

LG Chem, Ltd. and Subsidiaries

**Condensed Consolidated Interim Financial Statements
June 30, 2024 and 2023 (Unaudited), and December
31, 2023**

LG Chem, Ltd. and Subsidiaries

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Report on Review of Condensed Consolidated Interim Financial Statements

(English Translation of a Report Originally Issued in Korean)

To the Shareholders and Board of Directors of
LG Chem, Ltd.

Reviewed Financial Statements

We have reviewed the accompanying condensed consolidated interim financial statements of LG Chem, Ltd. and its subsidiaries (collectively referred to as the "Group"). These condensed consolidated interim financial statements consist of the consolidated interim statement of financial position of the Group as at June 30, 2024, and the related consolidated interim income statement, statement of comprehensive income for the three-month and six-month periods ended June 30, 2024, and consolidated interim statement of changes in equity and cash flows for the six-month period ended June 30, 2024, and material accounting policy information and other selected explanatory notes, expressed in Korean won.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these condensed consolidated interim financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS) 1034 *Interim Financial Reporting*, and for such internal control as management determines is necessary to enable the preparation of condensed consolidated interim financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express a conclusion on these condensed consolidated interim financial statements based on our review.

We conducted our review in accordance with quarterly or semi-annual review standards established by the Securities and Futures Commission of the Republic of Korea. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Korean Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe the accompanying condensed consolidated interim financial statements are not presented, in all material respects, in accordance with Korean IFRS 1034 *Interim Financial Reporting*.

Other Matters

The consolidated income statement, statements of comprehensive income for the three-month and six-month periods ended June 30, 2023, statements of changes in equity and cash flows for the six-month period ended June 30, 2023, presented herein for comparative purposes, were reviewed by another auditor whose report dated August 14, 2023. Based on their review, nothing has come to their attention that causes them to believe the accompanying financial statements do not present fairly, in all material respects, in accordance with Korean IFRS 1034 *Interim Financial Reporting*.

The consolidated statement of financial position as at December 31, 2023, and the consolidated income statement, statements of comprehensive income, changes in equity and cash flows for the year then ended, not presented herein, were audited by another auditor who expressed an unqualified opinion on those statements on March 7, 2024. The consolidated statement of financial position as at December 31, 2023, presented herein for comparative purposes, is consistent, in all material respects, with the above audited statement of financial position as at December 31, 2023.

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

August 14, 2024
Seoul, Korea

This report is effective as of August 14, 2024, the review report date. Certain subsequent events or circumstances, which may occur between the review report date and the time of reading this report, could have a material impact on the accompanying condensed consolidated interim financial statements and notes thereto. Accordingly, the readers of the review report should understand that there is a possibility that the above review report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

LG Chem, Ltd. and Subsidiaries
Consolidated Interim Statements of Financial Position
June 30, 2024 and December 31, 2023

<i>(in millions of Korean won)</i>	Notes	June 30, 2024 (Unaudited)	December 31, 2023
Assets			
Current assets			
Cash and cash equivalents	3, 5, 6	₩ 7,167,416	₩ 9,084,899
Trade receivables	3, 5, 7, 31	8,856,942	8,082,952
Other receivables	3, 5, 7, 31	406,698	682,178
Other current financial assets	3, 5, 8	269,374	141,428
Prepaid income taxes		113,561	86,032
Other current assets	13	1,794,784	1,211,374
Inventories	9	9,759,646	9,375,327
Assets held for sale	34	211,195	195,106
Total current assets		<u>28,579,616</u>	<u>28,859,296</u>
Non-current assets			
Trade receivables	3, 5, 7	138,469	129,996
Other receivables	3, 5, 7	449,959	427,693
Other non-current financial assets	3, 5, 8	1,462,643	1,228,501
Investments in associates and joint ventures	1, 10, 33	1,022,295	1,005,606
Deferred tax assets	28	2,558,331	2,308,966
Property, plant and equipment	11	45,262,372	38,950,393
Intangible assets	12	3,865,190	3,692,922
Investment properties	36	100,085	88,950
Other non-current assets	13, 16	748,721	774,371
Total non-current assets		<u>55,608,065</u>	<u>48,607,398</u>
Total assets		<u>₩ 84,187,681</u>	<u>₩ 77,466,694</u>
Liabilities			
Current liabilities			
Trade payables	3, 5, 31	₩ 4,265,897	₩ 4,117,913
Other payables	3, 5, 31	4,712,071	4,905,081
Borrowings	3, 5, 14	8,259,436	7,077,782
Other current financial liabilities	3, 5, 8	389,779	523,910
Provisions	15	559,427	546,950
Income tax payables		176,126	45,304
Other current liabilities	17, 35	1,220,143	1,146,844
Liabilities of disposal group held for sale	34	23,867	27,055
Total current liabilities		<u>19,606,746</u>	<u>18,390,839</u>
Non-current liabilities			
Other payables	3, 5	26,162	33,418
Borrowings	3, 5, 14	16,492,161	14,850,332
Other non-current financial liabilities	3, 5, 8	511,565	99,950
Provisions	15	1,019,908	887,775
Net defined benefit liabilities	13, 16	14,467	11,879
Deferred tax liabilities	28	707,632	735,326
Other non-current liabilities	17, 35	1,544,936	1,518,990
Total non-current liabilities		<u>20,316,831</u>	<u>18,137,670</u>
Total liabilities		<u>₩ 39,923,577</u>	<u>₩ 36,528,509</u>

LG Chem, Ltd. and Subsidiaries
Consolidated Interim Statements of Financial Position
June 30, 2024 and December 31, 2023

<i>(in millions of Korean won)</i>	Notes	June 30, 2024 (Unaudited)	December 31, 2023
Equity			
Issued capital	1, 19	391,406	391,406
Capital surplus	19	11,572,098	11,572,098
Elements of other stockholders equity	21	(19,569)	(19,569)
Accumulated other comprehensive income		1,535,808	598,038
Retained earnings	20	19,196,017	19,650,632
Equity attributable to owners of the Parent Company		32,675,760	32,192,605
Non-controlling interests		11,588,344	8,745,580
Total equity		44,264,104	40,938,185
Total liabilities and equity		₩ 84,187,681	₩ 77,466,694

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

LG Chem, Ltd. and Subsidiaries
Consolidated Interim Income Statements
Three-month and Six-month Periods Ended June 30, 2024 and 2023

(in millions of Korean won, except per share amounts)

	Notes	Period Ended June 30			
		2024		2023	
		(Unaudited)		(Unaudited)	
		Three months	Six months	Three months	Six months
Revenue	22, 31, 33, 35	₩ 12,299,672	₩ 23,909,104	₩ 14,335,670	₩ 28,620,157
Cost of sales	22, 23, 31	(10,423,581)	(20,129,260)	(11,930,289)	(23,902,375)
Gross profit		1,876,091	3,779,844	2,405,381	4,717,782
Other operating income	22	447,794	636,748	110,916	211,210
Selling and administrative expenses	22, 23, 31	(1,918,025)	(3,746,101)	(1,898,657)	(3,507,649)
Operating income	22, 33	405,860	670,491	617,640	1,421,343
Finance income	25	476,596	1,112,686	440,413	975,741
Finance costs	25	(629,203)	(1,286,621)	(358,775)	(874,025)
Losses of associates and joint ventures	10	(16,707)	(20,167)	(4,920)	(19,223)
Other non-operating income	26	233,883	563,078	526,551	1,049,406
Other non-operating expenses	27	(283,166)	(528,900)	(440,907)	(849,142)
Profit before income tax	32	187,263	510,567	780,002	1,704,100
Income tax expense	28	(153,509)	(157,454)	(108,850)	(357,630)
Profit from continuing operations		₩ 33,754	₩ 353,113	₩ 671,152	₩ 1,346,470
Profit (loss) from discontinued operations	34	₩ 26,039	₩ 48,379	₩ (340)	₩ (6,608)
Profit		₩ 59,793	₩ 401,492	₩ 670,812	₩ 1,339,862
Profit is attributable to:					
Owners of the Parent Company					
Profit (loss) from continuing operations		₩ (343,020)	₩ (228,753)	₩ 525,253	₩ 1,004,977
Profit (loss) from discontinued operations		26,159	48,617	(390)	(5,947)
		(316,861)	(180,136)	524,863	999,030
Non-controlling interests					
Profit from continuing operations		376,774	581,866	145,899	341,493
Profit (loss) from discontinued operations		(120)	(238)	50	(661)
		376,654	581,628	145,949	340,832
Earnings per share for profit attributable to the owners of the Parent Company (in won)					
29					
Basic earnings (losses) per ordinary share		₩ (4,048)	₩ (2,301)	₩ 6,700	₩ 12,758
Basic earnings (losses) per preferred share		(4,048)	(2,301)	6,750	12,808
Earnings per share for profit from continuing operations attributable to the owners of the Parent Company (in won)					
29					
Basic earnings (losses) per ordinary share		₩ (4,382)	₩ (2,922)	₩ 6,705	₩ 12,834
Basic earnings (losses) per preferred share		(4,382)	(2,922)	6,755	12,884

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

LG Chem, Ltd. and Subsidiaries
Consolidated Interim Statements of Comprehensive Income
Three-month and Six-month Periods Ended June 30, 2024 and 2023

(in millions of Korean won)

	Notes	Period Ended June 30, 2024			
		2024		2023	
		(Unaudited)		(Unaudited)	
		Three months	Six months	Three months	Six months
Profit		₩ 59,793	₩ 401,492	₩ 670,812	₩ 1,339,862
Other comprehensive income					
<i>Items that will not be reclassified to profit or loss</i>					
Remeasurements of net defined benefit liabilities	16	1,021	(29)	1,572	2,983
Loss on valuation of financial assets at fair value through other comprehensive income		(34,955)	(58,404)	(29,892)	(32,654)
Shares of remeasurements of net defined benefit liabilities of associates		-	-	-	461
Income tax relating to these items		3,883	16,454	7,787	8,180
<i>Items that may be subsequently reclassified to profit or loss</i>					
Exchange differences on translation of foreign operations		740,935	1,565,983	(158,597)	518,814
Cash flow hedge		2,291	3,674	(8,248)	(15,475)
Shares of other comprehensive income of associates and joint ventures		19,658	36,652	421	28,911
Income tax relating to these items		(21,189)	(23,433)	441	11,014
Other comprehensive income for the period, net of tax		<u>711,644</u>	<u>1,540,897</u>	<u>(186,516)</u>	<u>522,234</u>
Total comprehensive income for the period		₩ 771,437	₩ 1,942,389	₩ 484,296	₩ 1,862,096
Total comprehensive income for the period is attributable to:					
Owners of the Parent Company		₩ 107,922	₩ 757,674	₩ 367,145	₩ 1,374,142
Non-controlling interest		663,515	1,184,715	117,151	487,954

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

LG Chem, Ltd. and Subsidiaries
Consolidated Interim Statements of Changes in Equity
Six-Month Periods Ended June 30, 2024 and 2023

(in millions of Korean won)

Notes	Attributable to owners of the Parent Company						Non-controlling interests	Total equity
	Issued capital	Capital surplus	Elements of other stockholders equity	Accumulated other comprehensive income (loss)	Retained earnings	Total		
Balance at January 1, 2023	₩ 391,406	₩ 11,569,556	₩ (19,569)	₩ 366,916	₩ 19,142,263	₩ 31,450,572	₩ 6,030,555	₩ 37,481,127
Comprehensive income								
Profit	-	-	-	-	999,030	999,030	340,832	1,339,862
Remeasurements of net defined benefit liabilities	-	-	-	-	1,974	1,974	226	2,200
Exchange differences on translation of foreign operations	-	-	-	378,751	-	378,751	147,205	525,956
Gain (loss) on valuation of financial assets at fair value through other comprehensive income	-	-	-	(23,952)	-	(23,952)	260	(23,692)
Cash flow hedge	-	-	-	(9,496)	-	(9,496)	(2,107)	(11,603)
Others	-	-	-	27,374	461	27,835	1,538	29,373
Total comprehensive income for the period	-	-	-	372,677	1,001,465	1,374,142	487,954	1,862,096
Transactions with owners:								
Dividends	-	-	-	-	(783,135)	(783,135)	(81,875)	(865,010)
Increase in paid-in capital of a subsidiary	-	2,542	-	-	-	2,542	1,125,531	1,128,073
Others	-	-	-	-	1,274	1,274	-	1,274
Total transactions with owners	-	2,542	-	-	(781,861)	(779,319)	1,043,656	264,337
Balance at June 30, 2023 (Unaudited)	₩ 391,406	₩ 11,572,098	₩ (19,569)	₩ 739,593	₩ 19,361,867	₩ 32,045,395	₩ 7,562,165	₩ 39,607,560
Balance at January 1, 2024	₩ 391,406	₩ 11,572,098	₩ (19,569)	₩ 598,038	₩ 19,650,632	₩ 32,192,605	₩ 8,745,580	₩ 40,938,185
Comprehensive income								
Profit (loss)	-	-	-	-	(180,136)	(180,136)	581,628	401,492
Remeasurements of net defined benefit liabilities	-	-	-	-	40	40	(99)	(59)
Exchange differences on translation of foreign operations	-	-	-	943,374	-	943,374	600,070	1,543,444
Loss on valuation of financial assets at fair value through other comprehensive income	-	-	-	(41,666)	-	(41,666)	(255)	(41,921)
Cash flow hedge	-	-	-	2,276	-	2,276	505	2,781
Others	-	-	-	33,786	-	33,786	2,866	36,652
Total comprehensive income for the period	-	-	-	937,770	(180,096)	757,674	1,184,715	1,942,389
Transactions with owners:								
Dividends	-	-	-	-	(274,347)	(274,347)	(92,953)	(367,300)
Increase in paid-in capital of a subsidiary	-	-	-	-	-	-	1,952,673	1,952,673
Others	-	-	-	-	(172)	(172)	(201,671)	(201,843)
Total transactions with owners	-	-	-	-	(274,519)	(274,519)	1,658,049	1,383,530
Balance at June 30, 2024 (Unaudited)	₩ 391,406	₩ 11,572,098	₩ (19,569)	₩ 1,535,808	₩ 19,196,017	₩ 32,675,760	₩ 11,588,344	₩ 44,264,104

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

LG Chem, Ltd. and Subsidiaries
Consolidated Interim Statements of Cash Flows
Six-Month Periods Ended June 30, 2024 and 2023

(in millions of Korean won)

	Notes	Period Ended June 30	
		2024 (Unaudited)	2023 (Unaudited)
Cash flows from operating activities			
Cash generated from operations	32	₩ 2,515,909	₩ 3,565,300
Interest received		185,236	143,550
Interest paid		(437,375)	(306,493)
Dividends received		8,517	17,883
Income taxes paid		(328,858)	(945,921)
Net cash inflow from operating activities		1,943,429	2,474,319
Cash flows from investing activities			
Decrease in other receivables		239,886	349,368
Proceeds from disposal of other financial assets		9,333	4,930
Proceeds from disposal of property, plant and equipment		26,435	1,239
Proceeds from disposal of intangible assets		1,153	1,293
Government grants received		144,574	131,735
Proceeds from disposal of assets held for sale		616	15,684
Other cash inflow from investing activities		144	-
Cash inflow from settlement of derivative instruments transactions		4,061	-
Increase in other receivables		(202,711)	(224,654)
Acquisition of investments in associates and joint ventures		(7,847)	(66,959)
Acquisition of other financial assets		(90,529)	(223,735)
Acquisition of property, plant and equipment		(7,270,759)	(6,032,995)
Acquisition of intangible assets		(67,660)	(78,049)
Cash outflows from transfer of business		-	(702,227)
Other cash outflows from investing activities		-	(4,431)
Cash outflow from settlement of derivative instruments transactions		(18,091)	-
Net cash outflow from investing activities		(7,231,395)	(6,828,801)
Cash flows from financing activities			
Proceeds from borrowings		5,614,966	6,597,704
Capital contribution from non-controlling interests		1,952,673	1,128,073
Settlement of derivative instruments transactions		49,480	-
Repayments of borrowings and others		(3,987,587)	(4,174,243)
Dividends paid		(367,300)	(895,768)
Others		(201,580)	-
Net cash inflow from financing activities		3,060,652	2,655,766
Net decrease in cash and cash equivalents		(2,227,314)	(1,698,716)
Cash equivalents included in the disposal group held for sale at the beginning of the period		23,877	-
Cash and cash equivalents at the beginning of the period		9,084,899	8,497,882
Effects of exchange rate changes on cash and cash equivalents		301,252	47,000
Cash equivalents included in the disposal group held for sale at the end of the period		(15,298)	-
Cash and cash equivalents at the end of the period		₩ 7,167,416	₩ 6,846,166

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

LG Chem, Ltd. and Subsidiaries

Notes to the Condensed Consolidated Interim Financial Statements

June 30, 2024 and 2023 (Unaudited), and December 31, 2023

1. General Information

General information about LG Chem, Ltd. (the Parent Company) and its 73 subsidiaries (collectively referred to as the “Group”) is as follows:

1.1 The Parent Company

The Parent Company was spun off on April 1, 2001, from LG Chem Investment Ltd. (now LG Corp., formerly LG Chemical Ltd.).

As at June 30, 2024, the Group has its manufacturing facilities in Yeosu, Daesan, Ochang, Cheongju, Naju, Iksan, Osong, Onsan, Gimcheon and overseas sites.

As at June 30, 2024, the Parent Company's capital, including the preferred issued capital of ₩38,444 million, is ₩391,406 million. The largest shareholder of the Parent Company is LG Corp., which owns 33.34% of the Parent Company's ordinary shares.

The Parent Company is authorized to issue 292 million shares of ordinary shares with par value of ₩5,000 per share. As at June 30, 2024, the Parent Company has 70,592,343 ordinary shares and 7,688,800 preferred shares issued and outstanding. Preferred shareholders have no voting rights but are entitled to receive dividends at a rate of 1% more than those paid to ordinary shareholders.

1.2 Business Overview

The Group is engaged in Petrochemicals, Energy solutions, and Advanced materials business, and also engaged in Life Sciences business acquired through a merger with LG Life Sciences, Ltd. in January 2017. In addition, the Parent Company acquired 100% shares of FarmHannong Co., Ltd., in April 2016, which is engaged to manufacture crop protection products, seeds, fertilizers and others.

The Petrochemical business includes production of olefin petrochemicals, such as ethylene, propylene, butadiene from Naphtha, and aromatic petrochemicals such as benzene. It also includes production of synthetic resin and synthetic components from olefin, and aromatic petrochemicals. This business bears characteristics of a large-volume process industry. The Group's major products are PE, PP, BPA, ABS, EP, PVC, plasticizers, acrylic, SAP, synthetic rubber, a special resin, and others.

LG Energy Solution, Ltd. which was established through the split-off of the Energy solution business from the Parent Company on December 1, 2020, and its subsidiaries mainly manufacture and supply batteries ranging from IT & New application batteries for mobile phones and laptop computers, to automotive batteries for electric vehicles and ESS (Energy Storage System) batteries. Demand of small-sized batteries for new applications such as electric tools and electric driving devices as well as traditional IT devices is increasing recently and the automotive battery business is also expected to expand rapidly due to an increasing demand of the batteries in associated with enhanced environment regulation in developed countries. Demand for ESS is expanding with an increasing importance of efficient usage of electricity and generation of renewable energy.

The advanced material business manufactures and supplies various kinds of electronic materials including engineering materials, semiconductor materials, and display and battery materials such as LCD photoresist, cathode materials and separator. It also manufactures and supplies RO membranes, which will be the next growth engine for future.

The Life Sciences business manufactures and supplies pharmaceutical products, such as human

LG Chem, Ltd. and Subsidiaries

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growth hormone 'Eutropin', diabetes drug 'Zemiglo', bovine somatotropin 'Boostin', hyaluronic acid filler 'YVOIRE' and others, as well as fine chemical products, such as herbicide 'PYANCHOR' for rice farming and others.

FarmHannong Co., Ltd. and its subsidiaries which were acquired by the Group in 2016 to manufacture and sell crop protection products, seeds, fertilizers and others. The crop protection business provides high value products such as environmentally friendly pesticide. The fertilizer business leads developing a next generation fertilizers such as eco-friendly organic and functional fertilizers, and potting soil. The seed business puts priority on retaining various genetic resources and developing rare breeds with high profit in order to remain competitive in a future food industry.

