

LG ENERGY SOLUTION, LTD.

Separate Financial Statements

As of and for the Years Ended December 31, 2024 and 2023

(With the Independent Auditor's Report Thereon)

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Independent Auditor's Report

English Translation of Independent Auditor's Report Originally Issued in Korean on March 5, 2025.

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

Audit Opinion

We have audited the separate financial statements of LG Energy Solution, Ltd. (the "Company"), which comprise the separate statement of financial position as of December 31, 2024 and 2023, respectively, and the separate statement of profit or loss, the separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flows, all expressed in Korean won, for the years then ended, and notes to the separate financial statements, including material accounting policy information.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024 and 2023, respectively, and its financial performance and its cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("K-IFRSs").

We have also audited, in accordance with the Korean Standards on Auditing ("KSAs"), the internal control over financial reporting of the Company as of December 31, 2024, based on the 'Conceptual Framework for Design and Operation of Internal Control over Financial Reporting' and our report dated March 5, 2025, expressed an unqualified opinion.

Basis for Audit Opinion

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

Key Audit Matters

The key audit matters are those matters that, in our professional judgment, were of most significance in our audits of the separate financial statements of the current period. These matters were addressed in the context of our audits 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.

Warranty Provisions

1) Description of Key Audit Matter

As stated in Notes 4 and 15 of the separate financial statements, the warranty provisions are estimated based on the average warranty period, revenue and historical claim experience rate, or the number of vehicles subject to recall, the expected total repair costs, etc. The estimated amount of the warranty provisions based on experience rate etc, recognized by the Company is ₩221,497 million as of December 31, 2024.

We have assessed this item as a Key Audit Matter, considering that the recognized amount of the warranty provision based on experience rate etc, is material, and the significant management judgment is involved in estimation.

2) How our audit addressed the Key Audit Matter

Our procedures included the following:

- Evaluate whether the Company's policies for measuring and recognizing warranty provisions comply with accounting standards.
- Perform the following procedures to assess the reasonableness of the key variables, including relevant revenue, claim rate and warranty period used by management:
 - Evaluate whether the Company's internal controls for recognizing and measuring the warranty provisions are effectively designed and operated.
 - Evaluate the adequacy of the claim rate (relevant revenue and claim costs) of general warranty provision.
 - Assess whether the warranty provision is calculated exactly based on the claim rate and relevant revenue.
 - Evaluate the adequacy of average warranty period for each business unit.
- Independently recalculate the balance of the warranty provisions by developing and applying a statistical model based on the analysis of the historical claim occurrence cycle.
- Assess the adequacy of the related footnote disclosures.

Timing of Revenue Recognition for Customer Compensation

1) Description of Key Audit Matter

The Company's sales of automotive batteries, its primary product, declined during the current period due to a temporary slowdown in demand within the electric vehicle market. As a result, the Company has been receiving compensation from automotive OEM customers for reduced order volumes and others.

As stated in Notes 2.4 and 21 of the separate financial statements, the Company identifies performance obligations within customer contracts and recognizes revenue when those obligations are satisfied.

We have determined this matter to be a Key Audit Matter, considering that customer compensation revenue recognized for the year ended December 31, 2024, amounted to ₩450,894 million, representing a material portion of total revenue, that the nature and terms of customer compensation agreements vary by customer, and that significant management judgment is involved when determining the satisfaction of performance obligations and the timing of revenue recognition.

2) How our audit addressed the Key Audit Matter

Our procedures included the following:

- Evaluate whether the Company's accounting policies for measuring and recognizing customer compensation revenue are in compliance with accounting standards.
- Evaluate whether the Company's internal controls for recognizing customer compensation revenue are effectively designed and operated.
- Perform a sample test on compensation revenue as follows:
 - Obtain initial supply contracts, compensation agreements, internal approval documents, invoices, proof of payment and other relevant audit evidence from the Company's sales department.
 - Verify the total compensation amount and assess the level of uncertainty associated with the compensation amount based on the obtained supply contracts, compensation agreements, and others.
 - Independently recalculate the compensation revenue by measuring the performance obligations satisfied during the current period and determining any remaining performance obligations to be fulfilled at the point when the compensation amount is finalized, in accordance with the contracts, compensation agreements, revenue recognition standards, and others.
- Assess the adequacy of the related disclosures.



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

Management is responsible for the preparation of the accompanying separate financial statements in accordance with K-IFRS, and for such internal control as they determine 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 of the Company 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, or has no realistic alternative but to do so.

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 KSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in 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 KSAs, 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 audit 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 the 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 to 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 audits and significant audit findings, including any significant deficiencies in internal control that we identify during our audits.

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.

Deloitte.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audits 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 Kiu Seok Seo.

Deloitte idnjin LLC

March 5, 2025

This report is effective as of March 5, 2025, the auditor's report date. Certain subsequent events or circumstances may have occurred between the auditor's report date and the time the auditor's report is read. Such events or circumstances could significantly affect the separate financial statements and may result in modifications to the auditor's report.

LG ENERGY SOLUTION, LTD.

Separate financial statements
as of and for the years ended December 31, 2024 and 2023

“The accompanying separate financial statements, including all footnotes and disclosures, have been prepared by, and are the responsibility of, the Company.”

Dong Myung Kim
Chief Executive Officer
LG Energy Solution, Ltd.

LG Energy Solution, Ltd.
Separate statements of financial position
As of December 31, 2024 and 2023

(Korean won in millions)

	<u>Notes</u>		<u>December 31, 2024</u>		<u>December 31, 2023</u>
Assets					
Current assets					
Cash and cash equivalents	3,5,6	₩	849,894	₩	1,855,224
Trade receivables	3,5,7,30		2,303,799		2,289,892
Other receivables	3,5,7,30		1,015,552		1,173,761
Prepaid income taxes	27		10,478		15,132
Other current financial assets	3,5,8		-		65,400
Other current assets	13		185,384		118,776
Inventories	9		<u>1,228,678</u>		<u>1,265,558</u>
			5,593,785		6,783,743
Non-current assets					
Trade receivables	3,5,7		148,296		127,946
Other receivables	3,5,7,30		145,236		153,173
Other non-current financial assets	3,5,8		1,033,765		287,187
Investments in subsidiaries	10		13,379,517		9,847,300
Investments in associates and joint ventures	10		69,993		271,463
Deferred tax assets	27		1,913,174		1,598,516
Property, plant and equipment	11,18		4,059,252		3,383,740
Intangible assets	12		918,174		712,217
Investment properties	33		226,094		212,650
Other non-current assets	13,16		<u>153,524</u>		<u>168,004</u>
			22,047,025		16,762,196
Total assets		₩	<u>27,640,810</u>	₩	<u>23,545,939</u>
Liabilities					
Current liabilities					
Trade payables	3,5,30	₩	1,114,929	₩	1,097,287
Other payables	3,5,30		1,509,931		983,134
Borrowings	3,5,11,14,31		157,950		670,418
Other current financial liabilities	3,5,8		43,107		58,440
Current provisions	15		670,990		374,710
Other current liabilities	17,32		<u>415,566</u>		<u>326,930</u>
			3,912,473		3,510,919
Non-current liabilities					
Other non-current payables	3,5,30		2,329		3,368
Borrowings	3,5,11,14,31		7,804,308		3,149,383
Other non-current financial liabilities	3,5,8		-		68,368
Non-current provisions	15		147,019		152,295
Other non-current liabilities	17,32		<u>57,601</u>		<u>60,112</u>
			8,011,257		3,433,526
Total liabilities		₩	<u>11,923,730</u>	₩	<u>6,944,445</u>
Equity					
Share capital	19	₩	117,000	₩	117,000
Capital surplus	19		17,589,722		17,589,722
Accumulated other comprehensive income			(51,598)		(53,516)
Accumulated deficit	20		<u>(1,938,044)</u>		<u>(1,051,712)</u>
Total equity			<u>15,717,080</u>		<u>16,601,494</u>
Total liabilities and equity		₩	<u>27,640,810</u>	₩	<u>23,545,939</u>

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

LG Energy Solution, Ltd.
Separate statements of profit or loss
For the years ended December 31, 2024 and 2023

(Korean won in millions)

	<u>Notes</u>	<u>2024</u>	<u>2023</u>
Revenue	21,30,32	₩ 7,926,651	₩ 12,288,439
Cost of sales	21,22,30	<u>6,842,993</u>	<u>9,881,450</u>
Gross profit	21	1,083,658	2,406,989
Selling and administrative expenses	21,22,30	<u>3,388,836</u>	<u>2,725,903</u>
Operating loss	21	(2,305,178)	(318,914)
Finance income	24,30	811,933	615,296
Finance costs	24,30	902,154	575,148
Other non-operating income	25	1,653,179	729,536
Other non-operating expenses	26	<u>333,487</u>	<u>424,544</u>
(Loss) gain before income tax benefit		(1,075,707)	26,226
Income tax (benefit) expense	27	(138,064)	91,915
Loss for the year	20	<u>₩ (937,643)</u>	<u>₩ (65,689)</u>
Loss per share attributable to the equity holders of the Company (in Korean won)	28		
Basic or diluted losses per share		<u>₩ (4,007)</u>	<u>₩ (281)</u>

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

LG Energy Solution, Ltd.
Separate statements of comprehensive income
For the years ended December 31, 2024 and 2023

(Korean won in millions)

	<u>Notes</u>	<u>2024</u>	<u>2023</u>
Loss for the year	₩	(937,643)	₩ (65,689)
Other comprehensive income:			
Items that will not be subsequently reclassified to profit or loss:			
Remeasurements of net defined benefit liabilities	16	66,543	(35,317)
Gain (loss) on valuation of financial assets at FVOCI	5	818	(129,038)
Income tax effect of other comprehensive income		<u>(15,419)</u>	<u>37,621</u>
		51,942	(126,734)
Items that may be subsequently reclassified to profit or loss:			
Gain (loss) on cash flow hedge	5	1,669	(850)
(Loss) income tax effect of other comprehensive income		<u>(382)</u>	<u>195</u>
		1,287	(655)
Other comprehensive income (loss) for the year, net of tax		53,229	(127,389)
Total comprehensive loss for the year, net of tax	₩	<u>(884,414)</u>	<u>₩ (193,078)</u>

The accompanying notes are an integral part of separate financial statements.

LG Energy Solution, Ltd.
Separate statements of changes in equity
For the years ended December 31, 2024 and 2023

(Korean won in millions)

	Notes	Share capital	Capital surplus	Accumulated other comprehensive income (loss)	Retained earnings (accumulated deficit)	Total
As of January 1, 2023		₩ 117,000	₩ 17,589,722	₩ 46,640	₩ (958,790)	₩ 16,794,572
Comprehensive loss for the year:						
Loss for the year		-	-	-	(65,689)	(65,689)
Remeasurements of net defined benefit liabilities	16	-	-	-	(27,233)	(27,233)
Loss on valuation of financial assets at FVOCI	5	-	-	(99,501)	-	(99,501)
Loss on cash flow hedge	5	-	-	(655)	-	(655)
Total comprehensive loss for the year		-	-	(100,156)	(92,922)	(193,078)
As of December 31, 2023		₩ 117,000	₩ 17,589,722	₩ (53,516)	₩ (1,051,712)	₩ 16,601,494
As of January 1, 2024		₩ 117,000	₩ 17,589,722	₩ (53,516)	₩ (1,051,712)	₩ 16,601,494
Comprehensive loss for the year:						
Loss for the year		-	-	-	(937,643)	(937,643)
Remeasurements of net defined benefit liabilities	16	-	-	-	51,311	51,311
Gain on valuation of financial assets at FVOCI	5	-	-	631	-	631
Gain on cash flow hedge	5	-	-	1,287	-	1,287
Total comprehensive gain (loss) for the year		-	-	1,918	(886,332)	(884,414)
As of December 31, 2024		₩ 117,000	₩ 17,589,722	₩ (51,598)	₩ (1,938,044)	₩ 15,717,080

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

LG Energy Solution, Ltd.
Separate statements of cash flows
For the years ended December 31, 2024 and 2023

(Korean won in millions)

