		-		-		869		100		7,266
Disposals		-		-		-		(8)		-		-		-		-		(8)
Depreciation Foreign currency translation		-		(45)		(8)		(1,069)		-		-		(661)		-		(1,783)
differences		-		(11)		-		(3)		-		-		(2)		-		(16)
Ending balance	₩	-	₩	2,760	₩	298	₩	7,278	₩	-	₩	-	₩	2,018	₩	100	₩	12,454
Carrying amount				•														
Beginning balance	₩	558,133	₩	344,752	₩	47,365	₩	387,172	₩	1,531	₩	22,201	₩	26,073	₩	229,145	₩1	616,372
Ending balance	₩	562,035	₩	,	₩	51,018	₩	472,558	₩	1,336	₩	22,685	₩	26,908	₩	97,939		615,970

¹Others include # 3,748 million of transfer from construction-in-progress to intangible assets, and ₩ 2,876 million of reclassification of investment properties, and ₩ (779) million of reclassification of other accounts.

² The Group recognized an impairment loss of ₩ 3,947 million on unused assets and the amount is included in other non-operating expenses.

(in millions of Korean									2	2021								
won)								h :			-	ht-of-use		046		nstruction-		Tatal
Acquisition cost		Land	в	uildings	51	ructures	N	lachinery	ve	hicles	i	assets		Others	IN	-progress		Total
Beginning balance	₩	555,554	₩	456,672	₩	110,363	₩	1,016,379	₩	2,375	₩	36,730	₩	126,927	₩	172,406	₩2	2,477,406
Acquisitions		1,348		336		22		2,155		-		14,095		486		182,313		200,755
Disposals		(90)		(221)		(31)		(6,979)		(164)		(14,702)		(4,750)		(171)		(27,108)
Increase due to																		
business		10 00						17 000						10 500				
combinations Foreign currency		12,590		41,060		-		47,926		278		174		16,529		1,407		119,964
translation																		
differences				934		323		1,987		10		654		162		(121)		3,949
Others ¹		(11,269)		5,520		2,501		94,856		1,203		(5,520)		7,725		(125,777)		(30,761)
Ending balance	₩	558,133	₩	504,301	₩	113,178	₩	1,156,324	₩	3,702	₩	31,431	₩	147,079	₩	230,057	₩2	2,744,205
Accumulated		,				- / -		,,-		- / -				1		/		/ /
depreciation																		
Beginning balance	₩	-	₩	138,558	₩	53,521	₩	679,734	₩	1,844	₩	14,573	₩	103,275	₩	-	₩	991,505
Disposals		-		(99)		(6)		(5,799)		(164)		(13,201)		(4,164)		-		(23,433)
Increase due to																		
business								~~ ~~~										~~ ~~~
combinations		-		4,333		-		22,608		180		-		11,418		-		38,539
Depreciation Foreign currency		-		14,082		3,567		52,452		308		7,481		8,519		-		86,409
translation																		
differences		-		325		16		895		3		116		86		-		1,441
Others ¹		-		(510)		-		-		-		(200)		-		-		(710)
Ending balance	₩	-	₩	156,689	₩	57,098	₩	749,890	₩	2,171	₩	8,769	₩	119,134	₩	-	₩1	1,093,751
Accumulated impairment loss						·		· · ·										
Beginning balance	₩	-	₩	2,860	₩	8,140	₩	12,088	₩	-	₩	524	₩	572	₩	912	₩	25,096
Impairment loss ²		-		· -		568		1,998		-		-		-		-		2,566
Disposals		-		-		-		-		-		(63)		(512)		-		(575)
Ending balance	₩	-	₩	2,860	₩	8,708	₩	14,086	₩	-	₩	461	₩	60	₩	912	₩	27,087
Government grants																	_	
Beginning balance	₩	-	₩	2	₩	9	₩	1,633	₩	-	₩	-	₩	951	₩	-	₩	2,595
Acquisitions		-		-		-		274		-		-		81		433		788
Disposals		-		-		-		-		-		-		(2)		-		(2)
Increase due to																		
business																		
combinations		-		-		-		3,382		-		-		904		-		4,286
Depreciation		-		(2)		(2)		(263)		-		-		(405)		-		(672)
Foreign currency translation																		
differences		-		-		-		150		-		-		283		(433)		-
Ending balance	₩	-	₩	-	₩	7	₩	5,176	₩	-	₩	-	₩	1,812	₩	-	₩	6,995
Carrying amount						·		2,0	·		·			.,				2,220
Beginning balance	₩	555,554	₩	315,252	₩	48,693	₩	322,924	₩	531	₩	21,633	₩	22.129	₩	171.494	₩ 1	1,458,210
Ending balance	₩	558,133	₩	344,752	₩	47.365	₩	387,172	₩	1,531	₩	22,201	₩	26,073	₩	229.145	-	1,616,372
Linding Salarioo		000,100		311,702		,000		001,172		1,001		,201		20,010		220,140		.,310,012

¹Others include $\forall 11,679$ million of transfer from construction-in-progress to intangible assets, and ₩ 19,059 million of reclassification of investment properties, and ₩ (687) million of reclassification of other accounts.

² The Group recognized an impairment loss of 2,566 million on unused assets and the amount is included in other non-operating expenses.

As at December 31, 2022, the Group's property, plant and equipment has been provided as collateral for the borrowings and commitments, and details are explained in Note 31.

During the year, the Group has capitalized borrowing costs amounting to $\forall 934$ million on property, plant and equipment that are qualifying assets. The capitalization rate of borrowings used to determine the amount of borrowing costs to be capitalized is 1.87%~3.01%.

Line items including depreciation in the statements of comprehensive income for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022		2021
Cost of sales	₩	82,424	₩	67,668
Selling and administrative expenses, and others		15,095		18,069
	₩	97,519	₩	85,737

9. Leases

Set out below is information for leases when the Group is a lessee.

(a) Amounts recognized in the consolidated statement of financial position

The consolidated statement of financial position shows the following amounts relating to leases:

(in millions of Korean won)		2022		2021		
Right-of-use assets ¹						
Properties	₩	11,407	₩	11,656		
Vehicles		3,258		2,576		
Others		8,020		7,969		
	₩	22,685	₩	22,201		

¹ Included in the line item 'property, plant and equipment' in the statements of financial position.

(in millions of Korean won)	2	022	2021		
Lease liabilities ¹					
Current	₩	4,819	₩	4,421	
Non-current		19,411		19,920	
	₩	24,230	₩	24,341	

¹ Included in the line item 'other financial liabilities' in the statements of financial position.

Additions to the right-of-use assets during the 2022 and 2021 financial years were $\forall 5,323$ million and $\forall 14,095$ million, respectively.

(b) Amounts recognized in the consolidated statement of comprehensive income

The consolidated statement of comprehensive income shows the following amounts relating to leases:

(in millions of Korean won)		2022		2021		
Depreciation of right-of-use assets						
Properties	₩	2,479	₩	5,357		
Vehicles		1,463		1,222		
Others		886		902		
	₩	4,828	₩	7,481		
Interest expense relating to lease liabilities (included in finance cost)	₩	1,172	₩	676		
Expense relating to short-term leases (included in cost of goods sold and selling and administrative expenses)		1,923		2,043		
Expense relating to leases of low-value assets that are not short-term leases (included in selling and administrative expenses)		755		639		
Expense relating to variable lease payments not included in lease liabilities (included in selling and						
administrative expenses)		16,922		15,133		

The total cash outflow for leases in 2022 was $\forall 26,106$ million (2021: $\forall 26,810$ million). During the year ended December 31, 2021, revenue from sub-lease for right-of-use assets was $\forall 23$ million.

10. Intangible Assets

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

(in millions of Korean won)								2022						
	Industrial property Goodwill rights Software			Club membership Others ¹			Intangible assets under development			Total				
Beginning balance	₩	237,200	₩	275	₩	9,257	₩	14,251	₩	72,666	₩	27,834	₩	361,483
Acquisitions		-		107		1,966		97		-		7,635		9,805
Disposals		-		-		-		(1,141)		-		-		(1,141)
Amortization		-		(133)		(10,140)		-		(4,729)		-		(15,002)
Impairment ²		-		-		(56)		-		-		-		(56)
Foreign currency translation differences		-		-		(82)		-		1		-		(81)
Others ³		-		7		39,061		122		(8)		(35,442)		3,740
Ending balance	₩	237,200	₩	256	₩	40,006	₩	13,329	₩	67,930	₩	27	₩	358,748

¹ Others include brand value and customer relationships.

² The Group recognized an impairment loss of ₩ 56 million on unused assets and the amount is included in other non-operating expenses.

³ Others include # 3,748 million of transfers from construction-in-progress to intangible assets and other account reclassifications of $\forall \forall$ (8) million.

(in millions of Korean won)							2021						
	Goodwill	Indus prope righ	erty	Software		Club membership		Others ¹		Intangible assets under development			Total
Beginning balance	₩ 201,795	₩	312	₩	6,998	₩	13,754	₩	45,228	₩	-	₩	268,087
Acquisitions	-		80		250		77		-		20,892		21,299
Disposals	-		-		-		(20)		-		-		(20)
Amortization	-	(141)		(2,947)		-		(2,721)		-		(5,809)
Increase due to business combinations	35,405		22		308		440		30,156		-		66,331
Foreign currency translation differences	-		-		21		-		3		-		24
Others ²			2		4,627		_		-		6,942		11,571
Ending balance	₩ 237,200	₩	275	₩	9,257	₩	14,251	₩	72,666	₩	27,834	₩	361,483

¹Others include brand value and customer relationships.

² Others include $\forall 11,679$ million of transfers from construction-in-progress to intangible assets, decrease due to government grants of $\forall (110)$ million, and other account reclassifications of $\forall 2$ million.

Details of goodwill allocated to CGUs and group of CGUs as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022		2021
Processed oil and fat	₩	3,154	₩	3,154
Samyang Packaging Corporation		164,590		164,590
KCI Co., Ltd		34,051		34,051
NC Chem Corporation		35,405		24,747
CT Chemical Corporation		-		10,658
	₩	237,200	₩	237,200

The value in use of CGUs and group of CGUs were estimated using the discounted cash flows method. The key assumptions used in the estimation of value in use are as follows:

- Cash flows were projected based on past experiences, actual financial results and future business plan.
- The revenue growth rate for the future was estimated based on past average growth rates. The discount rate applied is based on the average-weighted average cost of capital of CGU and group of CGU to determine the recoverable amount of CGU and group of CGU.
- The key assumptions used in calculating value in use represent management's expectation on future trends in each CGUs and group of CGUs, which are based on historical data from external and internal sources. As a result of impairment test, the CGU and group of CGU's recoverable amount exceeds its carrying amount.

(in millions of Korean won)	Samyang Packaging Corporation		к	CI Co., Ltd.	NC Chem Corporation		
Perpetual growth rate		0%		0%		1%	
Discount rate		9.49%		8.79%		10.42%	
Value in use	\mathbf{W}	466,416	₩	200,498	₩	213,273	

When the perpetual growth rate and discount rate fluctuate, the value in use is as follows.