1.3 Consolidated Subsidiaries, Associates and Joint Ventures

	Percentage of ownership (%)		Business location	Closing month	Business activities
	June 30, 2024	December 31, 2023			
Consolidated subsidiaries					
LG Energy Solution, Ltd. ¹	82	82	Korea	December	Battery manufacturing and sales
Ningbo LG Yongxing Chemical Co., Ltd. ²	75	75	China	December	ABS/SBL manufacturing and sales
Ningbo Zhenhai LG Yongxing Trade Co., Ltd. ²	75	75	China	December	ABS sales
LG Chem America, Inc	100	100	USA	December	Sales and trading
LG Chemical India Pvt. Ltd. ³	100	100	India	December	Synthetic resin manufacturing and sales
LG Polymers India Pvt. Ltd. ³	100	100	India	December	PS manufacturing and sales
LG Chemical (Guangzhou) Engineering Plastics Co., Ltd.	100	100	China	December	EP manufacturing and sales
LG Chem (Taiwan), Ltd.	100	100	Taiwan	December	Sales and trading
Tianjin LG Bohai Chemical Co., Ltd.	75	75	China	December	PVC, VCM, EDC manufacturing and sales
Tianjin LG BOTIAN Chemical Co., Ltd.	58	58	China	December	SBS manufacturing and sales
LG Chem (China) Investment Co., Ltd. ⁴	100	100	China	December	China holding company
LG Chem (Tianjin) Engineering Plastics Co., Ltd.	100	100	China	December	EP manufacturing and sales
LG Chem Europe GmbH	100	100	Germany	December	Sales and trading
LG Chem Poland Sp. z o.o.	100	100	Poland	December	EP manufacturing and sales
LGC Petrochemical India Private Ltd.	100	100	India	December	Synthetic resin manufacturing and sales
HAENGBOKNURI CO., LTD.	100	100	Korea	December	Facility management and general cleaning
LG CHEM TK Kimya SANAYI VE TIC. Ltd. STI.	100	100	Turkey	December	Sales and trading
LG Chem Japan Co., Ltd.	100	100	Japan	December	Sales and trading
LG NanoH2O, LLC	100	100	USA	December	Water processing membrane sales
LG Chem (Chongqing) Engineering Plastics Co., Ltd.	100	100	China	December	EP manufacturing and sales
LG Chem (HUIZHOU) Petrochemical Co., Ltd.	70	70	China	December	ABS manufacturing and sales
LG Chem Life Sciences India Pvt. Ltd.	100	100	India	December	Pharmaceutical products sales
LG Jiansheng Chem Life Sciences (Beijing) Co., Ltd.	60	60	China	December	Pharmaceutical products sales
LG Chem Life Sciences (Thailand) Ltd.	100	100	Thailand	December	Pharmaceutical products sales
LG Chem Hai Phong Vietnam Company Ltd.	100	100	Vietnam	December	Polarizer manufacturing and sales
LG Chem Mexico S.A. de C.V.	100	100	Mexico	December	Sales and trading

LG Chem, Ltd. and Subsidiaries
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	Percentage of ownership (%)		Business location	Closing month	Business activities
	June 30, 2024	December 31, 2023			
LG Chem Hai Phong engineering Plastics LLC.	100	100	Vietnam	December	EP manufacturing and sales
LG Chem (Guangzhou) Information & Electronics Materials Co., Ltd.	100	100	China	December	Polarizer manufacturing and sales
LEYOU NEW ENERGY MATERIALS(WUXI) Co., LTD.	51	51	China	December	Battery materials manufacturing and sales
LG Chem Fund I LLC	100	100	USA	December	Investments in venture companies
Uniseal, Inc.	100	100	USA	December	Adhesive manufacturing and sales
LG Chem Life Sciences USA Inc. ⁵	100	100	USA	December	Pharmaceutical products research
LG Chem Asia Pte. Ltd.	100	100	Singapore	December	Asia BSC
LG Chem China Tech Center ⁴	100	100	China	December	Research on petrochemicals
LG PETRONAS CHEMICALS Malaysia Sdn.Bhd.	51	51	Malaysia	December	NBL manufacturing and sales
LG Chem Hangzhou Advanced Materials Co., Ltd.	70	70	China	December	Polarizer sheet manufacturing and sales
LG-HY BCM CO., LTD.	51	51	Korea	December	Battery materials manufacturing and sales
LG Chem Ohio Petrochemical, Inc.	100	100	USA	December	ABS manufacturing and sales
LG Chem VietNam Co., Ltd.	100	100	Vietnam	December	Sales and trading
LG Chem Malaysia SDN.BHD.	100	100	Malaysia	December	Sales and trading
LG Chem BRASIL INTERMEDIACAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	100	100	Brazil	December	Sales and trading
Aveo Pharmaceuticals, Inc.	100	100	USA	December	Anticancer drug sales and research
PT LG CHEM INDONESIA	100	100	Indonesia	December	Sales and trading
TW Biomassenergy Co., Ltd	60	60	Korea	December	Plant utility manufacturing and sales
LG Chem America Advanced Materials, Inc. ⁶	100	-	USA	December	Battery materials manufacturing and sales
FarmHannong Co., Ltd. ⁷	100	100	Korea	December	Agricultural pesticide manufacturing and sales
Farmhannong America, Inc. ⁷	100	100	USA	December	Agricultural pesticide sales
FarmHannong(Thailand) Ltd. ⁷	100	100	Thailand	December	Research and development ("R&D") on seeds
FARMHANNONG(MALAYSIA) SDN. BHD. ⁷	100	100	Malaysia	December	Agricultural pesticide licensing
PT FARM HANNONG INDONESIA ⁷	100	100	Indonesia	December	Agricultural pesticide licensing
FarmHannong do Brasil Limitada ⁷	100	100	Brazil	December	Agricultural pesticide sales
LG Energy Solution (Nanjing) Co., Ltd. ¹	82	82	China	December	Small-battery manufacturing and sales
LG Energy Solution Michigan Inc. ¹	82	82	USA	December	Automotive battery research and manufacturing
LG Energy Solution Battery (Nanjing) Co., Ltd. ¹	82	82	China	December	Automotive battery manufacturing and sales
LG Energy Solution Wroclaw sp. z o.o. ¹	82	82	Poland	December	Automotive battery manufacturing and sales
LG Energy Solution Australia Pty Ltd ¹	82	82	Australia	December	ESS sales
LG Energy Solution Technology (Nanjing) Co., Ltd. ¹	82	82	China	December	Automotive battery manufacturing and sales
Ultium Cells Holdings LLC ¹	41	41	USA	December	Automotive battery manufacturing and sales
Ultium Cells LLC ¹	41	41	USA	December	Automotive battery manufacturing and sales
LG Energy Solution Europe GmbH ¹	82	82	Germany	December	ESS sales
LG Energy Solution (Taiwan), Ltd. ¹	82	82	Taiwan	December	Small-storage battery sales
Aremnuri. Co. Ltd ¹	82	82	Korea	December	Facility management and general cleaning

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	Percentage of ownership (%)		Business location	Closing month	Business activities
	June 30, 2024	December 31, 2023			
LG Energy Solution Fund I LLC ¹	82	82	USA	December	Investments in venture companies
LG Energy Solution Vertech Inc. ¹	82	82	USA	December	ESS installation service
LG Energy Solution Arizona, Inc ¹	82	82	USA	December	Small-battery manufacturing and sales
Baterias De Castilla, S.L. ¹	82	82	Spain	December	Special purpose company
L-H Battery Company, Inc. ¹	42	42	USA	December	Automotive battery manufacturing and sales
LG Energy Solution India Private Limited ¹	82	82	India	December	Small-battery sales
LG Energy Solution Arizona ESS, Inc. ¹	82	82	USA	December	ESS Manufacturing and sales
Nextstar Energy Inc. ¹	42	42	Canada	December	Automotive battery manufacturing and sales
LG Energy Solution Fund II LLC ¹	82	82	USA	December	Investments in venture companies
HL-GA BATTERY COMPANY LLC ^{1, 8}	41	41	USA	December	Automotive battery manufacturing and sales
LG Energy Solution Japan Co., Ltd. ^{1, 9}	82	-	Japan	December	ESS sales
Associates					
TECHWIN Co., Ltd.	20	20	Korea	December	Environment solution and construction of chemical plant
LG Chem Life Sciences Poland Ltd.	100	100	Poland	December	Pharmaceutical products sales
HUAJIN NEW ENERGY MATERIALS(QUZHOU)CO., LTD.	49	49	China	December	Battery materials manufacturing and sales
TL Chemical CO., Ltd	40	40	Korea	December	AN manufacturing and sales
KOREA PRECURSOR CO., LTD.	49	49	Korea	December	Battery materials manufacturing and sales
Sam-a Aluminium Company, Limited ^{1, 10}	8	8	Korea	December	Aluminium sales and manufacturing
NEXPO Co., Ltd ^{1, 10}	16	16	Korea	December	Battery products manufacturing and sales
Bricks Capital Management Global Battery Private Equity Fund I ^{1, 11}	49	49	Korea	December	Collective investment scheme
Joint ventures¹²					
SEETEC Co., Ltd.	50	50	Korea	December	Plant utility and distribution, research assistance service
LG Toray Hungary Battery Separator Kft.	50	50	Hungary	December	Battery separator manufacturing and sales
PT.HLI Green Power. ¹	41	41	Indonesia	December	Automotive battery manufacturing and sales

¹ As at June 30, 2024, LG Energy Solution, Ltd. owns shares in subsidiaries, associates and joint ventures, such as LG Energy Solution (Nanjing) Co., Ltd. and others, and the Group has stated the shares of those companies as effective share ratio.

² As at June 30, 2024, Ningbo LG Yongxing Chemical Co., Ltd. owns 100% of Ningbo Zhenhai LG Yongxing Trade Co.'s shares.

³ As at June 30, 2024, LG Chemical India Pvt. Ltd. owns 100% of LG Polymers India Pvt. Ltd.'s shares.

⁴ As at June 30, 2024, LG Chem (China) Investment Co., Ltd. owns 100% of LG Chem China Tech Center's shares.

⁵ During the six-month period ended June 30, 2024, LG Chem Life Science Innovation Center, Inc. changed its name to LG Chem Life Sciences USA Inc.

⁶ During the six-month period ended June 30, 2024, LG Chem America Advanced Materials, Inc. was established, and the Group has newly acquired a 100% interest for ₩133,130 million.

⁷ As at June 30, 2024, FarmHannong Co., Ltd. owns 100% of Farmhannong America, Inc., FarmHannong(Thailand) Ltd., FARMHANNONG(MALAYSIA) SDN.BHD., PT FARM HANNONG INDONESIA and FarmHannong do Brasil Limitada's shares.

⁸ Although the Group has less than a majority ownership interest in HL-GA Battery Company LLC, it is considered to have control over HL-GA Battery Company LLC as the Group can exercise the majority voting rights in its decision-making process and has the ability to use power to affect the

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returns of the investee through its involvement in the production and cost management and other activities in accordance with the shareholders' agreement.

⁹ During the six-month period ended June 30, 2024, LG Energy Solution Japan Co., Ltd. was established, and LG Energy Solution has newly acquired a 100% interest for ₩535 million.

¹⁰ Although the ownership interest is less than 20%, the Group can participate in its decision-making process in accordance with the shareholders' agreement. Therefore, it is judged to have a significant influence.

¹¹ Although the Group's ownership interest in the limited partnership is more than 50%, since the consent of all equity participants is required for major decisions, the Group determine that the Group has not control over the limited partnership and has classified it as an associate.

¹² All joint arrangements over which the Group has joint control are classified as a joint venture since the joint arrangements are structured through a separate vehicle and the parties have rights to the net assets of the arrangement.

1.4 Changes in Scope for Consolidation

Subsidiaries newly included in the consolidation for the six-month period ended June 30, 2024, are as follows:

Subsidiary	Reason
LG Chem America Advanced Materials, Inc.	Newly established
LG Energy Solution Japan Co., Ltd.	Newly established

2. Material 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 condensed consolidated interim financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

The Group's condensed consolidated interim financial statements for the six-month period ended June 30, 2024, have been prepared in accordance with Korean IFRS 1034 *Interim Financial Reporting*. Therefore, these condensed consolidated interim financial statements should be read in conjunction with the annual consolidated financial statements as at December 31, 2023.

2.1.1 New and amended standards adopted by the Group

The Group has applied the following standards and interpretations for the first time for their annual reporting period commencing January 1, 2024.

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

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

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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. In addition, covenants that an entity is required to comply with after the end of the reporting period would not affect classification of a liability as current or non-current at the reporting date. When an entity classifies a liability that is subject to the covenants which an entity is required to comply with within twelve months of the reporting date as non-current at the end of the reporting period, the entity shall disclose information in the notes to understand the risk that non-current liabilities with covenants could become repayable within twelve months after the reporting period. The amendment does not have a significant impact on the consolidated interim financial statements.

(b) Amendments to Korean IFRS 1007 Statement of Cash Flows, Korean IFRS 1107 Financial Instruments: Disclosures – Supplier finance arrangements

When applying supplier finance arrangements, an entity shall disclose information about its supplier finance arrangements that enables users of financial statements to assess the effects of those arrangements on the entity's liabilities and cash flows and on the entity's exposure to liquidity risk. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted. There is no impact on the interim financial statements in accordance with the transitional provision that does not require to disclose the relevant information during the interim reporting period within the fiscal year in which these amendments are first applied.

(c) Amendments to Korean IFRS 1116 Leases – Lease Liability in a Sale and Leaseback

When subsequently measuring lease liabilities arising from a sale and leaseback, a seller-lessee shall determine lease payments or revised lease payments in a way that the seller-lessee would not recognize any amount of the gain or loss that relates to the right of use retained by the seller-lessee. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted. The amendment does not have a significant impact on the consolidated interim financial statements.

(d) Amendments to Korean IFRS 1001 Presentation of Financial Statements – Disclosure of Cryptographic Assets

The amendments require an additional disclosure if an entity holds cryptographic assets, or holds cryptographic assets on behalf of the customer, or issues cryptographic assets. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted. The amendment does not have a significant impact on the consolidated interim financial statements.

2.1.2 New standards and interpretations not yet adopted by the Group

The following new accounting standards and interpretations had been issued but were not mandatory for annual reporting periods ending on December 31, 2024.

(a) Amendments to Korean IFRS 1021 The Effects of Changes in Foreign Exchange Rates and 1101 First-time Adoption of International Financial Reporting Standards – Lack of Exchangeability

When an entity estimates a spot exchange rate because exchangeability between two currencies is lacking, the entity shall disclose related information. The amendments should be applied for annual periods beginning on or after January 1, 2025, and earlier application is permitted. The Group is in review for the impact of these amendments on the consolidated interim financial statements.

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2.2 Income Tax Expense

Income tax expense for the interim period is recognized based on management's best estimate of the weighted average annual income tax rate expected for the full financial year. The estimated average annual tax rate is applied to the pre-tax income.

The Group is within the scope of the Pillar Two model rules. The Group recognized an additional income tax expenses in relation to the rules and applied the exception to recognizing and disclosing information about deferred tax and assets and liabilities related to Pillar Two income Taxes.

3. Financial Risk Management

3.1 Financial Risk Factors

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

Risk management is carried out by the Group's finance team under policies approved by the Corporate Management Committee. The finance team identifies, evaluates and hedges financial risks in close co-operation with the Group's operating units. The Corporate Management Committee reviews and approves written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, and credit risk, use of derivative financial instruments and non-derivative financial instruments, investment of excess liquidity.

(a) Market risk

Foreign exchange risk

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

Management has set up a policy to require group companies to manage their foreign exchange risk against their functional currency. The Group manages maximum loss for currency risk exposures within acceptable range by using currency risk management model and hires employees who are exclusively responsible for currency risk management.

As at June 30, 2024 and December 31, 2023, the Group's monetary assets and liabilities denominated in currencies other than its functional currency, are as follows:

	<i>(in millions of Korean won)</i>							
	June 30, 2024		December 31, 2023					
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
USD	₩ 6,377,923	₩ 11,589,357	₩ 6,713,566	₩ 11,155,591				
EUR	624,150	4,691,717	626,087	4,459,588				
JPY	21,476	108,337	20,136	119,699				
CNY and others	365,749	39,055	292,973	22,210				

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As at June 30, 2024 and December 31, 2023, if the Group's functional currency had weakened / strengthened by 10% against the US dollar and other currencies with all other variables held constant, profit before income tax would have been affected as follows:

	June 30, 2024				December 31, 2023			
	10% Increase		10% Decrease		10% Increase		10% Decrease	
USD	₩	(424,736)	₩	424,736	₩	(359,888)	₩	359,888
EUR		(372,503)		372,503		(363,185)		363,185
JPY		(8,685)		8,685		(9,954)		9,954
CNY and others		(20,166)		20,166		31,036		(31,036)

The above sensitivity analysis has been performed for monetary assets and liabilities denominated in foreign currencies other than the Group's functional currency at the reporting date.

As at June 30, 2024 and December 31, 2023, the Group entered into foreign currency forward and currency swap contracts to manage risk from changes in exchange rates and the details are as follows:

(in millions of Korean won and in millions of US dollars)

		June 30, 2024							
		Contract amount	Contract exchange rate	Contract inception date	Contract maturity	Book amount			
Contractor						Assets	Liabilities		
Currency Forward	Shinhan Bank	USD 500	1,135.60	2020.10.14	2024.10.15	₩	121,307	₩	-
	KB Kookmin Bank	USD 500	1,102.83	2020.11.24	2029.4.16		85,941		-
Currency swap	KDB	USD 130	1,135.60	2021.6.24	2025.6.24		36,652		-
	KDB	USD 35	1,135.60	2021.6.24	2026.6.24		10,700		-
	Shinhan Bank	USD 300	1,131.80	2021.7.7	2026.7.7		60,174		-
	Woori Bank	USD 100	1,131.80	2021.7.7	2026.7.7		20,257		-
	Industrial and Commercial Bank of China	USD 100	1,131.80	2021.7.7	2026.7.7		20,388		-
	Shinhan Bank	USD 100	1,131.80	2021.7.7	2031.7.7		14,842		-
	Woori Bank	USD 200	1,131.80	2021.7.7	2031.7.7		30,242		-
	KDB	USD 200	1,131.80	2021.7.7	2031.7.7		30,322		-
	KDB	USD 250	1,289.70	2022.6.15	2025.6.15		26,065		-
	Shinhan Bank	USD 110	1,289.70	2022.6.15	2027.6.15		10,849		-
	The Export-Import Bank of Korea	USD 200	1,305.90	2022.7.14	2025.7.14		14,034		-
	Shinhan Bank	USD 100	1,305.90	2022.7.14	2025.7.14		6,996		-
	KDB	USD 200	1,233.40	2023.1.26	2025.1.26		33,116		-
	Shinhan Bank	USD 100	1,233.40	2023.1.26	2026.1.26		16,168		-
	KDB	USD 100	1,233.40	2023.1.26	2026.1.26		16,368		-
	JP Morgan	USD 200	1,337.60	2023.9.25	2026.9.25		5,603		-

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(in millions of Korean won and in millions of US dollars)

June 30, 2024						
Contractor	Contract amount	Contract exchange rate	Contract inception date	Contract maturity	Book amount	
					Assets	Liabilities
Shinhan Bank	USD 200	1,337.60	2023.9.25	2026.9.25	8,215	-
KDB	USD 400	1,337.60	2023.9.25	2028.9.25	8,667	-
Woori Bank	USD 200	1,337.60	2023.9.25	2028.9.25	4,341	-

(in millions of Korean won and in millions of US dollars)

December 31, 2023								
	Contractor	Contract amount	Contract exchange rate	Contract inception date	Contract maturity	Book amount		
						Assets	Liabilities	
Currency Forward	Industrial and Commercial Bank of China	USD 158	1,218.70	2022.4.22	2024.2.1	₩	-	₩ 10,808
	Bank of America	USD 158	1,307.73	2023.12.5	2024.2.1		-	3,500
	Shinhan Bank	USD 500	1,135.60	2020.10.14	2024.10.15		65,388	-
Currency swap	KB Kookmin Bank	USD 500	1,102.83	2020.11.24	2029.4.16		47,138	-
	SMBC	USD 200	1,118.00	2021.5.28	2024.5.28		31,693	-
	KDB	USD 130	1,135.60	2021.6.24	2025.6.24		24,902	-
	KDB	USD 35	1,135.60	2021.6.24	2026.6.24		7,303	-
	Shinhan Bank	USD 300	1,131.80	2021.7.7	2026.7.7		31,996	-
	Woori Bank	USD 100	1,131.80	2021.7.7	2026.7.7		10,906	-
	Industrial and Commercial Bank of China	USD 100	1,131.80	2021.7.7	2026.7.7		11,057	-
	Shinhan Bank	USD 100	1,131.80	2021.7.7	2031.7.7		6,234	-
	Woori Bank	USD 200	1,131.80	2021.7.7	2031.7.7		13,025	-
	KDB	USD 200	1,131.80	2021.7.7	2031.7.7		13,108	-
	KDB	USD 250	1,289.70	2022.6.15	2025.6.15		30	-
	Shinhan Bank	USD 110	1,289.70	2022.6.15	2027.6.15		-	1,399
	The Export-Import Bank of Korea	USD 200	1,305.90	2022.7.14	2025.7.14		-	6,571
	Shinhan Bank	USD 100	1,305.90	2022.7.14	2025.7.14		-	3,274
	KDB	USD 200	1,233.40	2023.1.26	2025.1.26		12,236	-
	Shinhan Bank	USD 100	1,233.40	2023.1.26	2026.1.26		5,097	-
	KDB	USD 100	1,233.40	2023.1.26	2026.1.26		5,332	-
	JP Morgan	USD 200	1,337.60	2023.9.25	2026.9.25		-	10,945
	Shinhan Bank	USD 200	1,337.60	2023.9.25	2026.9.25		-	10,722
	KDB	USD 400	1,337.60	2023.9.25	2028.9.25		-	30,788
	Woori Bank	USD 200	1,337.60	2023.9.25	2028.9.25		-	15,407

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Price risk

The Group is exposed to equity securities price risk arises from investments held by the Group and classified in the consolidated interim statement of financial position as non-current financial assets. The Group's equity investments are publicly traded and are related to the NASDAQ (National Association of Securities Dealers Automated Quotations), NYSE (New York Stock Exchange), SZSE (Shenzhen Stock Exchange), HSI (Hang Seng Index), ASX (Australian Stock Exchange) and KOSPI index.

