LG CHEM, LTD.

Separate Financial Statements and Internal Control over Financial Reporting

As of and for the Years Ended December 31, 2023 and 2022



LG Chem, Ltd.

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

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

Report on the Audited Separate Financial Statements:

Opinion

We have audited the accompanying separate financial statements of LG Chem, Ltd. (the "Company"), which comprise the separate statement of financial position as of December 31, 2023, and the related separate statement of profit or loss, separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flows, all expressed in Korean won, for the year ended December 31, 2023, and notes to the separate financial statements, including material accounting policies, expressed in Korean won.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the separate financial position of the Company as of December 31, 2023, and its separate financial performance and its separate cash flows for the year ended December 31, 2023, in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("Korean IFRS").

We also have audited, in accordance with Korean Standards on Auditing, the Company's Internal Control over Financial Reporting as of December 31, 2023, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting*, and our report dated March 7, 2024, expressed an unqualified opinion.

Basis for Opinion

We conducted our audit in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Separate Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the separate financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters

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

Impairment Assessment for CGUs to which Goodwill was Allocated

Why this matter was determined to be a key audit matter

The Company annually performs impairment assessment on the goodwill. We focused on goodwill impairment assessment due to the significant size of goodwill balance (\text{\text{\$\frac{W}\$}} 590,486 million as of December 31, 2023) and management's involvement in assumptions and judgments for the future results of the business, discount rate and adjustments arising from the perspective of market participants used in the measurement of the 'recoverable amount' of Cash Generating Units (CGUs). Details are described in Note 12.

In particular, we focused our audit effort on the goodwill recognized in relation to the Life Sciences CGU (goodwill amounting to $\forall 391,311$ million as of December 31, 2023) and the Separator CGU (goodwill amounting to $\forall 160,577$ million as of December 31, 2023), which are the significant elements among all relevant CGUs with goodwill. While management considered that there was enough headroom between the value in use and the underlying book value of these CGUs, we have determined this matter as a key audit matter considering the size of the balance and the significant level of management's assumption and judgment involved for the estimation of value in use.

How this matter was addressed the in our audit

We have performed the following audit procedures to address this key audit matter, including the involvement of valuation specialists:

- Obtained understanding of and evaluated accounting policy and internal controls related to the impairment assessment.
- Assessed the design and operating effectiveness of relevant internal controls in place in connection
 with impairment assessment, including review and approval by management of future cash flow
 forecasts and assumptions applied in the assessment.
- Assessed the objectivity and eligibility of the expert utilized by the management...
- Assessed whether an appropriate valuation model has been used by management to estimate value in use.
- · Assessment of the appropriateness of management's business plan estimates by comparing actual performance to the past business plans of the relevant CGU.
- Confirm whether the estimation of future cash flows related to impairment assessments is based on the business plans approved by the management, excluding certain adjusted cash flows from the perspective of market participants.
- Review the validity of applied key significant assumptions (economic and industry forecasts, perpetual growth rate, discount rate etc.) in terms of value in use evaluation.
- Review the adequacy of the comparable book value allocated to CGU subject to evaluation.

 Evaluate the impact on impairment assessment results due to variations in key assumptions, through sensitivity analysis for perpetuity terminal rates and discount rates applied in impairment assessments.

Other Matter

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

The accompanying separate financial statements as of and for the year ended December 31, 2022, were audited by Samil PricewaterhouseCoopers in accordance with the audit standards of Korea. This auditor's report, dated March 9, 2023, expressed unqualified opinion.

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

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

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

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the separate financial statements, as a whole, are free from material misstatement, whether due to fraud or error and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements.

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

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

- Conclude on the appropriateness of management's use of the going-concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the separate financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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

The engagement partner on the audit resulting in this independent auditor's report is Young-Jae Kim, Certified Public Accountant.

Deloine Idnjin uc

Seoul, Korea March 7, 2024

This report is effective as of March 7, 2024, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if an

LG Chem, Ltd.
Separate Statements of Financial Position
December 31, 2023 and 2022

(In millions of Korean won)	Notes	2023	2022
Assets			
Current assets			
Cash and cash equivalents	3, 5, 6	2,096,074	1,323,209
Trade receivables	3, 5, 7, 31	3,209,503	3,090,096
Other receivables	3, 5, 7, 31	132,699	419,600
Other current financial assets	3, 5, 8	75,989	-
Other current assets	13	137,996	227,982
Inventories	9	2,893,935	3,374,871
Assets held for sale	34 _	104,879	3,080
Total current assets	_	8,651,075	8,438,838
Non-current assets			
Other receivables	3, 5, 7	303,504	480,628
Other non-current financial assets	3, 5, 8	748,085	743,412
Investments in subsidiaries	10	9,276,614	8,465,346
Investments in associates and joint ventures	10	687,549	665,373
Property, plant and equipment	11	12,402,679	11,937,751
Intangible assets	12	1,631,557	1,686,988
Investment properties	36	50,375	54,655
Other non-current assets	13, 16	342,146	399,833
Total non-current assets	_	25,442,509	24,433,986
Total assets	-	34,093,584	32,872,824
Liabilities			
Current liabilities			
Trade payables	3, 5, 31	1,312,945	1,288,959
Other payables	3, 5, 31	1,246,110	1,799,663
Borrowings	3, 5, 14	3,292,634	625,186
Other current financial liabilities	3, 5, 8	516,442	3,484
Provisions	15	2,594	13,019
Income tax payables		103	420,852
Other current liabilities	17, 35	232,080	454,841
Total current liabilities		6,602,908	4,606,004
Non-current liabilities		_	
Other payables	3, 5, 31	8,135	6,297
Borrowings	3, 5, 14	6,531,926	6,457,883
Other non-current financial liabilities	3, 5, 8	31,126	32,578
Deferred income tax liabilities	28	460,576	646,053
Other non-current liabilities	17, 35	53,701	50,581
Total non-current liabilities	_	7,085,464	7,193,392
Total liabilities	-	13,688,372	11,799,396

LG Chem, Ltd.
Separate Statements of Financial Position
December 31, 2023 and 2022

(In millions of Korean won)	Notes	2023	2022
Equity			
Share capital	1, 19	391,406	391,406
Capital surplus	19	2,925,449	2,925,449
Other components of equity	19, 21	(270)	(270)
Accumulated other comprehensive income		(160,638)	(70,479)
Retained earnings	20	17,249,265	17,827,322
Total equity		20,405,212	21,073,428
Total liabilities and equity		34,093,584	32,872,824

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

LG Chem, Ltd.
Separate Statements of Profit or Loss
As of Years Ended December 31, 2023 and 2022

(In millions of Korean won, except per share amounts)	Notes	2023	2022
Revenue	31, 35	19,947,377	22,637,157
Cost of sales Gross profit	23	(17,253,928) 2,693,449	(18,209,342) 4,427,815
Selling and administrative expenses	22, 23	(2,802,598)	(3,375,539)
Operating profit		(109,149)	1,052,276
Financial income	25	862,867	1,091,949
Financial costs	25	(712,312)	(628,907)
Other non-operating income	26	521,511	3,002,293
Other non-operating expenses	27	(406,286)	(680,436)
Profit before income tax	32	156,631	3,837,175
Income tax expense	28	85,284	(881,780)
Profit from continuing operations		241,915	2,955,395
(Loss) profit from discontinued operations	34	(13,789)	51,574
Profit for the year		228,126	3,006,969
Earnings per share (in won)	29		
Basic earnings per ordinary share		2,910	38,573
Basic earnings per ordinary share from continuing operations		3,086	37,912
Basic earnings per preferred share		2,960	38,623
Basic earnings per preferred share from continuing operations		3,136	37,962

The above separate statements of profit or loss should be read in conjunction with the accompanying notes.

LG Chem, Ltd.
Separate Statements of Comprehensive Income
For the Years Ended December 31, 2023 and 2022

(In millions of Korean won)	Notes	2023	2022
Profit for the year		228,126	3,006,969
Other comprehensive income			
Items that will not be reclassified to profit or loss		(113,208)	6,998
Remeasurements of net defined benefit liabilities	16	(31,317)	121,694
Loss on valuation of financial assets at fair value through other comprehensive income	8	(122,498)	(123,347)
Income tax relating to these items		40,607	8,651
Other comprehensive income for the year, net of tax		(113,208)	6,998
Total comprehensive income for the year		114,918	3,013,967

he above separate statements of comprehensive income should be read in conjunction with the accompanying note

LG Chem, Ltd. Separate Statements of Changes in Equity For the Years Ended December 31, 2023 and 2022

Balance at January 1, 2022 391,406 2,733,331 (18,011) 19,893 15,658,258 18,784,8 Comprehensive income Profit for the year 3,006,969 3,006,9 Remeasurements of net defined benefit liabilities 16 97,370 97,3 Gain on valuation of financial assets at fair value through other comprehensive income 8 (90,372) - (90,372) Total comprehensive loss for the year (90,372) 3,104,339 3,013,9 Transactions with owners Disposal of treasury shares - 192,118 17,741 209,8	uity	Total (deficit) ed	Retained earnings (losses)	Accumulated other comprehensive income (loss)	Other components of (deficit) equity	Capital surplus	Share capital	Notes	(In millions of Korean won)
Profit for the year 3,006,969 3,006,969 Remeasurements of net defined benefit liabilities 16 97,370 97,3 Gain on valuation of financial assets at fair value through other comprehensive income 8 (90,372) - (90,372) Total comprehensive loss for the year (90,372) 3,104,339 3,013,9 Transactions with owners	,877	18,78	15,658,258	19,893	(18,011)	2,733,331	391,406		Balance at January 1, 2022
Remeasurements of net defined benefit liabilities 16 97,370 97,3 Gain on valuation of financial assets at fair value through other comprehensive income 8 (90,372) - (90,372) Total comprehensive loss for the year (90,372) 3,104,339 3,013,9 Transactions with owners									Comprehensive income
Gain on valuation of financial assets at fair value through other comprehensive income 8 (90,372) - (90,372) Total comprehensive loss for the year (90,372) 3,104,339 3,013,9 Transactions with owners	,969	3,000	3,006,969	-	-	-	-		Profit for the year
through other comprehensive income 8 - - - (90,372) - (90,372) Total comprehensive loss for the year - - - - (90,372) 3,104,339 3,013,9 Transactions with owners	,370	9	97,370	-	-	-	-	16	Remeasurements of net defined benefit liabilities
Total comprehensive loss for the year (90,372) 3,104,339 3,013,9 Transactions with owners									Gain on valuation of financial assets at fair value
Transactions with owners	372)	(90		(90,372)			<u>-</u>	8	through other comprehensive income
	,967	3,013	3,104,339	(90,372)	 -		<u>-</u>	_	Total comprehensive loss for the year
Disposal of treasury shares - 192,118 17,741 209,8									Transactions with owners
	,859	209	-	-	17,741	192,118	-		Disposal of treasury shares
Dividends 30 <u> (935,275)</u> (935,275)	275)	(935	(935,275)	<u> </u>			<u>-</u>	30	
Total transactions with owners - 192,118 17,741 - (935,275) (725,42)	416)	(725	(935,275)	<u>-</u>	17,741	192,118	<u>-</u>	_	Total transactions with owners
Balance at December 31, 2022 391,406 2,925,449 (270) (70,479) 17,827,322 21,073,4	,428	21,073	17,827,322	(70,479)	(270)	2,925,449	391,406	_	Balance at December 31, 2022
Balance at January 1, 2023 391,406 2,925,449 (270) (70,479) 17,827,322 21,073,4	,428	21,07	17,827,322	(70,479)	(270)	2,925,449	391,406		Balance at January 1, 2023
Comprehensive income									Comprehensive income
Profit for the year 228,126 228,1	,126	228	228,126	-	-	-	-		Profit for the year
Remeasurements of net defined benefit liabilities 16 (23,049)	049)	(23	(23,049)	-	-	-	-	16	Remeasurements of net defined benefit liabilities
Loss on valuation of financial assets at fair value 8								8	Loss on valuation of financial assets at fair value
through other comprehensive income	159)	(90	<u> </u>	(90,159)			<u>-</u>		through other comprehensive income
Total comprehensive income for the year - - - (90,159) 205,077 114,9	,918	114	205,077	(90,159)					Total comprehensive income for the year
Transactions with owners									Transactions with owners
Disposal of treasury shares 19	-		-	-	-	-	-	19	Disposal of treasury shares
Dividends 30 (783,134) (783,134)	134)	(783	(783,134)	-	-	-	-	30	Dividends
Total transactions with owners (783,134) (783,13	134)	(783	(783,134)	-	-		-	_	Total transactions with owners
Balance at December 31, 2023 391,406 2,925,449 (270) (160,638) 17,249,265 20,405,2	,212	20,40	17,249,265	(160,638)	(270)	2,925,449	391,406	_	Balance at December 31, 2023

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

LG Chem, Ltd.
Separate Statements of Cash Flows
As of Years Ended December 31, 2023 and 2022

(In millions of Korean won)	Notes	2023	2022
Cash flows from operating activities			
Cash generated from operations	32	2,418,621	2,059,708
Interest received		147,827	37,886
Interest paid		(220,138)	(144,748)
Dividends received		252,646	520,742
Income taxes paid		(494,956)	(1,086,080)
Net cash inflow from operating activities	_	2,104,000	1,387,508
Cash flows from investing activities			
Decrease in other receivables		378,539	100,691
Proceeds from disposal of investments in subsidiaries		-	297,458
Proceeds from disposal of other financial assets		3,835	30,238
Proceeds from disposal of property, plant and equipment		5,252	499
Proceeds from disposal of intangible assets		374	9,415
Proceeds from disposal of assets held for sale		27,620	2,558,384
Cash inflow due to business transfer		151,800	-
Increase in other receivables		(54,372)	(31,473)
Acquisition of investments in subsidiaries		(822,980)	(68,858)
Acquisition of investments in associates and joint ventures		(30,576)	(466,012)
Acquisition of other financial assets		(151,880)	(558,947)
Acquisition of property, plant and equipment		(2,371,302)	(1,732,944)
Acquisition of intangible assets		(48,480)	(76,630)
Net cash (outflow) inflow from investing activities	_	(2,912,170)	61,821
Cash flows from financing activities			
Proceeds from borrowings		6,353,546	2,169,130
Settlement of derivatives transaction		-	5,712
Disposal of treasury shares		-	256,995
Repayments of borrowings		(3,982,427)	(2,681,664)
Dividends		(783,135)	(935,274)
Net cash outflow from financing activities	_	1,587,984	(1,185,101)
Net increase in cash and cash equivalents		779,814	264,228
Cash and cash equivalents at the beginning of the year		1,323,209	1,056,665
Effects of exchange rate changes on cash and cash equivalents		(6,949)	2,316
Cash and cash equivalents at the end of year in	_		
the separate statement of financial position	_	2,096,074	1,323,209

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

1. **GENERAL INFORMATION:**

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

As of December 31, 2023, the Company has its manufacturing facilities in Yeosu, Daesan, Cheongju, Naju, Iksan, Osong, Onsan and Gimcheon and engages in petrochemical, advanced materials and life sciences business.

The Company is authorized to issue 292 million shares of ordinary shares with par value of \$5,000 per share. As of December 31, 2023, the Company has issued 70,592,343 ordinary shares (\$352,962 million) and 7,688,800 preferred shares (\$38,444 million). The largest shareholder of the Company is LG Corp., which owns 33.34% of the Company's ordinary shares. Preferred shareholders have no voting rights, but are entitled to receive dividends at a rate of 1% more than those paid to ordinary shareholders.

2. SUMMARY OF MATERIAL ACCOUNTING POLICIES:

The principal accounting policies applied in the preparation of these separate financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of Preparation

The Company 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 ("K-IFRS"). The accompanying separate financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

The separate financial statements of the Company have been prepared in accordance with Korean IFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board ("IASB") that have been adopted by the Republic of Korea.

The separate financial statements have been prepared on a historical cost basis, except for the following:

- Certain financial assets and liabilities (including derivative instruments), certain classes of property, plant and equipment and investment property – measured at fair value
- Assets held for sale measured at fair value less costs to sell
- · Defined benefit pension plans plan assets measured at fair value

The preparation of financial statements requires the use of critical accounting estimates. Management also needs to exercise judgement in applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the separate financial statements are disclosed in Note 4.

2.2 Changes in Accounting Policy and Disclosures

(a) New and amended standards adopted by the Company

The Company has applied the following standards and amendments for the first time for their annual reporting period commencing January 1, 2023.

-K-IFRS 1001 Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements – Disclosure of Accounting Policies (Amendments)

The amendments change the requirements in K-IFRS 1001 with regard to disclosure of accounting policies. The amendments replace all instances of the term 'significant accounting policies' with 'material accounting policy information.' Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general-purpose financial statements make on the basis of those financial statements.

The supporting paragraphs in K-IFRS 1001 are also amended to clarify that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. Accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material.

The International Accounting Standards Board IASB has also developed guidance and examples to explain and demonstrate the application of the 'four-step materiality process' described in IFRS Practice Statement 2.

-K-IFRS 1001 Presentation of Financial Statements – Disclosure of financial liabilities with clauses to adjust exercise price (Amendments)

The amendments require disclosure of valuation gains or losses (limited to those recognized in the profit or loss) of the conversion options or warrants (or financial liabilities including them), if all or part of the financial instrument with exercise price that is adjusted depending on the issuer's share price change is classified as financial liability as defined in paragraph 11 (2) of K-IFRS 1032.

-K-IFRS 1008 Accounting Polices, Changes in Accounting Estimates and Errors – Definition of Accounting Estimates (Amendments)

The amendments replace the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in separate financial statements that are subject to measurement uncertainty," The definition of a change in accounting estimates was deleted.

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

The amendments introduce a further exception from the initial recognition exemption. Under the amendments, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences. Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting profit nor taxable profit.

Following the amendments to K-IFRS 1012, an entity is required to recognize the related deferred tax asset and liability, with the recognition of any deferred tax asset being subject to the recoverability criteria in K-IFRS 1012.

-K-IFRS 1012 Income Taxes - International Tax Reform—Pillar Two Model Rules (Amendments)

The amendments clarify that the Standard applies to income taxes arising from tax law enacted or substantively enacted to implement the Pillar Two model rules published by the OECD, including tax law that implements qualified domestic minimum top-up taxes described in those rules.

The amendments introduce a temporary exception to the accounting requirements for deferred taxes in K-IFRS 1012, so that an entity would neither recognize nor disclose information about deferred tax assets and liabilities related to Pillar Two income taxes.

The Company does not anticipate that the application of the enactment and amendments will have a significant impact on the Company's separate financial statements.

- K-IFRS 1001 Presentation of Financial Statements – Non-current Liabilities with Covenants (Amendments)

The amendments specify that only covenants that an entity is required to comply with on or before the end of the reporting period affect the entity's right to defer settlement of a liability for at least 12 months after the reporting date. Such covenants affect whether the right exists at the end of the reporting period, even if compliance with the covenant is assessed only after the reporting date.

The amendments also specify that the right to defer settlement of a liability for at least 12 months after the reporting date is not affected if an entity only has to comply with a covenant after the reporting period. However, if the entity's right to defer settlement of a liability is subject to the entity complying with covenants within 12 months after the reporting period, an entity discloses information that enables users of financial statements to understand the risk of the liabilities becoming repayable within 12 months after the reporting period. This would include information about the covenants (including the nature of the covenants and when the entity is required to comply with them), the carrying amount of related liabilities and facts and circumstances, if any, that indicate that the entity may have difficulties complying with the covenants.

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

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period, specify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability, explain that rights are in existence if covenants are complied with at the end of the reporting period and introduce a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services.

The Company has decided to earlier application, judging that the impact of the above amendments is significant to the Company's separate financial statements. Accordingly, the Company's separate financial statements have been prepared in accordance with the early adoption of the above enactment and amendment.

(b) New and amended standards not yet adopted by the Company

The following new and amended accounting standards have been published that are not mandatory for December 31, 2023, reporting periods and have not been early adopted by the Company.

- K-IFRS 1007 Statement of Cash Flows and K-IFRS 1107 Financial Instruments: Disclosures - Supplier Finance Arrangements (Amendments)

The amendments add a disclosure objective to K-IFRS 1007 stating that an entity is required to 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. In addition, K-IFRS 1117 was amended to add supplier finance arrangements as an example within the requirements to disclose information about an entity's exposure to concentration of liquidity risk.

The term 'supplier finance arrangements' is not defined. Instead, the amendments describe the characteristics of an arrangement for which an entity would be required to provide the information.

To meet the disclosure objective, an entity will be required to disclose in aggregate for its supplier finance arrangements:

- The terms and conditions of the arrangements
- The carrying amount, and associated line items presented in the entity's statement of financial position, of the liabilities that are part of the arrangements
- The carrying amount and associated line items for which the suppliers have already received payment from the finance providers
- Ranges of payment due dates for both those financial liabilities that are part of a supplier finance arrangement and comparable trade payables that are not part of a supplier finance arrangement
- Liquidity risk information

- K-IFRS 1116 Leases - Lease Liability in a Sale and Leaseback (Amendments)

The amendments to K-IFRS 1116 add subsequent measurement requirements for sale and leaseback transactions that satisfy the requirements in K-IFRS 1115 to be accounted for as a sale. The amendments require the seller-lessee to determine 'lease payments' or 'revised lease payments' such that the seller-lessee does not recognise a gain or loss that relates to the right of use retained by the seller-lessee, after the commencement date.

- K-IFRS 1001 Presentation of Financial Statements – Disclosure of Virtual Assets (Amendments)

The amendments to K-IFRS 1001 add additional disclosure requirements required by other standards for transactions related to virtual assets, setting out disclosure requirement for each case of 1) holding virtual assets, 2) holding virtual assets on behalf of customer and 3) issuing virtual assets.