(in millions of Korean won)		•	g Packaging poration	KCI Co., Ltd.			NC Chem Corporation		
Perpetual growth rate	Increase 1%	₩	506,304	₩	219,683	₩	237,586		
Discount rate	Increase 1%		415,700		178,576		187,273		
	Decrease 1%		529,276		228,133		245,739		

Details of intangible assets with indefinite useful lives allocated to group of CGUs as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022		2021	Details		
Food	₩	15,455	₩	15,455	Value of brand names		

Key assumptions used in testing intangible assets with indefinite useful lives allocated to group of CGUs for impairment are as follows, and as a result of impairment testing, value in use exceeds the carrying amount.

(in millions of Korean won)	Food				
Perpetual growth rate		0%			
Discount rate		7.0%			
Value in use	₩	1,149,488			

When the perpetual growth rate and discount rate fluctuate, the value in use is as follows.

(in millions of Korean won)			Food
Perpetual growth rate Discount rate	Increase 1% Increase 0.5% Decrease 0.5%	₩	1,262,279 1,072,042 1,238,880

Research and development costs recognized as expenses for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Selling and administrative expenses	₩	26,564	₩	32,201

Line items including amortization in the statements of comprehensive income for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2	022	2021		
Cost of sales	₩	184	₩	168	
Selling and administrative expenses and others		14,818		5,641	
	\mathbf{W}	15.002	₩	5.809	

11. Investment Properties

Changes in investment properties for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022									
	Land			Buildings	Ri	ght-of-use assets	Total			
Beginning balance	₩	81,077	₩	8,946	₩	6,024	₩	96,047		
Acquisition		-		127		-		127		
Disposals		(51)		(1)		-		(52)		
Depreciation		-		(629)		(882)		(1,511)		
Others ¹		298		2,578		-		2,876		
Ending balance	₩	81,324	₩	11,021	₩	5,142	₩	97,487		

¹ Others include transfer from property, plant and equipment to investment properties.

(in millions of Korean won)	_			20	021			
					R	ight-of-use		
		Land		Buildings		assets		Total
Beginning balance	₩	70,102	₩	7,930	₩	-	₩	78,032
Disposals		(294)		(32)		-		(326)
Depreciation		-		(718)		-		(718)
Others ¹		11,269		1,766		6,024		19,059
Ending balance	₩	81,077	₩	8,946	₩	6,024	₩	96,047

¹ Others include transfer from property, plant and equipment to investment properties.

Details of income and expenses associated with investment properties for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022		2021		
Rental income	₩	5,857	₩	3,813		
Operating costs		(3,025)		(2,330)		

The carrying amount and fair value of investment properties as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021		
Carrying amount Fair value ¹	₩	97,487 221,631	₩	96,047 196,129		

¹ Fair value is measured using the official land price and price index.

No impairment loss (reversal) on investment properties was recognized for the years ended December 31, 2022 and 2021.

As at December 31, 2022, the Group's investment properties have been provided as collateral for the borrowings and commitments, and the details are explained in Note 31.

12. Interests in Associates and Joint Ventures

Details of investment in joint ventures and investment in associates as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Investment in associates	₩	42,961	₩	43,502
Investment in joint ventures	₩	242,052 285,013	₩	246,340 289,842

Details of investments in associates as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)			2022	2	2021	
Associates	Location	Main business	Date of financial statements	Percentage of ownership (%)	Carrying amount	Percentage of ownership (%)	Carrying amount
Kyungwon Construction Co., Ltd.	Korea	Managing country club Medicine	Dec. 31	25.00	₩ 26,345	25.00	₩ 25,643
Akina, Inc.	USA	research and	Dec. 31				
		development		22.54	726	22.54	637
KCI Japan Co., Ltd.	Japan	Wholesale	Dec. 31	45.00	682	45.00	698
The Perfumery Holdings, LLC	USA	Holding Company	Dec. 31	30.01	8,132	30.33	8,637
Keonchang Chemical Industry Co., Ltd. ¹	Thailand	Wholesale	Dec. 31	49.00	-	49.00	-
Bucheon Sosa PFV Co., Ltd. ²	Korea	Development of real estate	Dec. 31	15.00	2,404	15.00	2,727
Solid Ionics Co., Ltd. ³	Korea	Manufacture of solid electrolyte materials	Dec. 31	18.82	2,615	20.00	2,891
OSC KOREA CO., LTD ³	Korea	Computer programming service	Dec. 31	18.67	2,057	20.00	2,113
KINFOLK BEAUTY CO., LTD. ³	Korea	Distribution and sales of cosmetics	Dec. 31	19.00	<u> </u>	19.00	156_
					₩ 42,961		₩ 43,502

¹ The financial position of Keonchang Chemical Industry Co., Ltd. is not identifiable as the entity has discontinued its operations. Therefore, the investment has been impaired in full and the equity method is no longer applied to the investment.

² Although the Group holds less than 20% of the shares of Bucheon Sosa PFV Co., Ltd., it is determined that the Group can exercise significant influence by the contractual right to participate in decision-making body and, therefore, the Group classified it as investments in associates.

³ Although the Group holds less than 20% of shares in these entities, it is classified as associates as the Group can exercise significant influence due to the right to appoint directors.

Details of investments in joint ventures as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)			202	2	2021			
Joint venture	Location	Main business	Date of financial statements	Percentage of ownership (%)	Carrying amount	Percentage of ownership (%)	Carrying amount		
Huvis Corporation ^{1,2}	Korea	Manufacture and sale of raw materials of polyester, etc.	Dec. 31	25.50	₩ 96,581	25.50	₩ 119,173		
Samnam Petrochemical Co., Ltd.	Korea	Manufacture and sale of TPA Manufacture	Dec. 31	40.00	95,734	40.00	86,733		
Samyang Kasei Co., Ltd.	Korea	and sale of Poly carbonate	Dec. 31	50.00	30,912	50.00	23,201		
Samyang Fine Technology Co., Ltd.	Korea	Manufacture and sale of IER	Dec. 31	50.00	18,825	50.00	17,233		
					₩ 242,052		₩ 246,340		

¹ The Group's percentage of equity ownership of Huvis Corporation is 26.73% as Huvis Corporation holds 1,589,680 shares of treasury shares.

² For the year ended December 31, 2022, an impairment test was conducted on shares of Huvis Corporation held by the Group. As a result of the impairment test, the value in use was \forall 105,125 million, exceeding the carrying amount.

In accordance with the relevant joint agreements, the Group has residual interests in the net assets of the entities. Accordingly, the Group has classified its interests in the entities as joint ventures.

Changes in investments in associates and joint ventures for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)						2022				
		eginning alance	Div	vidend	Ending balance					
Huvis Corporation	₩	119,173	₩	(2,639)	₩	(21,233)	₩	1,280	₩	96,581
Samnam Petrochemical										
Co., Ltd.		86,733		(3,200)		11,908		293		95,734
Samyang Kasei Co., Ltd.		23,201		(1,600)		8,876		435		30,912
Samyang Fine Technology										
Co., Ltd.		17,233		-		1,377		215		18,825
Kyungwon Construction										
Co., Ltd.		25,643		(375)		1,077		-		26,345
Akina, Inc.		637		-		59		30		726
KCI Japan Co., Ltd.		698		(56)		102		(62)		682
The Perfumery Holdings,										
LLC		8,637		-		(563)		58		8,132
Bucheon Sosa PFV Co.,										
Ltd		2,727		-		(323)		-		2,404
Solid Ionics Co., Ltd.		2,891		-		(276)		-		2,615
OSC KOREA CO.,LTD		2,113		-		(56)		-		2,057
KINFOLK BEAUTY CO.,										
LTD. ¹		156		-		(156)		-		-
	₩	289,842	₩	(7,870)	₩	792	₩	2,249	₩	285,013

¹ The Group ceased to apply the equity method on KINFOLK BEAUTY CO., LTD. because the loss of associate exceeded the investment interest.

(in millions of Korean won)	2021											
	Beginning balance		Acquisition		Dividend	Gain (loss) on equity method investments		Others			Ending balance	
Huvis Corporation	₩	120,014	₩ .	- ∀	∀ (2,639)	₩	1,282	₩	516	₩	119,173	
Samnam Petrochemical												
Co., Ltd.		83,076	-	-	-		3,159		498		86,733	
Samyang Kasei Co., Ltd.		29,789	-	•	(1,150)		(5,485)		47		23,201	
Samyang Fine Technology												
Co., Ltd.		15,878	-	-	-		1,191		164		17,233	
Kyungwon Construction												
Co., Ltd.		24,563	-	-	(375)		1,455		-		25,643	
Akina, Inc.		526	-	•	-		80		31		637	
KCI Japan Co., Ltd.		655	-	-	(57)		110		(10)		698	
The Perfumery Holdings,												
LLC		7,662	-	•	-		1,000		(25)		8,637	
Bucheon Sosa PFV Co.,												
Ltd		2,872	-	-	-		(145)		-		2,727	
Solid Ionics Co., Ltd.		2,895	-	•	-		(4)		-		2,891	
OSC KOREA CO.,LTD		-	2,000)	-		113		-		2,113	
KINFOLK BEAUTY CO.,												
LTD.		-	156	<u>}</u>	-		-		-		156	
	₩	287,930	₩ 2,156	8 ∀	∀ (4,221)	₩	2,756	₩	1,221	₩	289,842	

The following table reconciles the summarized financial information to the carrying amount of the Group's interest in the associate and joint ventures as at December 31, 2022 and 2021:

(in millions of Korean won)	2022									
	Net value		Share of net assets			ifference in nvestments				
Huvis Corporation ¹	₩	381,268	₩	101,919	₩	338	₩	(5,676)	₩	96,581
Samnam Petrochemical Co., Ltd.		239,774		95,910		-		(176)		95,734
Samyang Kasei Co., Ltd.		65,161		32,580		-		(1,668)		30,912
Samyang Fine Technology Co., Ltd.		37,945		18,973		-		(148)		18,825
Kyungwon Construction Co., Ltd.		52,097		13,025		13,320		-		26,345
Akina, Inc.		2,342		528		198		-		726
KCI Japan Co., Ltd.		1,814		816		-		(134)		682
The Perfumery Holdings, LLC		24,325		7,377		755		-		8,132
Bucheon Sosa PFV Co., Ltd		16,079		2,412		-		(8)		2,404
Solid Ionics Co., Ltd.		2,292		432		2,183		-		2,615
OSC KOREA CO.,LTD		2,160		403		1,658		(4)		2,057
KINFOLK BEAUTY CO., LTD.	(908)) (126)			126				
	₩	824,349	₩	274,249	₩	18,578	₩	(7,814)	₩	285,013

(in millions of Korean won)			2021							
	Net value		Share of net assets			Difference in nvestments	Intercompany transaction		Carrying amount	
Huvis Corporation ¹	₩	466,931	₩	124,819	₩	4 338	₩	(5,984)	₩	119,173
Samnam Petrochemical Co., Ltd.		217,194		86,878		-		(145)		86,733
Samyang Kasei Co., Ltd.		66,083		33,041		-		(9,840)		23,201
Samyang Fine Technology Co., Ltd.		34,855		17,428		-		(195)		17,233
Kyungwon Construction Co., Ltd.		49,290		12,323		13,320		-		25,643
Akina, Inc.		1,948		439		198		-		637
KCI Japan Co., Ltd.		1,814		816		-		(118)		698
The Perfumery Holdings, LLC		25,917		7,882		755		-		8,637
Bucheon Sosa PFV Co., Ltd		18,251		2,738		-		(11)		2,727
Solid Ionics Co., Ltd.		3,761		708		2,183		-		2,891
OSC KOREA CO.,LTD		1,691		338		1,776		(1)		2,113
KINFOLK BEAUTY CO., LTD.	160		30			126	-		- 156	
	₩	887,895	₩	287,440	₩	⁴ 18,696	₩	(16,294)	₩	289,842

¹ Net assets of Huvis Corporation are based on its consolidated financial statements and consist only of equity attributable to owners of Huvis Corporation.