The table below summarizes the impact of increases/decreases of the listed stock price index on the Group's equity before tax effects as at June 30, 2024 and December 31, 2023. The analysis is based on the assumption that the equity index has increased/decreased by 10% with all other variables held constant, and that all the Group's equity instruments moved in line with the index.

<i>(in millions of Korean won)</i>	June 30, 2024				December 31, 2023			
	10% Increase		10% Decrease		10% Increase		10% Decrease	
NASDAQ	₩	13,412	₩	(13,412)	₩	14,104	₩	(14,104)
ASX		684		(684)		1,640		(1,640)
NYSE		823		(823)		520		(520)
SZSE		9,707		(9,707)		8,534		(8,534)
HSI		5,265		(5,265)		9,277		(9,277)
KOSPI		15,688		(15,688)		15,989		(15,989)
Total	₩	<u>45,579</u>	₩	<u>(45,579)</u>	₩	<u>50,064</u>	₩	<u>(50,064)</u>

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Interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate because of changes in future market interest rate. The interest rate risk mainly arises through floating rate deposits and borrowings. The objective of interest rate risk management lies in maximizing corporate value by minimizing uncertainty in interest rates fluctuations and net interest expense.

The Group adequately minimizes risks from interest rate fluctuations through various policies, such as sharing excess cash within the Group (internal cash sharing) to minimize external borrowings, avoiding high rate borrowings, reforming capital structure, managing an appropriate ratio of fixed rate borrowings and floating rate borrowings, monitoring a fluctuation of domestic and foreign interest rates daily, weekly and monthly, establishing alternatives, and balancing floating rate short-term borrowings with floating rate deposits.

The table below summarizes the impact of increases/decreases of interest rate on the Group's equity and post-tax profit as at June 30, 2024 and 2023. The analysis is based on the assumption that the interest rate has increased/decreased by 1% (100 basis points) with all other variables held constant.

		<i>(in millions of Korean won)</i>		Impact on post-tax profit		Impact on equity	
				June 30, 2024	June 30, 2023	June 30, 2024	June 30, 2023
Increase	Deposits	₩	27,813	₩	16,831	₩	27,813
	Borrowings		(45,701)		(46,841)		(46,841)
		₩	(17,888)	₩	(30,010)	₩	(17,888)
Decrease	Deposits	₩	(27,813)	₩	(16,831)	₩	(27,813)
	Borrowings		45,701		46,841		46,841
		₩	17,888	₩	30,010	₩	17,888

The deposits exposed to the above interest rate risk are held for the purpose of meeting the short-term demand for cash as it is easily convertible to a determined amount of cash. Also, the above borrowings are variable interest rate borrowings from KDB Bank and others, and the Group has entered into a currency interest rate swap contract amounting to USD 925 million (equivalent to ₩1,285,010 million) to hedge interest rate risk of variable interest rate borrowings.

(b) Credit risk

Credit risk arises from trade receivables and contract assets that the Group holds, as well as debt instruments at amortized cost.

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Trade receivables and contract assets

The Group applies the simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for trade receivables and contract assets. To measure the expected credit losses, trade receivables and contract assets have been grouped based on shared credit risk characteristics and the days past due. The loss allowance provision as at June 30, 2024, is as follows. Expected credit losses include forward-looking information.

(in millions of Korean won)

(in millions of Korean won)

	June 30, 2024						
	Receivables not past due ¹		Receivables past due but not impaired ¹		Impaired receivables ²		Total
June 30, 2024							
Gross carrying amount—trade receivables	₩	8,619,102	₩	376,641	₩	2,312	₩ 8,998,055
Gross carrying amount – contract assets		54,064		-		-	54,064
Expected loss rate		0.0%		0.1%		31.1%	0.0%
Loss allowance provision	₩	1,374	₩	552	₩	718	₩ 2,644
December 31, 2023							
Gross carrying amount—trade receivables	₩	8,065,741	₩	148,163	₩	1,854	₩ 8,215,758
Gross carrying amount – contract assets		70,356		-		-	70,356
Expected loss rate		0.0%		0.4%		64.0%	0.0%
Loss allowance provision	₩	1,071	₩	552	₩	1,187	₩ 2,810

¹ Note 7.(3) for aging analysis.

² Impaired receivables are those for which impairment indicators have been confirmed, such as significant lack of collectability.

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Movements in the loss allowance provision for trade receivables for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

(in millions of Korean won)

	Trade receivables and contract assets	
	June 30, 2024	December 31, 2023
Beginning balance	₩ 2,810	₩ 5,017
Reversal of loss allowance recognized in profit or loss	(35)	(636)
Receivables written off as uncollectible	(113)	(1,234)
Exchange differences	(18)	(337)
Ending balance	₩ 2,644	₩ 2,810

As at June 30, 2024, the carrying amount of trade receivables representing the maximum exposure to credit risk amounts to ₩8,995,411 million (December 31, 2023: ₩8,212,948 million), and the carrying amount of contract assets amounts to ₩54,064 million (December 31, 2023: ₩70,356 million).

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Other financial assets at amortized cost

Other financial assets at amortized cost include other receivables, other non-current receivables and others. Movements in loss allowance provision for other financial assets at amortized cost for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

	Financial assets at amortized cost			
	June 30, 2024		December 31, 2023	
Beginning balance	₩	628	₩	682
Reversal of loss allowance recognized in profit or loss		-		-
Receivables written off as uncollectible		-		(54)
Ending balance	₩	628	₩	628

All of the financial assets at amortized costs are considered to have low credit risk, and the loss allowance recognized during the period was, therefore, limited to 12 months expected losses.

The Group has established the following policies and procedures to manage credit risks.

To manage credit risks relating to trade receivables, the Group evaluates the credit rating of customers and determines credit limit for each customer based on the information provided by credit rating agencies and other available financial information before commencing business with new customers. The credit risks relating to trade receivables are also mitigated by insurance contracts, collateral as well as payment guarantees.

The Group has entered into export bond insurance contracts with Korea Trade Insurance Corporation to mitigate credit risks relating to export trade receivables to overseas customers. The Group is also provided with collateral by customers depending on their credit rating or payment guarantees from the customers' financial institutions if necessary.

The Group has deposited its cash and cash equivalents and other long-term deposits in several financial institutions, such as Woori Bank and others. The Group has also entered into derivative contract with several financial institutions. The Group maintains business relationship with those financial institutions with high credit ratings evaluated by independent credit rating agencies and accordingly, credit risks associated with these financial institutions are limited.

(c) Liquidity risk

Finance team of the Group monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. When predicting liquidity, considerations are taken into account from external regulations or legal requirements such as funding plans of consolidation units, compliance with agreements, internal target financial ratios within consolidation units, and restrictions related to currency.

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The table below categorizes the financial liabilities of consolidation units based on the remaining period from the end of the reporting period to the contract maturity date. The cash flows presented in the table are amounts not discounted as present value and include the cash flows related to interest expenses.

(in millions of Korean won)	June 30, 2024			
	Less than 1 year	Between 1-2 years	Between 2-5 years	Over 5 years
Non-derivative financial instruments				
Borrowings (excluding lease liabilities)	₩ 9,626,839	₩ 4,726,567	₩ 10,075,978	₩ 3,005,359
Lease liabilities	126,498	110,279	137,980	238,748
Trade and other payables	8,977,968	15,176	10,721	265
	<u>18,731,305</u>	<u>4,852,022</u>	<u>10,224,679</u>	<u>3,244,372</u>
Derivative instruments				
Gross settlement currency forwards and swaps				
(Inflows)	(1,622,164)	(880,144)	(2,912,637)	(735,842)
Outflows	1,357,227	789,770	2,570,003	597,753
	<u>(264,937)</u>	<u>(90,374)</u>	<u>(342,634)</u>	<u>(138,089)</u>
	<u>₩ 18,466,368</u>	<u>₩ 4,761,648</u>	<u>₩ 9,882,045</u>	<u>₩ 3,106,283</u>
(in millions of Korean won)				
	December 31, 2023			
	Less than 1 year	Between 1-2 years	Between 2-5 years	Over 5 years
Non-derivative financial instruments				
Borrowings (excluding lease liabilities)	₩ 5,876,982	₩ 3,647,796	₩ 11,356,290	₩ 5,763,791
Lease liabilities	123,528	121,499	85,865	242,717
Trade and other payables	9,022,994	19,953	13,363	102
	<u>15,023,504</u>	<u>3,789,248</u>	<u>11,455,518</u>	<u>6,006,610</u>
Derivative instruments				
Gross settlement currency forwards and swaps				
(Inflows)	(1,416,608)	(1,256,394)	(2,152,233)	(1,335,335)
Outflows	1,278,089	1,204,261	2,102,600	1,155,602
	<u>(138,519)</u>	<u>(52,133)</u>	<u>(49,633)</u>	<u>(179,733)</u>
	<u>₩ 14,884,985</u>	<u>₩ 3,737,115</u>	<u>₩ 11,405,885</u>	<u>₩ 5,826,877</u>

Although not included in the above cash flow, the agreement is made to purchase additional shares of LG Toray Hungary Battery Separator Kft. in accordance with the agreed price calculation method (Note 18). Additionally, during the period ended December 31, 2023, the Group issued exchangeable bonds that allow issuers and investors to exercise their early redemption rights (Note

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14).

As at June 30, 2024 and December 31, 2023, the Group has entered into swap contracts for which cash flow hedge accounting is applied, to avoid market price fluctuation of raw materials.

(in millions of Korean won)	Purpose of the contracts	Hedged items	Financial institution	Maturity	June 30, 2024		December 31, 2023	
					Assets	Liabilities	Assets	Liabilities
Merchandise (raw materials) swap ¹	Cash flow hedge	Non-ferrous metal	Citi Bank and others	2026.12	₩ 1,161	₩ 2,400	₩ 88	₩ 4,899

¹Gain (loss) resulting from the contracts to avoid cash flow fluctuation risk of expected future transaction is accounted for as accumulated other comprehensive income, which corresponds to an effective portion of the hedges.

Details of financial guarantee contracts by maturity as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)

	June 30, 2024			
	Less than 1 year	Between 1-2 years	Between 2-5 years	Over 5 years
Financial guarantee contracts ¹	₩ 419,538	₩ -	₩ -	₩ -

(in millions of Korean won)

	December 31, 2023			
	Less than 1 year	Between 1-2 years	Between 2-5 years	Over 5 years
Financial guarantee contracts ¹	₩ 285,602	₩ -	₩ -	₩ -

¹ The financial guarantee contracts above are for joint ventures and are presented based on the maximum amount of guarantee that can be requested as at June 30, 2024 and December 31, 2023. Meanwhile, the total amount of payment guarantee contracted as at June 30, 2024, is ₩ 493,861 million (December 31, 2023: ₩458,382 million) (Note 18).

3.2 Capital Risk Management

The Group's objectives for managing capital are to safeguard the Group's ability to continue as a going concern, so the Group can continue to provide returns for shareholders and benefits for other stakeholders, and to maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated statement of financial position plus net debt.

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The gearing ratio and debt-to-equity ratio as at June 30, 2024 and December 31, 2023, were as follows:

<i>(in millions of Korean won, except for ratios)</i>	June 30, 2024		December 31, 2023	
Total borrowings (Note 14) (A)	₩	24,751,597	₩	21,928,114
Less: cash and cash equivalents (B)		(7,167,416)		(9,084,899)
Net debt (C=A+B)		17,584,181		12,843,215
Total liabilities (D)		39,923,577		36,528,509
Total equity (E)		44,264,104		40,938,185
Total capital (F=C+E)		61,848,285		53,781,400
Gearing ratio (C/F)		28.4%		23.9%
Debt-to-equity ratio (D/E)		90.2%		89.2%

3.3 Fair Value

Carrying amount and fair value of financial instruments by category as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets (current)				
Cash and cash equivalents	7,167,416	¹	9,084,899	¹
Deposits held by financial institutions	2,166	¹	57,106	¹
Trade receivables	8,856,942	¹	8,082,952	¹
Other receivables (excluding deposits held by financial institutions)	404,532	¹	625,072	¹
Other current financial assets				
Current derivative financial assets (currency forward)	121,307	121,307	65,388	65,388
Current derivative financial assets (excluding currency forward)	761	761	51	51
Current derivative financial assets (currency swap)	95,833	95,833	31,693	31,693
Current derivative financial assets (purchase of interests)	47,116	47,116	44,296	44,296
Financial assets at amortized cost	4,357	¹	-	¹
Financial assets (non-current)				
Deposits held by financial institutions	272,618	¹	267,558	¹
Trade receivables	138,469	¹	129,996	¹
Other receivables (excluding deposits held by financial institutions)	177,341	¹	160,135	¹
Other non-current financial assets				
Marketable financial assets (excluding derivative financial assets)	485,332	485,332	507,186	507,186
Non-marketable financial assets ³	592,813	592,813	514,924	514,924

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	June 30, 2024		December 31, 2023	
	Carrying amount	Fair value	Carrying amount	Fair value
Non-current derivative financial assets (currency forward)	85,941	85,941	47,138	47,138
Non-current derivative financial assets (excluding currency forward)	400	400	850	850
Non-current derivative financial assets (currency swap)	278,168	278,168	141,226	141,226
Non-current derivative financial assets (purchase of interests)	19,989	19,989	17,177	17,177
Financial liabilities (current)				
Trade and other payables	8,977,968	¹	9,022,994	¹
Current borrowings (excluding lease liabilities/ exchangeable bond)	5,895,104	¹	4,979,229	¹
Current borrowings (exchangeable bond)	2,248,606	2,199,520	1,998,423	2,220,842
Current lease liabilities	115,726	²	100,130	²
Other current financial liabilities				
Current derivative financial liabilities (currency forward)	-	-	14,308	14,308
Current derivative financial liabilities (excluding currency forward)	1,942	1,942	3,936	3,936
Current derivative financial liabilities (right of exchange/option)	382,600	382,600	501,951	501,951
Financial guarantee contracts liabilities	5,237	¹	3,715	¹
Financial liabilities (non-current)				
Non-current borrowings (excluding lease liabilities)	16,080,957	15,993,958	14,458,596	13,537,804
Non-current lease liabilities	411,204	²	391,736	²
Other non-current payables	26,162	¹	33,418	¹
Other non-current financial liabilities				
Non-current derivative financial liabilities (excluding currency forward)	458	458	80,069	80,069
Financial liabilities at amortized cost	489,687	¹	-	-
Non-current derivative financial liabilities (purchase of interests)	21,420	21,420	19,881	19,881

¹ These financial assets and liabilities are not included in the disclosure above as their carrying amount is a reasonable approximation of the fair value.

² Fair values for these financial assets and liabilities are not disclosed above in accordance with related Korean IFRS.

³ Including some unmarketable financial assets for which acquisition cost is used as the best estimate of fair value.

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Fair value for measurement and disclosure are determined based on the following method:

The fair value of financial liabilities was calculated by applying the following discount rate to the nominal value of expected future outflow cash flows.

Discount rate	June 30, 2024	December 31, 2023	Remark
Non-current borrowings (excluding lease liabilities/ exchangeable bond)	3.42% ~ 4.54%	3.64% ~ 4.79%	Yield of won debenture with credit rating (AA+) and others
Current borrowings (Exchangeable Bond)	6.45% / 6.52%	4.55% / 4.47%	Yield of foreign currency debenture equal to the maturity of the evaluation target

Fair value hierarchy

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).

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Fair value hierarchy of the financial instruments that are either measured at fair value or their fair values are disclosed for as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>		June 30, 2024			
		Level 1	Level 2	Level 3	Total
Financial assets/liabilities measured at fair value					
Other non-current financial assets (marketable financial assets)	₩	485,332	₩	-	₩ 485,332
Other non-current financial assets (non-marketable financial assets) ¹		-	-	592,813	592,813
Current derivative financial assets (currency forward)		-	121,307	-	121,307
Current derivative financial assets (excluding currency forward)		-	761	-	761
Current derivative financial assets (currency swap)		-	95,833	-	95,833
Current derivative financial assets (purchase of interests)		-	-	47,116	47,116
Non-current derivative financial assets (currency forward)		-	85,941	-	85,941
Non-current derivative financial assets (excluding currency forward)			400	-	400
Non-current derivative financial assets (currency swap)		-	278,168	-	278,168
Non-current derivative financial assets (purchase of interests)		-	-	19,989	19,989
Current derivative financial liabilities (excluding currency forward)		-	1,942	-	1,942
Current derivative financial liabilities (right of exchange/option)		-	-	382,600	382,600
Non-current derivative financial liabilities (excluding currency forward)		-	458	-	458
Non-current derivative financial liabilities (purchase of interests)		-	-	21,420	21,420
Financial assets/liabilities not measured at fair value					
Current borrowings (exchangeable bond)		-	-	2,199,520	2,199,520
Non-current borrowings (excluding lease liabilities)		-	-	15,993,958	15,993,958

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(in millions of Korean won)	December 31, 2023			
	Level 1	Level 2	Level 3	Total
Financial assets/liabilities measured at fair value				
Other non-current financial assets (marketable financial assets)	₩ 507,186	₩ -	₩ -	507,186
Other non-current financial assets (non-marketable financial assets) ¹	-	-	514,924	514,924
Current derivative financial assets (currency forward)	-	65,388	-	65,388
Current derivative financial assets (excluding currency forward)	-	51	-	51
Current derivative financial assets (currency swap)	-	31,693	-	31,693
Current derivative financial assets (purchase of interests)	-	-	44,296	44,296
Non-current derivative financial assets (currency forward)	-	47,138	-	47,138
Non-current derivative financial assets (excluding currency forward)	-	850	-	850
Non-current derivative financial assets (currency swap)	-	141,226	-	141,226
Non-current derivative financial assets (purchase of interests)	-	-	17,177	17,177
Current derivative financial liabilities (currency forward)	-	14,308	-	14,308
Current derivative financial liabilities (excluding currency forward)	-	3,936	-	3,936
Current derivative financial liabilities (right of exchange/option)	-	-	501,951	501,951
Non-current derivative financial liabilities (excluding currency forward)	-	80,069	-	80,069
Non-current derivative financial liabilities (purchase of interests)	-	-	19,881	19,881
Financial assets/liabilities not measured at fair value				
Current borrowings (exchangeable bond)	-	-	2,220,842	2,220,842
Non-current borrowings (excluding lease liabilities)	-	-	13,537,804	13,537,804

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¹ Acquisition costs of a part of these financial assets approximate their fair values. For fair values measured by using other methods, see Valuation technique and the inputs.