	<u>Notes</u>	<u>2024</u>	<u>2023</u>
Cash flows from operating activities:			
Cash generated from operations	31	₩ (365,341)	₩ (684,103)
Interest received		81,683	129,514
Interest paid		(205,708)	(76,063)
Dividends received		1,079,047	329,775
Income tax refund		(176,152)	(105,378)
Net cash provided by (used in) operating activities		<u>413,529</u>	<u>(406,255)</u>
Cash flows from investing activities:			
Cash inflow from investing activities:			
Decrease in other receivables		5,000	13,866
Decrease in other non-current receivables		3,912	4,750
Proceeds from disposal of financial assets		2,751	-
Proceeds from disposal of property, plant and equipment		1,333	67,476
Proceeds from disposal of intangible assets		2,430	1,454
Government grants received		961	14,079
		<u>16,387</u>	<u>101,625</u>
Cash outflow for investing activities:			
Increase in other non-current receivables		(10,378)	(12,813)
Acquisition of investments in subsidiaries		(3,323,084)	(2,498,895)
Acquisition of investments in associates		(7,661)	(62,331)
Acquisition of financial instruments		(388,092)	(84,652)
Acquisition of property, plant and equipment		(1,329,337)	(1,491,141)
Acquisition of intangible assets		(113,268)	(87,192)
Other cash outflow for investing activities		(2,775)	(4,431)
		<u>(5,174,595)</u>	<u>(4,241,455)</u>
Net cash used in investing activities		<u>(5,158,208)</u>	<u>(4,139,830)</u>
Cash flows from financing activities:			
Cash inflow from financing activities:			
Increase in borrowings	31	4,330,054	2,325,688
Settlement of hedging derivative transactions		106,450	-
		<u>4,436,504</u>	<u>2,325,688</u>
Cash outflow for financing activities:			
Repayment of borrowings and others	31	(710,426)	(748,608)
		<u>(710,426)</u>	<u>(748,608)</u>
Net cash provided by financing activities		<u>3,726,078</u>	<u>1,577,080</u>
Net decrease in cash and cash equivalents		(1,018,601)	(2,969,005)
Cash and cash equivalents at beginning of the year		1,855,224	4,828,152
Effects of exchange rate changes on cash and cash equivalents		13,271	(3,923)
Cash and cash equivalents at end of the year		<u>₩ 849,894</u>	<u>₩ 1,855,224</u>

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

1. GENERAL:

General information about LG Energy Solution, Ltd. (the “Company”) is as follows:

1.1 Company Information

The Company, a split-off of LG Chem, Ltd.’s battery division, was incorporated on December 1, 2020.

As of December 31, 2024, the Company is engaged in the battery industry with its manufacturing facilities located in Ochang.

The Company’s shares have been listed on the Korea Exchange since January 27, 2022, and the share capital is ₩117,000 million as of December 31, 2024. The largest shareholder of the Company is LG Chem, Ltd., which holds 81.84% of the Company’s ordinary shares.

The Company is authorized to issue 800 million shares (₩500 per share) and has issued 234 million of ordinary shares as of December 31, 2024.

1.2 Business Overview

The Company is engaged in the battery business.

The Company manufactures and supplies batteries ranging from IT and new application batteries for mobile phones and laptops to automotive batteries for electric vehicles and ESS batteries. Demand for mobile batteries for new applications, such as electric tools and other electrical devices, as well as traditional IT devices, is increasing recently, and the automotive battery business is also expected to expand rapidly due to increasing demand for batteries associated with enhanced environment regulation in developed countries. Demand for ESS is expanding with an increasing importance of efficient usage of electricity and generation of renewable energy.

2. BASIS OF PREPARATION AND CHANGES IN ACCOUNTING POLICIES:

2.1 Basis of Preparation

The Company prepares its separate financial statements in accordance with Korean International Financial Reporting Standards (“K-IFRS”) 1027 *Separate Financial Statements*. The separate financial statements require a parent or an investor with joint control of, or significant influence over, an investee to account for their investment assets in accordance with the cost method or the method prescribed in K-IFRS 1109 *Financial Instruments* or using the equity method of accounting as prescribed in K-IFRS 1028 *Investments in Associates and Joint Ventures*.

The principal accounting policies are set out below. Except for the effect of the amendments to K-IFRSs and new interpretations set out below, the principal accounting policies used to prepare the separate financial statements as of and for the year ended December 31, 2024, are consistent with the accounting policies used to prepare the separate financial statements as of and for the year ended December 31, 2023.

The accompanying separate financial statements have been prepared on the historical cost basis, except for certain non-current assets and financial instruments that are measured at fair value, as explained in the accounting policies below. Historical cost is based on the fair value of the consideration given.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Company takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these separate financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of K-IFRS 1102 *Share-Based Payment*, leasing transactions that are within the scope of K-IFRS 1116 *Leases* and measurements that have some similarities to fair value but are not fair value, such as net realizable value in K-IFRS 1002 *Inventories* or value in use in K-IFRS 1036 *Impairment of Assets*.

The directors have, at the time of approving the financial statements, a reasonable expectation that the Company has adequate resources to continue in operational existence for the foreseeable future. Thus, they continue to adopt the going-concern basis of accounting in preparing the financial statements.

2.2 Changes in Accounting Policies and Disclosures

1) New and amended K-IFRSs and new interpretations that are effective for the current year:

- 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.

- 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.

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, the 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 includes 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 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 (see Note 5.(3)).

- 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 payment’ or ‘revised lease payments’ such that the seller-lessee does not recognize a gain or loss that relates to the right of use retained by the seller-lessee after the commencement date.

2) At the date of authorization of these separate financial statements, the Company has not applied the following new and revised K-IFRSs that have been issued but are not yet effective.

- K-IFRS 1021 *The Effects of Changes in Foreign Exchange Rates* – Lack of Exchangeability

The amendments specify how to assess whether a currency is exchangeable and how to determine the exchange rate when it is not. The amendments state that a currency is exchangeable into another currency when an entity is able to obtain the other currency within a time frame that allows for a normal administrative delay and through a market or exchange mechanism in which an exchange transaction would create enforceable rights and obligations.

The amendments are effective for annual reporting periods beginning on or after January 1, 2025, with earlier application permitted. An entity is not permitted to apply the amendments retrospectively. Instead, an entity is required to apply the specific transition provisions included in the amendments.

- K-IFRS 1109 *Financial Instruments* and K-IFRS 1107 *Financial Instruments: Disclosures* – Classification and Measurement Requirements of Financial Instruments

The amendments clarify the conditions related to the discharge of a financial liability before the settlement date when settling such financial liabilities using an electronic payment system. They further specify an interest feature, a contingent feature, financial assets with non-recourse features and contractually linked instruments that should be considered in assessing whether contractual cash flows of a financial asset are consistent with a basic lending arrangement. Furthermore, the amendments include additional disclosure requirements for investments in equity instruments designated at fair value through other comprehensive income (“FVOCI”) and contractual terms that could change the timing or amount of contractual cash flows. The amendments are applied retrospectively for annual reporting periods beginning on or after January 1, 2026, with earlier application permitted.

- K-IFRS 1109 *Financial Instruments* – Derecognition of Lease Liabilities and Transaction price

The amendments clarify that when a lessee has determined that a lease liability has been extinguished in accordance with K-IFRS 1109, the lessee is required to recognize any resulting gain or loss in profit or loss. Additionally, the amendments have replaced ‘their transaction price (as defined in K-IFRS 1115)’ in K-IFRS 1109:5.1.3 with ‘the amount determined by applying K-IFRS 1115’ to remove an inconsistency between K-IFRS 1109 and the requirements in K-IFRS 1115. The amendments are effective for annual reporting periods beginning on or after January 1, 2026, with earlier application permitted.

- K-IFRS 1110 *Consolidated Financial Statements* – Determination of ‘De Facto Agent’

The amendments have amended K-IFRS 10:B74 to use less conclusive language and to clarify that the relationship described in K-IFRS 10:B74 is just one example of a circumstance in which judgment is required to determine whether a party is acting as a de facto agent. The amendments are effective for annual reporting periods beginning on or after January 1, 2026, with earlier application permitted.

- K-IFRS 1101 *First-Time Adoption of Korean International Financial Reporting Standards* – Hedging Accounting by a First-Time Adopter

The amendments have improved the consistency of the wording of K-IFRS 1101:B6 with the requirements for hedge accounting in K-IFRS 1109 and added cross-references to K-IFRS 1109:6.4.1 to improve the understandability of K-IFRS 1101. The amendments are effective for annual reporting periods beginning on or after January 1, 2026, with earlier application permitted.

- K-IFRS 1107 *Financial Instruments: Disclosures* – Gain or Loss on Derecognition

The amendments have updated the obsolete cross-reference in K-IFRS 1107:B38 and aligned the wording of this paragraph with the terms used in K-IFRSs. The amendments are effective for annual reporting periods beginning on or after January 1, 2026, with earlier application permitted.

- K-IFRS 1007 *Statement of Cash Flows* – Cost Method

The amendments have replaced the term ‘cost method’ with ‘at cost’ in K-IFRS 1007:37. The amendments are effective for annual reporting periods beginning on or after January 1, 2026, with earlier application permitted.

The Company does not anticipate that the application of the enactment and amendments will have a significant impact on its 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 K-IFRS 1027 *Separate Financial Statements*. Investments in subsidiaries, joint ventures and associates are recognized at a cost under the direct equity method. The Company recognizes dividend income from subsidiaries, joint ventures and associates in profit or loss when its right to receive the dividend is established.

The Company determines whether impairments should be recognized on investments in subsidiaries, joint ventures and associates in accordance with K-IFRS 1036 *Impairment of Assets*. If there are indications of impairment, the Company performs impairment testing by comparing the carrying amount of investments with their recoverable amounts (the higher of net fair value and value in use), in accordance with K-IFRS 1036 *Impairment of Assets*. The difference between the recoverable amount and the carrying amount of these investment assets is recognized as impairment losses.

2.4 Revenue Recognition

(1) Identify performance obligation

With regard to the contract for 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 expired, the warranties are recognized as revenue and are identified as a separate performance obligation when the Company provides additional warranties for the quality of the product or when the customer has the option to purchase additional warranties separately.

(2) 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 the discounts and the refund, and the volume discounts are calculated based on the periodical forecast sales. The warranty provision for the sales and refund is reasonably estimated and recognized properly.

(3) A performance obligation satisfied over time

The Company recognizes revenue over time as services are rendered and determines revenue recognition using a method that reliably measures the services performed, depending on the nature of the transaction.

(4) 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.

2.5 Lease

(1) The Company as lessee

The Company assesses whether a contract is or contains a lease, at the inception of the contract. The Company recognizes a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low-value assets (such as tablets and personal computers, small items of office furniture and telephones). For these leases, the Company recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease, unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the rate implicit in the lease. If this rate cannot be readily determined, the Company uses its incremental borrowing rate.

The incremental borrowing rate depends on the term, currency and start date of the lease and is determined based on a series of inputs, including: the risk-free rate based on government bond rates; a country-specific risk adjustment; a credit risk adjustment based on bond yields; and an entity-specific adjustment when the risk profile of the entity that enters into the lease is different to that of the Company and the lease does not benefit from a guarantee from the Company.

Lease payments included in the measurement of the lease liability comprise:

- Fixed-lease payments (including in-substance fixed payments), less any lease incentives receivable
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date
- The amount expected to be payable by the lessee under residual value guarantees
- The exercise price of purchase options, if the lessee is reasonably certain to exercise the options
- Payment of penalties for terminating the lease if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is included in the measurement of the borrowings.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Company remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed, or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.
- The lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which case, the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate (unless the lease payments change is due to a change in a floating interest rate; in which case a revised discount rate is used).
- A lease contract is modified, and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement date, plus any lease incentives received and any initial direct costs. They are subsequently measured at cost, less accumulated depreciation and impairment losses.

Whenever the Company incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognized and measured under K-IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*. To the extent that the costs relate to a right-of-use asset, the costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of the lease term and the useful life of the right-of-use asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Company expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are included in the property, plant and equipment in the separate statements of financial position.

The Company applies K-IFRS 1036 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in the Property, Plant and Equipment policy, as stated in Note 2.14.

Variable rents that do not depend on an index or rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognized as an expense in the period in which the event or condition that triggers those payments occurs and are included in profit or loss.

As a practical expedient, K-IFRS 1116 permits a lessee not to separate non-lease components, and instead account for any lease and associated non-lease components as a single arrangement. The Company has not used this practical expedient. For contracts that contain a lease component and one or more additional lease or non-lease components, the Company allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

(2) The Company as lessor

Leases for which the Company is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

When the Company is an intermediate lessor, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance or operating lease by reference to the right-of-use asset arising from the head lease.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Company's net investment in the leases. Finance lease income is allocated to accounting periods to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Subsequent to initial recognition, the Company regularly reviews the estimated unguaranteed residual value and applies the impairment requirements of K-IFRS 1109, recognizing an allowance for expected credit losses on the finance lease receivables.