Fair value of investment in associates and joint ventures of which are publicly traded as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2	022		2021
Huvis Corporation	₩	42,976	₩	75,571

Financial information of associates and joint ventures as at and for the years ended December 31, 2022 and 2021, are summarized as follows:

(in millions of Korean won)	2022										
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Sales	Profit (loss) for the year	Other comprehensive income	Total comprehensive income (loss)			
Huvis Corporation ¹	₩ 280,186	₩ 513,573	₩ 289,592	₩ 122,896	₩ 1,021,726	₩ (80,579)	₩ 305	₩ (80,274)			
Samnam Petrochemical Co., Ltd.	338,469	106,698	204,278	1,115	1,109,938	29,847	734	30,581			
Samyang Kasei Co., Ltd.	101,371	41,884	75,245	2,849	323,262	1,468	809	2,277			
Samyang Fine Technology Co., Ltd.	20,647	64,385	25,924	21,163	50,355	2,661	429	3,090			
Kyungwon Construction Co., Ltd.	11,878	48,536	3,196	5,121	29,166	4,307	-	4,307			
Akina, Inc.	2,026	386	70	-	2,210	260	134	394			
KCI Japan Co., Ltd.	4,329	217	2,120	612	12,132	264	22	286			
The Perfumery Holdings, LLC	23,801	18,244	1,402	16,318	16,665	1,141	194	1,335			
Bucheon Sosa PFV Co., Ltd	240	19,700	3,861	-	-	(2,172)	-	(2,172)			
Solid Ionics Co., Ltd.	1,412	935	42	13	-	(1,054)	-	(1,054)			
OSC KOREA CO.,LTD	2,291	1,102	1,113	120	6,038	(530)	-	(530)			
KINFOLK BEAUTY CO., LTD.	971	13	49	1,843	95	(1,069)	-	(1,069)			

(in millions of Korean won)					2021			
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Sales	Profit (loss) for the year	Other comprehensive income (loss)	Total comprehensive income (loss)
Huvis Corporation ¹ Samnam	₩ 341,936	₩ 501,479	₩ 331,277	₩ 44,295	₩ 1,082,572	₩ 3,655	₩ 2,581	₩ 6,236
Petrochemical Co., Ltd.	303,789	109,930	194,185	2,340	832,048	8,010	1,246	9,256
Samyang Kasei Co., Ltd. Samyang Fine	115,780	43,283	88,425	4,555	397,323	3,223	96	3,319
Technology Co., Ltd.	16,569	70,436	23,212	28,938	45,493	2,388	328	2,716
Kyungwon Construction Co., Ltd.	12,938	46,060	4,607	5,101	27,500	5,820	-	5,820
Akina, Inc.	1,506	506	64	-	1,678	351	140	491
KCI Japan Co., Ltd.	3,734	283	1,684	519	6,942	295	22	317
The Perfumery Holdings, LLC	25,089	17,909	1,587	15,494	23,384	3,501	(83)	3,418
Bucheon Sosa PFV Co., Ltd	771	18,870	1,390	-	-	(988)	-	(988)
Solid Ionics Co., Ltd.	2,725	1,076	40	-	20	(603)	-	(603)
OSC KOREA CO.,LTD	2,126	614	889	160	3,641	79	-	79
KINFOLK BEAUTY CO., LTD.	506	-	2	344	-	(3)	-	(3)

¹ Profit for the year and total comprehensive income of Huvis Corporation are based on its consolidated financial statements and consist only of profit for the year and total comprehensive income attributable to owners of Huvis Corporation.

Details of profit or loss related to the equity method for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021	
Share in profit or loss of an associate	₩	792	₩		2,756

13. Trade and Other Payables

Details of trade and other payables as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Current				
Trade payables	₩	180,005	₩	228,084
Other payables		97,964		113,070
Others	2,416			2,094
		280,385		343,248
Non-Current				
Deposits received		2,533		1,782
Others		5,957		6,992
		8,490		8,774
	₩	288,875	₩	352,022

14. Borrowings and Debentures

Details of short-term borrowings as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)

		Annual interest rate (%) as at December 31,				
Lender	Туре	2022		2022		2021
Kookmin Bank and others	Import finance	3.42 ~ 5.24	₩	192,231	₩	171,990
Woori Bank	Facility loans	5.16		2,500		2,500
Korea Development Bank	Facility loans	3.34		4,000		-
	Facility loans	3M CD + 0.77		50,000		-
Shinhan Bank Europe GmbH	General loans	3M Euribor + 1.2		3,378		3,356
Woori Bank and others	General loans	4.2 ~ 5.86		14,300		8,300
Korea Development Bank	General loans	5.86		4,500		-
Raiffeisen Bank	L/C Nego and others	Euribor + 1.6		4,543		1,661
Woori Bank and others	L/C Nego and others	-		1,362		3,579
			₩	276,814	₩	191,386

Details of long-term borrowings as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)

		Annual interest rate (%) as at				
Lender	Туре	December 31, 2022		2022		2021
Korea Development Bank	General loans	3.11	₩	100,000	₩	115,000
Shinhan Bank	General loans	3M CD + 1.4		35,000		35,000
	General loans	3M Euribor + 0.9		6,756		-
Korea Exim bank	General loans	1.61		6,000		1,000
Woori Bank and others	General loans	5.62 ~ 6.46		4,633		11,817
Woori Bank London Branch	Facility loans	TERM SOFR 3M + 1.2		31,683		-
	Facility loans	6M Euribor + 1.32		15,133		15,035
Korea Development Bank	Facility loans	2.65 ~ 5.66		25,387		27,400
	Facility loans	2.24 ~ 2.37		20,400		20,400
	Facility loans	Environmental safety investment + 0.62		50,000		50,000
Shinhan Bank Singapore Branch	Facility loans	TERM SOFR + 0.26		17,856		16,732
Less: present value discount				-		(330)
				312,848		292,054
Less: current portion				(75,132)		(126,467)
			₩	237,716	₩	165,587

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

(in millions of Korean won)

		Annual interest rate (%) as at December 31,				
Lender	Maturity date	2022		2022		2021
91 st public bonds	2022-06-09	2.41	₩	-	₩	60,000
92 nd public bonds	2024-05-28	1.98		110,000		110,000
2 nd public bonds	2022-02-23	2.39		-		140,000
3-1 st public bonds	2024-01-18	2.28		150,000		150,000
3-2 nd public bonds	2026-01-18	2.59		100,000		100,000
4-1 st public bonds	2025-03-03	1.56		80,000		80,000
4-2 nd public bonds	2027-03-03	1.87		60,000		60,000
5-1 st public bonds	2027-02-22	3.26		120,000		-
5-2 nd public bonds	2029-02-22	3.53		60,000		-
2 nd public bonds	2024-09-06	2.35		94,000		94,000
Less: discount on debentures						
issuance				(1,247)		(1,172)
				772,753		792,828
Less: current portion				-		(199,966)
			₩	772,753	₩	592,862

15. Other Financial Liabilities

Details of other financial liabilities as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Current				
Derivative liabilities	₩	12,591	₩	230
Lease liabilities		4,819		4,421
Financial guarantee liabilities		271		321
		17,681		4,972
Non-Current				
Lease liabilities		19,411		19,920
Financial guarantee liabilities		224		657
Other non-current financial liabilities		61,277		61,277
		80,912		81,854
	₩	98,593	₩	86,826

16. Other Liabilities

Details of other liabilities as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Current				
Advances received	₩	20,198	₩	17,229
Withholdings		21,666		21,466
Value-added tax withholdings		4,962		2,011
Accrued expenses		43,530		45,999
Return provision		1,856		1,896
Others		168		2,508
		92,380		91,109
Non-Current				
Advances received		204		156
Unearned revenue		272		92
Accrued expenses		7,941		8,749
Others		70		71
		8,487		9,068
	₩	100,867	₩	100,177

17. Net Defined Benefit Liabilities (Assets)

Details of net defined benefit liabilities (assets) as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Present value of defined benefit obligation Fair value of plan assets	₩	141,807 (162,808)	₩	161,316 (149,849)
Net defined benefit liabilities (assets)	₩	(21,001)	₩	11,467

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

(in millions of Korean won)		2022				
	Present value of defined benefit obligation			value of plan assets		let defined efit liabilities (assets)
Beginning balance	₩	161,316	₩	(149,849)	₩	11,467
Recognized in profit or loss as incurred:		21,030		(3,990)		17,040
Current service cost		16,751		-		16,751
Interest cost (income)		4,279		(3,990)		289
Remeasurements recognized in other comprehensive income:		(23,534)		1,378		(22,156)
Actuarial loss (gain) arising from		(23,534)		-		(23,534)
Demographic assumptions		-		-		-
Financial assumptions		(26,365)		-		(26,365)
Experience adjustments		2,831		-		2,831
Return on plan assets excluding interest income		-		1,378		1,378
Others:		(17,005)		(10,347)		(27,352)
Benefits paid (received)		(16,886)		15,656		(1,230)
Contribution by the employer		-		(26,200)		(26,200)
Others		(119)		197		78
Ending balance	₩	141,807	₩	(162,808)	₩	(21,001)

(in millions of Korean won)	2021								
	Present value of defined benefit obligation assets			Net defined benefit liabilities (assets)					
Beginning balance	₩	145,466	₩	(135,486)	₩	9,980			
Recognized in profit or loss as									
incurred:		19,447		(3,064)		16,383			
Current service cost		16,149		-		16,149			
Interest cost (income)		3,298		(3,064)		234			
Remeasurements recognized in other comprehensive income:		6,751		1,029		7,780			
Actuarial loss (gain) arising from		6,751		-		6,751			
Demographic assumptions		4,712		-		4,712			
Financial assumptions		(4,723)		-		(4,723)			
Experience adjustments		6,762		-		6,762			
Return on plan assets excluding									
interest income		-		1,029		1,029			
Others:		(10,348)		(12,328)		(22,676)			
Benefits paid (received)		(10,276)		13,630		3,354			
Contribution by the employer		-		(25,900)		(25,900)			
Others		(72)		(58)		(130)			
Ending balance	₩	161,316	₩	(149,849)	₩	11,467			

Expenses recorded in relation to defined benefit plans for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	:	2022		2021
Defined benefit plan	₩	17,040	₩	16,383
Current service costs		16,751		16,149
Net interest costs		289		234
Defined contribution pension plan and others		4,901		3,726
	₩	21,941	₩	20,109

Details of plan assets as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022		2021	
Financial instruments with guaranteed interest rate	₩	162,741	₩	149,760
Others		67		89
	₩	162,808	₩	149,849

The Group expects to contribute $\forall 26,400$ million to its defined benefit plans in 2023.