Valuation technique and the inputs

Valuation techniques and inputs used in the fair value measurements categorized within Level 3 of the fair value hierarchy as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)		June 30, 2024			
	Fair value	Level	Valuation Technique	Inputs	Coverage of Level 3 inputs
Current derivative financial assets (purchase of interests)	₩ 47,116	3	Monte Carlo Simulation	Stock volatility of underlying assets	32.78%
				Stock price correlation coefficient	37.38%
				Volatility of financial indicators	42.17%
Non-current derivative financial assets (purchase of interests)	19,989	3	Binominal option-pricing model	Volatility	31.51%
				Risk-free rate	4.57%
Non-current derivative financial liabilities (purchase of interests)	21,420	3	Monte Carlo Simulation	Stock volatility of underlying assets	32.78%
				Stock price correlation coefficient	42.98%
				Volatility of financial indicators	21.82%
Other non-current financial assets (Non-listed shares)	14,426	3	Binominal option-pricing model	Volatility	12.34%
	91,625	3	Discounted cash flows model	Discount rates	11.31% and others
	147,792	3	Adjusted net asset method	-	-
Current financial liabilities (right of exchange/ option)	382,600	3	Binominal option-pricing model	Stock price of underlying assets	₩ 326,500 (in Korean won)
				Risk-free rate	4.58% / 4.59%
				Risk rate	6.45% / 6.52%
				Volatility	36.49%

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December 31, 2023					
	Fair value	Level	Valuation Technique	Inputs	Coverage of Level 3 inputs
Current derivative financial assets (purchase of interests)	₩ 44,296	3	Monte Carlo Simulation	Stock volatility of underlying assets	32.78%
				Stock price correlation coefficient	37.38%
				Volatility of financial indicators	42.17%
Non-current derivative financial assets (purchase of interests)	17,177	3	Binominal option-pricing model	Volatility	31.51%
				Risk-free rate	4.57%
Non-current derivative financial liabilities (purchase of interests)	19,881	3	Monte Carlo Simulation	Stock volatility of underlying assets	32.78%
				Stock price correlation coefficient	42.98%
				Volatility of financial indicators	21.82%
Other non-current financial assets (Non-listed shares)	14,426	3	Binominal option-pricing model	Volatility	12.34%
	88,077	3	Discounted cash flows model	Discount rates	11.31% and others
	133,655	3	Adjusted net asset method	-	-
Current financial liabilities (right of exchange/ option)	501,951	3	Binominal option-pricing model	Stock price of underlying assets	₩ 427,500 (in Korean won)
				Risk-free rate	3.17% / 3.19%
				Risk rate	4.55% / 4.47%
				Volatility	45.38%

4. Critical Accounting Estimates and Assumptions

The preparation of financial statements requires the Group to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Group's accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates may differ from the related actual results.

Significant accounting estimates and assumptions applied in the preparation of these condensed consolidated interim financial statements are the same as those applied to the consolidated financial statements for the year ended December 31, 2023, except for the estimates used to determine income tax expense.

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5. Financial Instruments by Category

Categorizations of financial instruments as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)

(in millions of Korean won)

		June 30, 2024					
		Financial assets at amortized cost	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Other financial assets ¹	Total	
Financial assets							
Cash and cash equivalents	₩	7,167,416	₩	-	₩	-	₩ 7,167,416
Trade receivables		8,292,043		564,899		-	8,856,942
Non-current trade receivables		138,469		-		-	138,469
Other receivables		406,698		-		-	406,698
Other non-current receivables		449,959		-		-	449,959
Other current financial assets		4,357	264,256	-	761		269,374
Other non-current financial assets		-	862,330	599,913	400		1,462,643
Total	₩	16,458,942	₩	1,126,586	₩	1,161	₩ 18,751,501

(in millions of Korean won)

(in millions of Korean won)		June 30, 2024							
		Financial liabilities at amortized cost		Financial liabilities at fair value through profit or loss		Other financial liabilities ²		Total	
Financial liabilities									
Trade payables		₩	4,265,897	₩	-	₩	-	₩	4,265,897
Other payables			4,708,484		-		-		4,708,484
Borrowings (current)			8,111,245		-		148,191		8,259,436
Other current financial liabilities			5,237		382,599		1,943		389,779
Other non-current financial liabilities			489,688		21,420		457		511,565
Other non-current payables			26,162		-		-		26,162
Borrowings (non-current)			16,080,957		-		411,204		16,492,161
Total		₩	33,687,670	₩	404,019	₩	561,795	₩	34,653,484

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(in millions of Korean won)

(in millions of Korean won)		December 31, 2023									
		Financial assets at amortized cost		Financial assets at fair value through profit or loss		Financial assets at fair value through other comprehensive income		Other financial assets ¹		Total	
Financial assets											
Cash and cash equivalents	₩	9,084,899	₩	-	₩	-	₩	-	₩	9,084,899	
Trade receivables		7,425,071		-		657,881		-		8,082,952	
Non-current trade receivables		129,996		-		-		-		129,996	
Other receivables		681,307		-		871		-		682,178	
Other non-current receivables		427,693		-		-		-		427,693	
Other current financial assets		-		-		-		141,428		141,428	
Other non-current financial assets		-		387,487		634,623		206,391		1,228,501	
Total	₩	17,748,966	₩	387,487	₩	1,293,375	₩	347,819	₩	19,777,647	

(in millions of Korean won)

(in millions of Korean won)	December 31, 2023				
	Financial liabilities at amortized cost		Other financial liabilities ²		Total
Financial liabilities					
Trade payables	₩	4,117,913	₩	-	₩ 4,117,913
Other payables		4,905,081		-	4,905,081
Borrowings (current)		6,978,097		99,685	7,077,782
Other current financial liabilities		-		523,910	523,910
Other non-current financial liabilities		-		99,950	99,950
Other non-current payables		33,418		-	33,418
Borrowings (non-current)		14,458,596		391,736	14,850,332
Total	₩	30,493,105	₩	1,115,281	₩ 31,608,386

¹ Other financial assets include derivative assets that are not subject to the categorizations.

² Other financial liabilities include lease liabilities, derivative liabilities and negotiated borrowings that are not subject to the categorizations.

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Net gains or losses on each category of financial instruments for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

<i>(in millions of Korean won)</i>	2024		2023	
	Three months	Six months	Three months	Six months
Dividend income				
Financial assets at fair value through other comprehensive income	₩ 2,180	₩ 2,180	₩ 423	₩ 13,053
Financial assets at fair value through profit or loss	249	249	-	290
Impairment losses (reversal)				
Financial assets at amortized cost	29	(35)	(35)	(560)
Interest income				
Financial assets at amortized cost	87,135	185,896	58,214	127,802
Interest expense				
Financial assets at amortized cost ¹	(3,006)	(3,091)	(17,592)	(23,399)
Other financial liabilities	(2,630)	(6,123)	(1,746)	(4,206)
Financial liabilities at amortized cost	(255,423)	(486,845)	(144,039)	(274,468)
Gain (loss) on valuation and disposal				
Financial assets at fair value through profit or loss	(4,927)	17,790	241	3,723
Financial assets at fair value through other comprehensive income	(34,954)	(58,404)	(29,892)	(32,654)
Derivative instruments	237,727	550,975	12,644	142,620
Exchange differences				
Financial assets at amortized cost	230,977	529,839	123,875	348,574
Financial liabilities at amortized cost	(367,056)	(786,067)	157,106	8,447
Derivative instruments	-	-	-	(517)
Other financial liabilities	(121)	(121)	7,602	(1,797)

¹ Fees paid to financial institutions for factoring.

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6. Cash and Cash Equivalents

Details of cash and cash equivalents as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Bank deposits and cash on hand	₩	2,755,544	₩	3,411,992
Deposits held by financial institutions and others		4,411,872		5,672,907
Total	₩	7,167,416	₩	9,084,899

As at June 30, 2024, cash and cash equivalents include ₩11,638 million(December 31, 2023: ₩7,038 million), which is subject to a restriction on the use in association with the national R&D projects.

7. Trade and Other Receivables

Trade and other receivables and its provisions for impairment, as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>		June 30, 2024		
		Gross amount	Provision for impairment	Carrying amount
Trade receivables	₩	8,859,586	₩ (2,644)	₩ 8,856,942
Non-current trade receivables		138,469	-	138,469
Other current receivables		407,326	(628)	406,698
Other non-current receivables		449,959	-	449,959
Total	₩	9,855,340	₩ (3,272)	₩ 9,852,068

<i>(in millions of Korean won)</i>		December 31, 2023		
		Gross amount	Provision for impairment	Carrying amount
Trade receivables	₩	8,085,762	₩ (2,810)	₩ 8,082,952
Non-current trade receivables		129,996	-	129,996
Other current receivables		682,806	(628)	682,178
Other non-current receivables		427,693	-	427,693
Total	₩	9,326,257	₩ (3,438)	₩ 9,322,819

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Details of other receivables as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Current				
Non-trade receivables	₩	348,389	₩	565,769
Deposits held by financial institutions ¹		2,166		57,106
Accrued income		12,731		16,570
Guarantee deposits provided		43,412		42,733
		<u>406,698</u>		<u>682,178</u>
Non-current				
Non-trade receivables		34,236		35,255
Deposits held by financial institutions ¹		272,618		267,558
Loans		14,924		9,890
Guarantee deposits provided		128,181		114,990
		<u>449,959</u>		<u>427,693</u>
Total	₩	<u>856,657</u>	₩	<u>1,109,871</u>

¹ As at June 30, 2024, ₩266,100 million (December 31, 2023: ₩266,100 million) is withdrawal restricted in relation to large-, small- and medium-sized companies cooperation agreement, ₩133 million is restricted in use to be retained in connection with maintaining checking accounts (December 31, 2023: ₩114 million) is restricted in use. There are no employee loan deposits as at June 30, 2024 (December 31, 2023: ₩5,000 million). Also, PLN 1 million (December 31, 2023: PLN 4 million) is withdrawal restricted in relation to overseas transportation of hazardous waste and USD 4 million is restricted for use as collateral for the issuance of LOC.

The aging analysis of trade and other receivables as at June 30, 2024 and December 31, 2023, is as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
	Trade receivables	Other receivables	Trade receivables	Other receivables
Receivables not past due	₩ 8,619,102	₩ 759,009	₩ 8,065,741	₩ 1,053,672
Past due but not impaired	376,641	97,648	148,163	56,199
Up to 3 months	339,149	74,998	106,433	31,350
Between 3-6 months	36,615	6,593	40,162	14,950
Over 6 months	877	16,057	1,568	9,899
Impaired receivables	<u>2,312</u>	<u>628</u>	<u>1,854</u>	<u>628</u>
Total	<u>₩ 8,998,055</u>	<u>₩ 857,285</u>	<u>₩ 8,215,758</u>	<u>₩ 1,110,499</u>

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Movements on the provision for impairment of trade and other receivables for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

(in millions of Korean won)

	June 30, 2024			
	Trade receivables		Other receivables	
	Current	Non-current	Current	Non-current
Beginning balance	₩ 2,810	₩ -	₩ 628	₩ -
Reversal	(35)	-	-	-
Write-off	(113)	-	-	-
Exchange differences	(18)	-	-	-
Ending balance	<u>₩ 2,644</u>	<u>₩ -</u>	<u>₩ 628</u>	<u>₩ -</u>

(in millions of Korean won)

	December 31, 2023			
	Trade receivables		Other receivables	
	Current	Non-current	Current	Non-current
Beginning balance	₩ 5,017	₩ -	₩ 682	₩ -
Reversal	(636)	-	-	-
Write-off	(1,234)	-	(54)	-
Exchange differences	(337)	-	-	-
Ending balance	<u>₩ 2,810</u>	<u>₩ -</u>	<u>₩ 628</u>	<u>₩ -</u>

As at June 30, 2024 and December 31, 2023, the carrying amounts of trade and other receivables are approximation of their fair values.

The Group transferred trade receivables to financial institutions and derecognized the trade receivables from the financial statements at the date of disposal, as substantial all the risks and rewards were transferred and as at June 30, 2024, the balance of transferred trade receivables is ₩ 192,269 million (December 31, 2023: ₩ 38,358 million).

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8. Other Financial Assets and Liabilities

Details of other financial assets and liabilities as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024	December 31, 2023
Other financial assets		
Financial assets at amortized cost (current)	₩ 4,357	₩ -
Financial assets at fair value through other comprehensive income (derivative instruments) (current)	761	51
Financial assets at fair value through profit or loss (derivative instruments) (current)	264,256	141,377
Financial assets at fair value through other comprehensive income (derivative instruments) (non-current)	400	38
Financial assets at fair value through other comprehensive income (excluding derivative instruments) (non-current)	599,912	634,623
Financial assets at fair value through profit or loss (derivative instruments) (non-current)	384,098	206,353
Financial assets at fair value through profit or loss (excluding derivative instruments) (non-current)	478,233	387,487
	<u>1,732,017</u>	<u>1,369,929</u>
Other financial liabilities		
Financial guarantee contracts	5,237	3,715
Financial liabilities at fair value through other comprehensive income (derivative instruments) (current)	1,942	3,936
Financial liabilities at fair value through profit or loss (derivative instruments) (current)	382,600	516,259
Financial liabilities at fair value through other comprehensive income (derivative instruments) (non-current)	458	962
Financial liabilities at fair value through profit or loss (derivative instruments) (non-current)	21,420	98,988
Financial liabilities at amortized cost (non-current)	489,687	-
	<u>₩ 901,344</u>	<u>₩ 623,860</u>

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Changes in equity and debt instruments included in other financial assets for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
¹				
Beginning balance	₩	1,022,110	₩	958,060
Acquisitions / transfer		85,345		273,210
Disposals		(5,503)		(4,640)
Loss on valuation through other comprehensive income (before income tax effects)		(58,404)		(222,998)
Gain on valuation through profit or loss		17,790		15,535
Exchange differences on translation of foreign operations		16,807		2,943
Ending balance	₩	<u>1,078,145</u>	₩	<u>1,022,110</u>

¹ The Group has entered into a Put-Option agreement regarding its equity investment for Volta Energy Solutions S.a.r.l for the purpose of guaranteeing the principal amount of investments. The main conditions of the Put-Option agreement are as follows:

Category	Details
Exercise date	For three years from the date on which three years lapse since it was acquired (Date of initial investment: January 27, 2021)
Exercise price	Investment amount deducting dividends (received from the time of investment to the time of exercise) from the investment
Other conditions	Put option cannot be exercised in case Volta Energy Solutions S.a.r.l is listed

During the six-month period ended June 30, 2024 and for the year ended December 31, 2023, the Group did not recognize impairment for other financial assets.

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9. Inventories

Details of inventories as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)

	June 30, 2024		
	Gross amount	Provision for impairment	Carrying amount
Merchandise	₩ 535,236	₩ (34,868)	₩ 500,368
Finished / Semi-finished products	5,019,416	(283,149)	4,736,267
Work-in-process	26,522	-	26,522
Raw materials	2,895,988	(45,911)	2,850,077
Supplies	354,671	-	354,671
Goods-in-transit	1,291,741	-	1,291,741
Total	₩ 10,123,574	₩ (363,928)	₩ 9,759,646

(in millions of Korean won)

	December 31, 2023		
	Gross amount	Provision for impairment	Carrying amount
Merchandise	₩ 487,525	₩ (33,453)	₩ 454,072
Finished / Semi-finished products	5,217,031	(256,599)	4,960,432
Work-in-process	18,443	-	18,443
Raw materials	2,565,721	(81,448)	2,484,273
Supplies	341,616	-	341,616
Goods-in-transit	1,116,491	-	1,116,491
Total	₩ 9,746,827	₩ (371,500)	₩ 9,375,327

During the six-month period ended June 30, 2024, the cost of inventories recognized as expense and included in 'cost of sales' amounted to ₩14,990,359 million (2023: ₩18,640,058 million).

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10. Investments in Associates and Joint Ventures

Changes in investments in associates and joint ventures for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

(in millions of
Korean won)

(in millions of
Korean won)

	June 30, 2024															
	Beginning balance		Acquisitions / transfer		Dividends		Share of profit (loss) of associates and joint ventures		Share of other comprehensive income (loss) of associates and joint ventures		Impairment / disposals		Others		Ending balance	
TECHWIN Co., Ltd.	₩	16,284	₩	-	₩	-	₩	(635)	₩	-	₩	-	₩	-	₩	15,649
SEETEC Co., Ltd		138,148		-		(7,500)		5,453		-		-		-		136,101
LG Life Sciences Poland Ltd.		17		-		-		-		-		-		-		17
HUAJIN NEW ENERGY MATERIALS(QUZHOU)CO., LTD.		79,383		-		-		2,939		3,562		-		-		85,884
PT.HLI Green Power		162,273		-		-		(41,558)		15,785		-		-		136,500
Sam-a Aluminium Company, Limited		46,257		-		-		220		-		-		-		46,477
NEXPO Co., Ltd		2,186		1,900		-		(65)		-		-		-		4,021
Bricks Capital Management Global Battery Private Equity Fund I		12,843		5,803		-		(202)		-		-		-		18,444
TL Chemical CO., Ltd		49,203		-		-		818		-		-		-		50,021
LG Toray Hungary Battery Separator Kft.		451,408		-		-		19,590		17,305		-		-		488,303
KOREA PRECURSOR CO., LTD.		47,604		-		-		(6,726)		-		-		-		40,878
	₩	1,005,606	₩	7,703	₩	(7,500)	₩	(20,166)	₩	36,652	₩	-	₩	-	₩	1,022,295

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(in millions of
Korean won)

(in millions of Korean won)	December 31, 2023															
	Beginning balance		Acquisitions / transfer		Dividends		Share of profit (loss) of associates and joint ventures		Share of other comprehensi ve income (loss) of associates and joint ventures		Impairment / disposals		Others		Ending balance	
TECHWIN Co., Ltd.	₩	16,526	₩	-	₩	-	₩	(242)	₩	-	₩	-	₩	-	₩	16,284
SEETEC Co., Ltd		134,482		-		(5,000)		9,187		-		-		(521)		138,148
LG Life Sciences Poland Ltd.		17		-		-		-		-		-		-		17
HUAJIN NEW ENERGY MATERIALS(QUZHOU)CO., LTD.		81,179		-		-		(1,612)		(184)		-		-		79,383
VINFAST LITHIUM BATTERY PACK, LLC. ¹		2,428		-		-		(482)		65		(2,011)		-		-
Jiangxi VL Battery Co., Ltd ²		13,323		-		-		(1,317)		543		(12,549)		-		-
PT.HLI Green Power		187,945		-		-		(29,606)		3,934		-		-		162,273
Sam-a Aluminium Company, Limited		-		46,575		-		(318)		-		-		-		46,257
NEXPO Co., Ltd		-		2,375		-		(189)		-		-		-		2,186
Bricks Capital Management Global Battery Private Equity Fund I		-		13,381		-		(538)		-		-		-		12,843
TL Chemical CO., Ltd		47,816		-		-		1,387		-		-		-		49,203
LG Toray Hungary Battery Separator Kft.		445,999		-		-		(7,025)		20,834		-		(8,400)		451,408
KOREA PRECURSOR CO., LTD.		19,838		30,576		-		(2,556)		(156)		-		(98)		47,604
	₩	949,553	₩	92,907	₩	(5,000)	₩	(33,311)	₩	25,036	₩	(14,560)	₩	(9,019)	₩	1,005,606

¹ During the year ended December 31, 2023, the Group disposed 100% ownership shares of VINFAST LITHIUM BATTERY PACK LLC.

² During the year ended December 31, 2023, the Group disposed 100% ownership shares of Jiangxi VL Battery Co., Ltd.

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The tables below provide a reconciliation of the summarized financial information presented to the carrying amount of its interest in the joint ventures or associates:

(in millions of
Korean won)

		June 30, 2024					
		Net Asset (a)	Group's share in % (b)	Group's share in KRW (a x b)	Investment difference	Intercompany transactions, etc.	Carrying amount
LG Toray Hungary Battery Separator Kft.	₩	850,716	50	₩ 425,357	₩ 62,946	₩ -	₩ 488,303
PT.HLI Green Power		404,427	50	202,214	-	(65,714)	136,500
SEETEC Co., Ltd		279,141	50	139,571	-	(3,470)	136,101
HUAJIN NEW ENERGY MATERIALS(QUZHOU)C O., LTD.		175,274	49	85,884	-	-	85,884

(in millions of
Korean won)

		December 31, 2023					
		Net Asset (a)	Group's share in % (b)	Group's share in KRW (a x b)	Investment difference	Intercompany transactions, etc.	Carrying amount
LG Toray Hungary Battery Separator Kft.	₩	776,928	50	₩ 388,464	₩ 71,344	₩ (8,400)	₩ 451,408
PT.HLI Green Power		434,608	50	217,304	-	(55,030)	162,274
SEETEC Co., Ltd		283,236	50	141,618	-	(3,470)	138,148
HUAJIN NEW ENERGY MATERIALS(QUZHOU)C O., LTD.		163,773	49	80,249	-	(866)	79,383

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11. Property, Plant and Equipment

Changes in property, plant and equipment for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Beginning balance	₩	38,950,393	₩	29,662,743
Business combination (Note 37)		-		935
Acquisitions / transfer		12,258,159		19,164,385
Disposals / transfer		(5,963,429)		(6,487,541)
Exchange differences		2,089,369		497,536
Depreciation		(1,938,016)		(3,555,738)
Impairment		(120,794)		(201,339)
Transfer to assets held for sale (Note 34)		(13,310)		(130,588)
Ending balance	₩	<u>45,262,372</u>	₩	<u>38,950,393</u>

During the six-month ended June 30, 2024, the Group capitalized ₩68,293 million of borrowing costs (2023: ₩32,416 million) in relation to acquisition of property, plant and equipment, on property, plant and equipment. The capitalization rate of borrowings used to determine the amount of borrowing costs eligible for capitalization is 3.21%~4.65% (2023: 3.04%).