Finance lease income is calculated with reference to the gross carrying amount of the lease receivables, except for credit-impaired financial assets for which interest income is calculated with reference to their amortized cost (i.e., after a deduction of the loss allowance).

When a contract includes both lease and non-lease components, the Company applies K-IFRS 1115 to allocate the consideration under the contract to each component.

2.6 Foreign currencies

The separate financial statements of the Company are presented in the currency of the primary economic environment in which the entity operates (its functional currency). For the purpose of the separate financial statements, the results and financial position of each group entity are expressed in Korean won, which is the functional currency of the entity and the presentation currency for the separate financial statements.

In preparing the separate financial statements of the Company, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences are recognized in profit or loss in the period in which they arise, except for:

- exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings
- exchange differences on transactions entered into in order to hedge certain foreign currency risks
- exchange differences on monetary items receivable from, or payable to, a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the net investment

2.7 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets until such time as the assets are substantially ready for their intended use or sale.

To the extent that variable-rate borrowings are used to finance a qualifying asset and are hedged in an effective cash flow hedge of interest rate risk, the effective portion of the derivative is recognized in other comprehensive income and reclassified to profit or loss when the qualifying asset impacts profit or loss. To the extent that fixed-rate borrowings are used to finance a qualifying asset and are hedged in an effective fair value hedge of interest rate risk, the capitalized borrowing costs reflect the hedged interest rate.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

2.8 Government grants

Government grants are not recognized until there is a reasonable assurance that the Company will comply with the conditions attached to them and that the grants will be received.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between the proceeds received and the fair value of the loan based on prevailing market interest rates.

Government grants related to assets are presented in the separate statements of financial position by deducting the grant from the carrying amount of the asset (including property, plant and equipment). The related grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

Government grants related to revenue are recognized as income over the corresponding period in accordance with systematic criteria to match against the costs intended to be preserved. Also, government grants received as immediate financial support to the Company, without offsetting against previously incurred costs or losses, and without anticipation of future-related costs, are recognized as current income when the right to receive such grants arises.

Government grants toward staff retraining costs are recognized as income over the periods necessary to match them with the related costs and are deducted in reporting the related expense.

2.9 Retirement benefit costs and termination benefits

Payments to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement plans, the cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurements comprising actuarial gains and losses, the effect of the asset ceiling (if applicable) and the return on plan assets (excluding interest) are recognized immediately in the separate statements of financial position with a charge or credit to the separate statements of comprehensive income in the period in which they occur. Remeasurements recognized in the separate statements of comprehensive income are not reclassified. Past service cost is recognized in profit or loss when the plan amendment or curtailment occurs, or when the Company recognizes related restructuring costs or termination benefits, if earlier. Gains or losses on the settlement of a defined benefit plan are recognized when the settlement occurs.

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset. Defined benefit costs are split into three categories:

- Service costs, which include current service cost, past service cost and gains and losses on curtailments and settlements;
- Net interest expense or income;
- Remeasurements.

Service costs are recognized within the cost of sales and selling and administrative expenses, and net interest expense or income is recognized within financial costs, and the remeasurement component in other comprehensive income. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognized in the separate statements of financial position represents the actual deficit or surplus in the Company's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

2.10 Taxation

Income tax expense represents the sum of the current tax and deferred tax expense.

(1) Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in the separate statements of profit or loss and comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

A provision is recognized for those matters for which the tax determination is uncertain, but it is considered probable that there will be a future outflow of funds to a tax authority. The provisions are measured at the best estimate of the amount expected to become payable. The assessment is based on the judgment of tax professionals within the Company, supported by previous experience in respect of such activities, and in certain cases, based on specialist independent tax advice.

(2) Deferred tax

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable profit, and is accounted for using the liability method. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination or for transactions that give rise to equal taxable and deductible temporary differences) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Company is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences, and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the assets to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. Such tax rates are the average rates that are expected to apply to taxable income, deducting unused tax losses. In case a forecast taxable income is expected to fall below zero, the Company applies the lowest rate in the range of future expected progressive tax rates. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

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

For the purpose of measuring deferred tax liabilities and deferred tax assets for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted. The presumption is rebutted when the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment properties over time, rather than through sale.

(3) Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case the current and deferred taxes are also recognized in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

2.11 Property, plant and equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to their purchase or construction, which includes any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of an asset or as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Company and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The Company does not depreciate land. Depreciation expense is computed using the straight-line method based on the estimated useful lives of the assets as follows:

	<u>Useful lives</u>
Buildings	25–50 years
Structures	6–50 years
Machinery	6–15 years
Others	1–12 years

If each part of an item of property, plant and equipment has a cost that is significant in relation to the total cost of the item, it is depreciated separately.

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

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising from the derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the profit or loss in the period in which the property is derecognized.

2.12 Investment property

Investment properties are properties held to earn rentals and/or for capital appreciation (including property under construction for such purposes). Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are reported at cost, less accumulated depreciation and accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of an asset, or as a separate asset, if it is probable that future economic benefits associated with the asset will flow to the Company and the cost of the asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

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

2.13 Intangible assets

(1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost, less accumulated impairment losses.

	<u>Useful lives</u>
Software	6 years
Development costs	6 years
Industrial property rights	1–10 years
Others	6–10 years

(2) Internally generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following conditions have been demonstrated:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale;
- The intention to complete the intangible asset and use or sell it
- The ability to use or sell the intangible asset
- How the intangible asset will generate probable future economic benefits
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
- The ability to measure reliably the expenditure attributable to the intangible asset during its development.

Expenditure arising from development (or from the development phase of an internal project) is recognized as an intangible asset if, and only if, the development project is designed to produce new or substantially improved products, and the Company can demonstrate the technical and economic feasibility and measure reliably the resources attributable to the intangible asset during its development.

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria. Where no internally generated intangible asset can be recognized, development expenditure is recognized in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost, less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

(3) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost, less accumulated amortization and accumulated impairment losses on the same basis as intangible assets that are acquired separately.

(4) Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use. Gains or losses arising from the derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

(5) Patents and trademarks

Patents and trademarks are measured initially at purchase cost and are amortized on a straight-line basis over their estimated useful lives.

2.14 Impairment of tangible and intangible assets other than goodwill

At each reporting date, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value, less costs to sell or value in use. If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount and the reduced amount is recognized in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

2.15 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost of inventories, except for those in-transit measured using specific identification of their individual costs, is measured under the weighted-average method and consist of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognized as an expense (cost of sales) in the period in which the related revenue is recognized. The amount of any write-down of inventories to net realizable value and all losses of inventories is recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, is recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

2.16 Provisions

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

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material). The discount rate used is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized in profit or loss as a borrowing cost.

When some, or all, of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefits is no longer probable, the related provision is reversed during the period.

2.17 Cash and cash equivalents

In the separate statements of financial position, cash and cash equivalents are comprised of cash (i.e., cash on hand and on-demand deposits) and cash equivalents. Cash equivalents are short-term (generally with original maturity of three months or less), highly liquid investments that are readily convertible to a known amount of cash and which are subject to an insignificant risk of changes in value. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.

Bank balances for which use by the Company is subject to third-party contractual restrictions are included as part of cash, unless the restrictions result in a bank balance no longer meeting the definition of cash. If the contractual restrictions to use the cash extend beyond 12 months after the end of the reporting period, the related amounts are classified as non-current in the separate statements of financial position.

For the purposes of the separate statements of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above, net of outstanding bank overdrafts, which are repayable on demand and form an integral part of the Company's cash management. Such overdrafts are presented as short-term borrowings in the separate statements of financial position.

2.18 Financial Instruments

Financial assets and financial liabilities are recognized in the Company's separate statements of financial position when the Company becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value, except for trade receivables that do not have significant financing components, which are measured at the transaction price. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss ("FVPL")) are added to, or deducted from, the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVPL are recognized immediately in profit or loss.

2.19 Financial assets

All regular-way purchases or sales of financial assets are recognized and derecognized on a trade-date basis. Regular-way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognized financial assets are measured subsequently in their entirety at either amortized cost or fair value, depending on the classification of the financial assets.

(1) Classification of financial assets

Debt instruments that meet the following conditions are measured subsequently at amortized cost:

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments that meet the following conditions are measured subsequently at FVOCI:

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

By default, all other financial assets are measured subsequently at FVPL

Despite the foregoing, the Company may make the following irrevocable election/designation at initial recognition of a financial asset:

- The Company may irrevocably elect to present subsequent changes in fair value of an equity investment in other comprehensive income if certain criteria are met (see (1-3) below)
- The Company may irrevocably designate a debt investment that meets the amortized cost or FVOCI criteria as measured at FVPL if doing so eliminates or significantly reduces an accounting mismatch (see (1-4) below).

1-1) Amortized cost and effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period. For financial assets other than purchased or originated credit-impaired financial assets (i.e., assets that are credit-impaired on initial recognition), the effective interest rate is the rate that exactly discounts estimated future cash flows (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts), excluding expected credit losses, through the expected life of the debt instrument or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition. For purchased or originated credit-impaired financial assets, a credit-adjusted effective interest rate is calculated by discounting the estimated future cash flows, including expected credit losses, to the amortized cost of the debt instrument on initial recognition.

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition, minus the principal repayments, plus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortized cost of a financial asset before adjusting for any loss allowance.

Interest income is recognized using the effective interest method for debt instruments measured subsequently at amortized cost and at FVOCI. For financial assets other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial asset. If, in subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset.

For purchased or originated credit-impaired financial assets, the Company recognizes interest income by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition. The calculation does not revert to a gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit impaired.

Interest income is recognized in profit or loss and is included in the "finance income" line item.

1-2) Debt instruments classified as at FVOCI

Debt instruments are initially measured at fair value, plus transaction costs. Subsequently, changes in the carrying amount of these corporate bonds as a result of foreign exchange gains and losses, impairment gains or losses, and interest income calculated using the effective interest method are recognized in profit or loss. The amounts that are recognized in profit or loss are the same as the amounts that would have been recognized in profit or loss if these corporate bonds had been measured at amortized cost. All other changes in the carrying amount of these corporate bonds are recognized in other comprehensive income and accumulated under the heading of investments revaluation reserve. When these corporate bonds are derecognized, the cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss.

1-3) Equity instruments designated as at FVOCI

On initial recognition, the Company may make an irrevocable election (on an instrument-by-instrument basis) to designate investments in equity instruments as at FVOCI. Designation at FVOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

Investments in equity instruments at FVOCI are initially measured at fair value, plus transaction costs. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in the investments revaluation reserve. The cumulative gain or loss is not reclassified to profit or loss on disposal of the equity investments; instead, it is transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss in accordance with K-IFRS 1109, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the 'Finance income' line item in profit or loss.

The Company designated all investments in equity instruments that are not held for trading as at FVOCI on initial recognition.

A financial asset is held for trading if:

- It has been acquired principally for the purpose of selling it in the near term;
- On initial recognition, it is part of a portfolio of identified financial instruments that the Company manages together and has evidence of a recent actual pattern of short-term profit-taking; or
- It is a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).

1-4) Financial assets at FVPL

Financial assets that do not meet the criteria for being measured at amortized cost or FVOCI are measured at FVPL. Specifically:

- Investments in equity instruments are classified as at FVPL, unless the Company designates an equity investment that is neither held for trading nor a contingent consideration arising from a business combination as at FVOCI on initial recognition (see (1-3) above).
- Debt instruments that do not meet the amortized cost criteria or the FVOCI criteria (see (1-1) and (1-2) above) are classified as at FVPL. In addition, debt instruments that meet either the amortized cost criteria or the FVOCI criteria may be designated as at FVPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency (so-called 'accounting mismatch') that would arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.

Financial assets at FVPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss to the extent they are not part of a designated hedging relationship (see hedge accounting policy). The net gain or loss recognized in profit or loss includes interest earned on the financial asset and is included in the 'financial income' line item. Fair value is determined in the manner described in Note 3.

(2) Foreign exchange gains and losses

The carrying amount of financial assets that are denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. Specifically;

- For financial assets measured at amortized cost that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'Other non-operating income (expenses)' line item.
- For debt instruments measured at FVOCI that are not part of a designated hedging relationship, exchange differences on the amortized cost of the debt instrument are recognized in profit or loss in the 'Other non-operating income (expenses)' line item. As the foreign currency element recognized in profit or loss is the same as if it was measured at amortized cost, the residual foreign currency element based on the translation of the carrying amount (at fair value) is recognized in other comprehensive income in the investments revaluation reserve.
- For financial assets measured at FVPL that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'Other non-operating income (expenses)' line item as part of the fair value gain or loss.
- For equity instruments measured at FVOCI, exchange differences are recognized in other comprehensive income in the investments revaluation reserve.