The principal actuarial assumptions as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	
Expected rate of increase in salaries	4.0%	4.0%
Discount rate	5.2% ~ 5.4%	2.0% ~ 2.9%

The discount rate is the yield at the end of the reporting period on corporate bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid. Also, the Group estimated the defined benefit obligation based on employee information, salary increase information, and demographic variables from Korea Insurance Development Institute.

Reasonably possible changes at the end of the reporting period due to any of the actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

(in millions of Korean won)	2022				
	1% Increase 1% Decrease		ecrease		
Changes in expected rate of increase in salaries	₩	9,575	₩	(8,595)	
Changes in discount rate		(8,165)		9,275	
(in millions of Korean won)	2021				
	1% Ir	ncrease	1% D	ecrease	
Changes in expected rate of increase in salaries	₩	13,225	₩	(11,728)	
Changes in discount rate		(11,548)		13,313	

Although the analysis does not take account of the full distribution of cash flows expected under the plan, it does provide an approximation of the sensitivity of the assumptions shown.

The weighted average duration of the defined benefit obligation is 6.58 years (2021: 7.15 years).

18. Share-based Payments

The Group has entered into share-based payment agreement with its executives and employees as follows. The details as at December 31, 2022, are as follows:

Grant date	Grant method	Number of shares granted ¹ <i>(in shares)</i>	Number of exercised shares in 2022 <i>(in shares)</i>	Number of unexercised shares at Dec.31, 2022 <i>(in shares)</i>	Number of exercisable shares at Dec.31, 2022 <i>(in shares)</i>	Granted by corporation	Exercise price (in Korean won)
2021-03-26	lssuance of shares	4,500	-	4,500	-	NC Chem Corporation	270,000

¹Adjustments due to exercise and cancellation of the previously granted share options up to December 31, 2021, are reflected.

The vesting conditions and exercisable period of the share-based payment agreement are as follows:

Grant date	Grant corporation	Vesting condition	Exercisable period
2021-03-26	NC Chem Corporation	Two years of service after the grant date	5 years after vesting

Share-based payments recognized as expenses for the years ended December 31, 2022 and 2021, amount to \forall 164 million and \forall 869 million, respectively. All expenses are related to equity-settled share-based payments.

19. Capital Stock and Capital Surplus

Details of the Group's capital stock as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won except par value

per share and in shares)		202	22		
		Number of			
	Number of shares issued	treasury shares	Par value	Capit	al stock
Ordinary shares	8,564,271	1,128,726	₩ 5,000	₩	42,822
Preferred shares	304,058	85	5,000		1,520
	8,868,329	1,128,811		₩	44,342

(in millions of Korean won except par value per share and in shares)

per share and in shares)		202	21		
		Number of			
	Number of trea shares issued sha		Par value	Capital stock	
Ordinary shares	8,564,271	1,128,726	₩ 5,000	₩	42,822
Preferred shares	304,058	85	5,000		1,520
	8,868,329	1,128,811		₩	44,342

The Parent Company's preferred shares have no voting rights. The dividends on the Parent Company's preferred shares are paid at the amount of 1% on par value of the shares per annum on top of dividends of ordinary shares.

Details of capital surplus as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022		2021	
Paid-in capital in excess of par value	₩	160,466	₩	160,466
Gain on disposal of treasury shares		77,299		77,299
Other capital surplus		92,766		96,903
	₩	330,531	₩	334,668

20. Accumulated Other Comprehensive Income

Details of accumulated other comprehensive income as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022		2021	
Gain on valuation of financial assets at fair value through other comprehensive income	₩	74,307	₩	90,339
Equity adjustments in equity method Foreign currency translation differences of foreign		796		654
operations		2,423		1,443
	₩	77,526	₩	92,436

21. Retained Earnings and Dividends

Details of retained earnings as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Beginning balance	₩	1,291,583	₩	1,070,973
Profit attributable to owners of the Parent Company		71,009		237,701
Dividends		(23,234)		(17,429)
Remeasurement of defined benefit liabilities		9,966		(3,482)
Retained earnings adjustments in equity method		1,933		(775)
Transfer of other comprehensive income that is not transferable to profit or loss		(26)		4,595
Ending balance	₩	1,351,231	₩	1,291,583

Dividends proposed but not paid to shareholders prior to the approval on the issuance of the consolidated financial statements for the year ended December 31, 2022, are as follows:

(in millions of Korean won)	2022						
	Number of shares issued (in shares)	Number of treasury shares (in shares)	Number of shares for dividends (in shares)	Dividends per share (In Korean won)	Total		
Ordinary shares	8,564,271	(1,128,726)	7,435,545	₩ 3,500	₩ 26,024		
Preferred shares	304,058	(85)	303,973	3,550	1,079		
	8,868,329	(1,128,811)	7,739,518		₩ 27,103		

Details of dividend paid to owners of the Parent Company for the year ended December 31, 2022, are as follows:

(in millions of Korean won)	2022						
	Number of shares issued (in shares)	Number of treasury shares (in shares)	Number of shares for dividends <i>(in shares)</i>	Dividends per share (In Korean won)	Total		
Ordinary shares	8,564,271	(1,128,726)	7,435,545	₩ 3,000	₩ 22,307		
Preferred shares	304,058	(85)	303,973	3,050	927		
	8,868,329	(1,128,811)	7,739,518		₩ 23,234		

22. Other Components of Equity

Details of other components of equity as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	:	2022		2021
Treasury shares	₩	(9,816)	₩	(9,816)
Others		(1,884)		(1,650)
	₩	(11,700)	₩	(11,466)

23. Sales

Details of sales for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		
Goods and products Construction contract sales	₩	3,247,319 60,992	₩	3,041,814 58,879	
Others		8,467		6,620	
	₩	3,316,778	₩	3,107,313	

Details of sales for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Revenue from contracts with customers:				
Sale of goods	₩	3,247,319	₩	3,041,814
Provision of services		63,607		60,846
Royalty	_	14		335
		3,310,940		3,102,995
Revenue from other sources:				
Rental income		5,838		4,318
	₩	3,316,778	₩	3,107,313

As at December 31, 2022, contract liabilities (advances received) arising from contracts with customers amount to $\forall 20,402$ million (2021: $\forall 17,385$ million).

Details of revenue from contracts with customers for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		
Geographical market:					
Domestic	₩	2,247,504	₩	1,902,021	
Export		1,063,436		1,200,974	
	₩	3,310,940	₩	3,102,995	
Timing of revenue recognition:					
Recognition at a point in time	₩	3,247,319	₩	3,041,814	
Recognition over time		63,621		61,181	
	$\forall \forall$	3,310,940	₩	3,102,995	

24. Cost of Sales

Details of cost of sales for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		
Goods and products	₩	2,714,448	₩	2,321,393	
Construction contract costs		54,872		52,568	
Others		4,146		4,322	
	₩	2,773,466	₩	2,378,283	

25. Selling and Administrative Expenses

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

(in millions of Korean won)	2022			2021		
Salaries	₩	101,015	₩	96,994		
Retirement benefits		9,841		8,970		
Employee welfare		17,715		16,401		
Travels		3,492		1,343		
Communications		1,425		1,244		
Utilities		3,288		2,698		
Supplies		4,297		1,862		
Taxes and dues		6,948	3 5,771			
Rents		339		1,858		
Commissions		67,272		59,507		
Depreciation		15,095		18,069		
Repair		1,747		1,046		
Vehicle maintenance		2,271		1,950		
Insurance		1,503		1,464		
Advertising		13,457		14,003		
Samples		2,720		2,296		
Bad debt		229		107		
Transportation		104,127		94,010		
Printing		569		476		
Education & Training		2,005		1,166		
Development		25,624		31,220		
Amortization		14,818		5,641		
Others		11,191		9,235		
	₩	410,988	₩	377,331		

26. Finance Income and Costs

Details of finance income and costs for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022		2021	
Finance income:				
Interest income	₩	14,414	₩	7,772
Dividend income		22,448		11,399
Gain on valuation of financial assets at fair value through profit or loss		1,797		1
Gain on disposal of financial assets at fair value through profit or loss		1		-
Gain on valuation of derivative instruments		4,966		1,975
Gain on transaction of derivative instruments		23,262		9,809
	₩	66,888	₩	30,956
Finance costs:				
Interest expenses	₩	33,768	₩	26,606
Loss on valuation of financial assets at fair value through profit or loss		3		-
Loss on valuation of derivative instruments		12,564		216
Loss on transaction of derivative instruments		8,549		3,314
	₩	54,884	₩	30,136

27. Other Non-operating Income and Expenses

Details of other non-operating income and expenses for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		
Other non-operating income:					
Gain on foreign currency transactions	₩	34,421	₩	24,336	
Gain on foreign currency translation		27,612		966	
Gain on disposal of property, plant and equipment		308		208	
Gain on disposal of intangible assets		262		-	
Gain on disposal of investment properties		94		841	
Commissions		246		401	
Insurance income		7,292		489	
Others		18,803		8,302	
	₩	89,038	₩	35,543	
Other non-operating expenses:					
Loss on foreign currency transactions	₩	72,691	₩	29,053	
Loss on foreign currency translation		15,461		2,330	
Loss on disposal of property, plant and equipment		3,388		228	
Loss on disposal of intangible assets		26		-	
Impairment losses on property, plant, and equipment		3,947		2,566	
Impairment losses on assets held for sale		-		4,144	
Impairment losses on intangible assets		56		-	
Donations		794		1,458	
Other bad debt expense		-		42	
Others		11,132		6,127	
	₩	107,495	₩	45,948	

28. Breakdown of Expenses by Nature

Details of expenses by nature for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Changes in inventories	₩	(29,728)	₩	(134,210)
Purchase of raw materials and merchandise		2,130,118		1,891,410
Salaries		244,701		228,759
Depreciation and amortization		114,032		92,264
Commissions		98,029		85,599
External processing expenses		65,885		72,427
Others		668,911		565,313
	₩	3,291,948	₩	2,801,562

29. Income Tax

Income tax expense for the years ended December 31, 2022 and 2021, consists of:

(in millions of Korean won)		2022		2021
Current tax	₩	20,315	₩	68,534
Adjustments in respect of current tax of prior year Relating to origination and reversal of temporary		(277)		(1,435)
differences		763		4,623
Income tax charged directly to equity		13		(1,332)
Others		-		395
Income tax expense	₩	20,814	₩	70,785

The tax effect relating to components of other comprehensive income (expenses) for the years ended December 31, 2022 and 2021, is as follows:

(in millions of Korean won)			2	2022			2021																																																			
	Be	Before tax		effect	A	After tax	Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Before tax		Т	ax effect	A	After tax
Items recognized in other comprehensive income:																																																										
Remeasurements of defined benefit liability	₩	22,156	₩	(5,734)	₩	16,422	₩	(7,780)	₩	2,170	₩	(5,610)																																														
Retained earnings adjustments in equity method		2,067		(83)		1,984		(658)		(82)		(740)																																														
Equity method capital change		123		(00)		135		1,904		(02)		1,906																																														
Gain (loss) on valuation of financial assets at fair value through other								.,		_		.,																																														
comprehensive income		(27,841)		7,737		(20,104)		97,183		(23,378)		73,805																																														
Gain (loss) on translation of foreign operations		904		4		908		3,714		(130)		3,584																																														
	₩	(2,591)	₩	1,936	₩	(655)	₩	94,363	₩	(21,418)	₩	72,945																																														

The components of other comprehensive income are presented net of tax on the consolidated statement of comprehensive income.