When holding a virtual asset, disclosure on the general information about virtual assets, the accounting policy applied and each virtual asset's acquisition method, cost and the fair value at the end of the reporting period is required. Also, when issuing a virtual asset, the entity's obligations and status of fulfilment of the obligation related to the issued virtual asset, the timing and amount of the recognized revenue of the sold virtual asset, the number of virtual assets held after issuance and important contract details shall be disclosed.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024. Earlier application is permitted.

The Company does not expect that these amendments have a significant impact on the separate financial statements.

2.3 Subsidiaries, Joint Ventures and Associates

The financial statements of the Company are the separate financial statements prepared in accordance with Korean IFRS 1027 *Separate Financial Statements*. Investments in subsidiaries, joint ventures and associates are recognized at cost. Management applied the carrying amounts under the previous K-GAAP at the time of transition to Korean IFRS as deemed cost of investments. The Company recognizes dividend income from subsidiaries, joint ventures and associates in profit or loss when its right to receive the dividend is established.

2.4 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the separate financial statements of each of the Company are measured using the currency of the primary economic environment in which each entity operates (the "functional currency"). The separate financial statements are presented in Korean won, which is the Company's functional and presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year-end exchange rates are generally recognized in profit or loss. They are recognized in other comprehensive income if they relate to qualifying cash flow hedges, qualifying effective portion of net investment hedges, or are attributable to monetary part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the separate statements of profit or loss, within finance costs.

Foreign exchange gains and losses on non-monetary items are recognized as part of gains and losses resulting from the changes in fair value. Foreign exchange gains and losses on equity investments measured at fair value through profit or loss are recognized in profit or loss and those on equity investments measured at fair value through other comprehensive income are recognized in other comprehensive income.

2.5 Cash and Cash Equivalents

Cash and cash equivalents include cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less.

2.6 Financial Assets

(a) Classification

The Company classifies its financial assets in the following measurement categories:

- Those to be measured at fair value through profit or loss
- Those to be measured at fair value through other comprehensive income
- Those to be measured at amortized cost

Financial assets are classified on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

For financial assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. The Company reclassifies debt investments when, and only when its business model for managing those assets changes.

For investments in equity instruments that are not held for trading, this will depend on whether the Company has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income. Changes in fair value of non-designated equity investment are recognized in profit or loss.

(b) Measurement

At initial recognition, the Company measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss. Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

A. Debt instruments

Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset. The Company classifies its debt instruments into one of the following three measurement categories:

Amortized cost: Assets that are held for collection of contractual cash flows where those
cash flows represent solely payments of principal and interest are measured at amortized
cost. A gain or loss on a debt investment that is subsequently measured at amortized cost
and is not part of a hedging relationship is recognized in profit or loss when the asset is
derecognized or impaired. Interest income from these financial assets is included in 'finance
income' using the effective interest rate method.

- Fair value through other comprehensive income: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment loss (reversal of impairment loss), interest income and foreign exchange gains and losses, which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Interest income from these financial assets is included in 'finance income' using the effective interest rate method. Foreign exchange gains and losses are presented in 'financial income/costs' or 'other non-operating income/expenses' and impairment losses are presented in 'other non-operating expenses'.
- Fair value through profit or loss: Assets that do not meet the criteria for amortized cost or fair
 value through other comprehensive income are measured at fair value through profit or loss.
 A gain or loss on a debt investment that is subsequently measured at fair value through
 profit or loss and is not part of a hedging relationship is recognized in profit or loss and
 presented net in the separate statement of profit or loss within 'finance income/costs' in the
 period in which it arises.

B. Equity instruments

The Company subsequently measures all equity investments at fair value. Where the Company's management has elected to present fair value gains and losses on equity investments, which held for long-term investment or strategic purpose, in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividend income from such investments continue to be recognized in profit or loss as 'finance income' when the right to receive payments is established.

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'finance income or costs' in the separate statements of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

(c) Impairment

The Company assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables and lease receivables, the Company applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables.

(d) Recognition and Derecognition

Regular-way purchases and sales of financial assets are recognized or derecognized on trade date, the date on which the Company commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Company has retained substantially all the risks and rewards of ownership of the transferred asset, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The Company classified the financial liability as "borrowings" in the separate statements of financial position.

2.7 Derivative Financial Instruments

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss within 'finance income or costs' based on the nature of transactions and if so, the nature of the item being hedged. The Company has hedge relationships and designates certain derivatives as either:

- Hedges of the fair value of recognized assets or liabilities or a firm commitment (fair value hedges)
- Hedges of a particular risk associated with the cash flows of recognized assets and liabilities and highly probable forecast transactions (cash flow hedges)
- Hedges of a net investment in a foreign operation (net investment hedges)

At inception of the hedge relationship, the Company documents the economic relationship between hedging instruments and hedged items, including whether changes in the cash flows of the hedging instruments are expected to offset changes in the cash flows of hedged items.

The full fair value of a hedging derivative is classified as a non-current asset or a liability when the remaining maturity of the hedged item is more than 12 months; it is classified as a current asset or liability when the remaining maturity of the hedged item is less than 12 months. A non-derivative financial asset and a non-derivative financial liability is classified as a current or non-current based on its expected maturity and its settlement, respectively.

Cash flow hedge

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in the cash flow hedge reserve within equity, limited to the cumulative change in fair value (present value) of the hedged item (the present value of the cumulative change in the future expected cash flows of the hedged item) from the inception of the hedge. The ineffective portion is recognized in 'finance income or costs.'

When option contracts are used to hedge forecast transactions, the Company designates only the intrinsic value of the option contract as the hedging instrument. Gains or losses relating to the effective portion of the change in intrinsic value of the option contracts are recognized in the cash flow hedge reserve within equity. The changes in the time value of the option contracts that relate to the hedged item ('aligned time value') are recognized within the costs of hedging in other comprehensive income within equity.

When forward contracts are used to hedge forecast transactions, the Company generally designates only the change in fair value of the forward contract related to the spot element as the hedging instrument. Gains or losses relating to the effective portion of the change in the spot element of the forward contracts are recognized in the cash flow hedge reserve within equity. The change in the forward element of the contract that relates to the hedged item is recognized within other comprehensive income within equity. In some cases, the Company may designate the full change in fair value of the forward contract (including forward points) as the hedging instrument. In such cases, the gains or losses relating to the effective portion of the change in fair value of the entire forward contract are recognized in the cash flow hedge reserve within equity.

Amounts accumulated in equity are reclassified in the periods when the hedged item affects profit or loss, as follows:

- Where the hedged item subsequently results in the recognition of a non-financial asset (such as inventory), both the deferred hedging gains and losses and the deferred time value of the option contracts or deferred forward points, if any, are included within the initial cost of the asset. The deferred amounts are ultimately recognized in profit or loss as the hedged item affects profit or loss (for example through cost of sales).
- The gain or loss relating to the effective portion of the interest rate swaps hedging variable rate borrowings is recognized in profit or loss within 'finance cost' at the same time as the interest expense on the hedged borrowings.

When a hedging instrument expires, or is sold, terminated, exercised or when a hedge no longer meets the criteria for hedge accounting, any accumulated cash flow hedge reserve at that time remains in equity until the forecast transaction occurs, resulting in the recognition of a non-financial asset, such as inventory. When the forecast transaction is no longer expected to occur, the cash flow hedge reserve and deferred costs of hedging that were reported in equity are immediately reclassified to profit or loss.

Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss within 'other non-operating income (expenses)' or 'finance income (costs)' based on the nature of transactions.

Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

Derivatives embedded in hybrid contracts with a financial asset host within the scope of K-IFRS 1109 are not separated. The entire hybrid contract is classified and subsequently measured as either amortized cost or fair value as appropriate.

Derivatives embedded in hybrid contracts with hosts that are not financial assets within the scope of K-IFRS 1109 (e.g., financial liabilities) are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at fair value through profit or loss.

An embedded derivative is presented as a non-current asset or non-current liability if the remaining maturity of the hybrid instrument to which the embedded derivative relates is more than 12 months and is not expected to be realised or settled within 12 months.

2.8 Trade Receivables

Trade receivables are recognized initially at the amount of consideration that is unconditional, unless they contain significant financing components, or are measured at fair value if the trade receivables contain a significant financing component. Trade receivables are subsequently measured at amortized cost using the effective interest method, less loss allowance.

2.9 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using average cost method, except for goods in transit, which is determined using the specific identification method.

2.10 Assets Held for Sale

Assets are classified as held for sale when their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. The assets are measured at the lower amount between their carrying amount and the fair value less costs to sell.

2.11 Property, Plant and Equipment

Property, plant and equipment are stated at historical cost, less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items. Depreciation of all property, plant and equipment, except for land, is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

Useful lives

Buildings	25–50 years
Structures	15–50 years
Machinery	4–15 years
Others	1 year–15 years

The assets' depreciation method, residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

2.12 Investment Property

Investment property is property held to earn rentals or for capital appreciation or both. An investment property is measured initially at its cost. An investment property is measured after initial measurement at depreciated cost (less any accumulated impairment losses). The Company depreciates investment properties, except for land, using the straight-line method over their useful lives of 20–50 years.

2.13 Borrowing Costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use or sale. Investment income earned on the temporary investment of specific borrowings on qualifying assets is deducted from the borrowing costs eligible for capitalization. Other borrowing costs are expensed in the period in which they are incurred.

2.14 Government Grants

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Company will comply with all attached conditions. Government grants related to assets are presented in the separate statements of financial position by deducting the grant in arriving at the carrying amount of the asset, and government grants related to income are deferred and later deducted from the related expense.

2.15 Intangible Assets

The excess of consideration transferred and acquisition-date fair value of any previous equity interest in the acquired entity over the fair value of the net identifiable assets acquired is recoded as goodwill. Goodwill is carried at its cost, less accumulated impairment losses. Impairment losses on goodwill are not reversed.

Intangible assets, except for goodwill, are initially recognized at its historical cost, and carried at cost, less accumulated amortization and accumulated impairment losses.

Development costs that are directly attributable to internally generated by the Company are recognized when the criteria; such as, technically feasible, generate probable future economic benefits and other, are met. Membership rights that have an indefinite useful life are not subject to amortization because there is no foreseeable limit to the period over which the assets are expected to be utilized. The Company amortizes intangible assets with a limited useful life using the straight-line method over the following periods:

Hooful lives

	Osetul lives
Software	3–15 years
Development costs	3–15 years
Industrial property rights	5–15 years
Other intangible assets	6–20 years

2.16 Research and Development

Costs associated with research are recognized as an expense as incurred. Costs that are identifiable, controllable and directly attributable to development projects are recognized as intangible assets when the following criteria are met:

- It is technically feasible to complete the development project so that it will be available for use.
- Management intends to complete the development project for its own use or selling.
- There is an ability to use or sell the development project.
- It can be demonstrated how the development project will generate probable future economic benefits.
- Adequate technical, financial resources and other resources to complete the development and to use or sell the development project are available.
- The expenditure attributable to the development project during its development can be reliably measured.

Generally, internally generated development projects have the following stages; formulation and selection of a project, verification of idea and technology, development and testing, decision of commercialization and test of final application. Expenditures can be capitalized as intangible assets only after the decision of commercialization. Expenditures incurred in other stages are recognized as expenses on the research phase.

Internally generated development projects in the Life Sciences business have the following stages; formulation of potential candidates, preclinical research, clinical researches, such as phase 1, 2 and 3 trials, approval of regulatory body and new product launch. Expenditures incurred from new drug development project are recognized as expensed on the research phase. However, expenditures incurred during clinical phase 1–3 trials from development projects for generic drugs or biosimilars are recognized as intangible assets depending on the nature of the products.

Expenditures incurred from technology license agreement with the third parties are recognized as intangible assets.

Development costs previously recognized as an expense are not recognized as an asset in a subsequent period. Capitalized development costs that are recognized as intangible assets are amortized using the straight-line method over their estimated useful lives when the assets are available for use and are tested for impairment.

2.17 Impairment of Non-financial Assets

Goodwill and intangible assets with indefinite useful life are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. Other assets that are subject to amortization are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value, less costs of disposal and value in use. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2.18 Trade and Other Payables

These amounts represent liabilities for goods and services provided to the Company prior to the end of reporting period, which are unpaid. Trade and other payables are presented as current liabilities, unless payment is not due within 12 months after the reporting period. They are recognized initially at their fair value and subsequently measured at amortized cost using the effective interest method.

2.19 Financial Liabilities

(a) Classification and measurement

The Company's financial liabilities at fair value through profit or loss are financial instruments held for trading. A financial liability is held for trading if it is incurred principally for the purpose of repurchasing in the near term. A derivative that is not designated as hedging instrument and an embedded derivative that is separated are also classified as held for trading.

The Company classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost and present as 'trade payables,' 'borrowings' and 'other payables' in the separate statements of financial position.

Borrowings are initially recognized at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortized cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognized in profit or loss over the period of the borrowings using the effective interest method. Fees paid on the establishment of loan facilities are recognized as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw-down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalized as a prepayment for liquidity services and amortized over the period of the facility to which it relates.

Borrowings are classified as current liabilities, unless the Company has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

(b) Derecognition

Financial liabilities are removed from the separate statements of financial position when it is extinguished; for example, when the obligation specified in the contract is discharged or cancelled or expired or when the terms of an existing financial liability are substantially modified. The difference between the carrying amount of a financial liability extinguished or transferred to another party and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

2.20 Financial Guarantee Contracts

Financial guarantee contracts are recognized as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value, subsequently at the higher of following and recognized in the separate statements of financial position within 'other financial liabilities.'

- The amount determined in accordance with the expected credit loss model under Korean IFRS 1109 *Financial Instruments*
- The amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with Korean IFRS 1115 Revenue from Contracts with Customers

2.21 Current and Deferred Taxes

The tax expense for the period consists of current and deferred tax. Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The current income tax expense is measured at the amount expected to be paid to the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation, and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Company measures its tax balances either based on the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the separate financial statements. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

The Company recognizes a deferred tax liability if all taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, The Company recognizes a deferred tax asset for all deductible temporary differences arising from such investments to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset when the Company has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the assets and settle the liability simultaneously.

2.22 Provisions

Provisions for warranties, site restorations and legal claims are recognized when the Company has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period, and the increase in the provision due to the passage of time is recognized as interest expense.

2.23 Greenhouse Gas Emissions Permits and Obligations

With enforcement of *The Act on the Allocation and Trading of Greenhouse Gas Emission Permits*, the permits that are received free of charge from the government are measured at zero while permits purchased are measured at acquisition cost and stated net of accumulated impairment loss. Emission obligations are measured as the sum of the carrying amount of the allocated permits that will be submitted to the government and the best estimate of expenditure required to settle the obligation at the end of reporting period for any excess emission. The permits and emission obligations are classified as intangible assets and provisions, respectively, in the separate statements of financial position.

2.24 Employee Benefits

(a) Postemployment benefits

The Company operates both defined contribution and defined benefit pension plans. For defined contribution plans, the Company pays contribution to publicly or privately administered pension insurance plans on mandatory, contractual or voluntary basis. The Company has no further payment obligation once the contribution has been paid. The contribution is recognized as employee benefit expense when they are due. A defined benefit plan is a pension plan that is not a defined contribution plan.

Generally, postemployment benefits are payable after the completion of employment, and the benefit amount depended on the employee's age, periods of service or salary levels. The liability recognized in the separate statements of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period, less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms approximating to the terms of the related obligation. Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income.

Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognized immediately in profit or loss as past service costs.

(b) Other long-term employee benefits

Certain entities within the Company provide long-term employee benefits that are entitled to employees with service period for ten years and above. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. The Company recognizes service cost, net interest on other long-term employee benefits and remeasurements as profit or loss for the year. These liabilities are valued annually by an independent qualified actuary.

2.25 Revenue Recognition

(a) Identify performance obligation

With regard to the contract of selling products to the customer, the Company identifies the services provided separately to the customer as a different performance obligation. When the Company makes a sales contract with the customer, the standard warranty period for each product and customer is set up considering the legal warranty period. Even though the standard warranty period has been expired, the warranties are recognized as a revenue and is identified as a separate performance obligation when the Company provides additional warranties for the quality of product or when the customer has an option to purchase additional warranties separately.

(b) A performance obligation satisfied at a point in time

The revenue from the sale of goods is recognized at the time they are delivered to the customer. Delivery occurs when the products have been shipped to the specific location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed or the Company has objective evidence that all criteria for acceptance have been satisfied.

The goods are often sold with volume discounts, and it is the Company's policy to sell its products to the customer with a right of return. Accumulated experience is used to estimate for the discounts and the refund, and the volume discount is calculated based on the periodical forecast sales. The warranty provision for the sales and refund is reasonably estimated and recognized properly.

(c) Sales return

A gross contract liability for the expected refunds to customers is recognized as adjustment to revenue, and the Company has a right to recover the product from the customer where the customer exercises his right of return and recognizes an asset and a corresponding adjustment to cost of sales. A right to recover the products is measured at former carrying amount of the product, less the costs to recover the products.

(d) Significant financing component

As a practical expedient, the Company need not adjust the promised amount of consideration for the effects of a significant financing component as the period between when the entity transfers a promised good or service to a customer and when the customer pays for that good or service is generally one year or less.

2.26 Lease

(a) Lessor

Lease income from operating leases where the Company is a lessor is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognized as expense over the lease term on the same basis as lease income. The respective leased assets are included in the separate statements of financial position based on their nature.

(b) Lessee

The Company leases various machinery, real estate and cars. Lease contracts are typically made for fixed periods, but may have extension options.

Contracts may contain both lease and non-lease components. The Company allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone prices. However, for leases of real estate for which the Company is lessee, the Company applies the practical expedient, which has elected not to separate lease and non-lease components and instead accounts for these as a single-lease component.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

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

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- Fixed payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date
- Amounts expected to be payable by the Company (the lessee) under residual value guarantees
- The exercise price of a purchase option if the Company (the lessee) is reasonably certain to exercise that option
- Payments of penalties for terminating the lease, if the lease term reflects the Company (the lessee) exercising that option

Measurement of lease liability also includes payments to be made in optional periods if the lessee is reasonably certain to exercise an option to extend the lease.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

To determine the incremental borrowing rate, the Company:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received
- makes adjustments specific to the lease, for example term, country, currency and security

If a readily observable amortizing loan rate is available to the individual lessee (through recent financing or market data), which has a similar payment profile to the lease, then the Company uses that rate as a starting point to determine the incremental borrowing rate.

The Company is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- The amount of the initial measurement of lease liability
- Any lease payments made at or before the commencement date less any lease incentives received
- Any initial direct costs
- Restoration costs

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Company is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases of equipment and vehicles and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less without a purchase option. Low-value assets comprise IT-equipment and small items of office furniture.

(c) Extension and termination options

Extension and termination options are included in a number of leases across the Company. These terms are used to maximize operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Company and not by the respective lessor.

3. FINANCIAL RISK MANAGEMENT:

3.1 Financial risk factors

The Company's activities expose it to a variety of financial risks: market risk, credit risk and liquidity risk. The Company'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 Company. The Company uses derivative financial instruments to hedge certain risk exposures.

Risk management is carried out by the Company'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 Company'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, credit risk, use of derivative financial instruments and non-derivative financial instruments and investment of excess liquidity.

(a) Market risk

1) Foreign exchange risk

The Company operates internationally and is exposed to foreign exchange risk arising from foreign currency transactions, 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 companies to manage their foreign exchange risk against their functional currency. The Company manages maximum loss for currency risk exposures within acceptable range using currency risk management model and hires employees who are exclusively responsible for currency risk management.