(3) Impairment of financial assets

The Company recognizes a loss allowance for expected credit losses on investments in debt instruments that are measured at amortized cost or at FVOCI, lease receivables, trade receivables and contract assets, as well as on financial guarantee contracts. The amount of expected credit losses is updated at each reporting date to reflect changes in credit risk since the initial recognition of the respective financial instrument.

The Company always recognizes lifetime ECL for trade receivables, contract assets and lease receivables. The expected credit losses on these financial assets are estimated using a provision matrix based on the Company's historical credit loss experience; adjusted for factors that are specific to the debtors; general economic conditions; and an assessment of both the current and the forecast direction of conditions at the reporting date, including the time value of money, where appropriate.

For all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the expected credit losses that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

(4) Measurement and recognition of expected credit losses

The measurement of expected credit losses is a function of the probability of default, loss-given default (i.e., the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss-given default is based on historical data adjusted by forward-looking information, as described above. As for the exposure at default, for financial assets, this is represented by the assets' gross carrying amount at the reporting date; for financial guarantee contracts, the exposure includes the amount of guaranteed debt that has been drawn down as at the reporting date, together with any additional guaranteed amounts expected to be drawn down by the borrower in the future by default date determined based on historical trends, the Company's understanding of the specific future financing needs of the debtors and other relevant forward-looking information.

For financial assets, the expected credit loss is estimated as the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the Company expects to receive, discounted at the original effective interest rate. For a lease receivable, the cash flows used for determining the expected credit losses are consistent with the cash flows used in measuring the lease receivable in accordance with K-IFRS 1116 *Leases*.

For a financial guarantee contract, as the Company is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed, the expected loss allowance is the expected payments to reimburse the holder for a credit loss that it incurs, less any amounts that the Company expects to receive from the holder, the debtor or any other party.

If the Company has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the Company measures the loss allowance at an amount equal to 12-month ECL at the current reporting date, except for assets for which the simplified approach was used.

The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVOCI, for which the loss allowance is recognized in other comprehensive income and accumulated in the investment revaluation reserve, and does not reduce the carrying amount of the financial asset in the separate statements of financial position.

(5) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

If the Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Company recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. In addition, on the derecognition of an investment in a debt instrument classified as at FVOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is reclassified to profit or loss. In contrast, on derecognition of an investment in equity instrument which the Company has elected on initial recognition to measure at FVOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to retained earnings.

2.20 Financial liabilities and equity instruments

(1) Financial liabilities

All financial liabilities are measured subsequently at amortized cost using the effective interest method or at FVPL. However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, and financial guarantee contracts issued by the Company are measured in accordance with the specific accounting policies set out below.

1-1) Financial liabilities at FVPL

Financial liabilities are classified as at FVPL when the financial liability is (i) contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) it is designated as at FVPL.

A financial liability is classified as held for trading if either:

- It has been acquired principally for the purpose of repurchasing it in the near term
- On initial recognition, it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking
- It is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVPL upon initial recognition if either:

- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise
- The financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis
- It forms part of a contract containing one or more embedded derivatives, and K-IFRS 1109 permits the entire combined contract to be designated as at FVPL.

Financial liabilities at FVPL are measured at fair value, with any gains or losses arising on changes in fair value recognized in profit or loss to the extent that they are not part of a designated hedging relationship (see Hedge accounting policy). The net gain or loss recognized in profit or loss incorporates any interest paid on the financial liability and is included in the 'PL:Financial costs' line item in profit or loss.

However, for financial liabilities that are designated as at FVPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of the liability is recognized in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognized in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to retained earnings upon derecognition of the financial liability.

Gains or losses on financial guarantee contracts issued by the Company that are designated by the Company as FVPL are recognized in profit or loss.

1-2) Financial liabilities measured subsequently at amortized cost

Financial liabilities that are not (i) contingent consideration of an acquirer in a business combination, (ii) held for trading, or (iii) designated as at FVPL are measured subsequently at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortized cost of a financial liability.

(2) Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contract liabilities are measured initially at their fair values and, if not designated as at FVPL and do not arise from a transfer of an asset, are measured subsequently at the higher of:

- The amount of the loss allowance determined in accordance with K-IFRS 1109
- The amount recognized initially less, where appropriate, cumulative amortization recognized in accordance with K-IFRS 1115.

(3) Foreign exchange gains and losses

For financial liabilities that are denominated in a foreign currency and are measured at amortized cost at the end of each reporting period, the foreign exchange gains and losses are determined based on the amortized cost of the instruments. These foreign exchange gains and losses are recognized in the 'other non-operating income (expenses)' line item in profit or loss for financial liabilities that are not part of a designated hedging relationship. For those that are designated as a hedging instrument for a hedge of foreign currency risk, foreign exchange gains and losses are recognized in other comprehensive income and accumulated in a separate component of equity.

The fair value of financial liabilities denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period. For financial liabilities that are measured as at FVPL, the foreign exchange component forms part of the fair value gains or losses and is recognized in profit or loss for financial liabilities that are not part of a designated hedging relationship.

(4) Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, canceled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

When the Company exchanges with the existing lender one debt instrument for another one with substantially different terms, such an exchange is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, the Company accounts for a substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective interest rate, is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability. If the modification is not substantial, the difference between: (1) the carrying amount of the liability before the modification; and (2) the present value of the cash flows after modification should be recognized in profit or loss as the modification gain or loss with other non-operating income (expense).

2.21 Derivative financial instruments

The Company enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risks, including foreign exchange forward contracts, options and interest rate swaps.

Derivatives are recognized initially at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The resulting gain or loss is recognized in profit or loss immediately, unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

A derivative with a positive fair value is recognized as a financial asset, whereas a derivative with a negative fair value is recognized as a financial liability. Derivatives are not offset in the separate financial statements, unless the Company has both a legally enforceable right and the intention to offset. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not due to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

(1) Hedge accounting

The Company designates certain derivatives as hedging instruments in respect of foreign currency risk and interest rate risk in fair value hedges cash flow hedges or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the Company documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk, which is when the hedging relationships meet all of the following hedge effectiveness requirements:

- There is an economic relationship between the hedged item and the hedging instrument
- The effect of credit risk does not dominate the value changes that result from that economic relationship
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Company actually hedges and the quantity of the hedging instrument that the Company actually uses to hedge that quantity of hedged item.

If a hedging relationship ceases to meet the hedge effectiveness requirement relating to the hedge ratio, but the risk management objective for that designated hedging relationship remains the same, the Company adjusts the hedge ratio of the hedging relationship (i.e., rebalances the hedge) so that it meets the qualifying criteria again.

The Company designates the full change in the fair value of a forward contract (i.e., including the forward elements) as the hedging instrument for all of its hedging relationships involving forward contracts.

The Company designates only the intrinsic value of options as a hedging instrument as a means to hedge risks associated with forecast transactions. Time value changes (i.e., undesignated elements) are recognized in profit or loss in accordance with K-IFRS 1039 *Financial Instruments: Recognition and Measurement*. The changes in the fair value of the aligned time value of the option are recognized in other comprehensive income in accordance with K-IFRS 1109 *Financial Instruments*. The amount accumulated in equity is either reclassified to profit or loss or derecognized from equity and included in the book value of non-financial items when the hedged item affects profit or loss.

The Company designates only the intrinsic value of option contracts as a hedging instrument, i.e., excluding the time value of the option. The changes in the fair value of the aligned time value of the option are recognized in other comprehensive income and accumulated in the cost of hedging reserve. If the hedged item is transaction-related, the time value is reclassified to profit or loss when the hedged item affects profit or loss. If the hedged item is time-period-related, then the amount accumulated in the cost of hedging reserve is reclassified to profit or loss on a rational basis – the Company applies straight-line amortization. Those reclassified amounts are recognized in profit or loss in the same line as the hedged item. If the hedged item is a non-financial item, then the amount accumulated in the cost of hedging reserve is removed directly from equity and included in the initial carrying amount of the recognized non-financial item. Furthermore, if the Company expects that some, or all, of the loss accumulated in cost of hedging reserve will not be recovered in the future, that amount is immediately reclassified to profit or loss.

1-1) Fair value hedges

The fair value change on qualifying hedging instruments is recognized in profit or loss except when the hedging instrument hedges an equity instrument designated at FVOCI, in which case, it is recognized in other comprehensive income.

The carrying amount of a hedged item not already measured at fair value is adjusted for the fair value change attributable to the hedged risk with a corresponding entry in profit or loss. For debt instruments measured at FVOCI, the carrying amount is not adjusted as it is already at fair value, but the hedging gain or loss is recognized in profit or loss instead of other comprehensive income. When the hedged item is an equity instrument designated at FVOCI, the hedging gain or loss remains in other comprehensive income to match that of the hedging instrument.

Where hedging gains or losses are recognized in profit or loss, they are recognized in the same line as the hedged item.

The Company discontinues hedge accounting only when the hedging relationship (or a part thereof) ceases to meet the qualifying criteria (after rebalancing, if applicable). This includes instances when the hedging instrument expires or is sold, terminated or exercised. The discontinuation is accounted for prospectively. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to profit or loss from that date.

1-2) Cash flow hedges

The effective portion of changes in the fair value of derivatives and other qualifying hedging instruments that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of cash flow hedging reserve, limited to the cumulative change in fair value of the hedged item from the inception of the hedge. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss and is included in the ‘Other non-operating’ line item.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss, in the same line as the recognized hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognized in other comprehensive income and accumulated in equity are removed from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability. This transfer does not affect other comprehensive income. Furthermore, if the Company expects that some, or all, of the loss accumulated in the cash flow hedging reserve will not be recovered in the future, that amount is immediately reclassified to profit or loss.

The Company discontinues hedge accounting only when the hedging relationship (or a part thereof) ceases to meet the qualifying criteria (after rebalancing, if applicable). This includes instances when the hedging instrument expires or is sold, terminated or exercised. The discontinuation is accounted for prospectively. Any gain or loss recognized in other comprehensive income and accumulated in cash flow hedge reserve at that time remains in equity and is reclassified to profit or loss when the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in the cash flow hedge reserve is reclassified immediately to profit or loss.

2.22 Accounting Treatment related to the Emission Rights Cap and Trade Scheme

The Company classifies the emission rights as intangible assets. Emission rights allowances the government allocated free of charge are measured at nil, and emission rights allowances purchased are measured at cost, which the Company paid to purchase the allowances. If emission rights the government-allocated free of charge are sufficient to settle the emission rights allowances allotted for a vintage year, the emissions liabilities are measured at nil. However, for the emissions liabilities that exceed the allowances allocated free of charge, the shortfall is measured at the best estimate at the end of the reporting period.

3. FINANCIAL RISK MANAGEMENT:

3.1 Financial Risk Factors

The Company's activities expose it to a variety of financial risks: market, credit and liquidity risks. 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 board of directors. The finance team identifies, evaluates and hedges financial risks in close cooperation with the Company's operating units. The board of directors reviews and approves written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk and credit risk; use of derivative financial instruments and non-derivative financial instruments; and investment of excess liquidity.

(1) Market risk

1) Foreign exchange risk

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

Management has set up a policy requiring each division of the Company to manage its foreign exchange risk against its functional currency. The Company operates a dedicated team for foreign exchange risk management and utilizes foreign exchange derivatives such as forward exchange contracts and currency swaps as hedging instruments, while principally excluding transactions for trading purposes.

The Company makes certain investments in foreign operations, whose net assets are exposed to foreign exchange risk. This exposure is managed primarily through borrowings denominated in the relevant foreign currencies.

Monetary assets and liabilities denominated in foreign currencies as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024		December 31, 2023	
	Assets	Liabilities	Assets	Liabilities
USD	3,792,951	6,429,977	3,507,510	3,814,710
EUR	233,520	103,185	270,280	82,410
JPY	41,070	30,329	10,486	15,421
CNY and others	183,072	45,407	124,856	8,478

With all other variables held constant as of December 31, 2024 and 2023, a hypothetical change in exchange rates by 10% would have increased (decreased) the Company's profit before income tax as follows (Korean won in millions):

	December 31, 2024		December 31, 2023	
	10% Increase	10% Decrease	10% Increase	10% Decrease
USD	(263,703)	263,703	(30,720)	30,720
EUR	13,034	(13,034)	18,787	(18,787)
JPY	1,074	(1,074)	(494)	494
CNY and others	13,767	(13,767)	11,638	(11,638)

The above sensitivity analysis has been performed for monetary assets and liabilities denominated in foreign currencies as of December 31, 2024 and 2023.