The aggregate current and deferred tax relating to items that are charged or credited directly to equity for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	202	2		2021
Current tax Disposal of financial assets at fair value through other	₩	13	₩	(1,332)
comprehensive income		13		(1,332)
Deferred tax		(369)		-
Other capital adjustments		(369)		-

A reconciliation of effective tax rate for the years ended December 31, 2022 and 2021, is as follows:

(in millions of Korean won)		2022	2021		
Profit before income tax expense	₩	126,664	₩	344,871	
Tax at the statutory income tax rate		31,296		75,751	
Adjustments:					
Non-deductible expenses, net		(470)		(62)	
Tax credits and exemptions		(649)		(3,994)	
Adjustments to income tax for prior periods		(277)		(1,435)	
Effect on share of profit of subsidiaries		2,075		4,713	
Effect on share of profit of equity-accounted investees		724		75	
Deduction of tax loss carryforwards		-		(14,886)	
Others		(11,885)		10,623	
		(10,482)		(4,966)	
Income tax expense	₩	20,814	₩	70,785	
Effective tax rate		16.43%		20.53%	

The analysis of deferred tax assets and liabilities as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		
Deferred tax assets					
Deferred tax asset to be recovered within 12 months	₩	12,732	₩	13,048	
Deferred tax asset to be recovered after more than 12 months		68,396		73,530	
		81,128		86,578	
Deferred tax liabilities					
Deferred tax liability to be recovered within 12 months Deferred tax liability to be recovered after more than		(12,529)		(21,769)	
12 months		(223,782)		(220,796)	
		(236,311)		(242,565)	
Deferred tax liabilities, net	₩	(155,183)	₩	(155,987)	

Changes in deferred tax assets and liabilities for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022								
	Beginning balance Profit or loss		Equity		Ending balanc				
Financial assets at fair value Investments in subsidiaries and equity-	₩	(35,715)	₩	(26)	₩	7,737	₩	(28,004)	
accounted investees		(27,583)		1,617		(651)		(26,617)	
Accrued income		(739)		(600)		-		(1,339)	
Accrued expenses		9,489		(2,256)		-		7,233	
Retirement benefit obligations		2,111		(1,647)		(5,150)		(4,686)	
Property, plant and equipment		(18,775)		(1,256)		-		(20,031)	
Intangible assets		(37,147)		(3,050)		-		(40,197)	
Special deduction		(14,887)		689		-		(14,198)	
Land revaluation		(53,881)		2,226		-		(51,655)	
Others		21,140		3,540		(369)		24,311	
	₩	(155,987)	₩	(763)	₩	1,567	₩	(155,183)	

(in millions of Korean won)	2021													
		eginning alance	Profit or loss				Equity				Equity Others		E ners ba	
Financial assets at fair value Investments in subsidiaries and equity-	₩	(12,293)	₩	(44)	₩	(23,378)	₩	-	₩	(35,715)				
accounted investees		(23,748)		(3,844)		9		-		(27,583)				
Accrued income		(1,070)		331		-		-		(739)				
Accrued expenses		8,291		1,555		-	- (357) 951 194			9,489				
Retirement benefit obligations		2,241		(2,275)	- (4,169				1,951		2,111			
Property, plant and equipment		(17,358)		2,752			- (4,169) - (7,298)			(18,775)				
Intangible assets		(26,463)		(3,386)						(37,147)				
Special deduction		(14,887)) -							(14,887)				
Land revaluation		(53,881)		-	-				-		(53,881)			
Others		15,305		288	-			5,547		21,140				
	₩	(123,863)	₩	(4,623)	₩	(21,418)	₩	(6,083)	₩	(155,987)				

Details of unrecognized deductible (taxable) temporary differences as deferred tax assets (liabilities) as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		Remarks
Interests in subsidiaries	₩	(430,970)	₩	(357,235)	Permanent reinvestment plan of undistributed profit
Interests in subsidiaries, joint ventures and associates		178,624		137,430	No plan for disposal
Unused losses ¹		83,147		65,106	Uncertainty of future taxable profit and others
Temporary difference		30,686		1,679	Uncertainty of future taxable profit and others

¹ The maturity of unused losses is as follows:

(in millions of Korean won)	2022			2021
2022	\mathbf{W}	-	₩	259
2023		369		348
2024		797		771
2025		3,290		3,225
2026		1,723		1,698
After 2027		7,182		2,239
-		69,786		56,566
	₩	83,147	₩	65,106

As at December 31, 2022, the tax effects of temporary difference were calculated using the effective tax rate of the periods when the temporary differences are expected to reverse.

Deferred tax assets and liabilities are offset if the Group has legally enforceable right and intent to offset tax assets and liabilities and such deferred tax assets and liabilities are related to income taxes from the same tax authority.

30. Earnings per Share

Basic earnings per share is calculated by dividing profit for the year attributable to owners of the parent by the weighted average number of shares outstanding during the year. Earnings per share is calculated by considering preferred shares as a class of ordinary shares with a different dividend rate from that of another class of ordinary shares but without prior or senior rights.

Earnings per ordinary share for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	2021		
Profit attributable to owners of the parent	₩	71,009	₩	237,701	
Profit attributable to preference shares ¹		2,804		(9,350)	
Profit attributable to ordinary shareholders		68,205		228,351	
Weighted-average number of ordinary shares ²		7,435,545		7,435,545	
Basic and diluted earnings per share (in Korean won) ³	₩	9,173	₩	30,711	

¹ These consist of dividends of preference shares and remaining retained earnings that belong to preference shares.

² Details of calculation of weighted-average number of ordinary shares as at December 31, 2022 and 2021, are as follows:

(in shares)	2022	2021
Issued ordinary shares at the beginning of the year	8,564,271	8,564,271
Effect of treasury shares held	(1,128,726)	(1,128,726)
Weighted-average number of ordinary shares at the end of the year	7,435,545	7,435,545

³ Diluted earnings per share are not calculated as there is no potentially dilutive share.

Earnings per preferred share for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022		2021	
Profit attributable to preference shares Weighted average number of preference shares	₩	2,804 303,973	₩	9,350 303,973
Basic and diluted earnings per preference share (in Korean won)	₩	9,223	₩	30,761

31. Commitments and Contingencies

The Group's significant commitments with financial institutions as at December 31, 2022, are summarized as follows:

(in millions of Korean won,	and in thousands of l	ISD FUR JPY HUE
		550, 201, 511, 101)

Description	Currency	Limit amount
Bank overdraft	KRW	19,000
	EUR	2,000
General loans	KRW	90,500
	EUR	7,500
Facility fund loans	KRW	269,000
	EUR	11,200
	USD	39,000
Import credit	USD	466,000
Loans secured with trade receivables	EUR	3,362
Overseas trading	KRW	8,000
	USD	30,000
Payment guarantees	EUR	22,400
	USD	14,585
	KRW	51,950
	JPY	200,000
	HUF	1,557,212
Derivative instruments	USD	7,900
	KRW	3,000
Bills bought	USD	1,000
Electronic Tracing Accounts Receivable Mortgage	KRW	115,000

Financial assets restricted-in use as at December 31, 2022, are as follows:

(in millions of Korean won)			
Description	An	nount	Description
Other current financial assets	₩	2,642	Establishing the right of pledge
Other non-current financial assets		26	Deposit for overdraft

Details of property, plant and equipment pledged as collateral for the Group's borrowings and commitments as at December 31, 2022, are summarized as follows:

(in millions of Korean won)	Borrowings		Pledged amount		Secured party
Land, buildings, structures and machinery	₩	100,000	₩	120,000	KDB
Inventories		6,000		15,600	Korea Exim Bank
Land, buildings and others		20,400		36,000	KDB
Land, buildings and others		39,221		53,643	Woori Bank and KDB
Buildings, structures and machinery		100,000		120,000	KDB

Pending litigations

As at December 31, 2022, the lawsuit filed by the Group as a defendant consists of 4 claims amounting to $\forall 997$ million with regards to compensation for damages, 2 claim amounting to $\forall 163$ million with regards to wages. In relation to the lawsuit filed by the Group as a plaintiff, seizure has been imposed on some of the properties with regards to the non-existence of debt. Except for cases for which the Group cannot predict the outcome, the Group has paid the amount due under the lost cases, or recognized the related liabilities. The management believes that the outcome of the lawsuit will not have a material impact on the financial position of the Group.

The Group entered into contracts with the Ministry of Trade, Industry and Energy regarding certain development projects. The Group received $\forall 9,085$ million of government grants in 2022. The Group recognized other payables of $\forall 2,456$ million which shall be offset by government grants when the development projects are deemed successful.

The Group entered into a contract with Mitsubishi Chemical Corporation (MCC) to obtain technology information related to manufacturing for production of Bisphenol-A (BPA). The Group entered into a sub-license agreement with a related party, Samyang Fine Technology Co., Ltd., based on the agreement of regenerating technology for ion exchange resin.

The Group has entered into long-term supply agreements with related parties, Samyang Kasei Co., Ltd. and Samyang Fine Technology Co., Ltd.

The Group entered into a contract with LMITO Therapeutics to obtain technology information for metabolism-modulating anticancer drug candidate and with Cancure LLC for antibody drug candidate.

Limitation on disposal of joint ventures

The Group committed to obtain the written consent of the other party if it intends to transfer, provide collateral, or otherwise dispose of its shares in joint venture. As an exception, shares may be transferred to the Group's affiliates without the written consent of the other party, but even in this case, the affiliates have committed to succeed the Group's contractual obligations. The above provisions are not intended to limit the disposal of the shares held by the Group, but are intended to maintain the management rights of each joint venture, and the management of the Group has no plans to dispose

of the shares held by the Group.

Agreement on performance of public placement debentures

The bond issuance contracts of the Group provide for such terms and conditions that the debt-toequity ratio has to be kept at 400% or less; a collateral limit within 200% of equity capital; the restriction on disposition of assets of 500 billion won or more of total assets, or 400 billion won or more of total assets, or 50% more of total assets; restriction on changes in corporate governance. The Group has to follow this contract based on their own financial statements respectively. In case of failure to comply with these obligations, the Group's benefit of time may be forfeited.