As of December 31, 2023 and 2022, the Company's monetary assets and liabilities denominated in currencies other than its functional currency, are as follows:

(In millions of Korean won)	December 31, 2023		December	31, 2022
	Assets	Liabilities	Assets	Liabilities
USD	3,180,888	6,559,144	3,331,620	3,442,924
EUR	309,736	17,797	305,516	34,656
JPY	9,172	47,109	5,212	33,008
CNY and others	194,235	11,132	262,096	9,129

As of December 31, 2023 and 2022, if the Company's functional currency had weakened/strengthened by 10% against the US dollar with all other variables held constant, profit before income tax would have been affected as follows:

LG Chem, Ltd. **Notes to the Separate Financial Statements** As of and for the Years Ended December 31, 2023 and 2022

(In millions of Korean won)	Decembe	er 31, 2023	Decembe	· 31, 2022	
	10% Increase	10% Increase 10% Decrease		10% Decrease	
USD	(337,826)	337,826	(11,130)	11,130	
EUR	29,194	(29,194)	27,086	(27,086)	
JPY	(3,794)	3,794	(2,780)	2,780	
CNY and others	18,310	(18,310)	25,297	(25,297)	

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

As of December 31, 2023 and 2022, the Company entered into foreign currency forward contracts and currency swap contracts to manage risk from changes in exchange rates as

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

				, .			
		Contract	Contract exchange	Contract inception	Contract	Book	amount
		amount	rate	date	maturity	Assets	Liabilities
y I	Industrial and Commercial Bank of China	USD 158	1.218.70	2022.4.22	2024.2.1	_	10.808
	Bank of		1,210.70	2022.1.22	2021.2.1		10,000

December 31, 2023

Contractor	amount	rate	date	maturity	Assets	Liabilities
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
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
Export import bank	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	-
	Industrial and Commercial Bank of China Bank of America SMBC KDB KDB Shinhan Bank Woori Bank Industrial and Commercial Bank of China Shinhan Bank Woori Bank Shinhan Bank KDB KDB Shinhan Bank Export import bank Shinhan Bank KDB Shinhan Bank KDB Shinhan Bank KDB Shinhan Bank KDB Shinhan Bank	Industrial and Commercial Bank of China Bank of America SMBC KDB KDB Woori Bank USD 100 Industrial and Commercial Bank of China Shinhan Bank USD 100 KDB Woori Bank USD 100 USD 200 KDB USD 200 KDB USD 200 KDB USD 250 Shinhan Bank USD 100 KDB USD 250 Shinhan Bank USD 100 KDB USD 200 KDB USD 200 KDB USD 200 Shinhan Bank USD 100 KDB USD 200 Shinhan Bank USD 100	Contractor amount rate Industrial and Commercial Bank of China USD 158 1,218.70 Bank of America USD 158 1,307.73 SMBC USD 200 1,118.00 KDB USD 130 1,135.60 KDB USD 35 1,135.60 Shinhan Bank USD 300 1,131.80 Woori Bank USD 100 1,131.80 Industrial and Commercial Bank of China USD 100 1,131.80 Shinhan Bank USD 100 1,131.80 Woori Bank USD 200 1,131.80 KDB USD 200 1,289.70 Shinhan Bank USD 110 1,289.70 Export import bank USD 200 1,305.90 Shinhan Bank USD 100 1,305.90 KDB USD 200 1,233.40 Shinhan Bank USD 100 1,233.40	Contractor amount rate date Industrial and Commercial Bank of China Bank of America USD 158 1,218.70 2022.4.22 Bank of America USD 158 1,307.73 2023.12.5 SMBC USD 200 1,118.00 2021.5.28 KDB USD 130 1,135.60 2021.6.24 KDB USD 35 1,135.60 2021.6.24 Shinhan Bank USD 300 1,131.80 2021.7.7 Woori Bank USD 100 1,131.80 2021.7.7 Industrial and Commercial Bank of China USD 100 1,131.80 2021.7.7 Woori Bank USD 100 1,131.80 2021.7.7 Woori Bank USD 200 1,131.80 2021.7.7 KDB USD 200 1,131.80 2021.7.7 KDB USD 250 1,289.70 2022.6.15 Shinhan Bank USD 110 1,289.70 2022.6.15 Export import bank USD 200 1,305.90 2022.7.14 Shinhan Bank USD 100 1,233.40 2023.1.26	Contractor amount rate date maturity Industrial and Commercial Bank of China Bank of America USD 158 1,218.70 2022.4.22 2024.2.1 SMBC USD 200 1,118.00 2021.5.28 2024.5.28 KDB USD 130 1,135.60 2021.6.24 2025.6.24 KDB USD 35 1,135.60 2021.6.24 2026.24 Shinhan Bank USD 300 1,131.80 2021.7.7 2026.7.7 Woori Bank USD 100 1,131.80 2021.7.7 2026.7.7 Industrial and Commercial Bank of China USD 100 1,131.80 2021.7.7 2026.7.7 Shinhan Bank USD 100 1,131.80 2021.7.7 2031.7.7 Woori Bank USD 200 1,131.80 2021.7.7 2031.7.7 KDB USD 200 1,131.80 2021.7.7 2031.7.7 KDB USD 250 1,289.70 2022.6.15 2025.6.15 Shinhan Bank USD 100 1,305.90 2022.6.15 2027.6.15 Export import bank	Contractor amount rate date maturity Assets Industrial and Commercial Bank of China Bank of America USD 158 1,218.70 2022.4.22 2024.2.1 - SMBC USD 200 1,307.73 2023.12.5 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 13,025 KDB USD 200 1,389.70 2022.6.15

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

Decem	ber	31,	2022

		0	Contract	Contract	0	Book a	mount
	Contractor	Contract amount	exchange rate	inception date	Contract maturity	Assets	Liabilities
Currency Forward	Citi Bank	USD 105	1,234.6	2022.4.22	2023.2.1	-	3,348
	Industrial and Commercial Bank of China	USD 158	1,218.7	2022.4.22	2024.2.1	-	4,364
Currency swap	SMBC	USD 200	1,118.0	2021.5.28	2024.5.28	22,974	-
·	KDB	USD 130	1,135.6	2021.6.24	2025.6.24	26,317	-
	KDB	USD 35	1,135.6	2021.6.24	2026.6.24	7,898	-
	Shinhan Bank	USD 300	1,131.8	2021.7.7	2026.7.7	26,599	-
	Woori Bank	USD 100	1,131.8	2021.7.7	2026.7.7	9,067	-
	Industrial and Commercial Bank of China	USD 100	1,131.8	2021.7.7	2026.7.7	9,175	-
	Shinhan Bank	USD 100	1,131.8	2021.7.7	2031.7.7	6,192	-
	Woori Bank	USD 200	1,131.8	2021.7.7	2031.7.7	12,852	-
	KDB	USD 200	1,131.8	2021.7.7	2031.7.7	12,926	-
	KDB	USD 250	1,289.7	2022.6.15	2025.6.15	-	3,374
	Shinhan Bank	USD 110	1,289.7	2022.6.15	2027.6.15	-	1,700
	Export import bank	USD 200	1,305.9	2022.7.14	2025.7.14	-	10,360
	Shinhan Bank	USD 100	1,305.9	2022.7.14	2025.7.14	-	5,003

2) Price risk

The Company is exposed to equity securities price risk arises from investments held by the Company and classified in the separate statements of financial position either as available for sale or at fair value through profit or loss. The Company'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) and KOSPI Index.

The table below summarizes the impact of increases/decreases of the listed stock price index on the Company's equity before tax effects as of December 31, 2023 and 2022. 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 Company's equity instruments moved in line with the index.

(In millions of Korean won)	December	31, 2023	December 31, 2022		
	10% 10%		10%	10%	
	Increase	Decrease	Increase	Decrease	
NASDAQ	6,943	(6,943)	255	(255)	
NYSE	260	(260)	2,208	(2,208)	
SZSE	6,446	(6,446)	-	-	
HSI	9,277	(9,277)	8,349	(8,349)	
KOSPI	15,989	(15,989)	17,667	(17,667)	
Total	38,915	(38,915)	28,479	(28,479)	

3) 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 on 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 Company adequately minimizes risks from interest rate fluctuations through various policies, such as sharing excess cash within the Company (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 Company's equity and post-tax profit for the years ended December 31, 2023 and 2022. 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.

(In millions of Korean won)		Impact on prof	•	Impact on equity	
		2023	2022	2023	2022
Increase	Deposits	11,536	8,804	11,536	8,804
		11,536	8,804	11,536	8,804
Decrease	Deposits	(11,536)	(8,804)	(11,536)	(8,804)
		(11,536)	(8,804)	(11,536)	(8,804)

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.

Meanwhile, the Company has entered into a currency interest rate swap contract amounting to USD 925 million (equivalent to \pm 1,192,695 million) to hedge interest rate risk of variable interest rate borrowings.

(b) Credit risk

Credit risk arises from trade receivables that the Company holds, as well as other financial at assets amortized cost.

A. Trade receivables

The Company applies the simplified approach to measuring expected credit losses, which uses a lifetime expected loss allowance for trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The loss allowance provision as of December 31, 2023 and 2022, is as follows. Expected credit losses include forward-looking information.

(In millions of Korean won)	Receivables not past due ¹	Receivables past due, but not impaired ¹	Impaired receivables ²	Total
December 31, 2023 (Trade receivables)				
Gross carrying amount	3,157,050	52,676	1,323	3,211,049
Expected loss rate	0.0%	0.0%	64.4%	0.0%
Loss allowance provision December 31, 2022 (Trade receivables)	674	20	852	1,546
Gross carrying amount	3,018,815	72,353	899	3,092,067
Expected loss rate	0.0%	0.1%	100.0%	0.1%
Loss allowance provision	1,009	63	899	1,971

¹ See Note 7.(3) for aging analysis.

Movements in the loss allowance provision for trade receivables for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	Trade receivables			
	2023	2022		
Beginning balance	1,971	2,168		
Increase in loss allowance recognized in profit or loss during the year (reversal of)	(425)	(180)		
Receivables written off during the year as uncollectible	-	(17)		
Ending balance	1,546	1,971		

As of December 31, 2023, the carrying amount of trade receivables representing the maximum exposure to credit risk amounts to $\mbox{$\mbox{$$\mbox{$$$}$}$}3,209,503$ million (2022: $\mbox{$\mbox{$$$$}$}3,090,096$ million).

B. Other financial at assets amortized cost

Movements in loss allowance provision for other financial assets at amortized cost for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Beginning balance	628	2,111
Increase in loss allowance recognized in profit or loss during the year	-	(331)
Receivables written off during the year as uncollectible		(1,152)
Ending balance	628	628

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

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

To manage credit risks relating to trade receivables, the Company 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 customers. The credit risks relating to trade receivables are also mitigated by insurance contracts, collaterals, as well as payment guarantees.

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

The Company has deposited its cash and cash equivalents, and other long-term deposits in several financial institutions, such as Woori Bank and others. The Company has also entered into derivative contract with several financial institutions. The Company 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

The Company monitors rolling forecasts of the Company'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 Company does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. The Company's liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets necessary to meet these, monitoring separate statements of financial position liquidity ratios against internal and external regulatory requirements and maintaining debt financing plans.

 The table below analyzes the Company's financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date. Cash flows presented below are gross cash flows before discount and includes cash flows for interests.

(In millions of Korean won)	December 31, 2023				
		Between		_	
	Less than	1 year-2	Between	More than 5	
	1 year	years	2-5 years	years	
Non-derivative financial instruments					
Borrowings (excluding lease	1 512 022	1 900 110	2 020 602	2 250 404	
liabilities)	1,513,832	1,890,110	3,838,692	3,258,181	
Lease liabilities	37,715	15,907	14,125	47,648	
Trade and other payables	2,559,055	3,473	4,662		
	4,110,602	1,909,490	3,857,479	3,305,829	
Derivative instruments					
Gross settlement currency					
forwards and swaps	(774 000)	(4.056.204)	(060,022)	(600 635)	
(Inflows)	(771,908)	(1,256,394)	(862,833)	(690,635)	
Outflows	710,289	1,204,261	765,000	604,187	
	(61,619)	(52,133)	(97,833)	(86,448)	
	4,048,983	1,857,357	3,759,646	3,219,381	
(In millions of Korean won)		December	31, 2022		
,		Between	•		
	Less than 1 year	1 year-2 years	Between 2-5 years	More than 5 years	
Non-derivative financial	. you.	y cu. c	,		
! 4 4 -				years	
instruments Borrowings (evaluding lease				yours	
Borrowings (excluding lease	758 255	1 426 869	2 931 928	·	
Borrowings (excluding lease liabilities)	758,255 37,642	1,426,869 15,355	2,931,928 15,525	2,613,185	
Borrowings (excluding lease liabilities) Lease liabilities	37,642	15,355	2,931,928 15,525 -	·	
Borrowings (excluding lease liabilities)				2,613,185	
Borrowings (excluding lease liabilities) Lease liabilities Trade and other payables	37,642 3,088,622	15,355 6,297	15,525	2,613,185 53,031	
Borrowings (excluding lease liabilities) Lease liabilities	37,642 3,088,622	15,355 6,297	15,525	2,613,185 53,031	
Borrowings (excluding lease liabilities) Lease liabilities Trade and other payables Derivative instruments Gross settlement currency	37,642 3,088,622	15,355 6,297	15,525	2,613,185 53,031	
Borrowings (excluding lease liabilities) Lease liabilities Trade and other payables Derivative instruments Gross settlement currency forwards and swaps	37,642 3,088,622 3,884,519	15,355 6,297 1,448,521	15,525 - 2,947,453	2,613,185 53,031 2,666,216	
Borrowings (excluding lease liabilities) Lease liabilities Trade and other payables Derivative instruments Gross settlement currency forwards and swaps (Inflows)	37,642 3,088,622 3,884,519 (209,778)	15,355 6,297 1,448,521 (524,012)	15,525 - 2,947,453 (1,787,213)	2,613,185 53,031 - 2,666,216 (693,847)	

Although it is 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 (see Note 18). Additionally, during the period ended December 31, 2023, the Company issued exchangeable bonds that allow issuers and investors to exercise their early redemption rights (see Note 14).

2) The table below analyzes the Company's financial guarantee contracts into relevant maturity groupings based on the remaining maturity as of the reporting date to the contractual maturity date.

(In millions of Korean won)	December 31, 2023				
	Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years	
Financial guarantee contracts ¹	64,226	-	-	-	
		Decembe	er 31, 2022		
	Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years	
Financial guarantee contracts ¹	105,749	-	-	-	

¹ The Company has provided financial guarantee for subsidiaries. The amount represents the maximum amount of the guarantee as of December 31, 2023 and 2022, in which the guarantee could be called (see Note 18).

3.2 Capital Risk Management

The Company's objectives for managing capital are to safeguard the Company's ability to continue as a going concern, so the Company 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 Company 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 separate statements of financial position, plus net debt.

The gearing ratios and debt-to-equity ratios as of December 31, 2023 and 2022, were as follows:

(In millions of Korean won, except for ratios)	December 31, 2023	December 31, 2022
-	0.004.500	7 002 000
Total borrowings (Note 14) (A)	9,824,560	7,083,069
Less: cash and cash equivalents (B)	(2,096,074)	(1,323,209)
Net debt (C=A+B)	7,728,486	5,759,860
Total liabilities (D)	13,688,372	11,799,396
Total equity (E)	20,405,212	21,073,428
Total capital (F=C+E)	28,133,698	26,833,288
Gearing ratio (C/F)	27.5%	21.5%
Debt-to-equity ratio (D/E)	67.1%	56.0%

3.3 Fair Value

(a) Carrying amount and fair value of financial instruments by category as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023		December 31, 2022		
	Carrying amount	Fair value	Carrying amount	Fair value	
Financial assets (current)					
Cash and cash equivalents	2,096,074	1	1,323,209	1	
Trade receivables	3,209,503	1	3,090,096	1	
Other receivables	132,699	1	419,600	1	
Current derivative financial assets (currency swap)	31,693	31,693	-	-	
Current derivative financial assets (acquisition of interests)	44,296	44,296	-	-	
Financial assets (non-current)					
Deposits held by financial institutions	206,119	1	206,119	1	
Other receivables (excluding deposits held by financial institutions) Other non-current financial assets	97,385	1	274,509	1	
(carried at fair value)					
Marketable financial assets (excluding derivative instruments)	398,539	398,539	369,108	369,108	
Non-marketable financial assets ³	207,508	207,508	193,749	193,749	
Non-current derivative financial assets (currency swap)	142,038	142,038	134,000	134,000	
Non-current derivative financial assets (acquisition of interests)	-	-	46,555	46,555	
Financial liabilities (current)					
Trade and other payables Current borrowings	2,559,055	1	3,088,622	1	
(excluding lease liabilities/ exchangeable bond)	1,277,656	1	589,919	1	
Current borrowings (exchangeable bond)	1,998,423	2,220,842	-	-	
Current lease liabilities	16,555	2	35,267	2	
Current derivative financial liabilities (currency forward)	14,308	14,308	3,348	3,348	
Current derivative financial liabilities (right of exchange/option)	501,951	501,951	-	-	
Other current financial liabilities (excluding derivative liabilities)	183	1	136	1	
Financial liabilities (non-current)					
Non-current borrowings (excluding lease liabilities)	6,474,153	5,431,391	6,388,283	5,694,963	
Non-current lease liabilities	57,773	2	69,600	2	
Non-current derivative financial liabilities (currency forward)	-	-	4,364	4,364	
Non-current derivative financial liabilities (currency swap)	11,244	11,244	20,437	20,437	
Non-current derivative financial liabilities (acquisition of interests)	19,881	19,881	7,777	7,777	

(In millions of Korean won)	December 31, 2023		December 31, 2022	
	Carrying amount	Fair value	Carrying amount	Fair value
Other non-current payables	8,135	1	6,297	1

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.

(b) For measurement and disclosure purposes, fair value was determined based on the method described below.

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	December 31, 2023	December 31, 2022	Remark
Non-current borrowings (excluding lease liabilities/exchangeable bond)	3.64% - 4.44%	4.94% – 5.33%	Yield of won debenture with credit rating (AA+)
Current borrowings (exchangeable bond)	4.55% / 4.47%	-	Yield of foreign currency debenture equal to the maturity of the evaluation target

(c) 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, i.e., prices; or indirectly, i.e., derived from prices) for the asset or liability (Level 2).
- Unobservable inputs for the asset or liability (Level 3).

Fair value hierarchy classifications of the financial instruments that are measured at fair value or its fair value is disclosed as of December 31, 2023 and 2022, are as follows:

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

³ Acquisition costs of these financial assets approximate their fair values.

(In millions of Korean won)	December 31, 2023				
	Level 1	Level 2	Level 3	Total	
Financial assets/liabilities measure	d at fair value				
Other non-current financial assets (marketable financial assets)	398,539	-	-	398,539	
Other non-current financial assets (non-marketable financial assets)	-	-	207,508	207,508	
Current derivative financial assets (currency swap)	-	31,693	-	31,693	
Current derivative financial assets (acquisition of interests)	-	-	44,296	44,296	
Non-current derivative financial assets (currency swap)	-	142,038	-	142,038	
Current derivative financial liabilities (currency forward)	-	14,308	-	14,308	
Current financial liabilities (right of exchange/option)	-	-	501,951	501,951	
Non-current derivative financial liabilities (currency swap)	-	11,244	-	11,244	
Non-current derivative financial liabilities (acquisition of interests)	-	-	19,881	19,881	
(In millions of Korean won)		December	31, 2022		
,	Level 1	Level 2	Level 3	Total	
Financial assets/liabilities measure	d at fair value				
Other non-current financial assets (marketable financial assets)	369,108	-	-	369,108	
Other non-current financial assets (non-marketable financial assets)	-	-	193,749	193,749	
Non-current derivative financial assets (currency swap)	-	134,000	-	134,000	
Non-current derivative financial assets (acquisition of interests)	-	-	46,555	46,555	
Current derivative financial liabilities (currency forward)	-	3,348	-	3,348	
Non-current derivative financial liabilities (currency forward)	-	4,364	-	4,364	
Non-current derivative financial liabilities (currency swap)	-	20,437	-	20,437	
Non-current derivative financial liabilities (acquisition of interests)	-	-	7,777	7,777	

(d) 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 of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)			Decembe	r 31, 2023	
,	Fair value	Level	Valuation Technique	Inputs	Coverage of Level 3 inputs
Other non-current financial assets (non-marketable financial assets)	14,426	3	Binominal option-pricing model	Volatility	12.34%
manda acces,	15,448 133,655		Cash flow discount model Adjusted net asset method	Discount rate	13.96%
Current derivative	44,296	3	Monte carlo simulation	Stock volatility of underlying assets	32.78%
financial assets (acquisition of interests)				Stock price correlation coefficient	37.38%
interests)				Volatility of financial indicators	42.17%
Non-current derivative	19,881	3	Monte carlo simulation	Stock volatility of underlying assets	32.78%
financial liabilities (acquisition of				Stock price correlation coefficient	42.98%
interests)				Volatility of financial indicators	21.82%
Current derivative	501,951	3	Binominal option-pricing	Stock price of underlying assets	427,500 won
financial liabilities (right of exchange/ option)			model	Risk-free rate	3.17% / 3.19%
				Risk rate	4.55% / 4.47%
				Volatility	45.38%

(In millions of Korean won) **December 31, 2022 Valuation** Coverage of Fair value Level Technique Inputs Level 3 inputs Other non-current 14,437 3 Binominal Volatility 25.92% financial assets option-pricing (non-marketable model financial assets)) Cash flow 46,682 Discount rate 13.53% discount model Adjusted net 56,789 asset method Non-current 46,555 3 Monte carlo Stock volatility of 40.54% underlying assets derivative simulation Stock price correlation financial assets 35.81% coefficient (acquisition of interests) Volatility of financial 44.11% indicators Non-current Stock volatility of 7,777 3 Monte carlo 40.54% underlying assets derivative simulation Stock price correlation financial assets 57.86% (acquisition of coefficient Volatility of financial interests) 21.90% indicators

(e) Changes in Level 3 of the Fair Value Hierarchy for the Recurring Fair Value Measurements

	December	31, 2023	December 31, 2022		
(In millions of Korean won)	Financial assets measured at fair value	Financial liabilities measured at fair value	Financial assets measured at fair value	Financial liabilities measured at fair value	
Beginning balance	240,304	7,777	184,125	-	
Transfer into (from) Level 3	4,971	604,407	51,183	8,545	
Gains (losses) recognized in profit for the year	4,195	(90,352)	9,555	(768)	
Gains recognized in other comprehensive income	2,334		(4,559)		
Ending balance	251,804	521,832	240,304	7,777	

4. CRITICAL ACCOUNTING ESTIMATES AND ASSUMPTIONS:

The preparation of financial statements requires the Company to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Company'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.

(a) Impairment test of goodwill

The Company tests whether goodwill has suffered any impairment on an annual basis. The recoverable amount of a cash-generating unit (CGU) is determined based on value in use or fair value, less cost of disposal calculations (see Note 12).

(b) Income taxes

The Company recorded, based on its best estimate, current taxes and deferred taxes that the Company will be liable in the future for the operating results as at the financial year-end. However, the final tax outcome in the future may be different from the amounts that were initially recorded. Such differences will impact the current tax and deferred tax assets and liabilities in the period in which such determination is made.

(c) Provisions

The Company recognizes provisions for product warranties and others, as explained in Note 15. These provisions are estimated based on the past experience.

(d) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Company uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period (see Note 3.3).

(e) Impairment of financial assets

The provision for impairment for financial assets is based on assumptions about risk of default and expected loss rates. The Company uses judgement in making these assumptions and selecting the inputs to the impairment calculation based on the Company's past experience, existing market conditions as well as forward-looking estimates at the end of each reporting period (see Note 3.1 (b)).

(f) Net defined benefit liabilities

The present value of net defined benefit liabilities depends on a number of factors that are determined on an actuarial basis using a number of assumptions, including the discount rate (see Note 16).

(g) Leases

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

The lease term is reassessed if an option is actually exercised (or not exercised) or the Company becomes obliged to exercise (or not exercise) it. The assessment of reasonable certainty is only revised if a significant event or a significant change in circumstances occurs, which affects this assessment, and that is within the control of the lessee.