Line items including depreciation in the consolidated income statements for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

<i>(In millions of Korean won)</i>	2024		2023	
	Three months	Six months	Three months	Six months
Cost of sales	₩ 869,549	₩ 1,732,413	₩ 771,224	₩ 1,512,787
Selling and administrative expenses	102,167	199,697	91,349	172,124
Discontinued operations	463	5,906	8,641	17,412
Total	<u>₩ 972,179</u>	<u>₩ 1,938,016</u>	<u>₩ 871,214</u>	<u>₩ 1,702,323</u>

Details of property, plant and equipment provided as collateral as at June 30, 2024, is as follows:

<i>(in millions of Korean won)</i>	June 30, 2024				
	Carrying amount	Secured amount	Related line item	Related amount	Secured party
Buildings and others	₩ 130,145	₩ 378,000	Borrowings (Note 14)	₩ 215,000	KDB Bank

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Leases

Amounts recognized in the consolidated statement of financial position

Details of right-of-use assets in consolidated statement of financial position are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Right-of-use assets ¹				
Real estate	₩	508,059	₩	479,818
Machinery		46,745		43,631
Vehicles		34,296		35,853
Tools		2,750		1,765
Equipment		1,096		1,013
	₩	<u>592,946</u>	₩	<u>562,080</u>

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

Additions to the right-of-use assets for the six-month period ended June 30, 2024, were ₩ 90,352 million (2023: ₩ 202,862 million).

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Lease liabilities ¹				
Current	₩	115,726	₩	100,130
Non-current		411,204		391,736
	₩	<u>526,930</u>	₩	<u>491,866</u>

¹ Included in the line item 'Borrowings' in the consolidated statements of financial position.

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Amounts recognized in the consolidated income statements

Lease related expenses recognized in the consolidated income statements for the six-month periods ended June 30, 2024 and 2023, are as follows:

<i>(in millions of Korean won)</i>	2024	2023
Depreciation of right-of-use assets		
Real estate	₩ 50,270	₩ 42,766
Machinery	3,438	4,366
Vehicles	8,262	10,439
Tools	636	1,240
Equipment	184	146
	<u>₩ 62,790</u>	<u>₩ 58,957</u>
Interest expense relating to lease liabilities (included in finance cost)	₩ 6,123	₩ 4,206
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	17,990	15,588
Expense relating to leases of low-value assets that are not short-term leases (included in cost of goods sold and administrative expenses)	9,534	9,791

Total cash outflow for leases for the six-month period ended June 30, 2024, was ₩ 96,965 million (2023: ₩ 89,647 million).

12. Intangible Assets

Changes in intangible assets for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024	December 31, 2023
Beginning balance	₩ 3,692,922	₩ 2,690,203
Business combination (Note 37)	-	841,305
Separate acquisitions/ transfer	308,777	593,626
Disposals/ transfer	(6,791)	(49,334)
Exchange differences	99,398	75,296
Amortization	(228,191)	(398,196)
Impairment	(925)	(4,745)
Transfer to assets held for sale (Note 34)	-	(55,233)
Ending balance	<u>₩ 3,865,190</u>	<u>₩ 3,692,922</u>

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Line items including amortization of intangible assets for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024				2023			
	Three months		Six months		Three months		Six months	
Cost of sales	₩	22,881	₩	44,259	₩	15,779	₩	30,329
Selling and administrative expenses		93,246		179,893		89,413		154,832
Discontinued operations		1,764		4,039		3,608		7,040
Total	₩	117,891	₩	228,191	₩	108,800	₩	192,201

Total research and development costs recognized as expenses amounted to ₩1,051,231 million (2023: ₩965,989 million) for the six-month period ended June 30, 2024.

Details of greenhouse gas emission permits included in other intangible assets are as follows:

Greenhouse gas emission permits held for the purpose of fulfilling obligations

The number of greenhouse gas emission permits received at free of charge for the 3rd planning period (2021 to 2025) is as follows:

(in thousands of tons)	2021	2022	2023	2024	2025	Total
Allocation with nil consideration	10,167	10,504	9,073	9,220	9,217	48,181

Changes in greenhouse gas emission permits during the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

(in thousands of tons and millions of Korean won)	June 30, 2024							
	2020		2021		2022		2023	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance								
/Allocation with nil consideration	8,666	₩ -	10,167	₩ -	10,504	₩ -	9,073	₩ -
Purchase/Sale	(69)	1,111	(339)	(20)	(788)	179	(622)	-
Exchange	100	-	(100)	-	-	-	-	-
Borrowings/Carry forwards between years	(49)	(388)	(392)	388	(769)	-	1,211	-
Surrendered to the government	(8,648)	(723)	(9,336)	(368)	(8,947)	(179)	-	-
Ending balance	-	₩ -	-	₩ -	-	₩ -	9,662	₩ -

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(in thousands of tons and
millions of Korean won)

	June 30, 2024					
	2024		2025		Total	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance /						
Allocation with nil						
consideration	9,220	₩ -	9,217	₩ -	56,847	₩ -
Purchase/Sale	-	-	-	-	(1,818)	1,270
Exchange	-	-	-	-	-	-
Borrowings/Carry						
forwards between years	-	-	-	-	1	-
Surrendered to the						
government	-	-	-	-	(26,931)	(1,270)
Ending balance	9,220	₩ -	9,217	₩ -	28,099	₩ -

(in thousands of
tons and millions
of Korean won)

	December 31, 2023							
	2020		2021		2022		2023	
	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance								
/Allocation with nil								
consideration	8,666	₩ -	10,167	₩ -	10,504	₩ -	9,368	₩ -
Purchase/Sale	(69)	1,111	(339)	(20)	(788)	179	(317)	-
Exchange	100	-	(100)	-	-	-	-	-
Borrowings/Carry								
forwards between								
years	(49)	(388)	(392)	388	(769)	-	1,210	-
Surrendered to the								
government	(8,648)	(723)	(9,336)	(368)	(8,947)	(179)	-	-
Ending balance	-	₩ -	-	₩ -	-	₩ -	10,261	₩ -

(in thousands of tons and
millions of Korean won)

	December 31, 2023					
	2024		2025		Total	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance /						
Allocation with nil						
consideration	9,233	₩ -	9,233	₩ -	57,171	₩ -
Purchase/Sale	-	-	-	-	(1,513)	1,270
Exchange	-	-	-	-	-	-
Borrowings/Carry						
forwards between years	-	-	-	-	-	-
Surrendered to the						
government	-	-	-	-	(26,931)	(1,270)
Ending balance	9,233	₩ -	9,233	₩ -	28,727	₩ -

During the six-month period ended June 30, 2024 and for the year ended December 31, 2023, there are no greenhouse gas emission permits held for short-term trading purpose.

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Details of Greenhouse gas emission permits included in other intangible assets of consolidated financial statements regarding the EU ETS (Emissions Trading System) for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

*(in thousands of tons, in
millions of Korean won)*

	June 30, 2024		December 31, 2023	
	Quantity	Amount	Quantity	Amount
Beginning balance	153	₩ 13,809	87	₩ 8,002
Increase	40	4,510	170	16,875
Used	(115)	(8,361)	(104)	(11,068)
Ending balance	<u>78</u>	<u>₩ 9,958</u>	<u>153</u>	<u>₩ 13,809</u>

13. Other Current and Non-current Assets

Details of other current and non-current assets as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)

	2024	2023
Current		
Prepayments to suppliers and prepaid expenses	₩ 421,577	₩ 348,182
Prepaid value added tax	251,004	287,977
Others	1,122,203	575,215
Total	<u>₩ 1,794,784</u>	<u>₩ 1,211,374</u>
Non-current		
Net defined benefit assets	₩ 407,795	₩ 494,818
Long-term prepayments and long-term prepaid expenses	340,774	279,407
Others	152	146
Total	<u>₩ 748,721</u>	<u>₩ 774,371</u>

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14. Borrowings

Borrowings as at June 30, 2024 and December 31, 2023, consist of:

<i>(in millions of Korean won)</i>	2024		2023	
Current				
Short-term borrowings	₩	2,549,894	₩	1,875,362
Current portion of long-term borrowings		1,776,436		1,470,152
Current portion of debentures		3,817,380		3,632,138
Current lease liabilities		115,726		100,130
		<u>8,259,436</u>		<u>7,077,782</u>
Non-current				
Long-term borrowings		5,801,479		6,330,484
Debentures		10,279,478		8,128,112
Lease liabilities		411,204		391,736
		<u>16,492,161</u>		<u>14,850,332</u>
Total	₩	<u>24,751,597</u>	₩	<u>21,928,114</u>

Details of general borrowings as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	Currency	Bank	Latest maturity date	Interest rate(%) as at June 30, 2024	Carrying amount			
					June 30, 2024		December 31, 2023	
Short-term borrowings					Current	Non-current	Current	Non-current
Bank loans	Foreign currency	Citi and others	June 20, 2025	6.52 and others	₩ 2,549,894	₩ -	₩1,875,362	₩ -
Total					<u>₩ 2,549,894</u>	<u>₩ -</u>	<u>₩1,875,362</u>	<u>₩ -</u>
Long-term borrowings								
Bank loans	Korean won	KDB Bank and others ¹	January 30, 2030	3.05 and others	₩ 150,000	₩ 505,000	₩ 200,000	₩ 505,000
	Foreign currency	RHB and others	December 15, 2031	4.55 and others	1,626,436	5,296,799	1,270,249	5,825,873
Less: discount on long-term borrowings					-	(320)	(97)	(389)
Total					<u>₩ 1,776,436</u>	<u>₩ 5,801,479</u>	<u>₩ 1,470,152</u>	<u>₩ 6,330,484</u>
Debentures								
Public debentures	Korean won	KB Securities Co., Ltd. and others	February 19, 2036	3.73 and others	₩ 825,000	₩ 6,275,000	₩ 990,000	₩ 4,400,000
Private debentures	Korean won	KB Securities Co., Ltd. and others	May 7, 2036	2.39 and others	50,000	150,000	-	150,000
	Foreign currency	CITI Securities and others	July 7, 2031	2.38 and others	694,600	3,889,760	644,700	3,610,320
Exchangeable bonds ^{2,3}	Foreign currency	CITI Securities and others	July 18, 2030	1.60 and others	2,778,400	-	2,578,800	-
Less: discount on debentures					(530,620)	(35,282)	(581,362)	(32,208)
Total					<u>₩ 3,817,380</u>	<u>₩10,279,478</u>	<u>₩ 3,632,138</u>	<u>₩ 8,128,112</u>

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¹ The Group's building is provided as collateral for some borrowings from the KDB Bank (Note 11).

² The details of issued exchangeable bonds (Tranche 1) are as follows:

	Details
Aggregate principal amount	USD 1,000,000,000
Issue price	USD 1,000,000,000
Interest rate (%)	1.25
Issue Date	July 18, 2023
Maturity Date	July 18, 2028
Principal Repayment Method	<p>Maturity repayment: Lump-sum repayment at maturity of the remaining principal and interest of debentures that have been repaid early by maturity or for which the right of exchange has not been exercised.</p> <p>Early redemption: The Parent Company has the Call Option, and the bondholder has the Put Option.</p>
Exchange Target	<p>1,883,636 common shares of LG Energy Solution, Ltd. However, despite the bondholder's exercise of the exchange right, the issuer has the option to settle by paying cash equivalent to the consideration instead of issuing the target shares.</p>
Exchange Price (KRW/share)	<p>687,500 (23.07.11 closing price X premium 125%) However, the exchange price may be adjusted according to the standards set in the investment prospectus, such as when the target company pays stock dividends.</p>
Claim Period	<p>August 28, 2023 – July 11, 2028</p> <p>1) After three years and 14 days from the date of payment, if there are more than 20 trading days out of 30 consecutive trading days when the stock price (based on closing price) is 130% or more of the exchange price based on U.S. dollar conversion.</p>
Early Redemption at the Option of the Issuer	<p>2) When the outstanding principal is less than 10% of the original debt (Clean Up Call)</p> <p>3) When additional tax burden arises due to revision of related laws, etc.</p>
Early Redemption at the Option of the Bondholders	<p>1) Can be exercised on 2025.07.18 (Optional Put Date)</p> <p>2) When Shares cease to be listed or admitted to trading or are suspended for a period equal to or exceeding 30 consecutive Trading Days on the Relevant Stock Exchange</p> <p>3) When there is a change in control of the company or the issuer of stocks subject to exchange (Change of Control)</p> <p>4) When the issuer acquires more than 85% of the Voting Rights of the issued capital of LG Energy Solution (Free</p>

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Float)

³ The details of issued exchangeable bonds (Tranche 2) are as follows:

	Details
Aggregate principal amount	USD 1,000,000,000
Issue price	USD 1,000,000,000
Interest rate (%)	1.60
Issue Date	July 18, 2023
Maturity Date	July 18, 2030
Principal Repayment Method	<p>Maturity repayment: Lump-sum repayment at maturity of the remaining principal and interest of debentures that have been repaid early by maturity or for which the right of exchange has not been exercised.</p> <p>Early redemption: The Parent Company has the Call Option, and the bondholder has the Put Option.</p>
Exchange Target	<p>1,811,188 common shares of LG Energy Solution, Ltd. However, despite the bondholder's exercise of the exchange right, the issuer has the option to settle by paying cash equivalent to the consideration instead of issuing the target shares.</p>
Exchange Price (KRW/share)	<p>715,000 (23.07.11 closing price X premium 130%) However, the exchange price may be adjusted according to the standards set in the investment prospectus, such as when the target company pays stock dividends.</p>
Claim Period	<p>August 28, 2023 – July 11, 2030</p>
Early Redemption at the Option of the Issuer	<p>1) After five years and 14 days from the date of payment, if there are more than 20 trading days out of 30 consecutive trading days when the stock price (based on closing price) is 130% or more of the exchange price based on U.S. dollar conversion.</p> <p>2) When the outstanding principal is less than 10% of the original debt (Clean Up Call)</p> <p>3) When additional tax burden arises due to revision of related laws, etc.</p>
Early Redemption at the Option of the Bondholders	<p>1) Can be exercised on 2027.07.18 (Optional Put Date)</p> <p>2) When Shares cease to be listed or admitted to trading or are suspended for a period equal to or exceeding 30 consecutive Trading Days on the Relevant Stock Exchange</p> <p>3) When there is a change in control of the company or the issuer of stocks subject to exchange (Change of Control)</p> <p>4) When the issuer acquires more than 85% of the Voting</p>

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Details

Rights of the issued capital of LG Energy Solution (Free Float)

Details of the exchangeable bonds (Tranche 1) as of the date of issuance and as at June 30, 2024, are as follows:

<i>(in millions of Korean won)</i>		July 18, 2023		June 30, 2024
Issue price	₩	1,266,100	₩	1,389,200
Book amount of exchangeable bonds		991,756		1,165,652
Derivative financial liabilities		263,532		181,957

Details of the exchangeable bonds (Tranche 2) as of the date of issuance and as at June 30, 2024, are as follows:

<i>(in millions of Korean won)</i>		July 18, 2023		June 30, 2024
Issue price	₩	1,266,100	₩	1,389,200
Book amount of exchangeable bonds		914,412		1,082,954
Derivative financial liabilities		340,876		200,642

Details of lease liabilities as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>		June 30, 2024				
Leaser	Annual interest rate (%)	Latest maturity date	Total amount	Current	Non-current	
Hyundai Oil Bank and others	0.65 ~ 8.68	2082.2.28	₩ 526,930	₩ 115,726	₩	411,204

<i>(in millions of Korean won)</i>		December 31, 2023				
Leaser	Annual interest rate (%)	Latest maturity date	Total amount	Current	Non-current	
Hyundai Oil Bank and others	0.67 ~ 8.68	2082.2.28	₩ 491,866	₩ 100,130	₩	391,736

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15. Provisions

Changes in provisions for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

(in millions of Korean won)

	June 30, 2024			
	Warranty ¹	Greenhouse gas emission ²	Others ³	Total
Beginning balance	₩ 1,279,460	₩ 8,966	₩ 146,299	₩ 1,434,725
Additions	420,673	5,484	14,735	440,892
Used	(259,067)	(8,360)	(28,855)	(296,282)
Ending balance	₩ 1,441,066	₩ 6,090	₩ 132,179	₩ 1,579,335
Current	443,217	6,090	110,120	559,427
Non-current	997,849	-	22,059	1,019,908

(in millions of Korean won)

	December 31, 2023			
	Warranty ¹	Greenhouse gas emission ²	Others ³	Total
Beginning balance	₩ 1,485,978	₩ 8,712	₩ 65,170	₩ 1,559,860
Additions	771,185	11,501	134,171	916,857
Used	(977,703)	(11,247)	(53,042)	(1,041,992)
Ending balance	₩ 1,279,460	₩ 8,966	₩ 146,299	₩ 1,434,725
Current	413,309	8,966	124,675	546,950
Non-current	866,151	-	21,624	887,775

¹ Warranty provisions have been accrued based on historical experience for the estimated warranty costs to be incurred due to quality control, exchange and refunds with regard to products. In addition, provisions related to replacement costs for ESS and voluntary automotive battery recalls are determined based on the best estimate and included in the above warranty provision. The provisions are adjusted to reflect the current best estimate. As at June 30, 2024, the above warranty provision included ₩1,434,593 million (December 31, 2023: ₩1,274,438 million) of warranty provision for LG Energy Solution, Ltd. and its subsidiaries.

² Greenhouse gas emission provisions have been accrued for estimated expenditures to be obligated for any excess emission. The estimated emission as at June 30, 2024, amounts to 4,746 thousand tons (2023: 8,854 thousand tons).

³ The Group recognized as provisions in relation to certain litigations in progress.

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16. Net Defined Benefit Liabilities

Details of net defined benefit liabilities/assets recognized in the consolidated statements of financial position as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Present value of defined benefit obligations ¹	₩	1,787,580	₩	1,750,986
Fair value of plan assets		(2,180,908)		(2,233,925)
Liabilities (assets) in the consolidated statement of financial position	₩	(393,328)	₩	(482,939)

¹ The present value of retirement benefit obligations is net of existing contributions to the National Pension Plan of ₩518 million as at June 30, 2024 (December 31, 2023: ₩587 million).

The amounts recognized in the consolidated income statements for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

<i>(In millions of Korean won)</i>	2024		2023	
	Three months	Six months	Three months	Six months
Current service cost ¹	₩ 53,883	₩ 108,658	₩ 51,182	₩ 99,140
Interest cost	(5,582)	(11,135)	(8,007)	(15,983)
Total, included in employee benefit expenses	₩ 48,301	₩ 97,523	₩ 43,175	₩ 83,157

¹ The above amounts excluded ₩683 million (2023: ₩560 million) of expenses capitalized to construction in progress and development costs.

Post-employment benefits recognized for defined contribution plan for the six-month period ended June 30, 2024, amounted to ₩9,995 million (2023: ₩7,593 million).

Post-employment benefits recognized in the consolidated income statements for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

<i>(In millions of Korean won)</i>	2024		2023	
	Three months	Six months	Three months	Six months
Cost of sales	₩ 27,004	₩ 57,988	₩ 24,223	₩ 50,359
Selling and administrative expenses	22,869	46,616	19,107	36,250
Discontinued operations	1,473	2,914	2,053	4,141
Total	₩ 51,346	₩ 107,518	₩ 45,383	₩ 90,750

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Movements in the present value of defined benefit obligations for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Beginning balance	₩	1,750,986	₩	1,554,870
Transferred-in liability due to intercompany transfer		1,573		15,195
Transferred-out liability due to intercompany transfer		(719)		(8,849)
Current service cost		109,341		203,005
Interest expense		39,680		80,529
Remeasurements:				
Actuarial loss from change in demographic assumptions		-		2,290
Actuarial loss from change in financial assumptions		-		12,394
Actuarial loss from experience adjustments		-		59,020
Others		-		(2,303)
Exchange differences		(641)		(10,294)
Payments from plans ¹		(112,640)		(154,871)
Ending balance	₩	<u>1,787,580</u>	₩	<u>1,750,986</u>

¹The amount paid to employees who converted to the defined contribution plan for the six-month period ended June 30, 2024, is ₩63,200 million (December 31, 2023: ₩113,563 million).