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Notes to the separate financial statements

As of and for the years ended December 31, 2024 and 2023

As of December 31, 2024, the Company entered into foreign currency forwards and foreign currency swaps to hedge changes in exchange rates and the details are as follows (Korean won in millions):

	Contractor	Contract amount (in millions)	Contract exchange rate	Contract inception date	Contract maturity	Book amount	
						Assets	Liabilities
Currency forward (*)	KB Kookmin Bank	USD 500	1,102.83	2020.11.24	2029.04.16	₩ 118,088	₩ -
	JP Morgan	USD 200	1,337.60	2023.09.25	2026.09.25	26,287	-
	Shinhan Bank	USD 200	1,337.60	2023.09.25	2026.09.25	25,771	-
	KDB Bank	USD 400	1,337.60	2023.09.25	2028.09.25	39,389	-
	Woori Bank	USD 200	1,337.60	2023.09.25	2028.09.25	19,699	-
	DBS	USD 200	1,380.80	2024.07.02	2027.07.02	19,530	-
	JP Morgan	USD 200	1,380.80	2024.07.02	2027.07.02	19,639	-
	Shinhan Bank	USD 300	1,380.80	2024.07.02	2027.07.02	28,677	-
Currency swap (*)	KB Kookmin Bank	USD 200	1,380.80	2024.07.02	2029.07.02	15,143	-
	Woori Bank	USD 200	1,380.80	2024.07.02	2029.07.02	15,142	-
	Korea Exim Bank	USD 200	1,380.80	2024.07.02	2029.07.02	15,113	-
	IBK Securities	USD 100	1,380.80	2024.07.02	2029.07.02	7,482	-
	KDB Bank	USD 100	1,380.80	2024.07.02	2029.07.02	7,507	-
	KDB Bank	USD 400	1,380.80	2024.07.02	2034.07.02	10,243	-
	Woori Bank	USD 100	1,380.80	2024.07.02	2034.07.02	2,566	-

(*) A derivative where hedge accounting is not applied.

2) Price risk

The Company is exposed to price risks from equity instruments. As of December 31, 2024, the fair value of equity instruments is ₩91,312 million. With all other variables held constant, a price change in equity instruments by 10% would have changed the Company's equity by ₩9,131 million before tax.

(2) Credit risk

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

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

The Company has entered into export bond insurance contracts with Korea Trade Insurance Corporation to mitigate credit risks relating to export trade receivables to overseas customers. The Company is also provided with collateral by customers depending on their credit rating or payment guarantees from the customers' financial institutions if 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 contracts with several financial institutions. The Company maintains business relationships with financial institutions with high credit ratings evaluated by independent credit rating agencies, and accordingly, credit risks associated with these financial institutions are limited.

1) Trade receivables

The Company applies the simplified approach in measuring expected credit losses, which uses lifetime expected provisions for trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and days past due.

For the years ended December 31, 2024 and 2023, there were no changes in the provisions for trade receivables.

As of December 31, 2024, the carrying amount of trade receivables representing the maximum exposure to credit risk amounted to ₩2,452,095 million (as of December 31, 2023, ₩2,417,838 million).

2) Other financial assets at amortized cost

All of the financial assets at amortized cost are considered to have low credit risk, and the provisions recognized during the period were, therefore, limited to 12 months' expected losses.

As of December 31, 2024 and 2023, the provision for other financial assets measured at amortized cost does not exist.

3) Debt instruments measured at FVOCI

Debt instruments measured at FVOCI include trade receivables to be discounted. The provisions for these instruments are recognized in profit or loss and reduce the amount that would have been recognized in other comprehensive income as a loss on fair value change.

(3) Liquidity risk

The finance team of the Company monitors rolling forecasts of the Company's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining the limit of unused borrowings at an appropriate level 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 considers the Company's financing plans, covenants on the debt contracts, target financial ratios and, if applicable, other external regulatory requirements on the currency and others.

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1) The table below analyzes the Company's groupings based on the remaining period from the reporting date to the contractual maturity date. Cash flows presented below are gross cash flows before discount and include cash flows for interest (Korean won in millions):

	December 31, 2024			
	Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years
Non-derivative instruments:				
Borrowings	₩ 502,206	₩ 1,696,424	₩ 6,206,171	₩ 1,137,105
Lease liabilities	34,638	15,152	14,876	123
Trade and other payables (*)	2,624,860	1,478	851	-
	<u>3,161,704</u>	<u>1,713,054</u>	<u>6,221,898</u>	<u>1,137,228</u>
Derivative instruments:				
Currency forwards and swaps settled in gross:				
Inflows	-	(588,000)	(3,822,000)	(735,000)
Outflows	-	535,040	3,425,175	690,400
	-	(52,960)	(396,825)	(44,600)
	<u>₩ 3,161,704</u>	<u>₩ 1,660,094</u>	<u>₩ 5,825,073</u>	<u>₩ 1,092,628</u>

	December 31, 2023			
	Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years
Non-derivative instruments:				
Borrowings	₩ 809,298	₩ 266,085	₩ 2,660,107	₩ 656,385
Lease liabilities	27,736	24,625	9,180	-
Trade and other payables (*)	2,080,421	2,924	444	-
	<u>2,917,455</u>	<u>293,634</u>	<u>2,669,731</u>	<u>656,385</u>
Derivative instruments:				
Currency forwards and swaps settled in gross:				
Inflows	(644,700)	-	(1,289,400)	(644,700)
Outflows	567,800	-	1,337,600	551,415
	(76,900)	-	48,200	(93,285)
	<u>₩ 2,840,555</u>	<u>₩ 293,634</u>	<u>₩ 2,717,931</u>	<u>₩ 563,100</u>

(*) As of the end of the current period, the amount paid using the purchasing card includes ₩439,603 million, for which the substantive maturity has been extended. There was no outstanding balance related to the use of the purchasing card as of the end of 2023.

2) As of December 31, 2024 and 2023, the Company has entered into swap contracts, to which cash flow hedge accounting is applied, to avoid fluctuations in the market price of raw materials (Korean won in millions):

	Purpose of the contracts	Hedged items	Financial institution	Maturity	2024 fair value		2023 Fair value	
					Asset	Liability	Asset	Liability
Merchandise (raw materials) swap (*)	Cash flow hedge	Non-ferrous metal	Citibank, SC	2026.12	₩ -	₩ -	₩ 27	₩ 1,697

(*) Gain (loss) on the contracts that hedge the cash flow risk of forecast transaction is recognized in accumulated other comprehensive income and is fully effective portion for hedging.

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3) Details of financial guaranteed contracts by maturity are as follows (Korean won in millions):

	December 31, 2024			
	Less than 1 year	Between 1-2 years	Between 2-5 years	More than 5 years
Financial guarantee contracts (*)	₩ 2,731,136	₩ -	₩ -	₩ -

	December 31, 2023			
	Less than 1 year	Between 1-2 years	Between 2-5 years	More than 5 years
Financial guarantee contracts (*)	₩ 3,504,027	₩ -	₩ -	₩ -

(*) The Company has provided financial guarantees for subsidiaries, etc., and the amount represents the maximum amount that can be required to guarantee as of December 31, 2024 and 2023. As of December 31, 2024, the total limit amount of committed payment guarantee is ₩5,036,530 million(as of December 31, 2023, was ₩5,364,738 million) (see Note 18).

3.2 Capital Risk Management

The Company's objectives for managing capital are to safeguard the Company's ability to continue to provide profits to shareholders and other stakeholders as a going concern 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 ratio and debt-to-equity ratio as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024	December 31, 2023
Total borrowings (Note 14) (A)	₩ 7,962,258	₩ 3,819,801
Less: cash and cash equivalents (B)	(849,894)	(1,855,224)
Net debt (C=A+B)	7,112,364	1,964,577
Total liabilities (D)	11,923,730	6,944,445
Total equity (E)	15,717,080	16,601,494
Total capital (F=C+E)	₩ 22,829,444	₩ 18,566,071
Gearing ratio (C/F)	31.2%	10.6%
Debt-to-equity ratio (D/E)	75.9%	41.8%

3.3 Fair Value Estimation

(1) The carrying amount and fair value of financial instruments by category as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024		December 31, 2023	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets (current):				
Cash and cash equivalents	₩ 849,894	(*)	₩ 1,855,224	(*)
Trade receivables	2,303,799	(*)	2,289,892	(*)
Other receivables (excluding due from financial institutions)	1,015,552	(*)	1,168,761	(*)
Due from financial institutions	-	-	5,000	(*)
Current derivative financial assets	-	-	12	12
Current derivative financial assets (currency forward)	-	-	65,388	65,388
Financial assets (non-current):				
Non-current trade receivables	148,296	(*)	127,946	(*)
Non-current other receivables (excluding due from financial institutions)	85,222	(*)	93,159	(*)
Due from financial institutions	60,014	(*)	60,014	(*)
Other non-current financial assets:				
Marketable financial assets	7,320	7,320	12,255	12,255
Non-marketable financial assets	625,029	625,029	210,602	210,602
Non-current derivative financial assets	31,141	31,141	17,192	17,192
Non-current derivative financial assets (currency forward)	118,088	118,088	47,138	47,138
Non-current derivative financial assets (currency swap)	252,187	252,187	-	-
Financial liabilities (current):				
Trade and other payables	2,624,860	(*)	2,080,421	(*)
Current borrowings (excluding lease liabilities)	124,911	(*)	643,895	(*)
Current derivative financial liabilities	-	-	1,191	1,191
Other current financial liabilities	43,107	(*)	57,249	(*)
Financial liabilities (non-current):				
Non-current borrowings (excluding lease liabilities)	7,775,529	8,336,700	3,116,289	3,238,725
Other non-current payables	2,329	(*)	3,368	(*)
Non-current derivative financial liabilities	-	-	506	506
Non-current derivative financial liabilities (currency swap)	-	-	67,862	67,862

(*) Fair values for these financial assets and liabilities are not disclosed above as their carrying amounts are reasonable approximations of their fair values.

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(2) Fair values for measurement and disclosure are determined based on the following method:

Fair values of financial liabilities (non-current) are calculated by discounting the expected cash outflows by yield of the Company's Korean won-denominated corporate bonds with the specified credit rating (AA0). The applied discount rates as of December 31, 2024 and 2023, are as follows:

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Discount rate	3.17% ~ 4.12%	3.79% ~ 4.79%

(3) 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 the Company can access at the measurement date (Level 1)
- All inputs other than quoted prices included in Level 1 that are observable (either directly, that is, prices, or indirectly, that is, derived from prices) for the asset or liability (Level 2)
- Unobservable inputs for the asset or liability (Level 3)

As of December 31, 2024 and 2023, the fair value hierarchy of the financial instruments that are measured at fair value or for which fair value is disclosed is as follows (Korean won in millions):

	<u>December 31, 2024</u>			
	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Financial assets/liabilities measured at fair value:				
Non-current derivative financial assets	₩ -	₩ -	₩ 31,141	₩ 31,141
Non-current derivative financial assets (currency forward)	-	118,088	-	118,088
Non-current derivative financial assets (currency swap)	-	252,187	-	252,187
Other non-current financial assets (marketable financial assets)	7,320	-	-	7,320
Other non-current financial assets (non-marketable financial assets)	-	-	625,029	625,029
Financial assets/liabilities not measured at fair value:				
Non-current borrowings (excluding lease liabilities)	-	8,336,700	-	8,336,700

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	December 31, 2023				
	Level 1	Level 2	Level 3	Total	
Financial assets/liabilities measured at fair value:					
Current derivative financial assets	₩	- ₩	12 ₩	- ₩	12
Current derivative financial assets (currency forward)		-	65,388	-	65,388
Non-current derivative financial assets		-	15	17,177	17,192
Non-current derivative financial assets (currency forward)		-	47,138	-	47,138
Other non-current financial assets (marketable financial assets)	12,255	-	-	-	12,255
Other non-current financial assets (non-marketable financial assets)	-	-	210,602	-	210,602
Current derivative financial liabilities		-	1,191	-	1,191
Non-current derivative financial liabilities		-	506	-	506
Non-current derivative financial liabilities (currency swap)		-	67,862	-	67,862
Financial assets/liabilities not measured at fair value:					
Non-current borrowings (excluding lease liabilities)		-	3,238,725	-	3,238,725

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

(In millions of Korean won)	December 31, 2024			
	Fair Value	Valuation technique	Unobservable significant inputs	Coverage of inputs (weighted average)
Non-listed shares:				
Volta Energy Solutions S.a.r.l	₩ 48,481	Discounted cash flows model	Perpetual growth rate Weighted average cost of capital	1.00% 10.40%
Shanghai Greatpower Technology Co., Ltd.	29,420	Discounted cash flows model	Perpetual growth rate Weighted average cost of capital	1.00% 11.30%
Non-current derivatives:				
Put option on Volta Energy Solution S.a.r.l	31,141	Binominal option-pricing model	Volatility Risk-free rate	47.83% 3.63%
Convertible Bonds on Liontown Resources Limited. CB	353,964	Binominal option-pricing model	Volatility Risk-free rate	68.13% 3.84%

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(5) Changes in Level 3 of the financial instruments for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>		<u>2023</u>
Beginning	₩ 227,779	₩	245,462
Increase	388,093		67,212
Decrease	(2,023)		-
Profit for the year	36,568		13,601
Other comprehensive income (loss)	5,753		(98,496)
Ending	<u>₩ 656,170</u>	₩	<u>227,779</u>

4. SIGNIFICANT ACCOUNTING ESTIMATES AND ASSUMPTIONS:

The preparation of separate financial statements requires the Company to make estimates and assumptions concerning the future. Management also needs to exercise judgment 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.