(h) Valuation of inventory

Inventories are stated at the lower of cost and net realizable value, which is determined on the estimated selling price and the estimated costs necessary to make the sale. The assessment of slow-moving inventories is made of net realizable value estimated with the market circumstances and the historical experience.

(i) Impairment assessment of CGUs

To assess the recoverable amount for CGUs for impairment of property, plant and equipment and intangible assets, it is determined based on the higher amount between value in use and the net fair value, less costs of disposal.

(j) Impairment assessment of investments in subsidiaries and associates

The Company determines indications of impairment annually for investments in subsidiaries and associates. Impairment assessment is performed when there is an indication that an asset may be impaired. Impairment assessment is made by measuring the recoverable amount (value in use or net fair value), and estimation of the recoverable amount is made by using the valuation techniques.

5. FINANCIAL INSTRUMENTS BY CATEGORY:

(a) Categorizations of financial instruments as of December 31, 2023 and 2022, are as follows:

(In millions of **December 31, 2023** Korean won) **Financial Financial** assets at assets at fair **Financial** fair value value through through other Other assets at profit or amortize comprehensive financial **Financial assets** d cost loss income assets1 **Total** Cash and cash 2,096,074 2,096,074 equivalents Trade receivables 3,134,615 74,888 3,209,503 Other receivables 131,827 872 132,699 Other non-current 303,504 303,504 receivables Other current financial 75,989 75,989 assets Other non-current 216,023 390,024 142,038 748,085 financial assets **Total** 5,666,020 216,023 465,784 218,027 6,565,854

(In millions of Korean won)	Dec	cember 31, 2023	
Financial liabilities	Financial liabilities at amortized cost	Other financial liabilities ²	Total
Trade payables	1,312,945	-	1,312,945
Other payables	1,246,110	-	1,246,110
Borrowings (current)	3,276,079	16,555	3,292,634
Other current financial liabilities	-	516,442	516,442
Other non-current financial liabilities	-	31,126	31,126
Other non-current payables	8,135	-	8,135
Borrowings (non-current)	6,474,153	57,773	6,531,926
Total	12,317,422	621,896	12,939,318

(In millions of Korean won)	December 31, 2022					
Financial assets	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	
Cash and cash equivalents	1,323,209	-	-	-	1,323,209	
Trade receivables	3,000,445	-	89,651	-	3,090,096	
Other receivables	418,169	-	1,431	-	419,600	
Other non-current receivables	480,628	_	-	_	480,628	
Other non-current financial						
assets		161,572	401,285	180,555	743,412	
Total	5,222,451	161,572	492,367	180,555	6,056,945	

(In millions of Korean won)	December 31, 2022		
Financial liabilities	Financial liabilities at amortized cost	Other financial liabilities ²	Total
Trade payables	1,288,959	-	1,288,959
Other payables	1,799,663	-	1,799,663
Borrowings (current)	589,919	35,267	625,186
Other current financial liabilities	-	3,484	3,484
Other non-current financial liabilities	-	32,578	32,578
Other non-current payables	6,297	-	6,297
Borrowings (non-current)	6,388,283	69,600	6,457,883
Total	10,073,121	140,929	10,214,050

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.

(b) Net gains or losses on each category of financial instruments for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Dividend income		
Financial assets at fair value through other comprehensive income	19,943	20
Financial assets at fair value through profit or loss	289	-
(Reversal of) impairment losses		
Financial assets at amortized cost	(425)	(511)
Interest income		
Financial assets at amortized cost	73,843	59,929
Interest expense		
Financial liabilities at amortized cost	(259,867)	(146,667)
Other financial liabilities	(1,664)	(2,062)
Financial assets at amortized cost ¹	(23,757)	(3,205)
Gain (loss) on valuation/disposal		
Financial assets at fair value through profit or loss	18,652	9,555
Financial assets at fair value through other comprehensive income	(122,498)	(129,165)
Derivative instruments	143,332	36,465
Exchange differences		
Financial assets at amortized cost	169,751	189,392
Financial liabilities at amortized cost	(115,841)	(163,504)
Other financial liabilities	999	(17,000)

¹ Fees paid to financial institutions for factoring

6. CASH AND CASH EQUIVALENTS:

Details of cash and cash equivalents as of December 31, 2023 and 2022, are as follows:

Darik deposite and oden on manu	, 2022
Cash equivalents 1 989 768 1 196 3	26,967
	96,242
Total 2,096,074 1,323,2	23,209

7. TRADE AND OTHER RECEIVABLES:

Total

(a) Trade and other receivables and its provisions for impairment as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)		December 31, 2023	
	Gross amount	Provision for impairment	Carrying amount
Trade receivables	3,211,049	(1,546)	3,209,503
Other current receivables	133,327	(628)	132,699
Other non-current receivables	303,504	-	303,504
Total	3,647,880	(2,174)	3,645,706
(In millions of Korean won)		December 31, 2022	
	Gross amount	Provision for impairment	Carrying amount
Trade receivables	3,092,067	(1,971)	3,090,096
Other current receivables	420,228	(628)	419,600
Other non-current receivables	480,628		480,628

3,992,923

(2,599)

3,990,324

(b) Details of other receivables as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Current		
Non-trade receivables	113,564	207,333
Accrued income	4,477	61,487
Loans	-	133,143
Guarantee deposits provided	14,658	17,637
	132,699	419,600
Non-current		
Non-trade receivables	30,199	28,304
Deposits held by financial institutions ¹	206,119	206,119
Loans	37,315	218,610
Guarantee deposits provided	29,871	27,595
	303,504	480,628
Total	436,203	900,228

¹ As of December 31, 2023, ₩206,100 million (2022: ₩206,100 million) is restricted from being withdrawn in relation to large-, small- and medium-sized companies cooperation agreement and others. In addition, ₩19 million is restricted from withdrawal in connection with maintaining checking accounts (2022: ₩19 million).

(c) The aging analysis of trade and other receivables as of December 31, 2023 and 2022, is as follows:

(In millions of Korean won)	December 31, 2023		December	31, 2022
	Trade receivables	Other receivables	Trade receivables	Other receivables
Receivables not past due	3,157,050	436,203	3,018,815	900,228
Past due, but not impaired	52,676	-	72,353	-
Up to 3 months	51,947	-	72,105	-
Between 3-6 months	8	-	229	-
More than 6 months	721	-	19	-
Impaired receivables	1,323	628	899	628
	3,211,049	436,831	3,092,067	900,856

(d) Movements on the provision for impairment of trade and other receivables for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023					
,	Trade rece	Trade receivables		Other receivables		_
		Non-			Non-	_
	Current	current		Current	current	
Beginning balance	1,971		_	628		_
Provisions for impairment/Reversal of	(425)			-		
impairment Write-off	_		-	_		-
Ending balance	1,546		<u> </u>	628		<u> </u>

(In millions of Korean won)	December 31, 2022			
- -	Trade rece	ivables	Other rece	eivables
	Current	Non- current	Current	Non- current
Beginning balance	2,168	_	2,111	-
Provisions for impairment	(180)	-	(331)	-
Write-off	(17)	-	(1,152)	-
Ending balance	1,971	<u>-</u>	628	-

(e) As of December 31, 2023 and 2022, the carrying amounts of trade and other receivables are approximation of their fair values.

8. OTHER FINANCIAL ASSETS AND LIABILITIES:

(a) Details of other financial assets and liabilities as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Other financial assets		
Financial assets at fair value through profit or loss (derivative instruments) (current)	75,989	-
Financial assets at fair value through other comprehensive income (excluding derivative instruments) (non-current)	390,024	401,285
Financial assets at fair value through profit or loss (excluding derivative instruments) (non-current)	216,023	161,572
Financial assets at fair value through profit or loss (derivative instruments) (non-current)	142,038	180,555
	824,074	743,412
Other financial liabilities		
Financial guarantee contracts (current)	183	136
Financial liabilities at fair value through profit or loss (derivative instruments) (current) Financial liabilities at fair value through profit or loss (derivative instruments) (non-current)	516,259	3,348
	31,126	32,578
<u>.</u>	547,568	36,062

(b) Changes in equity and debt instruments included in other financial assets for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Beginning balance	562,857	191,690
Acquisitions/Transfer	151,880	520,938
Disposals	(3,852)	(30,161)
Loss on valuation (before income tax effects) through other		
comprehensive income	(122,498)	(123,347)
Gain on valuation through profit or loss	17,660	3,737
Ending balance	606,047	562,857

(c) No impairment losses on other financial assets were recognized for the years ended December 31, 2023 and 2022.

9. **INVENTORIES**:

(a) Details of inventories as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)			
-	Gross amount	Valuation allowance	Carrying amount
Merchandise Finished/Semifinished	37,239	(206)	37,033
products	1,538,852	(95,772)	1,443,080
Work in process	18,443	-	18,443
Raw materials	833,237	(20,975)	812,262
Supplies	186,772	-	186,772
Materials in transit	396,345	<u>-</u> _	396,345
Total _	3,010,888	(116,953)	2,893,935

(In millions of Korean won)		December 31, 2022	
	Gross amount	Valuation allowance	Carrying amount
Merchandise Finished/Semifinished	21,617	(208)	21,409
products	2,060,667	(168,456)	1,892,211
Work in process	32,439	-	32,439
Raw materials	900,669	(17,252)	883,417
Supplies	154,209	-	154,209
Materials in transit	391,186	<u> </u>	391,186
Total	3,560,787	(185,916)	3,374,871

⁽b) During the year, the cost of inventories recognized as expense and included in 'cost of sales' amounted to ₩12,838,987 million (2022: ₩14,027,408 million).

10. INVESTMENTS IN SUBSIDIARIES, ASSOCIATES AND JOINTS VENTURES:

(a) Changes in investments in subsidiaries, associates and joint ventures for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Beginning balance	9,130,719	8,958,283
Additions/Transfer	853,556	534,870
Impairment ¹	-	(55,314)
Reclassified as held for sale ²	(11,712)	(3,080)
Others ³	(8,400)	(304,040)
Ending balance	9,964,163	9,130,719

¹ The Company reviews whether there are any events or changes in circumstances indicate that assets might be impaired at the end of each reporting period. If the indications are present, the recoverable amount of that asset is estimated by cashflow discount method or other method. If the recoverable amount is less than its carrying amount, the carrying amount of the asset shall be reduced and the impairment loss shall me recognized.

During 2022, the major assumptions used to calculate the amount of impairment recognized and the value in use measured using the discounted cash flow method are as follows:

(In millions of Korean won and in percentage)	2022.12.31		
	LG Chem Hangzhou Advanced Materials Co., Ltd.		
Impaired amount	55,314		
Pretax discount rate	12.56%		
Growth rate for subsequent years after five years	0.00%		

² The Company decided to dispose of shares VINA Plasticizers Chemical Co., Ltd., and reclassified it as assets held for sale in the separate statements of financial position as of December 31, 2022. The disposal has been completed during 2023. In addition, the Company decided to dispose of shares of LG Chem Hangzhou Advanced Materials Co., Ltd., and reclassified it as assets held for sale in the separate statements of financial position as of December 31, 2023.

³ During the year ended December 31, 2022, the Company decreased the capital of LG CHEM FUND I LLC, LG Chem (Taiwan), Ltd., LG Chem (China) Investment Co., Ltd. with consideration of ₩8,245 million, ₩17 million and ₩240,480 million, respectively, and the Company sold 137,988,929 shares of Shanjin Optoelectronics (Taiwan) Co., Ltd., a subsidiary.

(b) Details of investments in subsidiaries, associates and joint ventures as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won and in percentage)	Location	Percent	•	Carrying amount		
(III IIIIIII O II Nordan won and in percentage)	Location	2023	2022	2023	2022	
Outraidiates						
Subsidiaries	Oh:	75	7.5	425.000	425.000	
Ningbo LG Yongxing Chemical Co.,Ltd.	China	75	75	135,908	135,908	
LG Energy Solution, Ltd.	Korea	82	82	6,618,295	6,618,295	
LG Chemical India Pvt. Ltd. LG Chemical (Guangzhou) Engineering Plastics	India	100	100	85,718	85,718	
Co.,Ltd.	China	100	100	21,911	21,911	
LG Chem (Taiwan), Ltd.	Taiwan	100	100	1	1	
Tianjin LG Bohai Chemical Co., Ltd.	China	68	68	77,871	77,871	
Tianjin LG BOTIAN Chemical Co., Ltd.	China	58	58	10,423	10,423	
LG Chem (China) Investment Co., Ltd.	China	100	100	23,753	23,753	
LG Chem (Tianjin) Engineering Plastics Co., Ltd.	China	90	90	14,733	14,733	
LG Chem Europe GmbH	Germany	100	100	20,619	20,619	
LG Chem Poland Sp. Z o.o.	Poland	100	100	49,142	49,142	
LGC Petrochemical India Private Ltd.	India	100	100	299	299	
HAENGBOKNURI CO., LTD.	Korea	100	100	600	600	
LG CHEM TK Kimya SANAYI VE TIC. Ltd. STI.	Turkey	100	100	174	174	
LG Chem Japan Co., Ltd.	Japan	100	100	1,406	1,406	
LG Chem (Chongqing) Engineering Plastics Co.,	oapan	100	100	1,100	1,100	
Ltd.	China	100	100	37,410	37,410	
LG Chem(HUIZHOU) Petrochemical Co., Ltd.	China	70	70	99,001	99,001	
LG Chem Hai Phong Veitnam Co.,Ltd.	Vietnam	100	100	3,079	3,079	
LG Chem Mexico S.A. de C.V.	Mexico	100	100	394	394	
LG Chem Hai Phong Engineering Plastics Co., Ltd.	Vietnam	100	100	15,344	15,344	
LG Chem (Guangzhou) Information & Electronics						
Materials Co., Ltd.	China	100	100	184,491	184,491	
FarmHannong Co., Ltd.	Korea	100	100	579,581	579,581	
LG Chem Life Sciences India Pvt. Ltd.	India	100	100	2,170	2,170	
LG Jiansheng Life Sciences (Beijing) Co., Ltd.	China	60	60	3,490	3,490	
LG Chem Life Sciences (Thailand) Ltd.	Thailand	100	100	431	431	
LG Chem Life Science Innovation Center, Inc. ¹	USA	100	100	725,478	18,295	
LG CHEM FUND I LLC ²	USA	100	100	72,558	64,303	
LEYOU NEW ENERGY MATERIALS(WUXI) CO.,	01:	-4	5 4	100 110	100 110	
LTD.	China	51	51	169,113	169,113	
LG Chem America, Inc.	USA	100	100	32,283	32,283	
LG NanoH2O, Inc.	USA	100	100	38,414	38,414	
Uniseal, Inc.	USA	100	100	30,186	30,186	
LG Chem Asia Pte. Ltd.	Singapore	100	100	821	821	
LG PETRONAS Chemicals Malaysia SDN.BHD.	Malaysia	51	51	36,867	36,867	
LG Chem Hangzhou Advanced Materials Co., Ltd. ³	China	70	70	-	11,712	
LG Chem Ohio Petrochemical, Inc.	USA	100	100	22,516	22,516	
LG-HY BCM Co., Ltd. ⁴	Korea	51	100	133,761	53,504	

LG Chem Vietnam Co., LTD.	Vietnam	100	100	359	359
LG Chem Malaysia SDN.BHD.	Malaysia	100	100	150	150
LG Chem BRASIL INTERMEDICAO DE					
NEGOCIOS DO SETOR QUIMICO LTDA.	Brazil	100	100	579	579
PT LG CHEM INDONESIA ⁵	Indonesia	100	-	885	-
TW Biomassenergy Co., Ltd. ⁶	Korea	60	-	26,400	
				9,276,614	8,465,346
Associates					
TECWIN Co.,Ltd.	Korea	20	20	2,861	2,861
LG Chem Life Sciences Poland Ltd.	Poland	100	100	17	17
HUAJIN NEW ENERGY		40	40	00.500	00 500
MATERIALS(QUZHOU)CO., LTD.	China	49	49	89,523	89,523
TL Chemical CO., Ltd.	Korea	40	40	48,544	48,544
KOREA PRECURSOR CO., LTD. 7	Korea	49	49	50,960	20,384
				191,905	161,329
Joint ventures					
SEETEC Co., Ltd.	Korea	50	50	58,416	58,416
LG Toray Hungary Battery Separator Kft.	Hungary	50	50	437,228	445,628
				495,644	504,044
Total				687,549	665,373

¹ During the year ended December 31, 2023, the Company invested ₩707,183 million for a 100% share in Aveo Pharmaceuticals, Inc.

Details of investments in subsidiaries that have a quoted market price as of December 31, 2023, are as follows:

(In millions of Korean won)		Decen	nber 31, 202	3	
	Classification	Number of shares	Market price per share (in won)	Market value	Book amount
LG Energy Solution, Ltd.	Subsidiary	191,500,000	427,500	81,866,250	6,618,295

² During the year ended December 31, 2023, the Company additionally acquired shares of LG CHEM FUND I LLC for ₩8,255 million.

³ During the year ended December 31, 2023, the Company reclassified the shares of LG Chem Hangzhou Advanced Materials Co., Ltd. amounting to ₩11,712 million as assets held for sale.

⁴ During the year ended December 31, 2023, the Company additionally acquired shares of LG BCM for ₩80,257 million. Meanwhile, the percentage of ownership has been reduced due to paid-in capital increase with allotment to the third party, and the company's name was changed to LG-HY BCM Co., Ltd.

⁵ During the year ended December 31, 2023, the Company invested ₩885 million for a 100% share in PT LG CHEM INDONESIA.

⁶ During the year ended December 31, 2023, the Company invested ₩26,400 million for a 60% share in TW Biomassenergy Co., Ltd.

⁷ During the year ended December 31, 2023, the Company additionally acquired shares of KOREA PRECURSOR CO., LTD. for ₩30,576 million.

11. PROPERTY, PLANT AND EQUIPMENT:

(a) Changes in property, plant and equipment for the years ended December 31, 2023 and 2022, are as follows:

(In millions of						Decemb	oer 31, 2023					
Korean won)									Right-of-	Construction	Machinery	
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	use assets	in progress	in transit	Total
Beginning balance	1,156,716	2,362,664	1,027,155	5,301,263	4,008	298,674	141,970	273,560	99,380	1,170,281	102,080	11,937,751
Cost	1,193,000	2,913,356	1,688,115	13,727,787	24,374	828,556	352,358	675,183	224,307	1,245,557	102,080	22,974,673
Accumulated												
depreciation	-	(526,846)	(640,932)	(8,310,893)	(20,283)	(524,241)	(208,957)	(395,542)	(124,927)	-	-	(10,752,621)
Accumulated												
impairment	(36,284)	(23,846)	(20,028)	(115,631)	(83)	(5,641)	(1,431)	(6,081)	-	(75,276)	-	(284,301)
Acquisitions/Transf												
er	1,015	265,062	95,077	716,220	1,235	72,357	53,774	155,948	11,411	1,773,623	121,338	3,267,060
Disposals/Transfer	(3,870)	(38,586)	(1,816)	(27,229)	(51)	(6,147)	(2,809)	-	(4,177)	(1,288,960)	(84,864)	(1,458,509)
Depreciation	-	(65,991)	(59,396)	(780,034)	(1,164)	(88,431)	(44,053)	(149,994)	(37,051)	-	-	(1,226,114)
Impairment/Revers												
al of impairment	-	(4,015)	(1,746)	(25,061)	(1)	(169)	(155)	-	-	95	-	(31,052)
Transfer to assets												
held for sale		(32,388)		(42,544)	(75)	(10,096)	(1,354)					(86,457)
Ending balance	1,153,861	2,486,746	1,059,274	5,142,615	3,952	266,188	147,373	279,514	69,563	1,655,039	138,554	12,402,679
Cost	1,190,145	3,105,110	1,778,644	13,885,611	23,203	826,350	374,075	514,117	221,712	1,721,126	138,554	23,778,647
Accumulated												
depreciation	-	(591,631)	(697,963)	(8,620,261)	(19,168)	(555,589)	(225,242)	(228,522)	(152,149)	-	-	(11,090,525)
Accumulated												
impairment	(36,284)	(26,733)	(21,407)	(122,735)	(83)	(4,573)	(1,460)	(6,081)	-	(66,087)	-	(285,443)

(In millions of	December 31, 2022											
Korean won)									Right-of-	Construction	Machinery	
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	use assets	in progress	in transit	Total
Beginning balance	1,102,586	2,217,123	1,023,738	5,356,071	2,715	240,994	118,107	185,958	115,771	762,914	78,177	11,204,154
Cost	1,138,870	2,708,304	1,630,529	13,065,640	22,186	723,343	308,724	490,049	205,524	839,544	78,177	21,210,890
Accumulated												
depreciation	-	(468,062)	(587,531)	(7,612,307)	(19,400)	(477,714)	(189,131)	(298,173)	(89,753)	-	-	(9,742,071)
Accumulated												
impairment	(36,284)	(23,119)	(19,260)	(97,262)	(71)	(4,635)	(1,486)	(5,918)	-	(76,630)	-	(264,665)
Acquisitions/Transf												
er	54,221	217,872	62,860	775,509	2,491	140,439	62,076	208,962	83,895	2,107,994	94,170	3,810,489
Disposals/Transfer	(91)	(9,126)	(1,349)	(6,074)	(6)	(2,256)	(442)	-	(62,184)	(1,700,631)	(70,267)	(1,852,426)
Depreciation	-	(61,986)	(57,199)	(800,721)	(1,181)	(78,736)	(37,707)	(121,197)	(38,102)	-	-	(1,196,829)
Impairment												
/Reversal of												
impairment		(1,219)	(895)	(23,522)	(11)	(1,767)	(64)	(163)		4		(27,637)
Ending balance	1,156,716	2,362,664	1,027,155	5,301,263	4,008	298,674	141,970	273,560	99,380	1,170,281	102,080	11,937,751
Cost	1,193,000	2,913,356	1,688,115	13,727,787	24,373	828,555	352,358	675,183	224,307	1,245,557	102,080	22,974,671
Accumulated												
depreciation	-	(526,846)	(640,932)	(8,310,893)	(20,283)	(524,240)	(208,957)	(395,542)	(124,927)	-	-	(10,752,620)
Accumulated												
impairment	(36,284)	(23,846)	(20,028)	(115,631)	(82)	(5,641)	(1,431)	(6,081)	-	(75,276)	-	(284,300)

- (b) During the year, the Company capitalized ₩28,994 million of borrowing costs (2022: ₩11,360 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 2.83% (2022: 2.18%).
- (c) Line items, including depreciation, in the separate statements of profit or loss for the years ended December 31, 2023 and 2022, are as follows:

2023	2022
1,060,540	1,048,116
142,061	122,718
23,513	25,995
1,226,114	1,196,829
	1,060,540 142,061 23,513

(d) Lease

(i) Amounts recognized in the separate statements of financial position

The separate statements of financial position shows the following amounts relating to leases:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Right-of-use assets ¹		
Real estate	60,402	87,059
Machinery	1,376	3,375
Vehicles	7,786	8,946
	69,564	99,380

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

Additions to the right-of-use assets during the 2023 financial year were $\mbox{$$W$}11,411$ million (2022: $\mbox{$$W$}83,895$ million).