Movements in the fair value of plan assets for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Beginning balance	₩	2,233,925	₩	2,153,449
Transferred-in plan assets due to intercompany transfer		12		-
Transferred-out plan assets due to intercompany transfer		(139)		(1,356)
Interest income		50,815		112,537
Remeasurements:				
Return on plan assets (excluding amounts included in interest income)		(29)		3,844
Contributions:				
Employers		1,143		106,411
Payments from plans ¹		(103,045)		(137,389)
Administrative costs		(1,774)		(3,571)
Ending balance	₩	<u>2,180,908</u>	₩	<u>2,233,925</u>

¹The amount paid to employees who converted to the defined contribution plan for the six-month period ended June 30, 2024, is ₩63,200 million (December 31, 2023: ₩113,563 million).

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The actual return on plan assets for the six-month period ended June 30, 2024, was ₩50,786 million and for the year ended December 31, 2023, was ₩116,381 million.

The significant actuarial assumptions as at June 30, 2024 and December 31, 2023, are as follows:

	June 30, 2024	December 31, 2023
Discount rate	4.5%~4.7%	4.5%~4.7%
Salary growth rate	5.0%~6.0%	5.0%~6.0%

The sensitivity analysis for changes in key actuarial assumptions as at June 30, 2024, is as follows:

<i>(in millions of Korean won)</i>	Increase by 0.5%		Decrease by 0.5%	
Discount rate:				
Increase (decrease) in defined benefit obligations	₩	(185,610)	₩	221,157
Salary growth rate:				
Increase (decrease) in defined benefit obligations	₩	229,975	₩	(195,296)

The decline in rate of return of the gilt, which is the discount rate, is exposed to the most significant risk through an increase in the defined benefit liability.

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

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

Plan assets as at June 30, 2024 and December 31, 2023, consist of:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
	Amount	Composition (%)	Amount	Composition (%)
Insurance contracts with guaranteed yield	₩ 2,160,630	99.1	₩ 2,212,965	99.1
Equity linked bonds	20,276	0.9	20,899	0.9
Time deposits	2	0.0	61	0.0
	<u>₩ 2,180,908</u>	<u>100.0</u>	<u>₩ 2,233,925</u>	<u>100.0</u>

Plan assets consist of various debt instruments with principal and interest protection and others which have no quoted market prices in an active market.

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17. Other Current and Non-Current Liabilities

Details of other current and non-current liabilities as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)	June 30, 2024		December 31, 2023	
Current				
Advances from customers	₩	319,366	₩	247,150
Withholdings		287,382		302,890
Unearned revenues		107,506		119,399
Accrued expenses		505,889		477,405
Total	₩	<u>1,220,143</u>	₩	<u>1,146,844</u>
Non-current				
Long-term accrued expenses	₩	77,404	₩	76,000
Long-term unearned revenues		117,610		163,497
Long-term advanced received		<u>1,349,922</u>		<u>1,279,493</u>
Total	₩	<u>1,544,936</u>	₩	<u>1,518,990</u>

18. Commitments and Contingencies

- (a) As at June 30, 2024, the Parent Company and certain subsidiaries have been guaranteed by Seoul Guarantee Insurance Company for the execution of contracts and others.
- (b) As at June 30, 2024, the Parent Company and certain subsidiaries have various specific line of credit agreements with several financial institutions, as follows:

(Unit: Korean won in millions, foreign currencies in millions)

Classification	The Parent Company		Certain Subsidiaries								
	KRW	USD	KRW	USD	CNY	EUR	PLN	INR	THB	MYR	JPY
Limit of bank overdraft	₩20,400	-	₩8,700	108	1,260	333	-	-	10	-	-
Limit of the letter of credit	15,000	273	-	440	1,159	-	-	-	-	-	500
Limit of discount of notes from export	-	1,269	-	1,362	3,625	-	-	-	-	-	-
Limit of guaranteed payments in other foreign currency	-	173	50,600	438	892	-	-	-	-	-	-
Limit of loan arrangements	350,000	-	960,000	7,311	13,140	2,956	155	2,970	-	450	-
Derivatives	-	40	430,000	3,103	-	210	-	-	-	-	-

The Parent Company and certain subsidiaries also entered into comprehensive credit line agreements with other financial institutions relating to trade finance and import/export (including

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bank overdraft) amounting to ₩30,000 million and USD 245 million. Certain subsidiaries entered into factoring agreements with a limit of ₩150,000 million.

- (c) As at June 30, 2024, the Parent Company and certain subsidiaries have B2B purchase arrangements with several financial institutions with limit of ₩356,000 million and ₩190,000 million, respectively.
- (d) As at June 30, 2024, the Parent Company has reverse factoring agreements, and there is no utilized amount.
- (e) As at June 30, 2024, the Group's litigation status is as follows:

As at June 30, 2024, in connection with styrene monomer gas leakage accident, several lawsuits against the Group have been filed with National Green Tribunal of India (NGT) and Andhra Pradesh High Court (APHC). The ultimate outcome of these cases cannot be determined at the reporting date. LG Polymer India Pvt. Ltd. deposited INR 500 million under the order from NGT, and deposited INR 953 million generated from sales of inventories under the order from APHC in connection with this accident. The manufacturing facility is currently closed with limited access in accordance with the order from APHC.

As at June 30, 2024, in relation to small rechargeable batteries sales and General Motors ("GM") Bolt EV, the consumers have filed five class actions against the Group. However, the ultimate outcome of these cases cannot be determined at the reporting date.

In addition, as at June 30, 2024, the Parent Company and certain subsidiaries have been named as plaintiffs in seven (related claim amount of ₩ 25,367 million) and 22 (related claim amount of USD 90 million and ₩6,196 million) legal actions, respectively. They have been named as defendants in 12 and 61 legal actions, respectively, with ₩76,934 million and ₩2,631 million, respectively, in claims. The ultimate outcome of these cases cannot be determined at the reporting date.

- (f) The Parent Company has entered into manufacture and production technical contracts with ExxonMobil and others.
- (g) The Parent Company has entered into a license agreement with LG Corp. to use trademarks on the products that the Group manufactures and sells, and on the services the Group provides in relation to its business.
- (h) As at June 30, 2024, the Group has entered into a payment guarantee contract of USD 9 million, and certain subsidiaries have entered into payment guarantee contracts of USD 109 million, EUR 5 million with financial institutions to guarantee the warrant of products and payment. Certain subsidiaries have entered into payment guarantee contracts of CNY 305 million with financial institutions in relation to the custom of imported raw materials.
- (i) Capital expenditure arrangement that has not incurred as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024	December 31, 2023
Property, plant and equipment	₩ 8,896,248	₩ 9,416,171

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- (j) As at June 30, 2024, the Group has entered into an agreement with GM regarding joint investment in Ultium Cells Holdings LLC and Ultium Cells LLC, whereby each party can sell its shares to third parties in eight years after the inception of the contract. In addition, if one party defaults, the other party has the right-to-purchase shares from the other party. The Group completed the process of approval by the government for the use of core technologies according to the Industrial Technology Protection Act.
- (k) As at June 30, 2024, the Group has entered into a joint venture agreement with Honda in which the Group agreed to invest USD 1,802 million. At the end of the current period, a total investment of USD 874 million has been made. In addition, during 2022, the Group determined payment guarantees of USD 450 million for the joint venture, in accordance with the equity ratio of the borrowing with a credit limit of USD 883 million. Additionally, in the event of default, other equity investors have the right to purchase the applicable interest.
- (l) As at June 30, 2024, the Group has entered into a joint venture agreement with Stellantis in which the Group agreed to invest USD 1,464 million. At the end of the current period, a total investment of USD 765 million has been made. Additionally, in the event of default, other equity investors have the right to purchase the applicable interest.
- (m) As at June 30, 2024, the Group has entered into a joint venture agreement with HMG Global LLC, in which the Group agreed to invest USD 1,108 million. At the end of the current period, a total investment of USD 395 million has been made. Additionally, after the expiration of the contract period, it is possible to transfer the applicable interest to a third party, and in the event of default, other equity investors have the right to purchase the applicable interest.
- (n) As at June 30, 2024, the Group has entered into an agreement for USD 2,048 million for the construction of a new plant for LG Energy Solution Arizona, Inc.
- (o) As at June 30, 2024, the Group and certain subsidiaries' investment agreements are as follows:

(in millions of Korean won,
USD and EUR)

	Currency	Committed investments	Cumulative investments	Remaining
KBE Fund	KRW	150,000	81,638	68,362
TW Biomassenergy Co., Ltd ¹	KRW	67,800	26,400	41,400
BCM Global Battery Fund	KRW	30,000	13,381	16,619
Secondary battery growth Fund	KRW	6,700	5,637	1,063
Gross Acceleration Fund	KRW	5,000	4,900	100
Yonsei Technology Holdings IP Fund	KRW	3,000	1,020	1,980
BNZ (Beyond Net Zero) Fund	USD	150	62	88
Phoenix Venture Partners III ²	USD	10	5	5
U.S. Venture Partners XII ²	USD	5	4	1
U.S. Venture Partners XIII ²	USD	5	1	4
Emerald Industrial Innovation Fund IX ²	EUR	5	1	4

¹ The Group has the right to request GS EPS to sell all of its shares at fair value, once in a year, after 20 years from the commencement of commercial operation of its subsidiary, TW Biomassenergy Co., Ltd. Additionally, GS EPS has the right to request LG Chem to purchase all of its shares at fair value.

² Investment agreements of LG Chem Fund LLC.

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- (p) For the six-month period ended June 30, 2022, the Parent Company acquired 50% of new shares issued by LG Toray Hungary Battery Separator Kft. for USD 375 million in accordance with the joint venture agreement with Toray Industries, Inc. The shares were recognized as investment in associates, as it was determined that there was a joint control under the agreement. The details on agreements entered into upon the acquisition of shares are as follows:

	Details
Agreement to purchase additional shares	After 30 months from the acquisition date of the 50% shares, purchasing the 20% shares through the agreed pricing method.
Restrictions on share transfer	- During the lock-up period ¹ , share transfer is prohibited without prior written consent of the other shareholder. - When sold to a third party, the Parent Company holds a drag-along right and Toray Industries, Inc. holds a tag-along right.
Default	In case the Parent Company or the contracting party defaults, non-default shareholder and subsidiaries have the right to request the default shareholder to sell their shares (Call Option) and the default shareholder to purchase the shares held by the non-default shareholder (Put Option).
Exit put option	Once the lock-up period ¹ ends, the other shareholder has a put option to sell the remaining 30% of the shares to the Parent Company.
Deadlock	After 30 months from the acquisition date of the 50% shares, in the event of a deadlock agreed by both parties, 1) the Parent Company holds a call option to request the counterparty's company and affiliates to sell their shares. 2) The other party holds a put option to request the Parent Company to purchase shares of the counterparty.

¹ Lock-up period: Restriction period of share transfer for five years from the time the Parent Company acquires 50% of the shares.

- (q) Certain subsidiaries provide payment guarantees for borrowings as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)			Amount of borrowing ¹		Guaranteed amount ²	
Guarantor	Guaranteed company	Creditor	June 30, 2024	December 31, 2023	June 30, 2024	December 31, 2023
LG ENERGY SOLUTION, LTD.	PT. HLI Green Power	ANZ and others	₩ 419,538	₩ 285,602	₩ 493,861	₩ 458,382

¹ It is the amount of borrowing as at June 30, 2024 and December 31, 2023.

² It is a total amount guaranteed.

- (r) During the year ended December 31, 2023, the Group issued exchangeable bonds targeting the stocks of LG Energy Solution, LTD., and recognized the right of exchange and option included in the exchangeable bonds as a derivative financial liability (Note 14).

- (s) As at June 30, 2024, the Group has provided as collateral for borrowings of ₩215,000 million from the KDB Bank, and upon the completion of the building or acquisition of land ownership,

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the Group has committed to provide the first priority security right (maximum amount of ₩378,000 million) to the KDB Bank (Note 11).

19. Issued Capital

Changes in issued capital and share premium for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

*(in millions of Korean won
and in shares)*

	Ordinary shares		Preferred shares		Share premium
	Number of shares	Issued capital	Number of shares	Issued capital	
January 1, 2023	70,592,343	₩ 352,962	7,688,800	₩ 38,444	₩ 2,014,036
December 31, 2023	70,592,343	352,962	7,688,800	38,444	2,014,036
June 30, 2024	70,592,343	₩ 352,962	7,688,800	₩ 38,444	₩ 2,014,036

Changes in treasury shares for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

<i>(in millions of Korean won and in shares)</i>	Number of shares		Carrying amount	Gain on disposal of treasury shares
	Ordinary shares	Preferred shares		
January 1, 2023	-	6,041	₩ 270	₩ 655,927
December 31, 2023	-	6,041	270	655,927
June 30, 2024	-	6,041	₩ 270	₩ 655,927

Capital surplus as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024	December 31, 2023
Revaluation reserve	₩ 206,769	₩ 206,769
Share premium	2,014,036	2,014,036
Gain on disposal of treasury shares	655,927	655,927
Other capital surplus	8,695,366	8,695,366
Total	₩ 11,572,098	₩ 11,572,098

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20. Retained Earnings

Retained earnings as at June 30, 2024 and December 31, 2023, consist of:

<i>(in millions of Korean won)</i>	June 30, 2024	December 31, 2023
Legal reserve ¹	₩ 765,794	₩ 765,794
Discretionary reserve ²	16,851,016	16,894,707
Retained earnings before appropriation	1,579,207	1,990,131
Total	₩ 19,196,017	₩ 19,650,632

¹ The Commercial Code of the Republic of Korea requires the Parent Company to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its issued capital. The reserve is not available for cash dividends payment, but may be transferred to capital or used to reduce accumulated deficit. When the accumulated legal reserves (the sum of capital reserves and earned profit reserves) are greater than 1.5 times the paid-in capital amount, the excess legal reserves may be distributed in accordance with a resolution of the shareholders' meeting.

² The Group separately accumulates a discretionary reserve for research and human resource development through appropriation of retained earnings, which has been included as deductible expense for the corporate income tax return according to the Special Tax Treatment Law. Among these reserves, the used amounts for each specific purpose and the balances after use can be transferred to discretionary reserve and will be able used for dividends.

21. Elements of Other Stockholders Equity

Details of other components of equity as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024	December 31, 2023
Treasury shares (Note 19)	₩ (270)	₩ (270)
Capital transactions within the Group ¹	(19,299)	(19,299)
Total	₩ (19,569)	₩ (19,569)

¹ Gain or loss on disposal interest within the consolidated entity, changes in ownership interests and the investment difference, etc., all adjusted for the related deferred corporate tax effects.

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22. Operating Income

Operating Income for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Revenue	₩ 12,299,672	₩ 23,909,104	₩ 14,335,670	₩ 28,620,157
Cost of sales	10,423,581	20,129,260	11,930,289	23,902,375
Gross profit	1,876,091	3,779,844	2,405,381	4,717,782
Other non-operating income ¹	447,794	636,748	110,916	211,210
Selling and administrative expenses	1,918,025	3,746,101	1,898,657	3,507,649
Wages and salaries	440,120	875,767	426,131	830,230
Post-employment benefits (Note 16)	22,869	46,616	19,107	36,251
Employee benefits	112,182	220,695	115,646	208,595
Travel expense	26,479	48,390	31,347	51,510
Water and utilities	32,206	68,920	26,072	60,395
Packaging expense	4,300	6,816	1,967	3,592
Rental expenses	34,433	69,424	40,387	80,086
Commission expenses	274,420	510,306	280,285	533,171
Depreciation (Notes 11 and 36)	103,080	201,504	89,544	171,211
Advertising expense	24,627	42,354	22,251	33,411
Freight expenses	213,320	400,517	204,912	412,772
Training expense	10,299	21,473	17,146	30,218
Amortization (Note 12)	93,246	179,893	89,413	154,832
Sample expense	9,681	17,586	8,118	16,920
Development costs	144,071	277,278	118,336	215,476
Others	372,692	758,562	407,995	668,979
Operating income	₩ 405,860	₩ 670,491	₩ 617,640	₩ 1,421,343

¹ Under the Inflation Reduction Act, which takes effect on January 1, 2023, manufacturers and sellers of battery cells/modules produced in the United States are eligible for tax deductions of a certain amount. This amount is expected to be revenue that the Group will receive for the six-month period ended June 30, 2024.

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23. Classification of Expenses by Nature

Cost of sales, and selling and administrative expenses by nature for the three-month and six-month periods ended June 30, 2024 and 2023, consist of:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Changes in inventories of merchandise, finished goods, semi-finished goods and work in process	₩ (8,854)	₩ 169,791	₩ 529,552	₩ 833,529
Raw materials and consumables used	7,629,137	14,077,393	8,219,075	17,069,573
Purchase of merchandise	429,139	743,175	354,546	736,956
Employee benefit expenses (Note 24)	1,309,370	2,576,619	1,208,955	2,382,820
Advertising expenses	25,206	43,301	22,630	33,969
Freight expenses	225,280	423,673	219,373	441,061
Commission expenses	370,513	825,888	457,480	888,596
Depreciation and amortization (Notes 11, 12, and 36)	1,089,732	2,158,068	969,176	1,871,813
Rent expenses and usage fee	25,429	51,348	26,851	56,082
Other expenses	1,246,654	2,806,105	1,821,308	3,095,625
Total	₩ 12,341,606	₩ 23,875,361	₩ 13,828,946	₩ 27,410,024

24. Employee Benefit Expenses

Details of employee benefit expenses for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Salaries	₩ 1,064,601	₩ 2,090,030	₩ 984,813	₩ 1,956,217
Post-employment benefits – Defined benefit plan (Note 16)	46,956	95,203	41,227	79,260
Post-employment benefits – Defined contribution plan (Note 16)	2,917	9,401	2,103	7,344
Others	194,896	381,985	180,812	339,999
Total	₩ 1,309,370	₩ 2,576,619	₩ 1,208,955	₩ 2,382,820

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25. Finance Income and Costs

Details of finance income and costs for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Finance income				
Interest income ¹	₩ 87,135	₩ 185,896	₩ 58,214	₩ 127,802
Dividend income	2,429	2,429	423	13,343
Exchange differences	143,457	337,973	381,684	686,113
Gain related to derivative instruments	244,830	556,298	(437)	144,186
Gain related to financial assets	(1,255)	30,090	529	4,297
Total	₩ 476,596	₩ 1,112,686	₩ 440,413	₩ 975,741
Finance costs				
Interest expense ²	₩ 231,072	₩ 427,765	₩ 140,503	₩ 270,093
Exchange differences	386,796	846,200	229,818	609,034
Loss related to derivative instruments	9,394	8,997	(12,419)	(6,623)
Loss related to financial assets	1,941	3,659	874	1,521
Total	₩ 629,203	₩ 1,286,621	₩ 358,776	₩ 874,025

¹ Details of interest income for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Deposits held by financial institutions	₩ 55,691	₩ 130,321	₩ 44,614	₩ 102,077
Other loans and receivables	31,444	55,575	13,600	25,725
Total	₩ 87,135	₩ 185,896	₩ 58,214	₩ 127,802

² Details of interest expense for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Interest on financial institutions	₩ 112,306	₩ 211,463	₩ 100,706	₩ 179,653
Interest on lease liabilities	2,630	6,123	1,746	4,206
Interest on debentures	137,112	261,108	49,357	99,725
Other interest expenses	9,010	17,364	11,564	18,489
Capitalized interest for qualifying assets	(29,986)	(68,293)	(22,870)	(31,980)
Total	₩ 231,072	₩ 427,765	₩ 140,503	₩ 270,093

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26. Other Non-operating Income

Details of other non-operating income for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Exchange differences	₩ 219,028	₩ 533,239	₩ 508,314	₩ 1,010,142
Gain on disposal of property, plant and equipment	1,723	3,568	3,070	3,731
Gain on disposal of intangible assets	-	14	191	191
Insurance income	1,649	2,415	7,474	8,733
Others	11,483	23,842	7,502	26,609
Total	₩ 233,883	₩ 563,078	₩ 526,551	₩ 1,049,406

27. Other Non-operating Expenses

Details of other non-operating expenses for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Exchange differences	₩ 111,888	₩ 281,361	₩ 367,694	₩ 732,514
Loss on disposal of property, plant and equipment	45,840	92,366	34,323	57,349
Loss on disposal of intangible assets	828	1,258	150	816
Impairment loss on property, plant and equipment (Note 11)	102,151	120,794	4,676	1,985
Impairment loss on intangible assets (Note 12)	800	925	-	-
Loss on disasters	102	110	1,811	16,040
Donations	9,282	10,294	9,365	11,808
Others	12,275	21,792	22,888	28,630
Total	₩ 283,166	₩ 528,900	₩ 440,907	₩ 849,142

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28. Tax Expense and Deferred Tax

Income tax expense is recognized based on the best estimate of weighted average annual income tax rate expected for the full financial year.