In November 2018, the Group entered into an agreement to invest \$14 million in KENSINGTON-SV GLOBAL INNOVATIONS LP for up to 4 years. As at December 31, 2022, \$13.12 million has been paid, and the amount is included in beneficiary certificates.

The Group has right to convert the redeemable convertible preferred shares of Staytuned Co., Ltd. held into ordinary share from the day after the issuance date to the day before the end of the maturity date and has the right to request for redemption for all or partial amount from the day after 3 years from the issuance date to the end of the maturity date. In addition, the Group has the pre-emption right to purchase under the same conditions or participate in the joint sale of shares under the same conditions when the interested party intends to dispose of all or part of the Company's share under an agreement with another investor of Staytuned Co., Ltd.

The Group has the pre-emption right to purchase under the same conditions or participate in the joint sale of shares under the same conditions when the interested party intends to dispose of all or part of the Company's share under an agreement with another investor of Solid Ionics Co., Ltd.

The Group has right to convert the redeemable convertible preferred shares of PharmCADD Co,Ltd. held into ordinary share from the day after the issuance date to the day of 10 years and has the right to request for redemption for all or partial amount from the day after 3 years from the day after the payment date. In addition, the Group has the pre-emption right to purchase under the same conditions or participate in the joint sale of shares under the same conditions when the interested party intends to dispose of all or part of the Company's share under an agreement with another investor of PharmCADD Co,Ltd.

The Group has the pre-emption right to purchase under the same conditions or participate in the joint sale of shares under the same conditions when the interested party intends to dispose of all or part of the Company's share under an agreement with another investor of EMKYULAEKSEU CO., LTD.

Limitation on disposal of shares and convertible bonds

The Group committed to obtain the written consent of the other party if it intends to transfer, provide collateral, or otherwise dispose of its shares and convertible bonds in KINFOLK BEAUTY CO., LTD. The above provisions are not intended to limit the disposal of the shares held by the Company, but are intended to maintain the management rights, and the management of the Company has no plans to dispose of the shares held by the Company.

The Group has granted a put option right to NEXUS HOLDINGS CO., LTD., Rivendell Investment 2018-2 LLC, the existing shareholders of NC Chem Corporation (The existing shareholders). The existing shareholders have the put option right to request Samyang Holdings Corporation to purchase all of the shares owned by the existing shareholders at the time of exercise of the put option if NC Chem Corporation fails to achieve the agreed business performance goals until the day of 18 months from the day after 30 months from the closing date of the transaction under the share purchase agreement.

In addition, the Group has the call option right to request the existing shareholders to sell all shares equivalent to 20% of the remaining shares to the Group or a designated person by the Group until the day of 18 months from the day after 30 months from the closing date of the transaction.

The Group has granted a put-option right to Changmin Lee, an existing shareholder of NC Chem Corporation (The existing shareholder). The existing shareholder has the put option right to request Samyang Holdings Corporation to purchase all of the shares owned by the existing shareholder at the time of exercise of the put option until the day of 18 months from the day after 30 months from the closing date of the transaction.

In addition, the Group has the call option right to request the existing shareholder to sell all shares equivalent to 50% of the remaining shares to the Group or a designated person by the Group until the day of 18 months from the day after 30 months from the closing date of the transaction.

Limitation on disposal of shares

The Group committed to obtain the written consent of NEXUS HOLDINGS CO., LTD., Rivendell Investment 2018-2 LLC, Changmin Lee, the existing shareholders of NC Chem Corporation (The existing shareholders) if it intends to transfer, provide collateral, or otherwise dispose of all or part of its shares in NC Chem Corporation (The shares). However, in the case of disposing of all or part of the shares to a related party of Samyang Holdings Corporation, the above shares may be disposed of by obtaining prior written consent from existing shareholders with a prerequisite that the existing shareholders have to submit a letter of commitment stating that they agree to succeed to the contractual obligations.

The Group has granted a call option right to SK Geocentric Co., Ltd., a strategic partner of Samyang EcoTech Corporation.

The strategic partner has the call option right to request to sell 49% of shares issued by Samyang EcoTech Corporation in the event of transfer of all or part of shares of Samyang EcoTech Corporation held by the Group without any legal restriction, or for any of the following reasons.

- Where Samyang Packaging Corporation is not obligated to own the total number of issued shares (100%) of affiliated companies due to the revision of the Fair Trade Act.

- Where Samyang Packaging Corporation is no longer a sub-subsidiary of the holding company under the Fair Trade Act.

– Where Samyang Packaging Corporation or a company subject to split-off is excluded from Samyang's affiliates (not subject to restrictions on behavior under the Fair Trade Act). If the strategic partner does not exercise the call option, the Group has a put option right to request the strategic partner or a third party designated by the strategic partner to purchase 49% of the total issued shares of Samyang Ecotech Corporation.

Limitation on disposal of shares

The Group committed to obtain the written consent of SK Geocentric Co., Ltd, if it intends to dispose of all or part of its shares in Samyang EcoTech Corporation (The shares). However, in the case of disposing of all of the shares to a related party of Samyang Packaging Corporation, the above shares may be disposed of by obtaining prior written consent with a prerequisite that submitting a letter of commitment to SK Geocentric Co., Ltd that agrees to succeed to the contractual obligations.

In July 2022, the Group entered into an agreement to invest USD 2 million for up to 4 years in KSV Global Fund II, LP. As at December 31, 2022, USD 260,000 has been paid, and the amount is included in beneficiary certificates.

the Group has the pre-emption right to purchase as second priority after Valo Health, LLC under the same conditions or participate in the joint sale of shares under the same conditions when the interested party intends to dispose of all or part of the Company's share under an agreement with another investor of Valo Health, LLC.

In June 2020, the Group entered into an agreement to sell all the Bucheon factory site and buildings. As a result, the property, plant and equipment amounting to $\forall 13,011$ million and investment properties amounting to $\forall 21,461$ were classified as held-for-sale assets with a total value of $\forall 34,472$ million. The transaction will be completed in 2023.

32. Related Party Transactions

Details of related parties as at December 31, 2022 and 2021, are as follows:

Relationship	2022	2021
Associates	Kyungwon Construction Co., Ltd.	Kyungwon Construction Co., Ltd.
	Akina, Inc.	Akina, Inc.
	KCI Japan Co., Ltd.	KCI Japan Co., Ltd.
	Keonchang Chemical Industry Co., Ltd.	Keonchang Chemical Industry Co., Ltd.
	The Perfumery Holdings, LLC	The Perfumery Holdings, LLC
	Staytuned Co., Ltd. ¹	Staytuned Co., Ltd. ¹
	Bucheon Sosa PFV Co., Ltd	Bucheon Sosa PFV Co., Ltd
	Solid Ionics Co., Ltd.	Solid Ionics Co., Ltd.
	OSC KOREA CO.,LTD	OSC KOREA CO.,LTD
	KINFOLK BEAUTY CO., LTD.	KINFOLK BEAUTY CO., LTD.
Joint ventures	Huvis Corporation	Huvis Corporation
	Samnam Petrochemical Co., Ltd.	Samnam Petrochemical Co., Ltd.
	Samyang Kasei Co., Ltd.	Samyang Kasei Co., Ltd.
	Samyang Fine Technology Co., Ltd.	Samyang Fine Technology Co., Ltd.
Other related parties	The Perfumery, LLC	The Perfumery, LLC
	Huvis Global Corporation and others	Huvis Global Corporation and others

¹ The Group invested in the redeemable convertible preferred share of Staytuned Co., Ltd. and classified it as financial assets at fair value through profit or loss. Since it has voting rights and the right to appoint directors over the investee, it is classified as an associate as the Group can exercise significant influence.

Significant transactions with related parties for the years ended December 31, 2022 and 2021, are as follows:

(in millions of K	orean won)	2022											
Туре	Name of entity	Sales Other		ner income	Purchase of Dividend Goods and income raw materia			oods and	and property, plant			Other expenses	
Associates	Kyungwon Construction Co., Ltd.	₩	9	₩	-	₩	375	₩	-	₩	-	₩	1
	KCI Japan Co., Ltd.		8,772		-		56		-		-		-
	OSC KOREA CO.,LTD		441		-		-		744		-		-
Joint ventures	Huvis Corporation		1,697		36		2,639		7,184		-		210
	Samnam Petrochemical Co., Ltd.		2,190		234		3,200		-		18		1
	Samyang Kasei Co., Ltd.		187,941		201		1,600		190,340		-		-
	Samyang Fine Technology Co., Ltd.		5,910		240				25,123		-		4
		₩	206,960	₩	711	₩	7,870	₩	223,391	₩	18	₩	216

(in millions of K	orean won)				2021									
Туре	Name of entity		Sales	Oth	er income		Dividend income	G	irchase of oods and v materials	prope	isition of erty, plant quipment ¹		Other penses	
Associates	Kyungwon Construction Co., Ltd.	₩	8	₩	-	₩	375	₩	-	₩	-	₩	2	
	KCI Japan Co., Ltd.		4,540		-		57		-		-		-	
	OSC KOREA CO.,LTD		75		-		-		-		-		4	
Joint ventures	Huvis Corporation		1,416		39		2,639		7,896		11		232	
	Samnam Petrochemical Co., Ltd.		2,223		795		-		-		-		-	
	Samyang Kasei Co., Ltd.		301,247		543		1,150		239,312		-		-	
	Samyang Fine Technology Co., Ltd.		5,576		404		-		24,044		-		20	
		₩	315,085	₩	1,781	₩	4,221	₩	271,252	₩	11	₩	258	

¹ The amount of acquisition of right-of-use assets is included for the years ended December 31, 2022 and 2021.

Fund transactions with related parties for the years ended December 31, 2022 and 2021, are as follows:

(in millions	of Korean won)						2022				
		L	_oan t	ransactio	ons	Con	vertible	Le	ase		
Туре	Name of entity	Lo	ans	Repayn	nents	k	oond	payn	nents ¹		
Executives	_	₩	-	₩	(2)	₩	-	₩	-		
Associates	KINFOLK BEAUTY C LTD.	CO.,	-		-		1,500		-		
Joint ventures	Huvis Corporation		-		-		-		11		
		₩	-	₩	(2)	₩	1,500	₩	11		
íin millions of K	(orean won)						2021				
	_	Loan	transa	octions	Conv	vertib	le Le	ase			
Туре	Name of entity	Loans	Repa	ayments	b	ond	paym	nents ¹	Contribution		
Executives	- +	₩ 508	₩	(402)	₩		- ₩	-	₩		

LACCULIVES	-	**	500	**	(402)			**	-
Associates	OSC KOREA CO.,LTD		-		-	-	-		2,000
	KINFOLK BEAUTY								
	CO., LTD.		-		-	344	-		156
Joint	Huvis Corporation						10		
ventures	·		-		-	-	12		-
		₩	508	₩	(402)	344	₩ 12	₩	2,156

¹ The amount of interest expense relating to lease is included for the years ended December 31, 2022 and 2021.