(In millions of Korean won)	December 31, 2023	December 31, 2022
Lease liabilities ¹		
Current	16,555	35,267
Non-current	57,773	69,600
	74,328	104,867

¹ Included in the line item 'borrowings' in the separate statements of financial position.

(ii) Amounts recognized in the statement of profit or loss

The statement of profit or loss shows the following amounts relating to leases:

(In millions of Korean won)	2023	2022
Depreciation of right-of-use assets		
Real estate	29,486	29,062
Machinery	1,608	2,829
Vehicles and others	5,957	6,211
_	37,051	38,102
Interest expense relating to lease liabilities (included in finance cost)	2,226	2,438
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	4,527	5,633
Expense relating to leases of low-value assets that are not short-term leases (included in cost of goods sold		
and administrative expenses)	9,957	8,036

The total cash outflow for leases during year ended December 31, 2023, was $\,$ \$\psi\$53,674 million. (2022: $\,$ \$\psi\$52,999 million)

12. <u>INTANGIBLE ASSETS:</u>

(a) Changes in intangible assets for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023									
	Development costs	Software	Industrial property rights	Goodwill	Memberships	Others	Total			
Beginning balance Separate	43,861	435,768	413,453	590,486	18,365	185,055	1,686,988			
acquisitions/Transfer	-	151,778	61,883	-	122	20,376	234,159			
Disposals/Transfer	-	(5,009)	(39,472)	-	(108)	(6,594)	(51,183)			
Amortization	(6,091)	(132,783)	(39,098)	-	-	(19,876)	(197,848)			
Impairment Transfer to assets held	-	(163)	(3,411)	-	-	-	(3,574)			
for sale (Note 34)	<u> </u>	(110)	(19,594)	-		(17,281)	(36,985)			
Ending balance	37,770	449,481	373,761	590,486	18,379	161,680	1,631,557			

(In millions of Korean won)	December 31, 2022									
	Development costs	Software	Industrial property rights	Goodwill	Memberships	Others	Total			
Beginning balance Separate	49,952	345,466	383,993	590,486	23,264	203,743	1,596,904			
acquisitions/Transfer	-	221,886	67,811	-	4,509	2,120	296,326			
Disposals/Transfer	-	(22,594)	(1,748)	-	(9,408)	(395)	(34,145)			
Amortization	(6,091)	(108,950)	(36,603)	-	-	(20,413)	(172,057)			
Impairment		(40)		-			(40)			
Ending balance	43,861	435,768	413,453	590,486	18,365	185,055	1,686,988			

(b) Line items, including amortization of intangible assets, for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Cost of sales	25,609	21,575
Selling and administrative expenses	158,499	137,813
Discontinued operations	13,739	12,669
Total	197,847	172,057

- (c) The Company recognized total research and development costs of \$916,624 million (2022: \$866,510 million) as expenses.
- (d) Goodwill is allocated to the Company's CGUs identified. The carrying amounts of goodwill allocation by CGUs as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)			2023					
	Acquisition of							
	Merger of LG	Acquisition	LG Life	Acquisition				
	Petrochemical	of SAP	Sciences,	of CEM				
CGUs	Co., Ltd. ¹	business	Ltd.	business	Total			
Petrochemicals								
ABS	2,131	-	-	-	2,131			
PO	472	_	-	-	472			
PVC	1,234	-	-	-	1,234			
Acrylic	819	-	-	-	819			
SAP ²	486	25,222	-	-	25,708			
Plasticizer	87	-	-	-	87			
BPA	280	-	-	-	280			
Others	2,684	-	-	-	2,684			
Advanced Materials								
Separator	-	-	-	160,577	160,577			
VCF	-	-	-	5,183	5,183			
Life Sciences								
Life sciences			391,311	<u> </u>	391,311			
Total	8,193	25,222	391,311	165,760	590,486			

(In millions of Korean won)			2022		
			Acquisition of		
	Merger of LG Petrochemical	Acquisition of SAP	LG Life Sciences,	Acquisition of CEM	
CGUs	Co., Ltd.	business	Ltd.	business	Total
Petrochemicals					
ABS	2,939	-	-	-	2,939
PO	1,092	-	-	-	1,092
PVC	1,271	-	-	-	1,271
Acrylic	595	25,222	-	-	25,817
Plasticizer	89	-	-	-	89
BPA	495	-	-	-	495
Others	1,712	-	-	-	1,712
Advanced Materials					
Separator ³	-	-	-	160,577	160,577
VCF ³	-	-	-	5,183	5,183
Life Sciences					
Life sciences	-	-	391,311	-	391,311
Total	8,193	25,222	391,311	165,760	590,486

¹ During the year ended December 31, goodwill related to the Merger of LG Petrochemical Co., Ltd. was redistributed due to organizational reorganization.

The recoverable amount of the CGU was determined based on the fair value, less the value in use or cost of disposal (net fair value). The value in use was calculated using estimated pretax cash flows over a period of five years based on the business plan approved by the management and was determined based on past performance and market growth.

Net fair value was evaluated by an independent assessor with certified professional qualifications, reflecting public notification of the value of land and recently available similar transaction price etc., and this is classified as Fair Value Hierarchy Level 3.

Management determined the estimated pretax cash flow based on past performance and its expectations of market development.

During 2023, key assumptions used for calculation of value in use and fair value, less cost of disposal are as follows:

(In millions of Korean won)	2023			
	Pretax discount rate	Growth rate for subsequent years after five years		
Life sciences	10.6%	3.0%		
Separator	12.5%	1.0%		
VCF	19.2%	2.0%		

² During the year ended December 31, goodwill related to the Acquisition of SAP business was separated due to organizational reorganization.

³ During 2022, goodwill related to the acquisition of the CEM business was separated due to organizational reorganization.

(e) 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	9,555	9,841	8,737	8,608	8,608	45,349

Changes in greenhouse gas emission permits during the years ended December 31, 2023 and 2022, are as follows:

(In thousands of	December 31, 2023							
tons and millions	2020		202	2021		2022		.3
of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance /Allocation with nil	0.440		0.555		0.044		0.707	
consideration	8,140	-	9,555	-	9,841	-	8,737	-
Purchase/Sale	(144)	-	(214)	-	(590)	-	(53)	-
Exchange	100	-	(100)	-	-	-	-	-
Issuance of offset emission permits	-	-	-	-	-	-	-	-
Borrowings/Carryf orward between								
years	(24)	-	(401)	-	(752)	-	1,177	-
Surrendered to the								
government	(8,072)	-	(8,840)	-	(8,499)	-	-	-
Ending balance ¹	-	_	-	-		-	9,861	-

(In thousands of			December	31, 2023		
tons and millions	2024		202	5	Tot	al
of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance /Allocation with						
nil consideration	8,608	-	8,608	-	53,489	-
Purchase/Sale	-	-	-	-	(1,001)	-
Exchange	-	-	-	-	-	_
Issuance of offset emission permits	-	-	-	-	-	_
Borrowings/Carryf orward between						
years	-	-	-	-	-	-
Surrendered to						
the government	<u> </u>	<u> </u>	<u> </u>	<u> </u>	(25,411)	_
Ending balance	8,608	-	8,608		27,077	_

2020

(In thousands of tons and millions

of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning								
balance								
/Allocation with								
nil								
consideration	8,140	-	9,555	-	8,787	-	8,787	-
Purchase/Sale	(144)	-	(214)	-	(192)	-	-	-
Exchange	100	-	(100)	-	-	-	-	-
Issuance of offset								
emission permits	-	-	-	-	119	-	-	-
Borrowings/Carr								
yforward								
between years	(24)	-	(401)	-	425	-	-	-
Surrendered to								
the government	(8,072)	<u>-</u> .	(8,840)		<u> </u>			
Ending balance			-		9,139		8,787	
(In thousands of				Dece	mber 31, 2022			
tons and millions		2024		2025			Total	
of Korean won)	Quantity	1	Amount	Quantity	Amo	ount	Quantity	Amoun
				•			Quantity	Amoun
Beginning balance				-			quantity	Amoun
Beginning balance /Allocation with nil				•			quantity	Amoun
•	8	3,704	-		704	-	52,677	Alloui
/Allocation with nil consideration	8	,704 -	- -		704 -	- -		Alloui
/Allocation with nil consideration Purchase/Sale	8	i,704 - -	-		704 - -	- - -	52,677	Amoun
/Allocation with nil consideration Purchase/Sale Exchange	8	3,704 - -	- - -		704 - -	- - -	52,677	Amoun
/Allocation with nil consideration Purchase/Sale Exchange	8	3,704 - - -	- - -		704 - -	- - -	52,677	Amoun
/Allocation with nil consideration Purchase/Sale Exchange Issuance of offset emission permits		3,704 - - -	- - -		704 - -	- - -	52,677 (550)	Alloui
/Allocation with nil consideration Purchase/Sale Exchange Issuance of offset emission permits		3,704 - - -	- - -		704 - - -	- - -	52,677 (550)	Alloui
/Allocation with nil consideration Purchase/Sale Exchange Issuance of offset emission permits Borrowings/Carryford d between years		3,704 - - -	- - - -		704 - - -	- - -	52,677 (550)	Amoun
consideration Purchase/Sale Exchange Issuance of offset emission permits Borrowings/Carryfor		3,704 - - - -	- - - -		704 - - -	- - -	52,677 (550)	Amoun

December 31, 2022

2022

2023

2021

During the years ended December 31, 2023 and 2022, there are no greenhouse gas emission permits held for short-term trading purpose.

13. OTHER CURRENT AND NON-CURRENT ASSETS:

Details of other current and non-current assets as of December 31, 2023 and 2022, consist of:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Current		
Prepayments to suppliers and prepaid		
expense	34,053	31,651
Prepaid value-added tax	87,680	114,537
Others	16,263	81,794
Total	137,996	227,982
Non-current		
Net defined benefit assets (see Note 16) Long-term prepayments and prepaid	338,128	395,407
expenses	4,018	4,426
Total	342,146	399,833

14. **BORROWINGS**:

(a) Borrowings as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Current		
Short-term borrowings	407,783	-
Current portion of debentures	2,868,296	589,919
Current portion of lease liabilities	16,555	35,267
	3,292,634	625,186
Non-current Long-term borrowings Debentures Lease liabilities	1,492,307 4,981,846 57,773 6,531,926	1,368,141 5,020,142 69,600 6,457,883
Total	9,824,560	7,083,069
i otai	3,024,000	1,000,000

(b) Details of borrowings as of December 31, 2023, are as follows:

				Interest rate (%) as				
(In millions of			Latest	of December 31,				
Korean won)	Currency	Bank	maturity date	2023	Decembe	r 31, 2023	Decemb	er 31, 2022
						Non-		
					Current	current	Current	Non-current
Long-term borro	wings							
Bank loans	Korean won	KDB Bank and others	2028.11.01	3.05 and other	150,000	300,000	-	450,000
	Foreign currency	KDB Bank and others	2027.06.15	3M SOFR + 0.79 and other	257,880	1,192,695	-	918,793
Less: discount on	long-term born	owings			(97)	(388)		(652)
Total					407,783	1,492,307	-	1,368,141
Debentures								
Public	Korean	KB Securities	2036.02.19	3.73 and other	870,000	3,170,000	590,000	3,240,000
debentures	won	Co., Ltd. and others						
Private	Korean	KB Securities	2036.05.07	2.39 and other	=	150,000	-	150,000
debentures	won	Co., Ltd. and others						
	Foreign	CITI Securities	2031.07.07	2.38 and other	-	1,676,220	-	1,647,490
	currency	and others						
Exchangeable	Foreign	CITI Securities	2030.07.18	1.60 and other	2,578,800	-	-	-
bond	currency	and others						
Less: discount on	debentures				(580,504)	(14,374)	(81)	(17,348)
Total					2,868,296	4,981,846	589,919	5,020,142

1) The details of newly issued exchangeable bonds (Tranche 1) during the year ended December 31, 2023, are as follows:

Category	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	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. Early redemption: The Parent Company has the Call Option and the bondholder has the Put Option.
Exchange Target	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.

Category	Details
Exchange Price (KRW/share)	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.
Claim Period	August 28, 2023–July 11, 2028
Early Redemption at the Option of the Issuer	 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. When the outstanding principal is less than 10% of the original debt (Clean Up Call) When additional tax burden arises due to revision of related laws, etc.
Early Redemption at the Option of the Bondholders	 Can be exercised on 2025.07.18 (Optional Put Date) 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 When there is a change in control of the Company or the issuer of stocks subject to exchange (Change of Control) When the issuer acquires more than 85% of the Voting Rights of the issued share capital of LG Energy Solution (Free Float)

2) The details of newly issued exchangeable bonds (Tranche 2) during the year ended December 31, 2023, are as follows:

Category	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	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. Early redemption: The Parent Company has the Call Option and the bondholder has the Put Option.		
Exchange Target	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		

Category	Details		
	to the consideration instead of issuing the target shares.		
Exchange Price (KRW/share)	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.		
Claim Period	August 28, 2023–July 11, 2030		
Early Redemption at the Option of the Issuer	 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. When the outstanding principal is less than 10% of the original debt (Clean Up Call) When additional tax burden arises due to revision of related laws, etc. 		
Early Redemption at the Option of the Bondholders	 Can be exercised on 2027.07.18 (Optional Put Date) 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 When there is a change in control of the Company or the issuer of stocks subject to exchange (Change of Control) When the issuer acquires more than 85% of the Voting Rights of the issued share capital of LG Energy Solution (Free Float) 		

3) Details of the exchangeable bonds (Tranche 1) as of the date of issuance and as of December 31, 2023, are as follows.

(In millions of Korean won)	July 18, 2023	December 31, 2023
Issue price	₩ 1,266,100	₩ 1,289,400
Book amount of exchangeable bonds	991,756	1,039,166
Derivative financial liabilities	263,532	246,994

4) Details of the exchangeable bonds (Tranche 2) as of the date of issuance and as of December 31, 2023, are as follows:

(In millions of Korean won)	July 18, 2023	December 31, 2023
Issue price	₩ 1,266,100	₩ 1,289,400
Book amount of exchangeable bonds	914,412	959,257
Derivative financial liabilities	340,876	254,957

Details of finance lease liabilities as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)			December 31, 2023		
Leaser	Annual interest rate (%)	Latest maturity date	Total amount	Current	Non-current
Hyundai Oil Bank and others	2.01 – 2.48	2082.2.28	74,328	16,555	57,773
(In millions of Korean won)		ı	December 31, 2022		
Leaser	Annual interest rate (%)	Latest maturity date	Total amount	Current	Non-current
Hyundai Oil Bank and others	1.98 – 2.35	2082.2.28	104,867	35,267	69,600

15. PROVISIONS:

Changes in the carrying amount of provisions for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won	December 31, 2023			
	Greenhouse			
		gas		
	Warranty ¹	emission ²	Restoration ³	Total
Beginning balance	5,226	-	7,793	13,019
Additions	20,675	-	-	20,675
Used	(23,307)	-	(7,793)	(31,100)
Ending balance	2,594			2,594
Current	2,594			2,594
Non-current	<u> </u>	_ _	<u> </u>	-

(In millions of Korean won	December 31, 2022 Greenhouse			
		gas		
	Warranty ¹	emission ²	Restoration ³	Total
Beginning balance	8,097	-	14,555	22,652
Additions (reversal)	37,100	-	356	37,456
Used	(39,971)	-	(7,118)	(47,089)
Ending balance	5,226		7,793	13,019
Current	5,226		7,793	13,019
Non-current	-			_

¹ Warranty provisions have been accrued based on historical experience for the estimated warranty costs to be incurred due to quality control, exchange, refunds with regard to products.

² Greenhouse gas emission provisions have been accrued for estimated expenditures to be obligated for any excess emission. The estimated emission for the year ended December 31, 2023, amounts to 8,313 thousand tons (2022: 8,561 thousand tons).

³ The Company estimated the costs incurred for the restoration of soil contamination and recorded them as a provision. However, the restoration work was completed during the current year.

16. <u>NET DEFINED BENEFIT ASSETS:</u>

(a) Details of net defined benefit assets recognized in the separate statements of financial position as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Present value of defined benefit obligations ¹	1,019,829	950,316
Fair value of plan assets	(1,357,957)	(1,345,723)
Liability (asset) in the separate statement of financial position	(338,128)	(395,407)

¹ The present value of retirement benefit obligations is net of existing contributions to the National Pension Plan of ₩521 million as of December 31, 2023 (2022: ₩579 million).

(b) The amounts recognized in the separate statements of profit or loss for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Current service cost ¹	107,689	126,494
Net interest cost	(20,956)	(1,292)
Total, included in employee benefit expenses	86,733	125,202

¹ The above amounts excluded ₩1,211 million (2022: ₩1,342 million) of expenses capitalized to construction in progress and development costs.

- (c) Postemployment benefits recognized for defined contribution plan for the year ended December 31, 2023, amounted to ₩13,580 million (2022: ₩8,756 million).
- (d) Postemployment benefits recognized in the separate statements of profit or loss for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Cost of sales	60,651	79,373
Selling and administrative expenses	30,905	43,673
Discontinued operations	8,757	10,912
Total	100,313	133,958

(e) Movements in the present value of defined benefit obligations for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Beginning balance	950,316	1,005,986
Transfer in	1,672	2,484
Transfer out	(6,423)	(4,082)
Current service cost	108,900	127,836
Interest expense	48,890	28,412
Remeasurements: Actuarial loss from change in demographic		
assumptions Actuarial gain from change in financial	466	1,959
assumptions	(33,411)	(177,807)
Actuarial loss from experience adjustments	66,644	45,695
Others	(337)	(316)
Payments from plans	(116,888)	(79,851)
Ending balance	1,019,829	950,316

(f) Movements in the fair value of plan assets for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Beginning balance	1,345,723	1,050,703
Transfer out	(1,231)	(860)
Interest income	69,846	29,704
Remeasurements:		
Return on plan assets	2,045	(8,775)
Contributions:		
Employers	50,000	349,900
Payments from plans	(106,108)	(73,372)
Administrative costs	(2,318)	(1,577)
Ending balance	1,357,957	1,345,723

(g) The actual return on plan assets for the year ended December 31, 2023, was ₩71,891 million (2022: ₩20,929 million).

(h) The significant actuarial assumptions as of December 31, 2023 and 2022, are as follows:

	December 31, 2023	December 31, 2022	
Discount rate	4.6%	5.3%	
Salary growth rate	5.0%	6.0%	

(i) The sensitivity analysis for changes in key actuarial assumptions as of December 31, 2023, is as follows:

(In millions of Korean won)	Increase by 0.5%	Decrease by 0.5%
Discount rate: Increase (decrease) in defined benefit	(400,020)	440.052
obligations Salary growth rate: Increase (decrease) in defined benefit	(100,630)	119,353
obligations	124,069	(105,890)

The decline in rate of return of the gilt, which is the discount rate, is a key factor leading to 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 in the separate statements of financial position.

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

(j) Plan assets as of December 31, 2023 and 2022, consist of:

(In millions of Korean won)	December 31, 2023		December 31, 2022	
	Amount	Composition	Amount	Composition
Insurance contracts with				
guaranteed yield	1,357,957	100%	1,345,723	100%

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

(k) As of December 31, 2023, the weighted-average duration of defined benefit obligation is 11.59 years.

The Company reviews the funding level on an annual basis, and has a policy of eliminating deficit from the fund. Expected contributions to postemployment benefit plans for the year ending December 31, 2024, are ₩144,084 million.

17. OTHER CURRENT AND NON-CURRENT LIABILITIES:

Details of other current and non-current liabilities as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Current		
Advances from customers	24,573	32,590
Withholding	69,198	80,779
Unearned revenues	22,651	21,144
Accrued expenses	115,658	320,328
Total	232,080	454,841
Non-current		
Long-term accrued expenses	46,828	41,606
Long-term unearned revenues	6,873	8,975
Total	53,701	50,581

18. COMMITMENTS AND CONTINGENCIES:

- (a) The Company is jointly liable for liabilities of LG Energy Solution, Ltd. as of December 1, 2020, a newly established company through the split-off from the Parent Company.
- (b) As of December 31, 2023, the Company has been guaranteed from the Seoul Guarantee Insurance Company for the execution of contracts and others.
- (c) As of December 31, 2023, the Company has bank overdraft agreements with several banks for up to ₩20,400 million and has entered into contracts with several financial institutions, and for letters of credit for up to ₩15,000 million and US\$ 278 million, foreign currency purchase agreement for up to US\$ 969 million and for the guaranteed payments in foreign currency for up to US\$ 181 million. The Company also has comprehensive credit line of credit agreements with several financial institutions for up to ₩20,000 million and US\$ 235 million (relating to trade finance and import/export).
- (d) As of December 31, 2023, the Company has B2B("Business-to-Business") purchase arrangements with several financial institutions amounting to ₩356,000 million as well as enterprise general fund arrangement with limit of ₩350,000 million.
- (e) As of December 31, 2023, the Company has reverse factoring agreements, and there is no utilized amount.
- (f) As of December 31, 2023, in relation to General Motors (GM) Bolt EV, the class action against GM Bolt EV, including the Company is still pending. However, the ultimate outcome of the case cannot be determined at the reporting date.
- (g) In addition, as of December 31, 2023, the Company has been named as a plaintiff in 7 legal actions, involving ₩25,781 million in claims. The Company has been named as a defendant in 14 legal actions, with ₩80,624 million in claims. The ultimate outcome of these cases cannot be determined at the reporting date.
- (h) The Company has entered into manufacture and production technical contracts with ExxonMobil and others.
- (i) The Company has entered into a license agreement with LG Corp. to use trademarks on the products that the Company manufactures and sells, and on the services the Company provides in relation to its business.