The significant estimates and assumptions made by management in the application of the Company's separate financial statements are the same as those of the annual separate financial statements as of and for the year ended December 31, 2023. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

(1) Income taxes

If a certain portion of the taxable income is not used for investments, increases in wages or dividends, the Company is liable to pay additional income tax calculated based on the tax laws. Accordingly, the measurement of current and deferred income taxes is affected by these tax effects. As the Company's income tax is dependent on investments, increases in wages and dividends, there is uncertainty measuring the final tax effects.

(2) Provisions

The Company recognizes provisions for product warranties as explained in Note 15. These provisions are estimated based on the average warranty period, revenue and historical claim experience rate. Provisions related to voluntary recalls by the Company's customers are estimated based on the number of vehicles subject to recall, estimated total repair cost and cost-sharing ratio.

(3) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined 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 as of December 31, 2024 (see Note 3.3).

(4) Impairment of financial assets

The provision for impairment of financial assets is based on assumptions about risk of default and expected loss rates. The Company uses judgment in making these assumptions and selecting the inputs to the impairment calculation based on the Company's past experience and existing market conditions, as well as forward-looking estimates at the end of each reporting period (see Note 3.1.(2)).

(5) Net defined benefit liabilities (Assets)

The present value of net defined benefit liabilities (assets) 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).

(6) Lease

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. Periods covered by the extension option (or the termination option) are only included in the lease term if it is reasonably certain that the lease will be extended (or not terminated).

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The lease term is reassessed if an option is actually exercised (or not exercised) or if 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.

5. FINANCIAL INSTRUMENTS BY CATEGORY:

(1) Categorizations of financial instruments as of December 31, 2024 and 2023, are as follows (Korean won in millions):

Financial assets	December 31, 2024			Total
	Financial assets at amortized cost	Financial assets at FVPL	Financial assets at FVOCI (*1)	
Cash and cash equivalents	₩ 849,894	₩ -	₩ -	₩ 849,894
Trade receivables	2,303,799	-	-	2,303,799
Non-current trade receivables	148,296	-	-	148,296
Other current receivables	1,015,552	-	-	1,015,552
Other non-current receivables	145,236	-	-	145,236
Other current financial assets	-	-	-	-
Other non-current financial assets	-	942,453	91,312	1,033,765
	₩ 4,462,777	₩ 942,453	₩ 91,312	₩ 5,496,542

Financial liabilities	December 31, 2024		
	Financial liabilities at amortized cost	Other financial liabilities (*3)	Total
Trade payables	₩ 1,114,929	₩ -	₩ 1,114,929
Other payables	1,509,931	-	1,509,931
Other non-current payables	2,329	-	2,329
Current borrowings	124,911	33,039	157,950
Non-current borrowings	7,775,529	28,779	7,804,308
Other current financial liabilities	43,107	-	43,107
	₩ 10,570,736	₩ 61,818	₩ 10,632,554

Financial assets	December 31, 2023				Total
	Financial assets at amortized cost	Financial assets at FVPL	Financial assets at FVOCI (*1)	Other financial assets (*2)	
Cash and cash equivalents	₩ 1,855,224	₩ -	₩ -	₩ -	₩ 1,855,224
Trade receivables	2,289,892	-	-	-	2,289,892
Non-current trade receivables	127,946	-	-	-	127,946
Other current receivables	1,173,761	-	-	-	1,173,761
Other non-current receivables	153,173	-	-	-	153,173
Other current financial assets	-	65,388	-	12	65,400
Other non-current financial assets	-	196,678	90,494	15	287,187
	₩ 5,599,996	₩ 262,066	₩ 90,494	₩ 27	₩ 5,952,583

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Financial liabilities	December 31, 2023			
	Financial liabilities at amortized cost	Financial liabilities at FVPL	Other financial liabilities (*3)	Total
Trade payables	₩ 1,097,287	₩ -	₩ -	₩ 1,097,287
Other payables	983,134	-	-	983,134
Other non-current payables	3,368	-	-	3,368
Current borrowings	643,895	-	26,523	670,418
Non-current borrowings	3,116,289	-	33,094	3,149,383
Other current financial liabilities	57,249	-	1,191	58,440
Other non-current financial liabilities	-	67,862	506	68,368
	₩ 5,901,222	₩ 67,862	₩ 61,314	₩ 6,030,398

(*1) At initial recognition, the Company made an irrevocable election to designate investments in equity instruments as at FVOCI. These instruments are held for strategic purposes, not for short-term trading.

(*2) Other financial assets include derivative assets.

(*3) Other financial liabilities include lease liabilities and derivative liabilities.

(2) Net gains (losses) on each category of financial instruments for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024	2023
Interest income:		
Financial assets at amortized cost	₩ 78,390	₩ 128,027
Interest expense:		
Financial liabilities at amortized cost	(271,932)	(93,022)
Other financial liabilities	(2,247)	(1,122)
(Losses) gains on valuation:		
Financial assets at FVPL	(8,823)	-
Financial assets at FVOCI	818	(129,038)
Derivative instruments (*)	403,596	(33,123)
Exchange differences:		
Financial assets at amortized cost	480,122	100,185
Financial liabilities at amortized cost	(619,229)	(67,947)
Financial assets at FVPL	34,561	1,063

(*) Changes in fair value are recognized in profit or loss or in other comprehensive income.

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(3) Supplier financing arrangements

Supplier financing arrangements involve one or more financial institutions providing amounts that the Company is obligated to pay to the supplier. The Company then reimburses the financial institutions according to the terms of the arrangement after the supplier has received the payment. These arrangements typically provide the Company with an extended payment term beyond the supplier's payment due date or allow the supplier to receive payment earlier than expected.

As of December 31, 2024, the Company has entered into the following supplier financing arrangements. (Korean won in millions):

<u>Classification</u>	<u>Line item</u>	<u>December 31, 2024</u>	<u>Index</u>
Purchase card	Accounts payable	₩ 439,603	(*)

(*) Under the purchase card arrangement, the financial institution acquires the rights to specific receivables of the supplier. Although there is a change in the payment terms due to this arrangement, since the terms of the liability have not materially changed, it was deemed appropriate to continue presenting the amounts related to accounts payable and other liabilities in the financial statement. In the cash flow statement, the Company determined that it is not a party to the cash flows between the financial institution and the supplier, and since the substantive terms of the accounts payable have not changed, it was considered a regular payment for business transactions.

There were no significant business combinations or exchange rate differences affecting the supplier financing liabilities.

The supplier financing liabilities are short-term, and their carrying amounts are considered to be a reasonable approximation of fair value.

6. CASH AND CASH EQUIVALENTS:

(1) Details of cash and cash equivalents as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>		<u>December 31, 2023</u>	
Bank deposits and cash on hand	₩	18,848	₩	6,524
Cash equivalents		831,046		1,848,700
	₩	849,894	₩	1,855,224

(2) As of December 31, 2024, there are no cash and cash equivalents subject to restriction on use.

7. TRADE AND OTHER RECEIVABLES:

(1) Trade and other receivables and their provisions for impairment are as follows (Korean won in millions):

	<u>December 31, 2024</u>			<u>December 31, 2023</u>		
	<u>Gross amount</u>	<u>Provision for impairment</u>	<u>Carrying amount</u>	<u>Gross amount</u>	<u>Provision for impairment</u>	<u>Carrying amount</u>
Trade receivables	₩ 2,303,799	₩ -	₩ 2,303,799	₩ 2,289,892	₩ -	₩ 2,289,892
Non-current trade receivables	148,296	-	148,296	127,946	-	127,946
Other current receivables	1,015,552	-	1,015,552	1,173,761	-	1,173,761
Other non-current receivables	145,236	-	145,236	153,173	-	153,173
	₩ 3,612,883	₩ -	₩ 3,612,883	₩ 3,744,772	₩ -	₩ 3,744,772

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(2) Details of other receivables as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>		<u>December 31, 2023</u>	
Current:				
Non-trade receivables	₩	1,005,076	₩	1,154,699
Deposits from financial institutions		-		5,000
Accrued income		288		3,582
Guarantee deposits provided		<u>10,188</u>		<u>10,480</u>
		1,015,552		1,173,761
Non-current:				
Non-trade receivables		46,428		61,125
Deposits from financial institutions (*)		60,014		60,014
Guarantee deposits provided		<u>38,794</u>		<u>32,034</u>
		145,236		153,173
	₩	<u>1,160,788</u>	₩	<u>1,326,934</u>

(*) As of December 31, 2024, the deposits from financial institutions (non-current) are subject to withdrawal restrictions, which include ₩60,000 million for the agreement on the Win-Win Growth Cooperation and ₩14 million related to guarantee deposit for current account opening.

(3) The aging analysis of trade and other receivables as of December 31, 2024 and 2023, is as follows (Korean won in millions):

	<u>December 31, 2024</u>		<u>December 31, 2023</u>	
	<u>Trade receivables</u>	<u>Other receivables</u>	<u>Trade receivables</u>	<u>Other receivables</u>
Receivables not past due	₩ 2,266,156	₩ 1,155,713	₩ 2,385,614	₩ 1,316,073
Past due, but not impaired:				
Up to 3 months	184,894	5,060	15,838	10,861
Between 3-6 months	961	-	16,386	-
More than 6 months	<u>84</u>	<u>15</u>	<u>-</u>	<u>-</u>
	185,939	5,075	32,224	10,861
Impaired receivables	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	₩ 2,452,095	₩ 1,160,788	₩ 2,417,838	₩ 1,326,934

(4) Changes in the provision for impairment of trade and other receivables for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>		<u>2023</u>	
	<u>Trade receivables</u>	<u>Other receivables</u>	<u>Trade receivables</u>	<u>Other receivables</u>
Beginning	₩ -	₩ -	₩ -	₩ 54
Additions (reversal)	-	-	-	-
Write-off	<u>-</u>	<u>-</u>	<u>-</u>	<u>(54)</u>
Ending	₩ -	₩ -	₩ -	₩ -

(5) The fair values of trade receivables and other receivables as of December 31, 2024 and 2023, are not significantly different from their carrying amounts.

8. OTHER FINANCIAL ASSETS AND LIABILITIES:

(1) Details of other financial assets and liabilities as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>		<u>December 31, 2023</u>	
Other financial assets:				
Financial assets at FVOCI	₩	91,312	₩	90,494
Cash flow hedge		-		27
Financial assets at FVPL		<u>942,453</u>		<u>262,066</u>
	<u>₩</u>	<u>1,033,765</u>	<u>₩</u>	<u>352,587</u>
Other financial liabilities:				
Financial guarantee contracts	₩	43,107	₩	57,249
Cash flow hedge		-		1,697
Financial liabilities at FVPL		<u>-</u>		<u>67,862</u>
	<u>₩</u>	<u>43,107</u>	<u>₩</u>	<u>126,808</u>

(2) Changes in equity securities included in other financial assets for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>		<u>2023</u>	
Beginning	₩	90,494	₩	202,094
Acquisitions/transfer		-		17,438
Valuation gain(loss) (before income tax deduction), other comprehensive income item		<u>818</u>		<u>(129,038)</u>
Ending	<u>₩</u>	<u>91,312</u>	<u>₩</u>	<u>90,494</u>

The Company has entered into a put option contract to secure the investment capital for its equity securities held in Volta Energy Solutions S.a.r.l. The major terms of the agreements are as follows:

- Exercise date: From three years after the acceptance date (initial investment date, January 27, 2021) to the following three years.
- Exercise price: The amount contributed, less any dividends received from the date of contribution up to the exercise.
- Other term: The option cannot be exercised once Volta Energy Solutions S.a.r.l is listed.