Outstanding balances arising with related parties as at December 31, 2022 and 2021, are as follows:

(in millions of l	Korean won)				20	22			
Туре	Name of entity		rade eivables		Other eivables	Trade payables			Other lyables
Associates	KCI Japan Co., Ltd.	₩	1,899	₩	-	₩	-	₩	-
	OSC KOREA CO.,LTD		37		-		101		-
	KINFOLK BEAUTY CO., LTD. Bucheon Sosa PFV Co., Ltd ¹		-		1,844		-		- 18.000
Joint ventures	Huvis Corporation		269		3		237		527
	Samnam Petrochemical Co., Ltd.		344		40		-		282
	Samyang Kasei Co., Ltd.		11,176		37		25,949		22
	Samyang Fine Technology Co., Ltd.		896		6,133		2,380		544
		₩	14,621	₩	8,057	₩	28,667	₩	19,375

(in millions of Korean won) 2021 Trade Other Trade Other Name of entity receivables Type receivables payables payables Associates KCI Japan Co., Ltd. ₩ ₩ 1,274 ₩ ₩ OSC KOREA CO., LTD 82 KINFOLK BEAUTY CO., LTD. -344 Bucheon Sosa PFV Co., Ltd¹ 18,000 Joint ventures Huvis Corporation 118 2 245 401 Samnam Petrochemical Co., Ltd. 279 210 _ 281 Samyang Kasei Co., Ltd. 18,181 140 62 38,886 Samyang Fine Technology 2 Co., Ltd. 5,340 2,990 1,178 ₩ 21,112 ₩ 6,036 ₩ 42,121 ₩ 18,746

¹ The Group has entered into a contract to sell property, plant and equipment and investment properties to Bucheon Sosa PFV Co., Ltd for $\forall 180$ billion in which down payment received amounting to $\forall 18$ billion is included in other payables. The transaction will be completed in 2023.

Compensations for key management personnel for the years ended December 31, 2022 and 2021, consists of:

(in millions of Korean won)	2	2022		2021
Short-term employee benefits	₩	25,032	₩	18,251
Retirement benefits		3,236		2,329
	₩	28,268	₩	20,580

Details of guarantees provided to related parties as at December 31, 2022, are as follows:

(in millions of Korean won)

Guarantor	Guarantee recipient	Currency	Collateral and guarantee limit		Withdrawn		Purpose	Guarantee period	Financial institution
Samyang Corporation	Samyang Fine Technology Co., Ltd.	KRW	₩	32,000	₩	13,094	Payment guarantee for borrowings	2015.06.25~ 2025.06.25	Nonghyup Bank

33. Statements of Cash Flows

Cash generated from operating activities for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Profit for the year	₩ 105,849	9 ₩ 274,086
Adjustments for:	34,80	
Income tax expense	20,814	
Interest expense	33,768	3 26,606
Depreciation	99,030	86,455
Amortization	15,002	2 5,809
Bad debt expense	229	9 107
Other bad debt expense		- 42
Retirement benefits	17,040) 16,383
Loss on foreign currency translation	15,46 ⁻	1 2,330
Loss on valuation of financial assets at fair value		
through profit or loss	:	- 3
Loss on valuation of derivative instruments	12,564	4 216
Loss on disposal of property, plant and equipment	3,388	3 228
Loss on disposal of intangible assets	20	· -
Impairment loss on property, plant and equipment	3,947	7 2,566
Impairment loss on assets held for sale		- 4,144
Impairment loss on intangible assets	56	· -
Interest income	(14,414) (7,772)
Gain on foreign currency translation	(27,612) (966)
Gain on disposal of property, plant and equipment	(308) (208)
Gain on disposal of investment property	(94) (841)
Gain on disposal of intangible assets	(262) -
Gain on valuation of financial assets at fair value		
through profit or loss	(1,797) (1)
Gain on disposal of financial assets at fair value through profit or loss	(1)
Gain on valuation of derivative instruments	(4,966	
Dividend income	(22,448	, , ,
Profit from equity-accounted investees investments	(792	, , ,
Increase in trade receivables	(11,489	, , ,
Increase in other receivables	(10,431	, , , ,
Increase in inventories	(29,728	
Decrease (increase) in other current assets	(1,044	, , ,
Decrease in other non-current assets	32	
Decrease in derivative financial assets	1,174	
Increase (decrease) in trade payables	(42,289	
Increase (decrease) in other payables		
	9,062	. ,
Decrease in other current liabilities	(1,623) (7,789)

(in millions of Korean won)	2022		2021
Increase (decrease) in other non-current liabilities		475	(2,264)
Decrease in other long-term payables		(108)	(1,176)
Decrease in derivative financial liabilities		(321)	(2,549)
Increase (decrease) in deposits received		(598)	2,894
Decrease in current portion of provisions		(40)	(298)
Increase (decrease) in non-current provisions		(1)	70
Transfer to (from) retirement benefit obligations		139	(72)
Payment of retirement benefits	(16	,886)	(10,276)
Increase in plan assets	(10	,543)	(12,328)
Others		95	(421)
	₩ 14	0,654 ₩	281,612

Significant non-cash transactions for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022		2021
Increase (decrease) in accounts payable related to the acquisition of property, plant and equipment	₩	(23,422)	₩	3,806
Increase (decrease) in accounts payable related to the acquisition of intangible assets under development		(1,477)		1,477
Reclassification from construction-in-progress to property, plant and equipment and intangible assets		240,446		125,343
Reclassification from property, plant and equipment to investment properties		2,876		19,059
Reclassification from Intangible assets under development to intangible assets		35,442		-
Purchase of right-of-use assets		5,315		14,086

Changes in liabilities arising from financial activities for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)						20	22					
						No	on-c	ash transacti	on			
	J	As at anuary 1 Cash flows			cquisition right-of-use assets	-	Transfer to current portion	Others ¹		De	As at cember 31	
Short-term borrowings	₩	191,386	₩	96,406	₩	-	₩	-	₩	(10,978)	₩	276,814
Long-term borrowings		165,587		142,254		-		(68,685)		(1,440)		237,716
Current portion of long-term borrowings		126,467		(120,263)		-		68,685		243		75,132
Debentures		592,862		179,426		-		-		465		772,753
Current portion of debentures Current portion of lease		199,966		(200,000)		-		-		34		-
liabilities		4,421		(5,334)		123		8,532		(2,923)		4,819
Long-term lease liabilities		19,920		-		7,862		(8,532)		161		19,411
Dividends payable		-		(33,682)		-		-		33,682		-
	₩	1,300,609	₩	58,807	₩	7,985	₩	-	₩	19,244	₩	1,386,645

¹ Others include dividends payable and valuation of foreign currency.

(in millions of Korean won)	2021													
							N	lon-cash t	rans	saction				
	J	As at anuary 1	Ca	ash flows	CO	siness mbina- ions	of	of right-of- cu		ansfer to current portion		Others ¹	D	As at ecember 31
Short-term borrowings	₩	70,765	₩	109,264	₩	10,800	₩	-	₩	-	₩	557	₩	191,386
Long-term borrowings		189,527		61,551		27,421		-		(115,000)		2,088		165,587
Current portion of long-														
term borrowings		42,671		(42,800)		11,796		-		115,000		(200)		126,467
Debentures		698,661		93,715		-		-		(199,893)		379		592,862
Current portion of debentures Current portion of lease		139,909		(140,000)		-		-		199,893		164		199,966
liabilities		8,032		(8,319)		17		453		3,701		537		4,421
Long-term lease liabilities		11,524		(-,,,,,,,,,,,,		157		13,168		(3,701)		(1,228)		19,920
Dividends payable		-		(29,299)								29,299		-
	₩	1,161,089	₩	44,112	₩	50,191	₩	13,621	₩	-	₩	31,596	₩	1,300,609

¹ Others include dividends payable and valuation of foreign currency.

34. Financial Risk Management

The Group's financial instruments are exposed to credit risk, liquidity risk and market risk. This note presents information on the Group's exposure to each of the above risks, the Group's risk management objectives, policies and processes for measuring and managing each risk, and details of the Group's capital management.

Risk management activities

The Group's risk management policies are established to identify and analyze the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

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 (primarily trade receivables) and from its financing activities, including deposits with banks and financial institutions. Accordingly, the credit risks from such financial institutions are considered low.

The Group has established a credit policy under which each new customer is analyzed individually for creditworthiness before the Group determines credit limit of trade receivables. The Group's review includes external ratings, when available, and in some cases bank references.

The Group sets credit limit of trade receivables for customers who meet the credit criteria based on average payment terms in industry practice and sales. For customers who do not meet the credit criteria, it sets limit of trade receivables based on limit of collaterals provided by the customers and sales. The Group transacts with other customers only when advanced payments are provided.

The Group reviews customer's credit ratings and collaterals provided at each end of reporting period and adjusts credit limits if appropriate.

The Group establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables and investments. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for groups of similar assets in respect of losses that have been incurred but not yet identified.

(a) Guarantees provided

As stated in Note 32 to the consolidated financial statements, the Group provides payment guarantees to the related parties other than the Group.

(b) Impairment of financial assets

The Group recognized an allowance for doubtful accounts of $\forall 1,353$ million and $\forall 958$ million for trade receivables and loans individually assessed in 2022 and 2021, respectively. The Group recognizes an allowance for doubtful accounts for other financial assets collectively to evaluate impairment.

(c) Aging analysis of the trade and other receivables, as at December 31, 2022, is as follows:

(in millions of Korean won)	Within 6 months		6 month- 1 year		1-3 years		More than 3 years		Total	
Trade receivables	₩	332,755	₩	705	₩	3,899	₩	5,059	₩	342,418
Allowance for doubtful accounts		(148)		(43)		(705)		(457)		(1,353)
	₩	332,607	₩	662	₩	3,194	₩	4,602	₩	341,065

Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, to the extent reasonably possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group established short-term and mid-to-long term financial management plans to manage liquidity risk, and continued to analyze actual cash outflows with that of planned financial liabilities. The Group holds overdraft agreements with several financial institutions to manage the temporary liquidity risk.

The Group monitors its risk of shortage of funds and manages its cash flows using L/Cs, overdrafts and other means.

The maturity analysis of contractual maturity of financial liabilities as at December 31, 2022 and 2021, is as follows:

(in millions of Korean won)	2022										
	Carrying amount		Within 1 year		1-5 years		More than 5 years			Total	
Non-derivative financial liabilities:											
Trade and other payables	₩	288,875	₩	280,394	₩	7,784	₩	2,588	₩	290,766	
Borrowings		589,662		369,307		251,899		436		621,642	
Debentures		772,753		18,793		749,270		62,650		830,713	
Lease liabilities		24,230		6,071		14,229		11,666		31,966	
Financial guarantee liabilities		495		32,000		-		-		32,000	
Other non-current financial											
liabilities		61,277		-		61,277		-		61,277	
		1,737,292		706,565		1,084,459		77,340		1,868,364	
Derivative financial liabilities:											
Other current financial liabilities		12,591		12,591		-		-		12,591	
	₩	1,749,883	₩	719,156	₩	1,084,459	₩	77,340	₩	1,880,955	

(in millions of Korean won)	2021										
	Carrying amount		Within 1 year		1-5 years		More than 5 years			Total	
Non-derivative financial liabilities:											
Trade and other payables	₩	352,022	₩	343,463	₩	7,415	₩	3,578	₩	354,456	
Borrowings		483,440		319,360		161,551		5,879		486,790	
Debentures		792,828		203,746		538,511		60,000		802,257	
Lease liabilities		24,341		5,026		13,733		12,754		31,513	
Financial guarantee liabilities		978		32,000		-		-		32,000	
Other non-current financial											
liabilities		61,277		-		61,277		-		61,277	
		1,714,886		903,595		782,487		82,211		1,768,293	
Derivative financial liabilities:											
Other current financial liabilities		230		230		-		-		230	
	₩	1,715,116	₩	903,825	₩	782,487	₩	82,211	₩	1,768,523	

The total amounts above are different to their carrying amounts as the above maturity analysis is presented at the nominal value of undiscounted future cash flows.