- (j) As of December 31, 2023, the Company has contracts of US\$10 million in guarantees with financial institutions in regard to payment and other.
- (k) As of December 31, 2023, the Company has guaranteed the repayment of various obligations of its subsidiaries. Details of guarantees provided as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won

and MYR)		_	Amount of borrowing ¹		Guaranteed amount 2		
Guarantee beneficiary	Financial institution	Guarantee period	Currency	2023	2022	2023	2022
FarmHannong Co.,Ltd. LG PETRONAS Chemicals Malaysia	Creditors	2018.3.2 – 2023.3.2	KRW	-	40,000	-	40,000
Sdn. Bhd	RHB	2022.1.11 - 2024.6.30 ³	MYR	220	181	230	230

¹ It is the amount of borrowing as of December 31, 2023 and 2022.

In addition, the Company provides Letters of Comfort in relation to certain borrowings of subsidiaries.

Further, as of December 31, 2023, the Company provided no financial guarantee to its associates in relation to their borrowings.

(I) Capital expenditure arrangement that has not incur at the end of the reporting period are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Property, plant and equipment	953,241	1,505,115

(m) As of December 31, 2023, the Company investment agreements are as follows:

(In millions of Korean won and USD)	Currency	Committed investments	Cumulative investments	Remaining
KBE Fund	KRW	75,000	39,870	35,130
Gross Acceleration Fund	KRW	5,000	4,900	100
LGC Fund	USD	105	68	37
BNZ (Beyond Net Zero) Fund	USD	75	25	50

² It is a total amount guaranteed.

³The debt guarantee period is until the completion of construction, and the expected completion of construction as of December 31, 2023, is June 2024.

(n) The 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. during the year ended December 31, 2022. 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:

Category	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 period¹, share transfer is prohibited without prior written consent of the other shareholder. When sold to a third party, the Company holds a drag-along right and Toray Industries, Inc. holds a tag-along right.
Default	In case the 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 Company.
Deadlock	After 30 months from the acquisition date of the 50% shares, in the event of a dead lock agreed by both parties, 1) the 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 Company to purchase shares of the counterparty.

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

(o) During the period ended December 31, 2023, the Company 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 (see Note 14).

19. SHARE CAPITAL:

(a) Changes in share capital and share premium for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won and in shares)	Ordinary s	shares	Preferred s	shares	
	Number of shares	Share capital	Number of shares	Share capital	Share premium
January 1, 2022	70,592,343	352,962	7,688,800	38,444	2,014,453
December 31, 2022	70,592,343	352,962	7,688,800	38,444	2,014,453
December 31, 2023	70,592,343	352,962	7,688,800	38,444	2,014,453

(b) Changes in treasury shares for the years ended December 31, 2023 and 2022, are as follows:

	Number of shares			Gain on	
(In millions of Korean won and in shares)	Ordinary shares	Preferred shares	Carrying amount	disposal of treasury shares	
January 1, 2022	367,529	6,041	18,011	463,807	
Disposal of treasury shares ¹	(367,529)	<u>-</u>	(17,741)	192,119	
December 31, 2022		6,041	270	655,927	
December 31, 2023	-	6,041	270	655,927	

¹ The Company disposed of all of treasury shares of the Company (367,529 shares), on November 24, 2022, as the board of directors' meeting decided to exchange treasury shares of Korea Zinc Company, Ltd. with the treasury shares of the Company.

Capital surplus as of December 31, 2023 and 2022, consists of:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Revaluation reserve	206,769	206,769
Share premium	2,014,453	2,014,453
Gain on disposal of treasury shares	655,927	655,927
Other capital surplus	48,300	48,300
Total	2,925,449	2,925,449

20. RETAINED EARNINGS:

Retained earnings as of December 31, 2023 and 2022, consist of:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Legal reserve ¹	195,703	195,703
Discretionary reserve ²	16,848,485	14,527,280
Retained earnings before appropriation	205,077	3,104,339
Total	17,249,265	17,827,322

¹ The Commercial Code of the Republic of Korea requires the Company to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its issued share capital. The reserve is not available for cash dividends payment, but may be transferred to share capital or used to reduce accumulated deficit. 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.

21. OTHER COMPONENTS OF EQUITY:

Details of other components of equity as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Treasury shares (Note 19)	(270)	(270)

² The Company 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.

22. SELLING AND ADMINISTRATIVE EXPENSES:

Selling and administrative expenses for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	23 2022	
Wages and salaries	567,474	589,957	
Postemployment benefits (Note 16)	30,905	43,673	
Employee benefits	95,497	106,078	
Travel expense	27,494	22,735	
Water and utilities	50,303	44,243	
Packaging expenses	4,098	3,653	
Rental expenses	89,451	94,204	
Commission expenses	704,893	657,245	
Depreciation	144,467	124,938	
Advertising expense	22,006	23,125	
Freight expenses	514,554	1,148,727	
Training expense	26,280	23,581	
Amortization (Note 12)	158,499	137,813	
Sample expense	12,309	9,883	
Development costs	220,948	225,489	
Others	133,420	120,195	
Total	2,802,598	3,375,539	

23. BREAKDOWN OF EXPENSES BY NATURE:

Cost of sales and selling and administrative expenses by nature for the years ended December 31, 2023 and 2022, consist of:

(In millions of Korean won)	2023	2022
Changes in inventories of merchandise, finished goods, semifinished goods and	447 500	(206.407)
work in process	447,502	(306,187)
Raw materials and consumables used	12,037,998	13,971,995
Purchase of merchandise	353,487	361,600
Employee benefit expenses (Note 24)	1,624,198	1,758,373
Advertising expenses	23,141	24,209
Freight expenses	541,278	1,174,207
Commission expenses	929,769	884,994
Depreciation and amortization	1,389,115	1,332,441
Rentals and fees	28,057	28,624
Other expenses	2,681,981	2,354,625
Total	20,056,526	21,584,881

24. EMPLOYEE BENEFIT EXPENSES:

Details of employee benefit expenses for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022	
Salaries	1,346,503	1,457,478	
Postemployment benefits – Defined benefit plan Postemployment benefits – Defined contribution	78,492	114,708	
plan	13,064	8,339	
Others	186,139	177,848	
Total	1,624,198	1,758,373	

25. FINANCE INCOME AND COSTS:

Details of finance income and costs for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022	
Finance income			
Interest income ¹	73,843	59,930	
Dividend income	176,008	625,169	
Exchange differences	444,907	330,335	
Gain on derivative instruments	145,641	63,903	
Gain on financial assets	22,468	12,612	
Total	862,867	1,091,949	
Finance costs			
Interest expense ²	257,432	140,867	
Exchange differences	435,365	457,565	
Loss on derivative instruments	2,254	27,418	
Loss on financial assets	17,261	3,057	
Total	712,312	628,907	

¹ Details of interest income for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Deposits held by financial institutions	64,333	28,873
Other loans and receivables	9,510	31,057
Total	73,843	59,930

² Details of interest expense for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022	
Interest on financial institutions	73,902	30,208	
Interest on finance lease liabilities	2,226	2,438	
Interest on debentures	197,733	118,254	
Other interest expenses	11,426	1,032	
Capitalized interest for qualifying assets	(27,855)	(11,065)	
Total	257,432	140,867	

26. OTHER NON-OPERATING INCOME:

Details of other non-operating income for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022	
Exchange differences	356,085	634,315	
Gain on disposal of property, plant and			
equipment	908	3,738	
Gain on disposal of intangible assets	-	8	
Gain on disposal of investment in associates and			
joint ventures	15,656	-	
Gain on disposal of investment in subsidiary	-	2,230,413	
Gain on disposal of business	118,353	61	
Others	30,509	133,758	
Total	521,511	3,002,293	

27. OTHER NON-OPERATING EXPENSES:

Details of other non-operating expenses for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Exchange differences	310,760	503,891
Loss on disposal of property, plant and equipment	9,809	20,036
Loss on disposal of intangible assets	30,531	22,208
Impairment loss on property, plant and equipment (Note 11)	31,052	27,958
Impairment loss on intangible assets (Note 12)	3,574	13
Impairment loss on investment properties (Note 36)	-	17,332
Impairment loss on investments in subsidiaries	-	55,314
Loss on disasters	1,151	4,244
Donations	14,718	19,571
Others	4,691	9,869
Total	406,286	680,436

28. TAX EXPENSE AND DEFERRED TAX:

(a) Income tax expense for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022	
Current tax:			
Current tax on profit for the year	17,793	824,642	
Adjustments in respect of prior years	46,653	(21,121)	
Deferred tax:			
Deferred tax movement in temporary			
differences	(67,865)	133,423	
Deferred tax – change in the Korean tax rate	-	(27,752)	
Deferred tax – credit carryforwards	(99,341)	14,975	
Deferred tax – tax loss carryforwards	(18,270)	-	
•	(121,030)	924,167	
Deferred tax charged directly to equity	40,607	8,649	
Current tax charged directly to equity	-	(47,132)	
Effect of discontinued operations	(4,861)	(3,904)	
Income tax expense	(85,284)	881,780	

(b) The aggregate current and deferred tax charged directly to equity (other comprehensive income) for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Current tax Gain on disposal of financial assets at fair value		
through other comprehensive income	-	1
Loss on disposal of treasury shares	-	(47,133)
Deferred tax Remeasurements of net defined benefits liabilities	8,268	(24,324)
Gain on valuation of financial assets at fair value through other comprehensive income	32,339	32,973
Total	40,607	(38,483)

(c) Movements in deferred tax assets (liabilities) for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023			
		Increase	(decrease)	
			Other	
	Beginning	Profit (loss)	comprehensive	Ending
	balance	for the year	income (loss)	balance
Defined benefit liabilities	237,887	13,393	8,808	260,088
Plan assets	(334,697)	(3,495)	(540)	(338,732)
Property, plant and equipment	9,883	5,476	-	15,359
Investments in subsidiaries, associates and joint ventures	(11,856)	63,395	-	51,539
Accrued income	(16,181)	15,427	-	(754)
Others	(551,091)	(66,937)	32,339	(585,689)
	(666,055)	27,259	40,607	(598,189)
Tax credit carryforwards	20,002	99,341	-	119,343
Tax loss carryforwards	-	18,270	-	18,270
Deferred income tax assets				
(liabilities)	(646,053)	144,870	40,607	(460,576)

(In millions of Korean won)	2022					
		_				
			Other			
	Beginning	Profit (loss)	comprehensive	Ending		
	balance	for the year	(loss) income	balance		
Defined benefit liabilities	261,124	2,841	(26,078)	237,887		
Plan assets	(288,943)	(47,508)	1,754	(334,697)		
Property, plant and equipment	29,753	(19,870)	-	9,883		
Investments in subsidiaries,						
associates and joint ventures	48,876	(60,732)	-	(11,856)		
Accrued income	(1)	(16,180)	-	(16,181)		
Others	(611,193)	27,129	32,973	(551,091)		
	(560,384)	(114,320)	8,649	(666,055)		
Tax credit carryforwards	34,977	(14,975)	-	20,002		
Deferred income tax assets						
(liabilities)	(525,407)	(129,295)	8,649	(646,053)		
•						

(d) The reconciliations between income tax expense and accounting profit for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022	
Profit before income tax expense ¹	147,703	3,892,653	
Tax at domestic tax rates applicable	33,657	1,060,641	
Tax effects of:			
Income not subject to tax	(40,403)	(1,169)	
Expenses not deductible for tax purposes	9,096	43,835	
Unrecognized deferred income tax for temporary			
differences in the current year	3,415	9,366	
Tax credit	-	(242,405)	
Remeasurement of deferred tax – change in the			
Korean tax rate	-	(27,752)	
Others	(86,188)	43,168	
Effect of discontinued operations	(4,861)	(3,904)	
Income tax expense	(85,284)	881,780	
Effective tax rate (income tax expense/profit before			
income tax)	-57.74%	22.65%	

¹ The amount includes profit before income tax from discontinued operations.

- (e) Realization of deferred tax assets is dependent on the Company's ability to generate future taxable profits in excess of the profits arising from the reversal of taxable temporary differences, and economic and industry outlooks. Management periodically reviews on these factors.
- (f) Details of deductible (taxable) temporary differences unrecognized as deferred tax assets (liabilities) as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022	
Investments in subsidiaries, associates and joint ventures	(857,036)	(857,036)	Permanently reinvested income not distributed as dividend
	4,335,687	4,312,841	No possibility of disposal
Land	373	373	
Total	3,479,024	3,456,178	

(g) The consolidated entity applies the temporary exemption provision for deferred corporate taxes under K-IFRS 1012, and does not recognize deferred corporate tax assets and liabilities related to Pillar 2 law and does not disclose information related to deferred corporate taxes. At the present time, the impact of the relevant law is unknown, and ongoing evaluations are planned to assess its impact on financial performance.

29. EARNINGS PER SHARE:

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

(a) Basic earnings per share for profit from continuing operations and earnings per share for the years ended December 31, 2023 and 2022, are computed as follows:

Basic earnings per ordinary share from continuing operations

(In millions of Korean won and in number of shares)	2023	2022
Profit from continuing operations attributable to ordinary shares ¹ Weighted-average number of ordinary shares	217,825	2,663,745
outstanding ²	70,592,343	70,262,070
Basic earnings per ordinary share from continuing operations (in won)	3,086	37,912
Basic earnings per ordinary share		
(In millions of Korean won and in number of shares)	2023	2022
Profit attributable to ordinary shares ¹	205,389	2,710,236
Weighted-average number of ordinary shares outstanding ²	70,592,343	70,262,070
Basic earnings per ordinary shares (in won)	2,910	38,573
Basic earnings per preferred share from contin	uing operations	
(In millions of Korean won and in number of shares)	2023	2022
Profit from continuing operations attributable to preferred share ¹	24,090	291,650
Weighted-average number of preferred shares outstanding ²	7,682,759	7,682,759
Basic earnings per preferred share from continuing operations (in won)	3,136	37,962

Basic earnings per preferred share		
(In millions of Korean won and in number of shares)	2023	2022
Profit attributable to preferred shares ¹ Weighted average number of preferred shares	22,737	296,733
outstanding ²	7,682,759	7,682,759
Basic earnings per preferred shares (in won)	2,960	38,623
¹ Profit attributable to ordinary and preferred shares	are as follows:	
(In millions of Korean won)	2023	2022
Profit from continuing operations	241,915	2,955,395
Ordinary shares dividends (A)	247,073	702,621
Preferred shares dividends (B)	27,274	77,211
Undistributed (losses) earnings from continuing operation for the year Undistributed (losses) earnings available for	(32,432)	2,175,563
ordinary shares (C)	(29,248)	1,961,124
Undistributed (losses) earnings available for preferred shares (D) Profit from continuing operations for the year	(3,184)	214,439
attributable to ordinary shares (A+C)	217,825	2,663,745
Profit from continuing operations for the year attributable to preferred shares (B+D)	24,090	291,650
(In millions of Korean won)	2023	2022
Profit	228,126	3,006,969
Ordinary shares dividends (A)	247,073	702,621
Preferred shares dividends (B)	27,274	77,211
Undistributed (losses) earnings for the year Undistributed (losses) earnings available for	(46,221)	2,227,137
ordinary shares (C) Undistributed (losses) earnings available for	(41,684)	2,007,615
preferred shares (D)	(4,537)	219,522
Profit for the year (A+C)	205,389	2,710,236
Profit for the year (B+D)	22,737	296,733

² Weighted-average number of shares are calculated as follows:

_	2023				
Ordinary shares outstanding	Period	Number of shares	Number of days	Number of shares x days	
Beginning balance	2023. 1. 1–2023. 12. 31	70,592,343	365	25,766,205,195	
Total				25,766,205,195	

Weighted-average number of ordinary shares outstanding: 25,766,205,195/365 = 70,592,343 shares

_	2023				
Preferred shares outstanding	Period	Number of shares	Number of days	Number of shares x days	
Beginning balance	2023. 1. 1–2023. 12. 31	7,682,759	365	2,804,207,035	
Total				2,804,207,035	

Weighted-average number of preferred shares outstanding: 2,804,207,035/365 = 7,682,759 shares

		2022		
Ordinary shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance Disposal of treasury shares	2022. 1. 1–2022. 12. 31 2022. 11. 24–2022. 12. 31	70,224,814 367,529	365 37	25,632,057,110 13,598,573
Total				25,645,655,683

Weighted-average number of ordinary shares outstanding: 25,645,655,683/365 = 70,262,070 shares

_	2022				
Preferred shares outstanding	Period	Number of shares	Number of days	Number of shares x days	
Beginning balance	2022. 1. 1–2022. 12. 31	7,682,759	365	2,804,207,035	
Total				2,804,207,035	

Weighted-average number of preferred shares outstanding: 2,804,207,035/365 = 7,682,759 shares

For the years ended December 31, 2023 and 2022, there were no dilutive potential outstanding ordinary shares at the reporting date. Accordingly, diluted earnings per share for profit attributable to owners of the Company is identical to basic earnings per share.

Basic and diluted earnings (losses) per share attributable to ordinary and preferred shares from discounted operations for the years ended December 31, 2023 and 2022, are as follows:

(In Korean won)	2023	2022
Basic (losses) per ordinary share from discounted operations	(176)	661
Basic (losses) per preferred share from discounted operations	(176)	661
Diluted (losses) per ordinary share from discounted operations	(176)	661
Diluted (losses) per preferred share from discounted operations	(176)	661

30. DIVIDENDS:

Profit for the year (B)

Dividend payout ratio (A/B)

(a) Details of dividends for the years ended December 31, 2023 and 2022, are as follows:

	2023	2022
Number of shares entitled to dividends: shares issued and outstanding (par value per share: ₩ 5,000)		
Ordinary shares	70,592,343	70,592,343
Preferred shares	7,682,759	7,682,759
Dividend per share (in Korean won, %)		
Ordinary shares: cash	3,500(70%)	10,000(200%)
Preferred shares: cash	3,550(71%)	10,050(201%)
Cash dividends to distribute (in millions of Korean won)		
Ordinary shares	247,073	705,923
Preferred shares	27,274	77,212
	274,347	783,135
(b) Dividend payout ratios for the years ended December 3	31, 2023 and 2022, a	are as follows:
(In millions of Korean won)	2023	2022
Dividends (A)	274,347	783,135

228,126

120.26%

3,006,969

26.04%

(c) Dividend yield ratios for the years ended December 31, 2023 and 2022, are as follows:

	202	3	2022		
(In Korean won)	Ordinary shares	Preferred Shares	Ordinary shares	Preferred Shares	
Dividend per share (A)	3,500	3,550	10,000	10,050	
Market value at the end of year (B) ¹	493,100	317,900	616,800	294,700	
Dividend yield ratio (A/B)	0.71%	1.12%	1.62%	3.41%	

¹ Average price in the stock market for one week preceding two business days before shareholder list closing date for the general shareholders' meeting.

31. RELATED-PARTY TRANSACTIONS:

(1) Details of related parties as of December 31, 2023, and December 31, 2022, are as follows:

Related party <significant influence="" over="" th="" the<=""><th>Related party's subsidiary (domestic)</th><th>Related party's subsidiary (overseas)</th><th>Related party's associates and joint ventures</th></significant>	Related party's subsidiary (domestic)	Related party's subsidiary (overseas)	Related party's associates and joint ventures
LG Corp.	5 1		
Subsidiaries of LG Corp.:>			
LG CNS Co., Ltd.	Biztech On Co., Ltd. and others	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.		o.o. and others	
LG Holdings Japan co., Ltd.			
<subsidiaries></subsidiaries>			
LG Energy Solution, Ltd.	Aremnuri. Co. Ltd	LG Energy Solution Wroclaw sp. z o.o. and others	Sam-a Aluminium Company, Limited ² and others
FarmHannong Co., Ltd.		Farmhannong America, Inc. and others	
HAENGBOKNURI CO., Ltd.			
LG-HY BCM Co., Ltd.			
TW Biomassenergy Co., Ltd³ LG Chem (China) Investment Co.,Ltd. Ningbo LG Yongxing Chemical Co.,Ltd. LG Chemical (Guangzhou) Engineering Plastics Co.,Ltd. LG Chem (Taiwan), Ltd. LG Chem (Tianjin) Engineering Plastics Co.,Ltd. Tianjin LG Bohai Chemical Co.,Ltd. Tianjin LG BOTIAN Chemical Co.,Ltd. LG Chem(HUIZHOU)		LG Chem China Tech Center Ningbo Zhenhai LG Yongxing Trade Co.,Ltd.	
Petrochemical Co., Ltd.			