9. INVENTORIES:

(1) Details of inventories as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>			<u>December 31, 2023</u>		
	<u>Gross amount</u>	<u>Valuation allowance</u>	<u>Carrying amount</u>	<u>Gross amount</u>	<u>Valuation allowance</u>	<u>Carrying amount</u>
Merchandise	₩ 143,210	₩ (3,352)	₩ 139,858	₩ 233,113	₩ (2,910)	₩ 230,203
Finished/semifinished products	778,801	(107,180)	671,621	1,013,658	(102,993)	910,665
Raw materials	286,014	(4,669)	281,345	83,359	(2,419)	80,940
Supplies	10,380	(3,510)	6,870	15,288	(5,174)	10,114
Materials in transit	128,984	-	128,984	33,636	-	33,636
	<u>₩ 1,347,389</u>	<u>₩ (118,711)</u>	<u>₩ 1,228,678</u>	<u>₩ 1,379,054</u>	<u>₩ (113,496)</u>	<u>₩ 1,265,558</u>

(2) The amount of inventories expensed as cost of sales for the years ended December 31, 2024 and 2023, was ₩6,625,806 million and ₩9,803,613 million, respectively.

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10. INVESTMENTS IN SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES:

(1) Changes in investments in subsidiaries, associates and joint ventures for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Beginning	₩ 10,118,763	₩ 7,547,546
Acquisitions	3,330,747	2,598,354
Disposals/impairment	-	(27,137)
Ending	<u>₩ 13,449,510</u>	<u>₩ 10,118,763</u>

(2) Details of investments in subsidiaries, associates and joint ventures as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>Location</u>	<u>Percentage of ownership (%)</u>		<u>Carrying amount</u>	
		<u>December 31, 2024</u>	<u>December 31, 2023</u>	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Subsidiaries:					
LG Energy Solution (Nanjing) Co., Ltd.	China	100	100	₩ 1,138,401	₩ 1,138,401
LG Energy Solution Michigan Inc.	USA	100	100	4,993,186	3,815,683
LG Energy Solution Battery (Nanjing) Co., Ltd.	China	100	100	323,438	323,438
LG Energy Solution Wroclaw sp. z o.o.	Poland	100	100	2,299,898	2,299,898
LG Energy Solution Australia Pty Ltd.	Australia	100	100	429	429
LG Energy Solution Technology (Nanjing) Co., Ltd.	China	100	100	788,171	788,171
LG Energy Solution Europe GmbH	Germany	100	100	34,729	34,729
LG Energy Solution (Taiwan) Ltd.	Taiwan	100	100	1,871	1,871
Areum noori Co., Ltd.	Korea	100	100	500	500
LG Energy Solution Fund I LLC	USA	100	100	49,605	47,842
LG Energy Solution Veritech Inc.	USA	100	100	16,168	16,168
LG Energy Solution Arizona, Inc.	USA	100	100	268,725	188,649
Baterias De Castilla S.L.	Spain	100	100	4	4
L-H Battery Company, Inc.	USA	51	51	1,764,828	548,958
LG Energy Solution India Private Limited	India	100	100	563	563
LG Energy Solution Arizona ESS, Inc.	USA	100	100	102,735	39,936
NextStar Energy Inc.	Canada	51	51	1,342,085	579,075
LG Energy Solution Fund II LLC	USA	100	100	44,513	22,985
LG Energy Solution Japan Co., Ltd. (*1)	Japan	100	-	535	-
PT. HLI Green Power (*2)	Indonesia	50	-	209,133	-
				<u>13,379,517</u>	<u>9,847,300</u>
Associates and joint ventures:					
PT. HLI Green Power (*2)	Indonesia	-	50	-	209,133
Sama Aluminium Co., Ltd.	Korea	10.2	10.2	46,575	46,575
Nexpo Co., Ltd.	Korea	19	19	4,274	2,374
Bricks Capital Management Global Battery Private Equity Fund I	Korea	59.9	59.9	19,144	13,381
				<u>69,993</u>	<u>271,463</u>
				<u>₩ 13,449,510</u>	<u>₩ 10,118,763</u>

(*1) During the current period, the Company newly acquired 100% shares in LG Energy Solution Japan Co., Ltd. for ₩535 million.

(*2) During the current period, the Company reclassified PT. HLI Green Power from a joint venture to a subsidiary due to amendments in the shareholder agreement.

11. PROPERTY, PLANT AND EQUIPMENT:

(1) Changes in property, plant and equipment for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024					
	<u>Land</u>	<u>Building</u>	<u>Structures</u>	<u>Machinery</u>	<u>Vehicle</u>	<u>Tool</u>
Beginning						
Carrying amount	₩ 246,882	₩ 1,443,433	₩ 87,973	₩ 1,794,567	₩ 7,369	₩ 741,264
Accumulated depreciation	-	(234,908)	(37,211)	(1,346,009)	(3,741)	(417,943)
Accumulated impairment	(668)	(3,222)	(1,834)	(2,870)	(1)	(1,222)
	<u>₩ 246,214</u>	<u>₩ 1,205,303</u>	<u>₩ 48,928</u>	<u>₩ 445,688</u>	<u>₩ 3,627</u>	<u>₩ 322,099</u>
Acquisition/transfer	61	178,143	3,205	239,363	1,556	189,712
Disposal/transfer	-	(16)	(28)	(23,724)	(9)	(3,845)
Depreciation	-	(32,347)	(2,922)	(173,325)	(657)	(101,681)
Impairment	-	-	-	(3,892)	(2)	(10,511)
Ending						
Carrying amount	₩ 246,943	₩ 1,628,586	₩ 91,140	₩ 1,841,871	₩ 8,258	₩ 857,486
Accumulated depreciation	-	(274,188)	(40,123)	(1,354,756)	(3,740)	(455,378)
Accumulated impairment	(668)	(3,315)	(1,834)	(3,005)	(3)	(6,334)
	<u>₩ 246,275</u>	<u>₩ 1,351,083</u>	<u>₩ 49,183</u>	<u>₩ 484,110</u>	<u>₩ 4,515</u>	<u>₩ 395,774</u>

	2024 (Cont.)					
	<u>Fixtures</u>	<u>Right-of-use assets</u>	<u>Construction in progress</u>	<u>Machinery in transit</u>	<u>Others</u>	<u>Total</u>
Beginning						
Carrying amount	₩ 279,118	₩ 105,905	₩ 860,764	₩ 22,509	₩ 22,744	₩ 5,612,528
Accumulated depreciation	(121,092)	(50,987)	-	-	(6,684)	(2,218,575)
Accumulated impairment	(396)	-	-	-	-	(10,213)
	<u>₩ 157,630</u>	<u>₩ 54,918</u>	<u>₩ 860,764</u>	<u>₩ 22,509</u>	<u>₩ 16,060</u>	<u>₩ 3,383,740</u>
Acquisition/transfer	97,534	42,213	1,218,047	94,954	15,668	2,080,456
Disposal/transfer	(1,635)	(6,251)	(932,901)	(22,912)	(2,890)	(994,211)
Depreciation	(44,361)	(32,810)	-	-	(8,006)	(396,109)
Impairment	(219)	-	-	-	-	(14,624)
Ending						
Carrying amount	₩ 371,406	₩ 135,707	₩ 1,145,910	₩ 94,551	₩ 35,522	₩ 6,457,380
Accumulated depreciation	(161,954)	(77,637)	-	-	(14,690)	(2,382,466)
Accumulated impairment	(503)	-	-	-	-	(15,662)
	<u>₩ 208,949</u>	<u>₩ 58,070</u>	<u>₩ 1,145,910</u>	<u>₩ 94,551</u>	<u>₩ 20,832</u>	<u>₩ 4,059,252</u>

LG Energy Solution, Ltd.

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	2023					
	Land	Building	Structures	Machinery	Vehicle	Tool
Beginning						
Carrying amount	₩ 224,890	₩ 966,284	₩ 80,988	₩ 1,799,948	₩ 6,527	₩ 648,872
Accumulated depreciation	-	(210,390)	(34,397)	(1,377,291)	(3,363)	(381,565)
Accumulated impairment	(668)	(3,219)	(1,834)	(1,209)	(4)	(257)
	<u>₩ 224,222</u>	<u>₩ 752,675</u>	<u>₩ 44,757</u>	<u>₩ 421,448</u>	<u>₩ 3,160</u>	<u>₩ 267,050</u>
Acquisition/transfer	21,992	477,189	7,150	201,375	1,057	146,658
Disposal/transfer	-	(117)	(135)	(17,636)	(16)	(6,781)
Depreciation	-	(24,444)	(2,844)	(157,857)	(574)	(83,853)
Impairment	-	-	-	(1,642)	-	(975)
Ending						
Carrying amount	₩ 246,882	₩ 1,443,433	₩ 87,973	₩ 1,794,567	₩ 7,369	₩ 741,264
Accumulated depreciation	-	(234,908)	(37,211)	(1,346,009)	(3,741)	(417,943)
Accumulated impairment	(668)	(3,222)	(1,834)	(2,870)	(1)	(1,222)
	<u>₩ 246,214</u>	<u>₩ 1,205,303</u>	<u>₩ 48,928</u>	<u>₩ 445,688</u>	<u>₩ 3,627</u>	<u>₩ 322,099</u>

	2023 (Cont.)					
	Fixtures	Right-of-use assets	Construction in progress	Machinery in transit	Others	Total
Beginning						
Carrying amount	₩ 224,696	₩ 83,067	₩ 593,293	₩ 9,465	₩ 3,316	₩ 4,641,346
Accumulated depreciation	(94,005)	(27,496)	-	-	(298)	(2,128,805)
Accumulated impairment	(414)	-	-	-	-	(7,605)
	<u>₩ 130,277</u>	<u>₩ 55,571</u>	<u>₩ 593,293</u>	<u>₩ 9,465</u>	<u>₩ 3,018</u>	<u>₩ 2,504,936</u>
Acquisition/transfer	62,375	26,132	1,433,009	47,113	24,930	2,448,980
Disposal/transfer	(619)	(1,435)	(1,165,538)	(34,069)	(5,502)	(1,231,848)
Depreciation	(34,399)	(25,350)	-	-	(6,386)	(335,707)
Impairment	(4)	-	-	-	-	(2,621)
Ending						
Carrying amount	₩ 279,118	₩ 105,905	₩ 860,764	₩ 22,509	₩ 22,744	₩ 5,612,528
Accumulated depreciation	(121,092)	(50,987)	-	-	(6,684)	(2,218,575)
Accumulated impairment	(396)	-	-	-	-	(10,213)
	<u>₩ 157,630</u>	<u>₩ 54,918</u>	<u>₩ 860,764</u>	<u>₩ 22,509</u>	<u>₩ 16,060</u>	<u>₩ 3,383,740</u>

(2) The current ending balances of property, plant and equipment include ₩1,145,910 million and ₩860,764 million of construction in progress as of December 31, 2024 and 2023, respectively, and some of these amounts will subsequently be transferred to intangible assets.

(3) The Company capitalized ₩32,373 million of borrowing costs in relation to the acquisition of property, plant and equipment (for the year ended December 31, 2023, was ₩17,119 million). The capitalization rate of borrowings used to determine the amount of borrowing costs eligible for capitalization is 4.14% (for the year ended December 31, 2023, was 3.66%).

(4) Line items including depreciation in the separate statements of profit or loss for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024	2023
Cost of sales	₩ 236,867	₩ 210,816
Selling and administrative expenses	₩ 159,242	₩ 124,891
	<u>₩ 396,109</u>	<u>₩ 335,707</u>

LG Energy Solution, Ltd.
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(5) Lease

1) Amounts recognized in the separate statements of financial position

Details of amounts recognized in the separate statements of financial position in relation to the lease for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Right-of-use assets (*):		
Buildings	₩ 47,511	₩ 43,129
Lands	243	228
Vehicles	10,316	11,561
	<u>₩ 58,070</u>	<u>₩ 54,918</u>

(*) Included in 'Property, plant and equipment' in the separate statements of financial position.