Market risk

Market risk is the risk that changes in market prices will affect the Group's profit or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing returns.

(a) Currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of Group's entities, primarily Korean won. The currencies that the transactions are denominated are USD, EUR, JPY, etc. The Group uses currency forward contracts to hedge 40% to 70% of its estimated foreign currency exposure in respect of forecasted sales and purchases over the following six months.

Assets and liabilities denominated in currencies other than the Group's functional currencies as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022				2021				
	Assets		Liabilities		Assets		Lia	bilities	
USD	₩	139,492	₩	360,083	₩	124,276	₩	337,884	
EUR		27,626		1,955		27,369		1,109	
JPY		26,932		6,118		19,641		5,866	
CNY		657		71		371		-	
HUF		148		20		98		50	
	₩ 194,855		₩	368,247	₩	171,755	₩	344,909	

The Group's forward exchange contracts to hedge against currency risk as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		20	22		2021				
	Short position		Long position		Short position		Long positior		
USD	₩	17,016	₩	165,630	₩	16,958	₩	101,700	
EUR		1,118		-		-		-	
JPY		9,913		-		8,429		-	
	₩	28,047	₩	165,630	₩	25,387	₩	101,700	

Assuming that foreign currency exchange rates fluctuate by 10% at the end of the reporting period and other variables remain constant, sensitivity analysis of income before taxes to change of foreign currency exchange rates as at December 31, 2022 and 2021, is as follows:

(in millions of Korean won)		20	22		2021				
		10%	10%		10%			10%	
	in	increase		decrease		increase		crease	
USD	₩	(22,059)	₩	22,059	₩	(21,361)	₩	21,361	
EUR		2,567		(2,567)		2,626		(2,626)	
JPY		2,081		(2,081)		1,377		(1,377)	
CNY		59		(59)		37		(37)	
HUF		13		(13)		5		(5)	
Profit (loss) from exposure Less effect of forward exchange		(17,339)		17,339		(17,316)		17,316	
contracts		13,758		(13,758)		7,631		(7,631)	
Profit (loss) from exposure, net	₩	(3,581)	₩	3,581	₩	(9,685)	₩	9,685	

(b) Interest rate risk

The Group is exposed to the interest rate risk related to its borrowings with variable rates. Management monitors the level of interest rate risks regularly and ensures to maintain an optimal balance between borrowings at variable and fixed rates.

Details of the Group's interest-bearing financial liabilities as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2	2022		2021
Liabilities with fixed rates:				
Short-term borrowings	$\forall \forall$	216,393	₩	186,369
Current portion of long-term borrowings		26,450		126,467
Current portion of debentures		-		199,966
Long-term borrowings		99,950		98,820
Debentures		772,753		592,862
		1,115,546		1,204,484
Liabilities with variable rates:				
Short-term borrowings		60,421		5,017
Current portion of long-term borrowings		48,682		-
Long-term borrowings		137,766		66,767
	₩	246,869	₩	71,784

The impact of 1% change in interest rates at the reporting date on equity and profit or loss (before tax) is shown below. This analysis assumes that all other variables, in particular, foreign currency rates remain constant.

(in millions of Korean won)	2022				2021				
	1% increase		1% decrease		1% increase		1% c	lecrease	
Liabilities with variable interest rates	₩	(2,469)	₩	2,469	₩	(718)	₩	718	
Effects of interest rate swap		997		(997)		517		(517)	
Net exposure gains and losses	₩	(1,472)	₩	1,472	₩	(201)	₩	201	

The Group does not account for any fixed rate financial liabilities as financial liabilities at fair value through profit or loss. Accordingly, changes in interest rates at the reporting date would not affect equity, profit or loss.

(c) Market price risk

The Group is exposed to equity price risk, which arises from listed equity securities in financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss. Management monitors the risk arising from changes in market prices regularly and approves all equity investment decisions.

As at December 31, 2022, the Group is exposed to the market price risk caused by equity instruments classified as financial assets at fair value through other comprehensive income. As at December 31, 2022, the carrying amount of the financial assets at fair value through other comprehensive income is \forall 307,710 million, assuming that market price fluctuates by 10% at the end of reporting period and other variables remain constant, the impact of the change on other comprehensive income before taxes amounts to \forall 30,771 million.

Capital management

The objective of the Group's capital management is to maximize shareholder value through maintaining a sound capital structure. The Group makes necessary improvements to its capital structure through monitoring financial ratios such as debt to equity and net borrowings to equity on a monthly basis in order to achieve an optimal capital structure.

The capital risk ratios the Group monitors as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021
Liabilities (A)	₩	2,024,270	₩	2,035,160
Equity (B)		2,523,511		2,425,407
Financial deposits and others (C)		784,612		752,392
Borrowings and debentures (D)		1,362,415		1,276,268
Debt to equity ratio (A/B)		80.22%		83.91%
Net debt to equity ratio ((D-C)/B)		22.90%		21.60%

Transfers of financial assets

Financial assets that are transferred but not derecognized as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	Loa	eivables		
	2	022		2021
Liabilities with recourse only to the transferred assets				
Fair value of assets	₩	5,905	₩	3,579
Fair value of related liabilities		(5,905)		(3,579)
Net amount	₩	-	₩	-

35. Financial Instruments by Category

Details of the carrying amount of financial assets as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won) Category	Account		2022	2021		
Financial asset at amortized cost	Cash and cash equivalents ¹	₩	231,375	₩	175,824	
	Trade and other receivables ²		366,307		344,454	
	Other current financial assets ³		553,211		576,370	
	Other non-current receivables		9,862		16,103	
	Other non-current financial assets		26		199	
			1,160,781		1,112,950	
Financial assets at fair value through	Listed equity instruments					
other comprehensive income	Listed equity institutients		307,710		355,258	
	Unlisted equity instruments		72,259		49,707	
	Debt instruments		1,407		3	
			381,376		404,968	
Financial assets at fair value through	Ronoficiany cortificatos and others					
profit or loss	Beneficiary certificates and others		23,808		16,356	
Derivatives	Other current financial assets ⁴		5,153		1,274	
		₩	1,571,118	₩	1,535,548	

¹ Cash and cash equivalents consist of cash on hand and demand deposits which are presented net of unused government grants.

A reconciliation of cash and cash equivalents reported in the consolidated statements of cash flows and financial position for the years ended December 31, 2022 and 2021, is as follows:

(in millions of Korean won)		2022		2021
Cash and cash equivalents in the statements of cash flows Government subsidy	₩	231,766 (391)	₩	176,379 (555)
Cash and cash equivalents in the statements of financial position	₩	231,375	₩	175,824

² The above amount excludes due from customers for contract work.

³ Consist of short-term deposits to financial institutions such as time deposits and financial lease receivables.

⁴ Consist of derivative instruments which are not accounted for using hedge accounting.

Details of the carrying amount of financial liabilities as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)							
Category	Account		2022		2021		
Financial liabilities at amortized cost	Trade and other payables	₩	280,385	₩	343,248		
	Short-term borrowings Current portion of long-term		276,814		191,386		
	borrowings		75,132		126,467		
	Other non-current payables		8,490		8,774		
	Long-term borrowings		237,716		165,587		
	Debentures		772,753		592,862		
	Current portion of debentures		-		199,966		
	Other current financial liabilities ¹ Other non-current financial		5,090		4,743		
	liabilities ¹		80,912		81,853		
			1,737,292		1,714,886		
Derivatives	Other current financial liabilities ²		12,591		230		
		₩	1,749,883	₩	1,715,116		

¹ Other financial liabilities consist of lease liabilities, financial guarantee contracts and contract with an obligation to purchase own shares.

² The above other current financial liabilities consist of derivative instruments which are not accounted for hedge accounting.

Gains and losses from financial instruments by category for the years ended December 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022											
		F	ncial assets		Financial liabilities								
	Financial assets measured at amortized cost		Financial assets at fair value		Derivative instruments		Financial liabilities measured at amortized cost		Derivative instruments			Total	
Interest income	₩	14,414	₩	-	₩	-	₩	-	₩	-	₩	14,414	
Interest cost		-		-		-		(33,768)		-		(33,768)	
Dividend income		-		22,448		-		-		-		22,448	
Gain on disposal		-		1		-		-		-		1	
Bad debt expense Gain (loss) on foreign		(229)		-		-		-		-		(229)	
currency translation Net changes in fair value –		(5,276)		-		-		17,427		-		12,151	
profit or loss Net change in fair value – other comprehensive		-		1,794		24,321		-		(17,205)		8,910	
income		-		(27,895)		-		-		-		(27,895)	
	₩	8,909	₩	(3,652)	₩	24,321	₩	(16,341)	₩	(17,205)	₩	(3,968)	

(in millions of Korean won)		2021											
		I	inan	cial asset	5		Financial liabilities						
	Financial assets measured at amortized cost		Financial assets at fair value		Derivative instruments		Financial liabilities measured at amortized cost		Derivative instruments			Total	
Interest income	₩	7,772	₩	-	₩	-	₩	-	₩	-	₩	7,772	
Interest cost		-		-		-		(26,606)		-		(26,606)	
Dividend income		-		11,399		-		-		-		11,399	
Bad debt expense Gain (loss) on foreign		(149)		-		-		-		-		(149)	
currency translation		(175)		-		-		(1,189)		-		(1,364)	
Net changes in fair value – profit or loss		-		1		11,784		-		(3,530)		8,255	
Net change in fair value – other comprehensive income		-		103,205		-		-		-		103,205	
	₩	7,448	₩	114,605	₩	11,784	₩	(27,795)	₩	(3,530)	₩	102,512	

36. Construction Contracts

Accumulated costs and accumulated profit and loss related to service contracts in progress as at December 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022			2021			
Accumulated amount of costs incurred	₩	19,558	₩	23,030			
Accumulated profit		1,813		2,051			
Accumulated loss		(2,219)		(636)			
Accumulated construction revenue		19,152		24,445			
Progress billings		(17,850)		(24,037)			
	₩	1,302	₩	408			
Due from customers for contract work		1,373		1,409			
Due to customers for contract work		(71)		(1,001)			
	₩	1,302	₩	408			

As at December 31, 2022, there are $\forall 167$ million of advances and there are no collections related to construction contracts.

As at December 31, 2022, there is no contract for which the contracted amount is more than 5% of consolidated sales for the year ended December 31, 2021.