Related party's Related party's Related party's associates and joint subsidiary (domestic) Related party subsidiary (overseas) ventures LG Chem (Chongqing) Engineering Plastics Co.,Ltd. LG Jiansheng Life Sciences (Beiiing) Co., Ltd. LG Chem (Guangzhou) Information & Electronics Materials Co.,Ltd. LEYOU NEW ENERGY MATERIALS(WUXI) Co.,LTD LG Chem Hangzhou Advanced Materials Co., Ltd. LG Chem America, Inc. LG NanoH2O, LLC LG Chem Mexico S.A. de C.V. Uniseal.Inc. LG Chem Life Science Aveo Pharmaceuticals. Innovation Center, Inc. Inc.4 LG Chem Ohio Petrochemical, Inc. LG Chem BRASIL INTERMEDIACAO DE **NEGOCIOS DO SETOR** QUIMICO LTDA. LG Polymers India Pvt. LG Chemical India Pvt. Ltd. Ltd. LGC Petrochemical India Private Ltd. LG Chem Japan Co., Ltd. LG Chem Malaysia SDN.BHD. LG Chem Life Sciences India Pvt. Ltd. LG Chem Life Sciences (Thailand) Ltd. LG Chem Hai Phong Vietnam Company Ltd. LG Chem Hai Phong Engineering Plastics Ltd. LG Chem Asia Pte. Ltd. LG PETRONAS CHEMICALS Malaysia Sdn.Bhd. LG Chem VietNam Co.,Ltd PT LG CHEM INDONESIA3 LG Chem Europe GmbH LG Chem Poland Sp. z o.o. LG CHEM TK Kimva SANAYI VE TIC. Ltd. STI. <Associates and joint ventures:5> TECHWIN Co., Ltd. LG Chem Life Sciences Poland Ltd. **HUAJIN NEW ENERGY** MATERIALS(QUZHOU) CO., LTD.

Related party TL Chemical CO., Ltd KOREA PRECURSOR CO., LTD. LG Toray Hungary Battery Separator Kft. SEETEC Co., Ltd.	Related party's subsidiary (domestic)	Related party's subsidiary (overseas)	Related party's associates and joint ventures
<lg enterprise="" group<sup="">6,7> LG Display Co., Ltd.</lg>	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	Beijing LG Household Chemical Co., Ltd. and others	
LG Uplus Corp.	LG HelloVision Corp and others.	DACOM AMERICA, INC.	
HS AD Inc. ⁸		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 Company newly acquired shares of Sam-a Aluminium Company, Limited.
- ³ During the year ended December 31, 2023, the company newly established TW Biomassenergy Co., Ltd and PT LG CHEM INDONESIA.
- ⁴ During the year ended December 31, 2023, the Company newly acquired Aveo Pharmaceuticals.Inc.
- ⁵ During the year ended December 31, 2023, VINA PLASTICIZERS CHEM was disposed of and excluded from related parties.
- ⁶ Although these entities are not the related parties of the Group in accordance with K-IFRS 1024, these entities belong to a large enterprise group in accordance with the Monopoly Regulation and Fair-Trade Act.
- ⁷ During the year ended December 31, 2022, LX Holdings Corp. and its affiliates were excluded from the LG Group due to the spin-off of LG Corp.
- 8 During the year ended December 31, 2023, G $\; \square \;$ R Inc. merged HS AD Inc. and LBEST Inc. After the merger, G $\; \square \;$ R Inc. changed its name to HS AD Inc.

(2) Sales and purchases with related parties for the year ended December 31 2023 and 2022, are as follows:

(In millions of Korean won) 2023 Purchase and others Acquisition of property, plant Purchase of and equipment Acquisition Sales and raw materials and intangible of right-of-Interest others /merchandises assets use assets expense Others Entity with a significant influence over the Company 31 146 53,814 LG Corp. **Subsidiaries** 62,843 64,558 38 67 7,756 LG Energy Solution, Ltd.¹ Ningbo LG Yongxing 9,661 29,327 Chemical Co.,Ltd. LG Chem America, Inc. 870,612 12,432 LG Energy Solution 89,530 (Nanjing) Co., Ltd. LG Chemical (Guangzhou) 27,792 2,614 **Engineering Plastics** Co.,Ltd. LG Chem (Taiwan), Ltd. 73,148 1,977 Tianjin LG Bohai Chemical 216,717 Co.,Ltd. LG Chem (China) 6,895 64,435 Investment Co..Ltd. LG Chem (Tianjin) **Engineering Plastics** 14,973 Co.,Ltd. LG Chem Europe GmbH 725,315 91,512 LG Chem Poland Sp. z o. 477 68,785 Ο. 34,475 17,689 LG NanoH2O, LLC. **LG Energy Solution** 37,275 Michigan Inc. LG Energy Solution Battery (Nanjing) Co., 32,015 Ltd. LG Energy Solution 1,648,351 Wroclaw sp. z o.o. LG Chem (Guangzhou) 85,865 2,412 6 I&E Materials Co., Ltd. LG Energy Solution Technology (Nanjing) 698,146 Co., Ltd. LEYOU NEW ENERGY MATERIALS(WUXI) 101,113 29,243 CO., LTD.

LG Chem, Ltd.
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Total	6,765,783	1,217,193	538,293	3,597	567	663,120
Others	9,629	25,148	32	632	41	3,963
Shanjin Optoelectronics (Suzhou) Co.,Ltd. and its subsidiaries ²	315,973	129	-	-	-	-
LG Electronics Inc. and its subsidiaries and joint ventures	337,411	1,765	2,917	-	-	25,545
Others LG Display Co., Ltd. and its subsidiaries	375,145	124	-	-	-	-
Others	5	-	-	-	-	43,598
LG CNS Co., Ltd. and its subsidiaries	98	3,302	180,721	-	13	106,678
Other related parties D&O Corp. and its subsidiaries and associates	-	2,799	354,183	-	-	79,408
Others	46,864	3,216	-	-	-	188
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	230	794,906	-	-	-	-
SEETEC Co., Ltd. TECWIN Co., Ltd.	112,606	275,138 153	8 419	2,927	300	96,731 147
Associates and joint ventures						
Others	254,702	1,548	13	-	-	57,241
Ultium Cells LLC.	489,912	-	-	-	-	-

LG Chem, Ltd.
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(In millions of Korean won)	2022							
				se 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 Company								
LG Corp.	9	-	-	12,230	163	58,022		
Subsidiaries								
LG Energy Solution, Ltd. ¹ Ningbo LG Yongxing	69,718	16	-	16	205	5,472		
Chemical Co.,Ltd.	436,569	7,983	-	-	-			
LG Chem America, Inc. LG Energy Solution	1,260,189	-	-	-	-	7,117		
(Nanjing) Co., Ltd. LG Chemical (Guangzhou) Engineering Plastics	97,733	-	-	-	-	-		
Co.,Ltd.	43,286	3,366	-	-	-	-		
LG Chem (Taiwan), Ltd. Tianjin LG Bohai Chemical	99,474	-	-	-	-	1,901		
Co.,Ltd. LG Chem (China)	244,845	-	-	-	-	-		
Investment Co.,Ltd. LG Chem (Tianjin) Engineering Plastics	104,547	-	-	-	-	56,254		
Co.,Ltd.	13,143	-	-	-	-	-		
LG Chem Europe GmbH LG Chem Poland	984,213	-	-	-	-	60,623		
Sp. z o. o.	81,020	79	-	-	-	45.000		
LG NanoH2O, LLC. LG Energy Solution	58,821	-	-	-	-	15,823		
Michigan Inc. LG Energy Solution Battery (Nanjing) Co.,	212,629	-	-	-	-	-		
Ltd.	75,854	-	-	-	-	-		
LG Energy Solution Wroclaw sp. z o.o. LG Chem (Guangzhou)	1,446,700	-	-	-	-	-		
I&E Materials Co., Ltd. LG Energy Solution Technology (Nanjing)	110,178	577	-	-	-	-		
Co., Ltd. LEYOU NEW ENERGY MATERIALS (WUXI)	118,797	-	-	-	-	-		
CO., LTD.	169,112	23,687	-	-	-	-		
Ultium Cells LLC.	300,223	-	-	-	-	-		
Others Associates and joint	255,677	2,751	19	-	-	44,642		

LG Chem, Ltd.
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ventures						
SEETEC Co., Ltd.	138,706	251,919	-	38	395	82,900
TECWIN Co., Ltd. HUAJIN NEW ENERGY MATERIALS (QUZHOU)	-	465	1,940	-	-	94
CO., LTD.	9,453	328,975	-	-	-	76
Others	7	11,481	-	-	-	184
Other related parties D&O Corp. and its	21	2,948	335,175			73,974
subsidiaries LG CNS Co., Ltd. and its	21	2,940	333,175	-	-	73,974
subsidiaries	93	3,578	265,408	1,221	16	97,199
Others	5	-	-	-	-	30,280
Others						
LG Display Co., Ltd. and its subsidiaries LG Electronics Inc. and its subsidiaries and joint	404,396	70	-	-	-	1
ventures LX International Corp. and	372,850	1,453	13,177	-	-	17,894
its subsidiaries LX Hausys, Ltd. and its	43,467	198,425	236	-	-	633,589
subsidiaries	147,045	4,552	1,048	-	-	3
LX MMA Corporation ³ Shanjin Optoelectronics (Suzhou) Co.,Ltd. and its	111,043	107,866	-	-	-	2,582
subsidiaries	390,910	1,660	-	-		4.510
Others	10,603	31,572	196	48	50	4,513
Total	7,811,336	983,423	617,199	13,553	829	1,193,143

¹ Net sales and purchases amount after offsetting for Separators with LG Energy Solution, Ltd.

² It was excluded from related parties during the year ended December 31, 2023, and the transaction details occurred before it were excluded from related parties.

³ Net sales and purchase amounts after offsetting for Raffinate transactions with LX MMA.

(3) Balances of receivables and payables arising from sales and purchases of goods and services as of December 31, 2023 and 2022, are as follows:

	Trade receivables and others	Receival Loan		
		l oan		
	and stricts	receivables	Other receivables	Total
Entity with a significant influence over the				
Company				
LG Corp.	-	-	17,196	17,196
Subsidiaries				
LG Energy Solution, Ltd.	23,712	-	1,053	24,765
Ningbo LG Yongxing Chemical Co., Ltd.	9,587	-	1,300	10,887
LG Chem America, Inc.	225,512	-	-	225,512
LG Energy Solution (Nanjing) Co., Ltd.	20,859	-	-	20,859
LG Chemical (Guangzhou) Engineering Plastics Co., Ltd.	2,472	-	4,685	7,157
LG Chem (Taiwan), Ltd.	7,893	-	36,313	44,206
Tianjin LG Bohai Chemical Co.,Ltd.	28,807	-	351	29,158
LG Chem (China) Investment Co.,Ltd.	986	-	-	986
LG Chem (Tianjin) Engineering Plastics	785	-	2,038	2,823
LG Chem Europe Gmbh	240,250	-	35	240,285
LG Chem Poland Sp. z o. o.	12,915	-	9,496	22,411
LG NanoH2O, Inc.	10,953	-	-	10,953
LG Energy Solution Michigan Inc.	7,716	-	-	7,716
LG Energy Solution Battery (Nanjing) Co., Ltd.	7,572	-	-	7,572
LG Energy Solution Wroclaw sp. z o.o.	272,577	-	-	272,577
LG Chem (Guangzhou) I&E Materials Co., Ltd.	27,276	-	434	27,710
LG Energy Solution Technology (Nanjing) Co., Ltd.	49,493	-	-	49,493
LEYOU NEW ENERGY MATERIALS(WUXI) CO., LTD.	13,773	-	19,914	33,687
Ultium Cells LLC.	31,596	_	_	31,596
Others	52,921	35,551	16,675	105,147
Associates and joint ventures	,		,	,
SEETEC Co., Ltd.	13,653	_	1,000	14,653
TECWIN Co., Ltd.	-	_	-	-
HUAJIN NEW ENERGY MATERIALS (QUZHOU)				
CO., LTD.	-	-	-	-
Others	200	-	-	200
Other related parties				
D&O Corp. and its subsidiaries and associates	-	-	-	-
LG CNS Co., Ltd. and its subsidiaries	-	-	107	107
Others	-	_	7	7
Others				
LG Display Co., Ltd. and its subsidiaries	161,829	_	-	161,829
LG Electronics Inc. and its subsidiaries and joint				•
venture	110,253	-	625	110,878
Others	110		1,642	1,752
Total	1,333,700	35,551	112,871	1,482,122

LG Chem, Ltd.
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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 Company LG Corp.	_	_	3,060	6,400	9,460		
Subsidiaries			-,	-,	2,122		
LG Energy Solution, Ltd.	28,478	_	1,469	5,904	35,851		
Ningbo LG Yongxing Chemical Co., Ltd.	426	_	, -	1	427		
LG Chem America, Inc.	-	-	_	14,286	14,286		
LG Energy Solution (Nanjing) Co., Ltd.	_	-	_	_	-		
LG Chemical (Guangzhou) Engineering Plastics Co., Ltd.	117	-	-	-	117		
LG Chem (Taiwan), Ltd.	-	-	-	264	264		
Tianjin LG Bohai Chemical Co., Ltd.	-	-	-	-	-		
LG Chem (China) Investment Co., Ltd.	-	-	-	7,685	7,685		
LG Chem (Tianjin) Engineering Plastics	-	-	-	-	-		
LG Chem Europe Gmbh	-	-	-	8,671	8,671		
LG Chem Poland Sp. z o. o.	235	-	-	2	237		
LG NanoH2O, Inc.	-	-	-	6,250	6,250		
LG Energy Solution Michigan Inc.	-	-	-	-	-		
LG Energy Solution Battery (Nanjing) Co., Ltd.	-	-	-	-	-		
LG Energy Solution Wroclaw sp. z o.o.	-	-	-	-	-		
LG Chem (Guangzhou) I&E Materials Co., Ltd.	142	-	-	29	171		
LG Energy Solution Technology (Nanjing) Co., Ltd.	-	-	-	-	-		
LEYOU NEW ENERGY MATERIALS(WUXI) CO., LTD.	13,394	-	-	83	13,477		
Ultium Cells LLC.	-	-	-	-	-		
Others	712	-	-	7,326	8,038		
Associates and joint ventures							
SEETEC Co., Ltd.	31,148	-	20,662	11,735	63,545		
TECWIN Co., Ltd.	-	-	-	380	380		
HUAJIN NEW ENERGY MATERIALS (QUZHOU) CO., LTD.	161,178	-	-	-	161,178		
Others	-	-	-	117	117		
Other related parties							
D&O Corp. and its subsidiaries and associates	-	-	-	98,296	98,296		
LG CNS Co., Ltd. and its subsidiaries	-	-	308	89,872	90,180		
Others	-	-	-	684	684		
Others							
LG Display Co., Ltd. and its subsidiaries	14	-	-	-	14		
LG Electronics Inc. and its subsidiaries and joint venture	66	-	-	6,907	6,973		
Others	2,713		2,512	3,240	8,465		
Total	238,623		28,011	268,132	534,766		

(In millions of Korean won)	December 31, 2022						
		Receival					
	Trade receivables and others	Loan receivables	Other receivables	Total			
Entity with a significant influence over the							
Company							
LG Corp.	-	-	10,290	10,290			
Subsidiaries							
LG Energy Solution, Ltd.	43,394	-	1,497	44,891			
Ningbo LG Yongxing Chemical Co.,Ltd.	3,887	-	75,743	79,630			
LG Chem America, Inc.	276,810	-	-	276,810			
LG Energy Solution (Nanjing) Co., Ltd.	24,880	-	-	24,880			
LG Chemical (Guangzhou) Engineering Plastics							
Co.,Ltd.	1,324	-	5,356	6,680			
LG Chem (Taiwan), Ltd.	6,856	-	3	6,859			
Tianjin LG Bohai Chemical Co., Ltd.	19,874	-	491	20,365			
LG Chem (China) Investment Co., Ltd.	996	-	-	996			
LG Chem (Tianjin) Engineering Plastics	648	-	2,014	2,662			
LG Chem Europe Gmbh	257,921	-	4,563	262,484			
LG Chem Poland Sp. z o. o.	23,749	-	9,218	32,967			
LG NanoH2O, Inc.	16,409	_	-	16,409			
LG Energy Solution Michigan Inc.	12,675	_	-	12,675			
LG Energy Solution Battery (Nanjing) Co., Ltd.	16,088	_	-	16,088			
LG Energy Solution Wroclaw sp. z o.o.	359,646	_	-	359,646			
LG Chem (Guangzhou) I&E Materials Co., Ltd.	25,244	_	146	25,390			
LG Energy Solution Technology (Nanjing) Co.,	,						
Ltd.	51,754	_	_	51,754			
LEYOU NEW ENERGY MATERIALS(WUXI) CO.,	2.,. 2.			2.,.2.			
LTD.	2,420	_	55,047	57,467			
Ultium Cells LLC.	65,950	_	-	65,950			
Others	53,551	18,434	12,312	84,297			
Associates and joint ventures		,	,	,			
SEETEC Co., Ltd.	15,002	_	1,221	16,223			
TECWIN Co., Ltd.	-	_	-,	-			
HUAJIN NEW ENERGY MATERIALS (QUZHOU)							
CO., LTD.	9,453	_	_	9,453			
Others	-	_	_	-			
Other related parties							
D&O Corp. and its subsidiaries and associates	_	_	_	_			
LG CNS Co., Ltd. and its subsidiaries	_	_	102	102			
Others	_	_	5	5			
Others	_	_	3	3			
	62,803		419	63,222			
LG Display Co., Ltd. and its subsidiaries	02,003	-	419	03,222			
LG Electronics Inc. and its subsidiaries and joint	102.061		1.062	104 122			
venture	103,061	-	1,062	104,123			
Shanjin Optoelectronics (Suzhou) Co., Ltd. and its	47 205		1 156	10 601			
subsidiaries	47,225	-	1,456	48,681			
Others	42	40.404	2,361	2,403			
Total	1,501,662	18,434	183,306	1,703,402			

LG Chem, Ltd.
Notes to the Separate Financial Statements
As of and for the Years Ended December 31, 2023 and 2022

(In millions of Korean won)	December 31, 2022						
_			Payables				
	Trade payables	Borrowings	Lease liabilities	Other payables	Total		
Entity with a significant influence over the							
Company							
LG Corp.	-	-	12,232	11,621	23,853		
Subsidiaries							
LG Energy Solution, Ltd.	6,957	-	5,906	16,206	29,069		
Ningbo LG Yongxing Chemical Co., Ltd.	300	-	-	-	300		
LG Chem America, Inc.	-	-	-	7,546	7,546		
LG Energy Solution (Nanjing) Co., Ltd.	-	-	-	-	-		
LG Chemical (Guangzhou) Engineering Plastics							
Co., Ltd.	179	-	-	-	179		
LG Chem (Taiwan), Ltd.	-	-	-	656	656		
Tianjin LG Bohai Chemical Co., Ltd.	-	-	-	-	-		
LG Chem (China) Investment Co., Ltd.	-	-	-	5,921	5,921		
LG Chem (Tianjin) Engineering Plastics	-	-	-	-	-		
LG Chem Europe Gmbh	-	-	-	23,079	23,079		
LG Chem Poland Sp. z o. o.	79	-	-	88	167		
LG NanoH2O, Inc.	-	-	-	5,652	5,652		
LG Energy Solution Michigan Inc.	-	-	-	-	-		
LG Energy Solution Battery (Nanjing) Co., Ltd.	-	-	-	-	-		
LG Energy Solution Wroclaw sp. z o.o.	-	-	-	-	-		
LG Chem (Guangzhou) I&E Materials Co., Ltd.	301	-	-	89	390		
LG Energy Solution Technology (Nanjing) Co.,							
Ltd.	-	-	-	-	-		
LEYOU NEW ENERGY MATERIALS(WUXI) CO.,							
LTD.	1,533	-	-	-	1,533		
Ultium Cells LLC.	-	-	-	-	-		
Others	-	-	-	5,680	5,680		
Associates and joint ventures							
SEETEC Co., Ltd.	29,368	-	19,127	10,939	59,434		
TECWIN Co., Ltd.	-	-	-	274	274		
HUAJIN NEW ENERGY MATERIALS (QUZHOU)	0.4.000				0.4.000		
CO., LTD.	34,300	-	-	-	34,300		
Others	1	-	-	47	48		
Other related parties				074 447	074 447		
D&O Corp. and its subsidiaries and associates	-	-	-	271,447	271,447		
LG CNS Co., Ltd. and its subsidiaries	-	-	1,221	153,196	154,417		
Others	-	-	-	605	605		
Others							
LG Display Co., Ltd. and its subsidiaries	29	-	-	-	29		
LG Electronics Inc. and its subsidiaries and joint venture	-	-	-	18,472	18,472		
Shanjin Optoelectronics (Suzhou) Co., Ltd. and its							
subsidiaries	385	-	-	15,535	15,920		
Others	1,313		2,146	3,458	6,917		
Total	74,745		40,632	550,511	665,888		

(4) Fund transactions with related parties for the years ended December 31,2023 and 2022, are as follows:

(In millions of Korean won) 2023 Equity Loans Borrowings¹ contributions in cash **Dividends Dividends** (capital received paid reduction) Loans Repayment **Borrowings** Repayment Entity with a significant influence over the Company 235,342 12,148 LG Corp. **Subsidiaries** LG Energy Solution, Ltd. 38 5,838 Ningbo LG Yongxing 74,738 Chemical Co., Ltd. LG Chemical (Guangzhou) 1,888 **Engineering Plastics** Co., Ltd. LG Chem (Tianjin) **Engineering Plastics** 5,097 Co., Ltd. Tianjin LG Bohai 28,182 Chemical Co., Ltd. Tianjin LG BOTIAN 1,549 Chemical Co., Ltd. LEYOU NEW ENERGY MATERIALS(WUXI)CO., 79,288 LTD. 80,256 LG-HY BCM Co., Ltd. TW Biomassenergy Co., 26,400 Ltd. LG Chem Fund I LLC 8,256 LG Chem Life Science 707,183 Innovation Center, Inc PT LG CHEM 885 **INDONESIA** LG Polymers India Pvt. 21,693 Ltd. 327,264 327,264 LG Chem Asia Pte. Ltd. LG Chem(HUIZHOU) 25,659 Petrochemical Co., Ltd. LG Chem (Guangzhou) Information & 1,887 **Electronics Materials** Co., Ltd. 4,560 LG Chem Europe GmbH LG Chem (Taiwan), Ltd. 35,802 Associates and joint

ventures							
SEETEC Co., Ltd.	5,000	-	-	-	-	2,927	1,357
KOREA PRECURSOR CO., LTD.	-	-	30,576	-	-	-	-
VINA Plasticizers Chemical Co., Ltd.	4,444	-	-	-	-	-	-
Other related parties							
LG CNS Co., Ltd.	-	-	-	-	-	-	1,222
Others LG HOUSEHOLD & HEALTH CARE LTD.	<u> </u>	<u>-</u>	<u>-</u>		_	632	338
Total	268,094	235,342	853,556	21,693	_	330,861	348,167