The Group is within the scope of Pillar Two model rules and liable to pay an additional tax expense as a parent company of LG Energy Solution Michigan Inc. that operates in USA and LG Chem Hai Phong Engineering Plastics LLC. that operates in Vietnam. The Group recognized income tax expense amounting to ₩ 15,232 million for the six-month period ended June 30, 2024, and applied the exception to recognizing and disclosing information about deferred tax.

29. Earnings per Share

Basic earnings per share is calculated by dividing the profit attributable to owners of the Parent Company by the weighted average number of shares in issue excluding shares purchased by the Parent Company and held as treasury shares. As at the reporting date, the Parent Company has no potential ordinary shares. Preferred shares have a right to participate in the profits of the Group. These participation rights have been considered in presenting the earnings per share information for both of ordinary shares and preferred shares.

Basic earnings per share for profit from continuing operations and earnings per share attributable to the owners of the Parent Company for the three-month and six-month periods ended June 30, 2024 and 2023, are computed as follows:

Basic earnings (losses) per ordinary share from continuing operations

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Profit (loss) from continuing operations attributable to ordinary shares ¹	₩ (309,352)	₩ (206,301)	₩ 473,352	₩ 905,991
Weighted average number of ordinary shares outstanding	<u>70,592,343</u>	<u>70,592,343</u>	<u>70,592,343</u>	<u>70,592,343</u>
Basic earnings (losses) per ordinary share from continuing operations <i>(in won)</i>	<u>₩ (4,382)</u>	<u>₩ (2,922)</u>	<u>₩ 6,705</u>	<u>₩ 12,834</u>

Basic earnings (losses) per ordinary share

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Profit (loss) attributable to ordinary shares ¹	₩ (285,761)	₩ (162,456)	₩ 473,001	₩ 900,628
Weighted average number of ordinary shares outstanding	<u>70,592,343</u>	<u>70,592,343</u>	<u>70,592,343</u>	<u>70,592,343</u>
Basic earnings (losses) per ordinary shares <i>(in won)</i>	<u>₩ (4,048)</u>	<u>₩ (2,301)</u>	<u>₩ 6,700</u>	<u>₩ 12,758</u>

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Basic earnings (losses) per preferred share from continuing operations

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Profit (loss) from continuing operations attributable to preferred share ¹	₩ (33,668)	₩ (22,452)	₩ 51,900	₩ 98,986
Weighted average number of preferred shares outstanding	<u>7,682,759</u>	<u>7,682,759</u>	<u>7,682,759</u>	<u>7,682,759</u>
Basic earnings (losses) per preferred share from continuing operations <i>(in won)</i>	<u>₩ (4,382)</u>	<u>₩ (2,922)</u>	<u>₩ 6,755</u>	<u>₩ 12,884</u>

Basic earnings (losses) per preferred share

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Profit (loss) from continuing operations attributable to preferred share ¹	₩ (31,100)	₩ (17,680)	₩ 51,862	₩ 98,402
Weighted average number of preferred shares outstanding	<u>7,682,759</u>	<u>7,682,759</u>	<u>7,682,759</u>	<u>7,682,759</u>
Basic earnings (losses) per preferred share from continuing operations <i>(in won)</i>	<u>₩ (4,048)</u>	<u>₩ (2,301)</u>	<u>₩ 6,750</u>	<u>₩ 12,808</u>

¹ Profit attributable to ordinary and preferred shares are as follows:

(In millions of Korean won)

	2024		2023	
	Three months	Six months	Three months	Six months
Profit (loss) from continuing operations attributable to the owners of the Parent Company	₩ (343,020)	₩ (228,753)	₩ 525,252	₩ 1,004,977
Ordinary shares dividends (A)	-	-	141,658	269,946
Preferred shares dividends (B)	-	-	15,801	29,763
Undistributed earnings (losses) from continuing operation for the period	(343,020)	(228,753)	367,793	705,268
Undistributed earnings (losses) available for ordinary shares (C)	(309,352)	(206,301)	331,694	636,046
Undistributed earnings (losses) available for preferred shares (D)	(33,668)	(22,452)	36,099	69,222
Profit (loss) from continuing operations for the period attributable to ordinary shares (A+C)	(309,352)	(206,301)	473,352	905,992
Profit (loss) from continuing operations for the period attributable to preferred shares (B+D)	(33,668)	(22,452)	51,900	98,985

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(In millions of Korean won)	2024				2023			
	Three months		Six months		Three months		Six months	
Profit (loss) attributable to the owners of the Parent Company	₩	(316,861)	₩	(180,136)	₩	524,863	₩	999,030
Ordinary shares dividends (A)		-		-		141,658		269,946
Preferred shares dividends (B)		-		-		15,801		29,763
Undistributed earnings (losses) for the period		(316,861)		(180,136)		367,404		699,321
Undistributed earnings (losses) available for ordinary shares (C)		(285,761)		(162,456)		331,343		630,682
Undistributed earnings (losses) available for preferred shares (D)		(31,100)		(17,680)		36,061		68,639
Profit (loss) for the period attributable to ordinary shares (A+C)		(285,761)		(162,456)		473,001		900,628
Profit (loss) for the period attributable to preferred shares (B+D)		(31,100)		(17,680)		51,862		98,402

For the six-month periods ended June 30, 2024 and 2023, there were no dilutive potential outstanding ordinary shares at the reporting date. Accordingly, diluted earnings per share for profit attributable to owners of the Parent Company is identical to basic earnings per share.

Basic and diluted earnings per share attributable to ordinary and preferred shares from discontinued operations for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(In millions of Korean won)	2024				2023			
	Three months		Six months		Three months		Six months	
Basic earnings (losses) per ordinary share from discontinued operations	₩	334	₩	621	₩	(5)	₩	(76)
Basic earnings (losses) per preferred share from discontinued operations		334		621		(5)		(76)
Diluted earnings (losses) per ordinary share from discontinued operations		334		621		(5)		(76)
Diluted earnings (losses) per preferred share from discontinued operations		334		621		(5)		(76)

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30. Dividends

The amount of dividends and dividends per share for the three-month and six-month periods ended June 30, 2024 and 2023, are as follows:

(in Korean won and number of share)	2024		2023	
	Ordinary share	Preferred share	Ordinary share	Preferred share
Number of shares outstanding	70,592,343	7,688,800	70,592,343	7,688,800
Number of treasury shares	-	(6,041)	-	(6,041)
Number of dividend share	70,592,343	7,682,759	70,592,343	7,682,759
Dividend per share	₩ 3,500	₩ 3,550	₩ 10,000	₩ 10,050
Total dividend (in millions of Korean won)	247,073	27,274	705,923	77,212

31. Related Party Transactions

Details of related parties as at June 30, 2024 and December 31, 2023, are as follows:

Related party	Related party's subsidiary (Domestic)	Related party's subsidiary (Overseas)	Related party's associates and joint ventures
Significant influence over the group: ¹ LG Corp.			
Subsidiaries of the entity with significant influence:			
LG CNS Co., Ltd.	Biztech On Co., Ltd. and others	LG CNS America Inc. and others	
D&O Corp.	D&O CM and others	D&O CM POLAND sp.z o.o. and others	
LG Management Development Institute			
LG Sports Ltd.			
LG Holdings Japan Co., Ltd.			
Associates and joint ventures: ²			
TECHWIN Co., Ltd.			
LG Chem Life Sciences Poland Ltd.			
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.			
TL Chemical CO., Ltd.			
KOREA PRECURSOR CO., LTD.			
KOREA PRECURSOR CO., LTD.			
LG Toray Hungary Battery SEETEC Co., Ltd.			

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Related party	Related party's subsidiary (Domestic)	Related party's subsidiary (Overseas)	Related party's associates and joint ventures
PT.HLI Green Power. Sam-a Aluminium Company, Limited ³ NEXPO Co., Ltd. ³ Mintech Co., Ltd. ⁴ Bricks Capital Management Global Battery Private Equity Fund I ³ Affiliate within the same large enterprise group ⁵			
LG Display Co., Ltd.	Nanumnuri Co., Ltd.	LG Display High-Tech (China) Co., Ltd. and others	
LG Electronics Inc.	LG Innotek Co., Ltd. and others	LG ELECTRONICS INDIA PRIVATE LIMITED and others	Robostar Co., Ltd. and others
LG Household & Health Care Ltd.	Coca-Cola Beverage Co. and others	Everlife Co., Ltd and others	
LG Uplus Corp.	LG HelloVision Corp and others.	DACOM AMERICA, INC.	DACOM Crossing Corporation
HS AD Inc. ⁶		GIIR America Inc. and others	

¹ LG Corp. is an entity exercising a significant influence over the Group, which owns 33.34% of the Parent Company's ordinary shares.

² During the year ended December 31, 2023, the Group disposed VINFAST LITHIUM BATTERY PACK LLC., Jiangxi VL Battery., Ltd., VINA Plasticizers Chemical Co.,Ltd. Therefore, it was excluded from the related parties.

³ During the year ended December 31, 2023, the Group newly acquired shares of the entity.

⁴ Although, the Group owns less than 20% of the shares in the form of redeemable convertible preference shares, it is judged to have significant influence as it holds a right to appoint directors. Meanwhile, it is classified as a financial asset measured at fair value through profit or loss, considering Korean IFRS 1109 and the nature of the shares held.

⁵ Although, these entities are not the related parties of the Group in accordance with Korean IFRS 1024, these entities belong to a large enterprise group in accordance with the Monopoly Regulation and Fair-Trade Act.

⁶ During the year ended December 31, 2023, G IIR Inc. merged HS AD Inc. and LBEST Inc. After the merger, G IIR Inc. changed its name to HS AD Inc.

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Sales and purchases with related parties for the six-month periods ended June 30, 2024 and 2023, are as follows:

(in millions of Korean won)

	2024									
	Purchase and others									
	Sales and others		Purchase of raw materials /merchandises		Acquisition of property, plant and equipment and intangible assets		Acquisition of right-of-use assets		Interest expense	Others
Entity with a significant influence over the Group										
LG Corp.	₩	2	₩	-	₩	-	₩	-	₩	136 - ₩ 45,236
Associates and joint ventures										
SEETEC Co., Ltd.		42,415		109,201		2		136	200	48,880
TECWIN Co., Ltd.		-		23		305		-	-	54
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.		357		193,964		-		-	-	-
PT. HLI Greenpower		35,524		363		-		-	-	5,402
Others		1,421		26,756		1		-	-	268
Subsidiaries of the entity with significant influence:										
D&O Corp. and its subsidiaries and associates		43		396		12,585		-	-	7,010
LG CNS Co., Ltd. and its subsidiaries		13,759		12,435		373,473		-	8	149,230
Others		62		-		-		-	-	35,741
Affiliate within the same large enterprise group:										
LG Display Co., Ltd. and its subsidiaries		278,396		101		30		-	6	-
LG Electronics Inc. and its subsidiaries and joint ventures		315,394		117,048		554,178		-	166	23,784
Others		4,822		18,465		92,953		11,836	33	39,274
Total	₩	692,195	₩	478,752	₩	1,033,527	₩	11,972	₩	549 ₩ 354,879

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(in millions of Korean won)

	2023							
	Purchase and others							
	Sales and others	Purchase of raw materials /merchandises	Acquisition of property, plant and equipment and intangible assets	Acquisition of right-of- use assets	Interest expense	Others		
Entity with a significant influence over the Group								
LG Corp.	₩ -	₩ -	₩ -	₩ -	₩ 115	₩ 61,109		
Associates and joint ventures								
SEETEC Co., Ltd.	57,809	135,149	8	2,919	195	47,533		
TECWIN Co., Ltd.	-	138	145	-	-	103		
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	230	342,585	-	-	-	-		
PT. HLI Greenpower	23,338	-	-	-	-	-		
Others	27,754	15,692	-	-	-	78		
Subsidiaries of the entity with significant influence:								
D&O Corp. and its subsidiaries	65	-	10,514	-	-	5,330		
LG CNS Co., Ltd. and its subsidiaries	24,845	1,696	318,524	-	10	134,643		
Others	66	-	-	-	-	41,694		
Affiliate within the same large enterprise group:								
LG Display Co., Ltd. and its subsidiaries	215,756	65	-	-	5	52		
LG Electronics Inc. and its subsidiaries and joint ventures	1,294,787	172,889	383,567	-	180	39,177		
Shanjin Optoelectronics (Suzhou) Co., Ltd. and its subsidiaries ¹	234,394	73	-	-	-	8,216		
Others	5,175	24,205	481,034	632	44	53,505		
Total	₩ 1,884,219	₩ 692,492	₩ 1,193,792	₩ 3,551	₩ 549	₩ 391,440		

¹ Excluded from related parties during the year ended December 31, 2023, and the details of these relevant transactions occurred transaction details before it was excluded from related party.

LG Chem, Ltd. and Subsidiaries

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Balances of receivables and payables arising from sales and purchases of goods and services as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)

	June 30, 2024					
	Receivables					
	Trade receivables and others	Loan receivables	Other receivables	Total		
Entity with a significant influence over the Group						
LG Corp.	₩ -	₩ -	₩ 22,798	₩		22,798
Associates and joint ventures						
SEETEC Co., Ltd.	4,928	-	470			5,398
TECWIN Co., Ltd.	-	-	-			-
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	47	-	-			47
PT. HLI Greenpower	3,315	-	13,445			16,760
Others	-	-	501			501
Subsidiaries of the entity with significant influence:						
D&O Corp. and its subsidiaries	-	-	-			-
LG CNS Co., Ltd. and its subsidiaries	11,906	-	5			11,911
Others	-	-	-			-
Affiliate within the same large enterprise group:						
LG Display Co., Ltd. and its subsidiaries	234,146	-	853			234,999
LG Electronics Inc. and its subsidiaries and joint ventures ¹	191,146	-	4,713			195,859
Others	117	-	2,130			2,247
Total	₩ 445,605	₩ -	₩ 44,915	₩		490,520

(in millions of Korean won)

	June 30, 2024					
	Payables					
	Trade payables	Borrowings	Lease liabilities	Other payables	Total	
Entity with a significant influence over the Group						
LG Corp.	₩ -	₩ -	₩ 6,624	₩ 11,823	₩	18,447
Associates and joint ventures						
SEETEC Co., Ltd.	19,668	-	19,495	11,723		50,886
TECWIN Co., Ltd.	-	-	-	28		28
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	77,673	-	-	-		77,673
PT. HLI Greenpower	-	-	-	23,470		23,470
Others	5,687	-	-	92		5,779
Subsidiaries of the entity with significant influence:						
D&O Corp. and its subsidiaries	-	-	-	6,352		6,352
LG CNS Co., Ltd. and its subsidiaries	1	-	432	325,432		325,865
Others	-	-	-	1,803		1,803

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(in millions of Korean won)

	June 30, 2024				
	Payables				
	Trade payables	Borrowings	Lease liabilities	Other payables	Total
Affiliate within the same large enterprise group:					
LG Display Co., Ltd. and its subsidiaries	124	-	221	28	373
LG Electronics Inc. and its subsidiaries and joint ventures ¹	29,841	-	16,055	117,270	163,166
Others	4,067	-	2,954	8,408	15,429
Total	₩ 137,061	₩ -	₩ 45,781	₩ 506,429	₩ 689,271

(in millions of Korean won)

	December 31, 2023			
	Receivables			
	Trade receivables and others	Loan receivables	Other receivables	Total
Entity with a significant influence over the Group				
LG Corp.	₩ -	₩ -	₩ 17,196	₩ 17,196
Associates and joint ventures				
SEETEC Co., Ltd.	13,653	-	1,000	14,653
TECWIN Co., Ltd.	-	-	-	-
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	-	-	-	-
PT. HLI Greenpower	200	-	4,006	4,206
Others	-	-	-	-
Subsidiaries of the entity with significant influence:				
D&O Corp. and its subsidiaries	-	-	23	23
LG CNS Co., Ltd. and its subsidiaries	7,859	-	670	8,529
Others	-	-	6	6
Affiliate within the same large enterprise group:				
LG Display Co., Ltd. and its subsidiaries	209,113	-	-	209,113
LG Electronics Inc. and its subsidiaries and joint ventures ¹	349,239	-	5,575	354,814
Others	109	-	2,201	2,310
Total	₩ 580,173	₩ -	₩ 30,677	₩ 610,850

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(in millions of Korean won)

	December 31, 2023				
	Payables				
	Trade payables	Borrowings	Lease liabilities	Other payables	Total
Entity with a significant influence over the Group					
LG Corp.	₩ -	₩ -	₩ 3,060	₩ 21,425	₩ 24,485
Associates and joint ventures					
SEETEC Co., Ltd.	31,148	-	20,662	11,735	63,545
TECWIN Co., Ltd.	-	-	-	2,566	2,566
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	161,178	-	-	-	161,178
PT. HLI Greenpower	-	-	-	45,778	45,778
Others	3,769	-	-	117	3,886
Subsidiaries of the entity with significant influence:					
D&O Corp. and its subsidiaries	-	-	-	8,669	8,669
LG CNS Co., Ltd. and its subsidiaries	293	-	308	472,299	472,900
Others	-	-	-	1,401	1,401
Affiliate within the same large enterprise group:					
LG Display Co., Ltd. and its subsidiaries	14	-	360	34	408
LG Electronics Inc. and its subsidiaries and joint ventures ¹	45,591	-	16,026	304,673	366,290
Others	2,765	-	3,519	212,619	218,903
Total	₩ 244,758	₩ -	₩ 43,935	₩ 1,081,316	₩ 1,370,009

¹ The warranty provision related to the recall of GM Bolt is not included in the above receivables and payables.

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Fund transactions with related parties for the six-month periods ended June 30, 2024 and 2023, are as follows:

(in millions of Korean won)

	2024											
				Equity contributions in cash (capital reduction) and others		Loans				Borrowings ¹		
	Dividends received	Dividends paid				Loans	Repayment			Borrowings	Repayment	
Entity with a significant influence over the Group												
LG Corp.	₩ -	₩ 82,370		₩ -		₩ -	₩ -		₩ -	₩ 13,065	₩ 6,435	
Associates and joint ventures												
SEETEC Co., Ltd.	7,500	-		-		-	-		-	136	715	
NEXPO Co., Ltd.	-	-		1,900		-	-		-	-	-	
Bricks Capital management Global Battery Private Equity Fund I	-	-		5,803		-	-		-	-	-	
Subsidiary of the Group with significant influence:												
LG CNS Co., Ltd.	-	-		-		-	-		-	859	427	
Affiliate within the same large enterprise group:												
LG Display America, Inc.	-	-		-		-	-		-	-	105	
LG Electronics Deutschland GmbH	-	-		-		-	-		-	-	175	
LG ELECTRONICS WROCLAW SP. Z O.O.	-	-		-		-	-		-	-	790	
LG Display Vietnam Haiphong Co. Ltd.	-	-		-		-	-		-	105	26	
LG HOUSEHOLD & HEALTH CARE LTD	-	-		-		-	-		-	-	504	
Total	₩ 7,500	₩ 82,370		₩ 7,703		₩ -	₩ -		₩ -	₩ 14,165	₩ 9,177	

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(in millions of Korean won)

	2023							
			Equity contributions in cash (capital reduction) and others		Loans		Borrowings ¹	
	Dividends received	Dividends paid			Loans	Repayment	Borrowings	Repayment
Entity with a significant influence over the Group								
LG Corp.	₩ -	₩ 235,342	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 6,033
Associates and joint ventures								
SEETEC Co., Ltd.	5,000	-	-	-	-	-	2,919	559
KOREA PRECURSOR CO., LTD.	-	-	20,384	-	-	-	-	-
Sam-A Aluminium Co., Ltd.	-	-	46,575	-	-	-	-	-
VINA Plasticizers Chemical Co., Ltd.	4,444	-	-	-	-	-	-	-
Subsidiary of the Group with significant influence:								
LG CNS Co., Ltd.	-	-	-	-	-	-	-	607
Affiliate within the same large enterprise group:								
LG Display America, Inc.	-	-	-	-	-	-	-	91
LG Electronics Deutschland GmbH	-	-	-	-	-	-	-	157
LG ELECTRONICS WROCLAW SP. Z O.O.	-	-	-	-	-	-	-	741
LG HOUSEHOLD & HEALTH CARE LTD	-	-	-	-	-	-	632	493
Total	₩ 9,444	₩ 235,342	₩ 66,959	₩ -	₩ -	₩ -	₩ 3,551	₩ 8,681

¹ The amounts represent lease liabilities that were recognized or repaid for the six-month periods ended June 30, 2024 and 2023.