LG Chem, Ltd.
Notes to the Separate Financial Statements
As of and for the Years Ended December 31, 2023 and 2022

Equity with a significant influence over the Company 1	(In millions of Korean won)				2022			
Public				Equity	Loa	ins	Borrov	vings ¹
Influence over the Company Li G Corp. 2 282,411 3 2 12,230 11,845 2894 1 2 3 3 12,230 11,845 2894 1 3 3 3 3 3 3 3 3 3				in cash (capital	Loans	Repayment	Borrowings	Repayment
Subsidiaries	influence over the							
LG Energy Solution, Ltd. 2 -	LG Corp.	-	282,411	-	-	-	12,230	11,845
LIG Chem (Taiwan), Ltd.	Subsidiaries							
Ningbo LG Yongxing Chemical Co., Ltd. 326,905 Tanjin LG Bohal Chemical Co., Ltd. 25,669 LG Chem Fund I LLC LG Chem China) Investment Co., Ltd. 92,856 LG Chemical India Pvt. Ltd. 92,856 LG Chemical India Pvt. Ltd. 93,789 LG Chemical India Pvt. Ltd. 93,789 RESERVENCIAN STANSSON STANS	LG Energy Solution, Ltd. ²	-	-	-	-	-	16	5,927
Tianjin LG Bohai Chemical Co., Ltd. 25,669 - 12,872 - 12,672 LG Chem Fund I LLC LG Chem (China) Investment Co., Ltd. 92,856 (240,480) - 12,672 LG Chemical India Pvt. Ltd. 1		61,560	-	(17)	-	-	-	-
LG Chem Fund I LLC LG Chem (China) Investment Co., Ltd. 92,856	Tianjin LG Bohai		-	-	-	-	-	-
LG Chem (China)	Chemical Co., Ltd.	25,669	-	-	-	-	-	-
Lid	LG Chem (China)	-	-		-	-	-	-
LG Chem VietNam CO., LTD.	LG Chemical India Pvt.	92,856	-		-	-	-	-
LTD 359		-	-	30,789	-	-	-	-
Engineering Plastics		_	_	350	_	_	_	_
Engineering Plastics 1,368		_	_	339	_	_	_	_
Co., Ltd.	Engineering Plastics LG Chemical (Guangzhou)	1,368	-	-	-	-	-	-
LG Polymers India Pvt. Ltd. 7,345 - - 18,434 -		-	-	_	-	-	_	_
LG Chem Life Science Innovation Center, Inc.	LG Polymers India Pvt.							
Innovation Center, Inc.	Ltd.	7,345	-	-	18,434	-	-	-
Associates and joint ventures SEETEC Co., Ltd. 5,000 - - - - 38 959 LG Toray Hungary Battery Separator Kft. ³ - - 483,638 - - - - - KOREA PRECURSOR CO., LTD. - - 20,384 -								
SEETEC Co., Ltd. 5,000 - - - - 38 959 LG Toray Hungary Battery Separator Kft. 3 - - 483,638 - - - - - KOREA PRECURSOR CO., LTD. - - 20,384 - - - - - - Other related parties LG CNS Co., Ltd. - - - - - 1,221 1,190 Others LG HOUSEHOLD & + - - - - 48 628 Shanjin Optoelectronics -	Associates and joint	-	-	16,593	-	-	-	-
LG Toray Hungary Battery Separator Kft. 3 - - 483,638 - <		5.000					00	050
Separator Kft. 3 - - 483,638 - <td></td> <td>5,000</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>38</td> <td>959</td>		5,000	-	-	-	-	38	959
CO., LTD 20,384	Separator Kft. ³	-	-	483,638	-	-	-	-
Other related parties LG CNS Co., Ltd. - - - - - 1,190 Others LG HOUSEHOLD & - - - - - 48 628 Shanjin Optoelectronics (Suzhou) ⁴ - -<		_	_	20.384	_	_	_	_
LG CNS Co., Ltd. - - - - - 1,190 Others LG HOUSEHOLD & HEALTH CARE LTD - - - - - 4 48 628 Shanjin Optoelectronics (Suzhou) ⁴ - - </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
Others LG HOUSEHOLD & HEALTH CARE LTD - - - - - 48 628 Shanjin Optoelectronics (Suzhou) ⁴ - -		_	_	_	_	_	1 221	1 190
LG HOUSEHOLD & HEALTH CARE LTD 48 628 Shanjin Optoelectronics (Suzhou) ⁴							.,	.,
(Suzhou) ⁴	LG HOUSEHOLD & HEALTH CARE LTD	-	-	-	-	-	48	628
Total 520,703 282,411 324,138 18,434 - 13,553 20,549		<u>-</u> _	-	<u> </u>				
	Total	520,703	282,411	324,138	18,434	_	13,553	20,549

(5) Compensation for key management of the Company for the years ended December 31, 2023 and 2022, consists of the following:

(In millions of Korean won)	2023	2022
Short-term employee benefits	70,710	68,653
Postemployment benefits	5,388	7,613
Total	76,098	76,266

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

There is no provision recognized for receivables of related parties as of December 31, 2023, and no impairment loss on receivables for related parties is recognized for the years ended December 31, 2023 and 2022.

Details of the guarantees manufactured by the Company for related parties at the reporting date are disclosed in Note 18.

¹ The amounts represent lease liabilities that were recognized or repaid for the years ended December 31, 2023 and 2022.

² The Company transferred 50% of the shares of Korea Battery & ESG Private Equity Investment Joint Stock Company for ₩ 28,874 million during the year ended December 31, 2022. It has not been included in the above fund transactions.

³ The amount is related to the acquisition of 50% of the shares during the year ended December 31, 2022.

⁴ The Company disposed of shares of Shanjin Optoelectronics (Taiwan) Co., LTD. amounting to ₩ 38 million. It has not been included in the above fund transactions.

32. CASH FLOWS:

(a) Reconciliation between profit before income tax and cash generated from operations for the years ended December 31, 2023 and 2022, is as follows:

(In millions of Korean won)	2023	2022
Profit before income tax	147,703	3,892,652
Profit before income tax from continuing operations	156,631	3,901,109
Loss before income tax from discontinued operations	(8,928)	(8,457)
Adjustments for		
Depreciation	1,228,520	1,199,048
Amortization	197,847	172,057
Post-employment benefits	86,733	125,202
Finance income	(442,152)	(802,527)
Finance costs	413,603	289,266
Foreign exchange differences	8,230	101,317
Loss on valuation of inventories (reversal)	(68,963)	106,679
Gain on disposal of property, plant and equipment	(839)	(36,870)
Gain on disposal of intangible assets	-	(8)
Loss on disposal of property, plant and equipment	9,953	21,383
Loss on disposal of intangible assets	30,700	22,780
Impairment loss on property, plant and equipment Impairment loss on property, plant and equipment	31,052	28,346
(reversal)	- 0.574	(705)
Impairment loss on intangible assets	3,574	40
Impairment loss on investment properties	-	17,332
Impairment loss on investments in subsidiaries	-	55,314
Gain on disposal of investments in subsidiaries	-	(2,230,413)
Loss on disposal of investments in subsidiaries	-	15,552
Additions to provisions	20,675	37,456
Other expenses (income) Decrease (increase) in inventories	(156,283) 503,187	4,681
(Increase) decrease in trade receivables	(160,790)	(219,967) 23,882
Decrease in other receivables	14,686	45,571
Decrease (increase) in other current assets	99,626	(85,031)
Increase (decrease) in trade payables	33,721	(186,762)
Increase in other payables	738,212	22,658
Decrease in other current liabilities	(233,748)	(152,734)
Decrease in net defined benefit liabilities	(61,982)	(355,540)
Decrease in provisions	(31,100)	(47,089)
Other cash flows from operations	6,456	(3,862)
Cash generated from operations	2,418,621	2,059,708
- a.c gonerates ironi operationo	2,110,021	2,300,700

(b) Changes in liabilities arising from financial activities for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)			202	3			
			No	n-cash transaction	ons		
	At January 1, 2023	Cash flows from financing activities	Acquisition	Amortization	Others	At December 31, 2023	
Borrowings	1,368,141	515,386	-	165	16,398	1,900,090	
Debentures	5,610,061	2,718,176	-	50,983	(529,078)	7,850,142	
Lease liabilities	104,867	(36,963)	10,580	-	(4,156)	74,328	
Other payables for the reverse							
factoring arrangement		(825,480)			825,480	-	
	7,083,069	2,371,119	10,580	51,148	308,644	9,824,560	
(In millions of Korean won)			202	2			
			No				
	At January 1, 2022	Cash flows from financing activities	Acquisition	Amortization	Others	At December 31, 2022	
Borrowings	1,329,579	(4,225)	-	279	42,508	1,368,141	
Debentures	5,707,145	(171,772)	-	4,467	70,221	5,610,061	
Lease liabilities	118,460	(36,892)	23,668	-	(369)	104,867	
Other payables for the reverse							
factoring arrangement	299,645	(299,645)					
	7,454,829	(512,534)	23,668	4,746	112,360	7,083,069	

(c) The significant non-cash transactions for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Reclassification of construction in progress	1,288,866	1,700,631
Reclassification of machinery in transit	84,864	70,267
Reclassification of long-term borrowings into current		
portion	10,156,629	627,588
Other payables related to acquisitions of property, plant		
and equipment and intangible assets	485,832	1,012,866
Reclassification of other payables under the reverse		
factoring arrangement	825,480	-
Transfer of non-current assets held for sale	46,452	-

33. APPROPRIATION OF RETAINED EARNINGS:

The appropriation of retained earnings for the year ended December 31, 2023, is expected to be appropriated at the shareholders' meeting on March 25, 2024. The appropriation date for the year ended December 31, 2022, was March 28, 2023.

The appropriation of retained earnings for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	2023	2022
Unappropriated retained earnings carried over from prior year	-	-
Profit for the year	228,126	3,006,969
Remeasurements of net defined benefit liabilities	(23,049)	97,370
Cash flow hedge	-	-
Retained earnings available for appropriation	205,077	3,104,339
Transfer from other reserves Development transfer for technology		
development	69,270	-
·	69,270	_
Appropriation of retained earnings		
Legal reserve	-	-
Dividends	274,347	783,135
Reserve for technology development	<u> </u>	2,321,204
	274,347	3,104,339
Unappropriated retained earnings to be carried forward	<u>-</u>	-

34. ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS:

34.1 Assets Held for Sale

In accordance with the final approval of management, the Company decided to dispose of polarizer and related material business and all shares of LG Chem Hangzhou Advanced Materials COMPANY LIMITED (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.

(a) Details of assets of disposal group classified as assets held for sale as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Assets of disposal group		
Property, plant and equipment	26,353	-
Intangible assets	20,100	-
Inventories	46,714	-
Investment in subsidiaries	11,712	-
Investment in joint venture	-	3,080
Total	104,879	3,080

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 of December 31, 2023.

34.2 Discontinued Operations

The Company 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 Company 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 Company decided to dispose of LCD("Liquid Crystal Display") polarizer business with the resolution of the board of directors in June 2020, and the disposal was completed in February 2021. Accordingly, the profit and loss from the related operations are presented as discontinued operations and the comparative statements of profit or loss have been restated.

Comprehensive income information from discontinued operation for the years ended December 31, 2023 and 2022, is as follows:

	2023							
(In millions of Korean won)	LCD p	olarizer	Glass	s substrate		larizer and ted material		Total
Revenue Expense	₩	307 (1)	₩	1 (4,940)	₩	675,935 (680,230)	₩	676,243 (685,171)
Profit (loss) before income tax of discontinued operation		306		(4,939)		(4,295)		(8,928)
Income tax benefit (expense)		167		(2,689)		(2,339)		(4,861)
Profit (loss) after income tax of discontinued operations	₩	473	₩	(7,628)	₩	(6,634)	₩	(13,789)

	2022							
(In millions of Korean won)	LCD	polarizer	Glass	s substrate		larizer and ted material		Total
Revenue Expense	₩	10,361 (15,989)	₩	354 (3,183)	₩	849,919 (785,984)	₩	860,634 (805,156)
Profit (loss) before income tax of discontinued operation		(5,628)		(2,829)		63,935		55,478
Income tax benefit (expense)		1,281		644		(5,829)		(3,904)
Profit (loss) after income tax of discontinued operations	₩	(4,347)	₩	(2,185)	₩	58,106	₩	51,574

Net cash flows from discontinued operations for the years ended December 31, 2023 and 2022, are as follows:

	2023					
(In millions of Korean won)	LCD polarizer	Glass substrate	Polarizer and related material	Total		
Net cash inflow (outflow) from operating activities Net cash inflow (outflow)	₩ (14,261)	₩ (7,148)	₩ 56,811	₩ 35,402		
from investing activities Net cash inflow (outflow)	(24)	9,750	(23,589)	(13,863)		
from financing activities	-	-	-	-		

	2022						
(In millions of Korean won)	LCD polarizer	Glass substrate	Polarizer and related material	Total			
Net cash inflow (outflow) from operating activities Net cash inflow (outflow)	₩ 861	₩ (2,782)	₩ 38,215	₩ 36,294			
from investing activities Net cash inflow (outflow)	(6,618)	712	(20,658)	(26,564)			
from financing activities	5,757	2,070	-	7,827			

35. ASSETS AND LIABILITIES RELATED TO CONTRACTS WITH CUSTOMERS:

(a) Assets and liabilities related to contracts with customers as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022	
Contract liabilities			
Advances in relation to revenue from the Company's main business activities	24,073	29,566	
Expected customer incentives	1,582	1,538	
Unearned revenue	25,222	27,784	
Total contract liabilities	50,877	58,888	

(b) Revenue recognized in relation to contract liabilities

Revenue recognized in the current year that was included in the contract liability balance at the beginning of the year, and revenue recognized in the current year from performance obligations satisfied (or partially satisfied) in previous years are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022	
Revenue recognized in the current year from the contract liability balance at the			
beginning of the year	36,135	36,076	
Advances in relation to revenue from the			
Company's main business activities	28,764	31,130	
Unearned revenue	7,371	4,946	
Revenue recognized from performance obligations satisfied in previous years	_	-	

36. INVESTMENT PROPERTIES:

(a) Details of investment properties as of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)		December	· 31. 2023		December 31, 2022			2	
	Acquisitions cost	Accumulated depreciation	Accumulated impairment	Book amount	Acquisitions cost	Accumulated depreciation	Accumulated impairment	Book amount	
Land	4,358	(67)	(462)	3,829	5,170	(42)	(462)	4,666	
Buildings	76,392	(12,826)	(17,020)	46,546	78,117	(11,098)	(17,030)	49,989	
	80,750	(12,893)	(17,482)	50,375	83,287	(11,140)	(17,492)	54,655	

(b) Changes in investment properties for the years ended December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023			December 31, 2022		
	Land	Building	Total	Land	Building	Total
Beginning balance	4,666	49,989	54,655	4,216	19,054	23,270
Acquisitions/Transfers	-	398	398	1,440	53,273	54,713
Disposals/Transfers	(812)	(1,460)	(2,272)	(486)	(3,291)	(3,777)
Depreciation	(25)	(2,381)	(2,406)	(42)	(2,177)	(2,219)
Impairment ¹			<u> </u>	(462)	(16,870)	(17,332)
Ending balance	3,829	46,546	50,375	4,666	49,989	54,655

¹ Impairment recognized for Magok donation public contribution facility classified as investment properties. As the recoverable amount was less than carrying amount due to the impact of lease payment setting for public purposes and others, impairment losses were recognized during the year ended December 31, 2022.

(c) 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 of December 31, 2023, is ₩62,612 million (2022: ₩69,231 million).

(d) Operating lease

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

Although the Company is exposed to changes in the residual value at the end of the current leases, the Company 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 of December 31, 2023 and 2022, are as follows:

(In millions of Korean won)	December 31, 2023	December 31, 2022
Mrs.	0.470	0.007
Within one year	2,472	3,297
Within two years	2,452	2,429
Within five years	3,786	6,178
	8,710	11,904

37. EVENTS AFTER THE REPORTING PERIOD:

(a) The Company decided to issue non-guaranteed bonds in KRW by resolution of the Management Committee held on February 5, 2024. Accordingly, the Company issued bonds in KRW of ₩1,000,000 million on March 6, 2024.

(In millions of Korean won)	Maturity date	Amount
Non-guaranteed bonds in KRW (2 years maturity)	2026.03.06	KRW 100,000
Non-guaranteed bonds in KRW (3 years maturity)	2027.03.05	KRW 320,000
Non-guaranteed bonds in KRW (5 years maturity)	2029.03.06	KRW 380,000
Non-guaranteed bonds in KRW (7 years maturity)	2031.03.06	KRW 200,000

(b) In February 2024, the company established a subsidiary in Tennessee, USA and paid in capital of 100 million USD to enter the cathode materials business in North America.

38. APPROVAL OF ISSUANCE OF THE SEPARATE FINANCIAL STATEMENTS:

The separate financial statements 2023 were approved for issue by the board of directors on January 31, 2024, and it is planned to be finally approved at the Annual General Meeting.



Deloitte Anjin LLC

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Report on Independent Auditor's Audit of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

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

Opinion on Internal Control over Financial Reporting

We have audited LG Chem, Ltd. (the "Company") Internal Control over Financial Reporting as of December 31, 2023, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.*

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.*

We also have audited, in accordance with Korean Standards on Auditing, the separate financial statements of the Company, which comprise the separate statement of financial position as of December 31, 2023, and the separate statement of profit or loss, separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flow for the year then ended, and notes to the separate financial statements, including material accounting policies, and our report dated on March 7, 2024, expressed unqualified opinion.

Basis for Opinion on Internal Control over Financial Reporting

We conducted our audit in accordance with Korean Standards on Auditing. Our responsibility under these standards are further described in the *Auditor's Responsibilities for the Audit of the Internal Control over Financial Reporting* section of our report. We are independent of the Company in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of internal control over financial reporting and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management and Those Charged with Governance for Internal Control over Financial Reporting

Management is responsible for designing, implementing and maintaining effective internal control over financial reporting, and for its assessment about the effectiveness of internal control over financial reporting, included in the accompanying *Report on the Effectiveness of Internal Control over Financial Reporting.*

Those charged with governance have the responsibilities for overseeing internal control over financial reporting.

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Auditor's Responsibilities for the Audit of Internal Control over Financial Reporting

Our responsibility is to express opinion on the Company's internal control over financial reporting based on our audit. We conducted the audit in accordance with Korean Standards on Auditing. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

An audit of internal control over financial reporting involves performing procedures to obtain audit evidence about whether a material weakness exists. The procedures selected depend on the auditor's judgment, including the assessment of the risks that a material weakness exists. An audit includes obtaining an understanding of internal control over financial reporting and testing and evaluating the design and operating effectiveness of internal control over financial reporting based on the assessed risk.

Definition and Inherent Limitations of Internal Control over Financial Reporting

An entity's internal control over financial reporting is a process effected by those charged with governance, management and other personnel, designed to provide reasonable assurance regarding the preparation of reliable separate financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea. An entity's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the entity; (2) provide reasonable assurance that transactions are recorded, as necessary, to permit preparation of separate financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea, and that receipts and expenditures of the entity are being made only in accordance with authorizations of management and those charged with governance; and (3) provide reasonable assurance regarding prevention, or timely detection and correction of unauthorized acquisition, use or disposition of the entity's assets that could have a material effect on the separate financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent, or detect and correct, misstatements. Also, projections of any assessment of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The engagement partner on the audit resulting in this independent auditor's report is Young-Jae Kim, Certified Public Accountant.

Seoul, Korea

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March 7, 2024

This report is effective as of March 7, 2024, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the Company's internal control over financial reporting thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if an .

Report on the Effectiveness of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

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

We, as the Chief Executive Officer ("CEO") and the Internal Control over Financial Reporting ("ICFR") Officer of LG Chem, Ltd. (the "Company"), assessed the effectiveness of the design and operation of the Company's Internal Control over Financial Reporting for the year ended December 31, 2023.

The Company's management, including ourselves, is responsible for designing and operating ICFR. We assessed the design and operating effectiveness of the ICFR in the prevention and detection of an error or fraud, which may cause material misstatements in the preparation and disclosure of reliable separate financial statements.

We designed and operated ICFR in accordance with Conceptual Framework for Designing and Operating Internal Control over Financial Reporting established by the Operating Committee of Internal Control over Financial Reporting in Korea (the "ICFR Committee"). And, we conducted an evaluation of ICFR based on Management Guideline for Evaluating and Reporting Effectiveness of Internal Control over Financial Reporting established by the ICFR Committee.

Based on the assessment results, we believe that the Company's ICFR as of December 31, 2023, is designed and operating effectively, in all material respects, in accordance with *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.*

We certify that this report does not contain any untrue statement of a fact or omit to state a fact necessary to be presented herein. We also certify that this report does not contain or present any statement which causes material misunderstandings, and we have reviewed and verified this report with sufficient due care.

January 31, 2024

Hak -Cheol Shin, Chief Executive Officer

Dong-Seok Cha, Internal Control over Financial Reporting Officer