Compensation for key management of the Group for the six-month periods ended June 30, 2024 and 2023, consists of:

(in millions of Korean won)

	2024	2023
Short-term employee benefits	₩ 36,586	₩ 73,105
Post-employment benefits	7,953	7,195
Total	₩ 44,539	₩ 80,300

Key management includes directors and audit committee members having duties and responsibilities over planning, operations and controlling of the Group's business activities.

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There is no loss allowance recognized against receivables from related parties as at June 30, 2024 and December 31, 2023; therefore, there are no impairment losses recognized against the receivables from related parties for the six-month period ended June 30, 2024 and for the year ended December 31, 2023.

As at June 30, 2024, payment guarantees provided by the Group for related parties are listed in Note 18.

32. Cash Flows

Cash generated from operations for the six-month periods ended June 30, 2024 and 2023, are as follows:

(in millions of Korean won)

	2024		2023	
Profit before income tax				
Profit before income tax from continuing operations	₩	510,567	₩	1,704,100
Profit before income tax from discontinued operations		47,837		(8,803)
		<u>558,404</u>		<u>1,695,297</u>
Adjustments for:				
Depreciation		1,939,823		1,703,983
Amortization		228,191		192,201
Post-employment benefits		97,523		83,157
Finance income		(824,348)		(548,165)
Finance costs		1,072,181		483,665
Other foreign exchange differences		(100,167)		(100,279)
Gain on valuation of inventories (reversal)		(7,573)		(64,839)
Gain on disposal of property, plant and equipment		(3,616)		(3,597)
Gain on disposal of intangible assets		(14)		(191)
Loss on disposal of property, plant and equipment		92,383		57,479
Loss on disposal of intangible assets		1,483		915
Impairment loss on property, plant and equipment (reversal)		120,794		3,762
Impairment loss on intangible assets		925		20
Impairment loss on investments in associates and joint ventures		-		14,559
Additions to provisions		440,891		519,938
Other income/expenses		(52,499)		75,554
Decrease (increase) in inventories		(104,706)		1,204,479
Increase in trade receivables		(428,290)		(753,131)
Decrease (increase) in other receivables		142,738		(232,637)
Decrease (increase) in other current assets		(242,084)		104,782
Decrease in trade payables		(97,148)		(290,219)

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	2024	2023
Decrease in other payables	(83,809)	(1,080)
Increase (decrease) in other current liabilities	223,223	(353,427)
Decrease in provisions	(296,282)	(271,675)
Decrease in net defined benefit liabilities	(8,625)	(4,517)
Other cash flows from operations	(153,489)	49,266
Cash generated from operations	₩ 2,515,909	₩ 3,565,300

Changes in liabilities arising from financial activities for the six-month periods ended June 30, 2024 and 2023, are as follows:

(in millions of
Korean won)

	2024					
	As at January 1, 2024	Cash flows from financing activities	Non-cash transactions			As at June 30, 2024
			Acquisition	Amortization	Others	
Short-term borrowings	₩ 9,675,998	₩ (61,375)	₩ -	₩ 5,893	₩ 507,293	₩ 10,127,809
Debentures	11,760,250	1,752,072	-	56,565	527,971	14,096,858
Lease liabilities	491,866	(63,318)	102,409	-	(4,027)	526,930
	₩ 21,928,114	₩ 1,627,379	₩ 102,409	₩ 62,458	₩ 1,031,237	₩ 24,751,597

(in millions of
Korean won)

	2023					
	As at January 1, 2023	Cash flows from financing activities	Non-cash transactions			As at June 30, 2023
			Acquisition	Amortization	Others	
Short-term borrowings	₩ 7,609,924	₩ 2,210,698	₩ -	₩ 5,347	₩ 383,703	₩ 10,209,672
Debentures	7,964,957	458,984	-	4,174	104,436	8,532,551
Lease liabilities	389,638	(60,061)	168,359	-	(4,713)	493,223
Other payables for the reverse factoring arrangement	-	(186,160)	-	-	752,227	566,067
	₩ 15,964,519	₩ 2,423,461	₩ 168,359	₩ 9,521	₩ 1,235,653	₩ 19,801,513

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Significant non-cash transactions for the six-month periods ended June 30, 2024 and 2023, are as follows:

<i>(in millions of Korean won)</i>		2024		2023
Reclassification of construction-in-progress	₩	5,604,642	₩	2,085,901
Reclassification of machinery-in-transit		128,078		62,463
Reclassification of long-term borrowings into current portion		2,154,643		2,054,297
Other payables related to acquisitions of property, plant and equipment and intangible assets		2,537,383		654,365
Reclassification of other payables under the reverse factoring arrangement		-		752,227
Reclassification of non-current assets held for sale		12,501		19,977
Reclassification of non-current liabilities held for sale		-		1,081

33. Segment Information

General information about the Group's reportable segments is as follows:

Segment	Products or services
Petrochemicals	ABS, PC, PE, PP, Acrylic, Alcohol, SAP, PVC, Synthetic rubber, Special resin, BPA, Ethylene, Propylene and others
LG Energy solution	Mobile batteries, Automotive batteries, Electricity storage batteries and others
Advanced materials ¹	Engineering materials, Display materials, Cathode materials and Separator, RO membranes and others
Life sciences	Growth hormone, Vaccine, Antidiabetic, agricultural chemicals and others
Common and others	Crop protection products, Seeds, Fertilizers, General management, sales and R&D and others

¹ Management approved the disposal of LCD polarizer business and polarizer material business, and the related profit and loss are presented as discontinued operations are disclosed in Note 34.

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Segment information on revenue, profit and loss for the six-month periods ended June 30, 2024 and 2023, are as follows:

(in millions of
Korean won)

	2024					
	Petro-chemicals	LG Energy solution	Advanced materials	Life sciences	Common and others ³	Total
Total segment revenue	₩ 9,421,045	₩ 12,290,580	₩ 3,311,418	₩ 689,322	₩ 492,539	₩ 26,204,904
Inter-segment revenue	264,798	9,397	1,985,168	30,503	5,934	2,295,800
Revenue from external customers ¹	9,156,247	12,281,183	1,326,250	658,819	486,605	23,909,104
Operating profit (loss) ²	1,174	352,656	312,030	112,283	(107,652)	670,491
Depreciation and amortization	451,151	1,388,786	116,949	73,915	127,267	2,158,068

(in millions of
Korean won)

	2023					
	Petro-chemicals	LG Energy solution	Advanced materials	Life sciences	Common and others ³	Total
Total segment revenue	₩ 9,137,524	₩ 17,520,604	₩ 4,327,016	₩ 594,902	₩ 537,843	₩ 32,117,889
Inter-segment revenue	310,242	7,549	3,139,253	30,689	9,999	3,497,732
Revenue from external customers ¹	8,827,282	17,513,055	1,187,763	564,213	527,844	28,620,157
Operating profit (loss) ²	(63,544)	1,093,765	402,061	7,225	(18,164)	1,421,343
Depreciation and amortization	510,756	1,065,160	93,581	66,814	135,502	1,871,813

¹ Revenue from external customers consists of sales of goods. Interest income and dividend income are included in finance income.

² Management assesses the performance of the operating segments based on a measurement of operating profit of segment.

³ Common and other segments include operating segments not qualifying as a reportable segment, supporting divisions as well as R&D divisions.

Segment information on assets and liabilities as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of
Korean won)

	June 30, 2024					
	Petro-chemicals	LG Energy solution	Advanced materials	Life sciences	Common and others	Total
Reportable segment asset ¹	₩ 16,276,509	₩ 51,452,054	₩ 7,717,488	₩ 3,489,158	₩ 5,252,472	₩ 84,187,681
Investments in associates and joint ventures	50,021	205,442	615,065	17	151,750	1,022,295
Reportable segment liability ¹	5,492,234	23,867,590	2,414,318	628,971	7,520,464	39,923,577

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(in millions of
Korean won)

	December 31, 2023					
	Petro-chemicals	LG Energy solution	Advanced materials	Life sciences	Common and others	Total
Reportable segment asset ¹	₩ 15,144,156	₩ 45,399,160	₩ 7,378,796	₩ 2,664,518	₩ 6,880,064	₩ 77,466,694
Investments in associates and joint ventures	49,203	223,559	578,394	17	154,433	1,005,606
Reportable segment liability ¹	4,873,964	21,036,411	2,211,319	592,085	7,814,730	36,528,509

¹ Assets and liabilities are measured in a manner consistent with those in the financial statements, and allocated on the basis of segment operation.

The external sales and non-current assets by geographical segments from continuing operations for the six-month periods ended June 30, 2024 and 2023, and as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)

	Sales		Non-current assets ¹	
	2024	2023	June 30, 2024	December 31, 2023
Korea ²	₩ 5,049,051	₩ 5,656,842	₩ 19,887,002	₩ 19,676,808
China	6,009,682	6,343,048	5,090,461	5,242,483
Asia/Oceania	2,627,203	2,772,036	351,852	342,873
America	5,801,678	5,481,381	18,692,895	12,246,392
Europe	4,368,043	8,318,375	5,205,437	5,223,709
Others	53,447	48,475	-	-
Total	₩ 23,909,104	₩ 28,620,157	₩ 49,227,647	₩ 42,732,265

¹ Represents aggregate amount of property, plant and equipment, intangible assets and investment properties.

² Domestic sales include the exports made through local letters of credit.

During the six-month period ended June 30, 2024, revenue to single external customers accounting for more than 10% of the Group's revenue was ₩ 3,313,707 million (2023: ₩ 2,028,479 million) and ₩2,758,874 million (2023: ₩3,166,005 million), respectively, all from LG Energy Solution, Ltd.

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34. Assets and Liabilities Held for Sale and Discontinued Operations

34.1 Assets and Liabilities Held for Sale

In accordance with the final approval of management, the Group decided to dispose of polarizer and related material business (September 2023) and diagnosis business (June 2023) and all shares of VINA PLASTICIZERS CHEMICAL COMPANY LIMITED (September 2022). As a result, the related assets were reclassified as assets held for sale. Sale of the diagnostic business was finalized in October 2023, and the entire share of VINA PLASTICIZERS CHEMICAL COMPANY LIMITED was sold in December 2023.

Meanwhile, the Group decided to dispose of the assets related to sulfuric acid and steam manufacturing business of FarmHannong Co., Ltd. on January 1, 2024, and related assets were reclassified as assets held for sale.

Details of assets and liabilities of disposal group classified as held for sale as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024		December 31, 2023	
Assets of disposal group				
Property, plant and equipment	₩	79,358	₩	64,589
Intangible assets		38,272		38,345
Inventories		64,338		57,708
Trade and other receivables		7,041		3,517
Right-of-use assets		6,587		6,587
Other current and non-current assets		15,599		24,360
	₩	211,195	₩	195,106
Liabilities of disposal group				
Trade and non-trade payables	₩	20,283	₩	20,613
Other current and non-current liabilities		3,584		6,442
	₩	23,867	₩	27,055

As the net fair value of the assets of the disposal group is expected to exceed the carrying amount, there is no impairment loss recognized for the disposal group classified as assets held for sale as at June 30, 2024.

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34.2 Discontinued Operations

The Group decided to discontinue polarizer and related material business with the resolution of the board of directors in September 2023 and, substantially, discontinued the related business as of September 2023. Also, the Group decided to discontinue glass substrate business with the resolution of the board of directors in January 2020 and, substantially, discontinued the related business as of March 2020. In addition, the Group decided to dispose of LCD polarizer business with the resolution of the board of directors in June 2020, and the disposal was completed in February 2021. The Group determined to dispose LCD polarizer business in Taiwan in May 2022, and the disposal was completed in July 2022. Accordingly, the profit and loss from the related operations are presented as discontinued operations and the comparative consolidated income statements have been restated.

Comprehensive income information from discontinued operation for the six-month periods ended June 30, 2024 and 2023, are as follows:

(in millions of Korean won)

	2024			
	LCD polarizer	Glass substrate	Polarizer and related material	Total
Revenue	₩ -	₩ 7	₩ 413,743	₩ 413,750
Expense	-	(3,938)	(361,975)	(365,913)
Profit (loss) before income tax of discontinued operation	-	(3,931)	51,768	47,837
Income tax benefit (expense)	-	(276)	818	542
Profit (loss) after income tax of discontinued operations	₩ -	₩ (4,207)	₩ 52,586	₩ 48,379

(in millions of Korean won)

	2023			
	LCD polarizer	Glass substrate	Polarizer and related material	Total
Revenue	₩ 306	₩ 1	₩ 437,165	₩ 437,472
Expense	(1)	(1,516)	(444,758)	(446,275)
Profit (loss) before income tax of discontinued operation	305	(1,515)	(7,593)	(8,803)
Income tax benefit (expense)	486	(2,405)	4,114	2,195
Profit (loss) after income tax of discontinued operations	₩ 791	₩ (3,920)	₩ (3,479)	₩ (6,608)

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Net cash flows from discontinued operations for the six-month periods ended June 30, 2024 and 2023, are as follows:

(in millions of Korean won)

	2024			
	LCD polarizer	Glass substrate	Polarizer and related material	Total
Net cash inflow (outflow) from operating activities	₩ -	₩ (6,240)	₩ 16,420	₩ 10,180
Net cash inflow (outflow) from investing activities	-	662	(1,776)	(1,114)
Net cash inflow (outflow) from financing activities	-	-	-	-

(in millions of Korean won)

	2023			
	LCD polarizer	Glass substrate	Polarizer and related material	Total
Net cash inflow (outflow) from operating activities	₩ (13,635)	₩ (3,689)	₩ 65,481	₩ 48,157
Net cash outflow from investing activities	-	(33)	(11,424)	(11,457)
Net cash inflow (outflow) from financing activities	-	-	-	-

35. Assets and Liabilities related to Contracts with Customers

Assets and liabilities related to contracts with customers as at June 30, 2024 and December 31, 2023, are as follows:

(in millions of Korean won)

	June 30, 2024	December 31, 2023
Contract assets		
Due from customers for contract work	₩ 54,064	₩ 70,356
Total contract assets	<u>₩ 54,064</u>	<u>₩ 70,356</u>
Contract liabilities		
Advances in relation to revenue from the Group's main business activities	₩ 1,632,763	₩ 1,361,224
Expected customer incentives	89,847	5,494
Unearned revenue	73,980	95,277
Due to customers for contract work	21,022	2,785
Total contract liabilities	<u>₩ 1,817,612</u>	<u>₩ 1,464,780</u>

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Revenue recognized in relation to contract liabilities.

The following table shows how much of the revenue recognized in the current reporting period relates to carried-forward contract liabilities and how much relates to performance obligations that were satisfied in the prior periods.

<i>(in millions of Korean won)</i>		2024		2023
Revenue recognized in the current period from the contract liabilities balance at the beginning of the period	₩	104,681	₩	143,488
Advances in relation to revenue from the Group's main business activities		75,483		113,358
Unearned revenue		29,198		30,130
Revenue recognized from performance obligations satisfied in previous periods		-		-

36. Investment Properties

Details of investment properties as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024				December 31, 2023			
	Cost	Accumulated depreciation	Accumulated impairment	Book amount	Cost	Accumulated depreciation	Accumulated impairment	Book amount
Land	₩ 6,696	₩ (81)	₩ (497)	₩ 6,118	₩ 4,475	₩ (75)	₩ (497)	₩ 3,903
Buildings	134,105	(21,898)	(18,240)	93,967	121,881	(18,591)	(18,243)	85,047
Total	₩ 140,801	₩ (21,979)	₩ (18,737)	₩ 100,085	₩ 126,356	₩ (18,666)	₩ (18,740)	₩ 88,950

Changes in investment properties for the six-month period ended June 30, 2024 and for the year ended December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	2024			2023		
	Land	Building	Total	Land	Building	Total
Beginning balance	₩ 3,903	₩ 85,047	₩ 88,950	₩ 4,744	₩ 89,282	₩ 94,026
Acquisitions/transfers	2,221	10,814	13,035	-	359	359
Disposals/transfers	-	(94)	(94)	(811)	(1,189)	(2,000)
Depreciation	(6)	(1,800)	(1,806)	(30)	(3,405)	(3,435)
Ending balance	₩ 6,118	₩ 93,967	₩ 100,085	₩ 3,903	₩ 85,047	₩ 88,950

The fair value of investment properties is measured either by independent professional appraisers with certified qualification or measured based on official appraised value of land and available information from recent transactions of similar properties, and it is classified as 'Level 3' of the fair value hierarchy. The fair value of investment properties as at June 30, 2024, is ₩115,550 million (December 31, 2023: ₩101,704 million).

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During the six-month period ended June 30, 2024, rental income from investment properties under operating lease is ₩2,427 million (2023: ₩3,445 million), and operating expenses incurred for investment properties that generated rental income (including maintenance and repair expenses) are ₩2,246 million (2023: ₩1,612 million). During the six-month period ended June 30, 2024, there are no operating expenses incurred for investment properties that do not generate rental income (including maintenance and repair expenses).

Operating lease

Investment properties are leased to tenants under operating leases with monthly rent payments. Where considered necessary to reduce credit risk, the Group may obtain bank guarantees for the term of the lease.

Although the Group is exposed to changes in the residual value at the end of the current leases, the Group typically enters into new operating leases and therefore will not immediately realize any reduction in residual value at the end of these leases. Expectations about the future residual values are reflected in the fair value of investment properties.

The future minimum lease payments expected to be received in relation to the above operating lease agreement for investment properties as at June 30, 2024 and December 31, 2023, are as follows:

<i>(in millions of Korean won)</i>	June 30, 2024	December 31, 2023
Within one year	₩ 4,185	₩ 2,073
Within two years	3,600	2,053
Within five years	3,769	4,085
Total	₩ 11,554	₩ 8,211

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37. Business Combination

To establish a foundation for becoming a global pharmaceutical company, the Group acquired 100% interest in Aveo Pharmaceuticals, Inc. on January 20, 2023, for the purpose of securing commercialization capabilities and pre-emptive products in the US anticancer market.

Details of consideration transferred, assets and liabilities recognized as a result of the business combination paid to Aveo Pharmaceuticals, Inc. are as follows:

The goodwill of ₩275,856 million resulting from the business combination arises from various factors, including the expected increase in revenue resulting from the combination of the businesses of the Company and Aveo Pharmaceuticals, Inc.

<i>(in millions of Korean won)</i>	Amount
Consideration transferred	
Cash and cash equivalents	₩ 701,103
Total consideration	<u>₩ 701,103</u>
Identifiable assets acquired and liabilities assumed	
Cash and cash equivalents	₩ 8,902
Trade and other receivables ¹	34,687
Inventories	845
Property, plant and equipment	935
Intangible assets	565,448
Other assets	246
Trade and non-trade payables	(40,941)
Other payables	(686)
Deferred tax liabilities	<u>(144,189)</u>
Fair value of net identifiable assets acquired	<u>425,247</u>
Goodwill (gain from a bargain purchase)	<u>275,856</u>
	<u>₩ 701,103</u>

¹ The fair value of trade and other receivables is equal to the total contractual amount.

The revenue and loss for the period reflected in the consolidated income statements for the six-month period ended June 30, 2023, contributed by Aveo Pharmaceuticals, Inc. after the acquisition were ₩ 83,038 million and ₩ 37,476 million, respectively.

38. Events After the Reporting Period

The Group decided to issue non-guaranteed overseas bonds by resolution of the Management Committee held on May 31, 2024. Accordingly, the Group issued overseas bonds of USD 2,000 million on July 2, 2024.

<i>(in millions of US dollars)</i>	Maturity date	Amount
Non-guaranteed overseas bonds (three years maturity)	July 2, 2027	USD 700
Non-guaranteed global green bonds (five years maturity)	July 2, 2029	USD 800
Non-guaranteed global green bonds (ten years maturity)	July 2, 2034	USD 500