Additions to the right-of-use assets for the year ended December 31, 2024, are ₩42,213 million (for the year ended December 31, 2023, was ₩26,132 million).

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Lease liabilities (*):		
Current	₩ 33,039	₩ 26,523
Non-current	28,779	33,094
	<u>₩ 61,818</u>	<u>₩ 59,617</u>

(*) Included in 'Borrowings' in the separate statements of financial position.

2) Amounts recognized in the separate statements of income

Details of amounts recognized in the separate statements of income in relation to the lease for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Depreciation of right-of-use assets:		
Buildings	₩ 26,618	₩ 18,831
Lands	262	857
Vehicles	5,930	5,662
	<u>₩ 32,810</u>	<u>₩ 25,350</u>
Interest expense relating to lease liabilities (included in finance cost)	₩ 2,247	₩ 1,122
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	2,794	4,220
Expense relating to leases of low-value assets that are not short- term leases (included in cost of goods sold and administrative expenses)	7,043	7,069

Total cash outflow for leases for the year ended December 31, 2024, is ₩45,060 million (for the year ended December 31, 2023, it was ₩32,823 million).

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12. INTANGIBLE ASSETS:

(1) Changes in intangible assets for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024				
	<u>Software</u>	<u>Industrial property rights</u>	<u>Memberships</u>	<u>Others</u>	<u>Total</u>
Beginning	₩ 415,681	₩ 277,038	₩ 18,938	₩ 560	₩ 712,217
Acquisition/transfer	236,337	106,048	4,563	61	347,009
Disposal/transfer	(20)	(1,413)	(2,600)	(183)	(4,216)
Amortization	(111,878)	(24,921)	-	(37)	(136,836)
Ending	<u>₩ 540,120</u>	<u>₩ 356,752</u>	<u>₩ 20,901</u>	<u>₩ 401</u>	<u>₩ 918,174</u>
	2023				
	<u>Software</u>	<u>Industrial property rights</u>	<u>Memberships</u>	<u>Others</u>	<u>Total</u>
Beginning	₩ 276,828	₩ 221,408	₩ 14,753	₩ 494	₩ 513,483
Acquisition/transfer	220,552	78,404	5,268	275	304,499
Disposal/transfer	(472)	(1,220)	(1,083)	(179)	(2,954)
Amortization	(81,218)	(21,554)	-	(30)	(102,802)
Impairment	(9)	-	-	-	(9)
Ending	<u>₩ 415,681</u>	<u>₩ 277,038</u>	<u>₩ 18,938</u>	<u>₩ 560</u>	<u>₩ 712,217</u>

(2) Line items including amortization of intangible assets in the separate statements of profit or loss for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Cost of sales	₩ 21,500	₩ 17,682
Selling and administrative expenses	115,336	85,120
	<u>₩ 136,836</u>	<u>₩ 102,802</u>

(3) Research and development expenses

The total amount of research and development expenses recognized by the Company is ₩982,980 million (for the year ended December 31, 2023, it was ₩927,990 million)

(4) Greenhouse gas emission right

1) The amount of allocated greenhouse gas emission rights for the domestic third plan period (2021-2025) is as follows (tons in thousands):

	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
Allocated emission rights	281	332 (*1)	360(*2)	297	297

(*1) An additional 32,000 tons have been allocated due to the expansion of the workplace discharge facility in addition to the initial free amount 300,000 tons of allocated greenhouse gas emission rights.

(*2) An additional 60,000 tons have been allocated due to the determination of emissions for 2023 in addition to the initial free amount 300,000 tons of allocated greenhouse gas emission rights.

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2) Changes in greenhouse gas emission right included in intangible assets for the years ended December 31, 2024 and 2023, are as follows (ton in thousands and Korean won in millions):

	2023		2024		2025	
	Ton	Amount	Ton	Amount	Ton	Amount
	Beginning/allocated	360	₩ -	297	₩ -	297
Purchase/sale	7	171	-	-	-	-
Borrowing/carried over	-	-	-	-	-	-
Government submission	(367)	(171)	-	-	-	-
Ending	-	₩ -	297	₩ -	297	₩ -

	2022		2023		2024		2025	
	Ton	Amount	Ton	Amount	Ton	Amount	Ton	Amount
	Beginning/allocated	332	₩ -	300	₩ -	297	₩ -	297
Purchase/sale	23	179	-	-	-	-	-	-
Borrowing/carried over	3	-	-	-	-	-	-	-
Government submission	(358)	(179)	-	-	-	-	-	-
Ending	-	₩ -	300	₩ -	297	₩ -	297	₩ -

13. OTHER CURRENT AND NON-CURRENT ASSETS:

Details of other current and non-current assets as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024		December 31, 2023	
Current:				
Prepayments and prepaid expenses	₩	48,430	₩	60,954
Prepaid value-added tax		55,284		56,386
Others		81,670		1,436
	₩	185,384	₩	118,776
Non-current:				
Long-term prepayments and long-term prepaid expenses	₩	10,790	₩	11,495
Net defined benefit assets		142,734		156,509
	₩	153,524	₩	168,004

14. BORROWINGS:

(1) Borrowings as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Current:		
Current portion of debentures	₩ 124,911	₩ 643,895
Current lease liabilities	33,039	26,523
	<u>₩ 157,950</u>	<u>₩ 670,418</u>
Non-current:		
Debentures	₩ 7,775,529	₩ 3,116,289
Non-current lease liabilities	28,779	33,094
	<u>₩ 7,804,308</u>	<u>₩ 3,149,383</u>
	<u>₩ 7,962,258</u>	<u>₩ 3,819,801</u>

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(2) Details of borrowings as of December 31, 2024 and 2023, are as follows:

1) Debentures (USD in thousands and Korean won in millions):

		December 31, 2024				
	Financial institution	Interest rate (%)	Longest maturity date	Amount	Current portion	Non-current portion
	NH					
1 st Debenture (non-guaranteed/public)	Investment & Securities Co., Ltd. and others	2.214	2026.03.13	₩ 200,000	₩ -	₩ 200,000
2-1 st Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.097	2025.06.29	125,000	125,000	-
2-2 nd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.196	2026.06.29	370,000	-	370,000
2-3 rd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.298	2028.06.29	505,000	-	505,000
3-1 st Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	3.806	2026.02.16	180,000	-	180,000
3-2 nd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	3.889	2027.02.16	660,000	-	660,000
3-3 rd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.054	2029.02.16	570,000	-	570,000
3-4 th Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.202	2031.02.16	190,000	-	190,000
USD foreign currency debenture (non-guaranteed)	Citibank and others	3.625	2029.04.15	735,000 (USD 500,000)	-	735,000
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.625	2026.09.25	588,000 (USD 400,000)	-	588,000
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.750	2028.09.25	882,000 (USD 600,000)	-	882,000
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.375	2027.07.02	1,029,000 (USD 700,000)	-	1,029,000
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.375	2029.07.02	1,176,000 (USD 800,000)	-	1,176,000
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.500	2034.07.02	735,000 (USD 500,000)	-	735,000
Less: discount on debentures		-	-	(44,560)	(89)	(44,471)
				<u>₩ 7,900,440</u>	<u>₩ 124,911</u>	<u>₩ 7,775,529</u>

LG Energy Solution, Ltd.

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		December 31, 2023					
		Financial institution	Interest rate (%)	Longest Maturity date	Amount	Current portion	Non-current portion
NH							
1 st Debenture (non-guaranteed/public)	Investment & Securities Co., Ltd. and others	2.214	2026.03.13	₩	200,000 ₩	- ₩	200,000
2-1 st Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.097	2025.06.29		125,000	-	125,000
2-2 nd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.196	2026.06.29		370,000	-	370,000
2-3 rd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.298	2028.06.29		505,000	-	505,000
USD foreign currency debenture (non-guaranteed)	Citibank and others	3.250	2024.10.15		644,700 (USD 500,000)	644,700	-
USD foreign currency debenture (non-guaranteed)	Citibank and others	3.625	2029.04.15		644,700 (USD 500,000)	-	644,700
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.625	2026.09.25		515,760 (USD 400,000)	-	515,760
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.750	2028.09.25		773,640 (USD 600,000)	-	773,640
Less: discount on debentures					(18,616)	(805)	(17,811)
					<u>₩ 3,760,184</u>	<u>₩ 643,895</u>	<u>₩ 3,116,289</u>

The Company has entered into debenture agreements stipulating that a loss of benefit of term will occur if the agreed ratio under the covenant is not maintained based on the reporting for each quarter, half-year, or full fiscal year. As of the end of the current period, the relevant amount is KRW 2.7 trillion, and the covenant ratios have been complied with.

2) Lease liabilities (Korean won in millions)

		December 31, 2024				
		Interest rate (%)	Longest maturity date	Amount	Current portion	Non-current portion
Baeksan industry and others		2.21 ~ 4.20	2039.02.28	₩ 61,818 ₩	33,039 ₩	28,779
		December 31, 2023				
		Interest rate (%)	Longest maturity date	Amount	Current portion	Non-current portion
Baeksan industry and others		2.16 ~ 4.20	2028.06.07	₩ 59,617 ₩	26,523 ₩	33,094

15. PROVISIONS:

Changes in provisions for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024			
	Warranty (*1)	Greenhouse gas emission (*2)	Other provisions (*3)	Total
Beginning	₩ 423,920	₩ 195	₩ 102,890	₩ 527,005
Provision transfer	745,611	50	24,357	770,018
Used	(469,666)	(171)	(9,177)	(479,014)
Ending	699,865	74	118,070	818,009
Less: current portion	(559,600)	(74)	(111,316)	(670,990)
	<u>₩ 140,265</u>	<u>₩ -</u>	<u>₩ 6,754</u>	<u>₩ 147,019</u>
	2023			
	Warranty (*1)	Greenhouse gas emission (*2)	Other provisions (*3)	Total
Beginning	₩ 920,184	₩ 1,250	₩ 4,118	₩ 925,552
Provision transfer	251,654	(876)	98,772	349,550
Used	(747,918)	(179)	-	(748,097)
Ending	423,920	195	102,890	527,005
Less: current portion	(277,810)	(195)	(96,705)	(374,710)
	<u>₩ 146,110</u>	<u>₩ -</u>	<u>₩ 6,185</u>	<u>₩ 152,295</u>

(*1) Warranty provisions have been accrued for the estimated warranty costs to be incurred due to quality control, exchanges and refunds with regard to products based on historical experience. In addition, provisions related to replacement costs due to ESS replacement costs and voluntary automotive battery recalls are included. The provision amount is adjusted to reflect the best estimate.

(*2) In relation to greenhouse gas emissions, the Company estimates the expected future costs of emissions exceeding the Company's emission rights for the year and recognizes them as provisions. Estimated emissions are 305 thousand tons as of December 31, 2024 (325 thousand tons as of December 31, 2023).

(*3) In addition to provisions for warranties and greenhouse gases, the Company has rationally estimated the probable amount of resource outflow embodying economic benefits as a present obligation resulting from past events and recognized it as a provision.

16. NET DEFINED BENEFIT LIABILITIES (ASSETS):

(1) Details of net defined benefit liabilities (assets) recognized in the separate statements of financial position as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024	December 31, 2023
Present value of defined benefit obligations (*1)	₩ 665,108	₩ 671,375
Fair value of plan assets (*2)	(807,842)	(827,884)
	<u>₩ (142,734)</u>	<u>₩ (156,509)</u>

(*1) The present value of defined benefit obligations is the amount after deducting the contributions to the National Pension Plan of ₩26 million as of December 31, 2024 (as of December 31, 2023, was ₩35 million).

(*2) The ₩142,734 million of net defined benefit asset is included in 'Other non-current assets' as of December 31, 2024 (as of December 31, 2023, was ₩156,509 million).

(2) The amounts recognized in the separate statements of profit or loss for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024	2023
Current service cost	₩ 93,460	₩ 77,762
Interest cost	(7,252)	(12,016)
	<u>₩ 86,208</u>	<u>₩ 65,746</u>

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(3) Retirement benefits recognized for defined contribution plan for the year ended December 31, 2024, amounted to ₩5,077 million (for the year ended December 31, 2023, amounted to ₩2,495 million).

(4) Line items including retirement benefits in the separate statements of profit or loss for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Cost of sales	₩ 40,934	₩ 27,130
Selling and administrative expenses	50,351	41,111
	<u>₩ 91,285</u>	<u>₩ 68,241</u>

(5) Changes in the present value of defined benefit obligations for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Beginning	₩ 671,375	₩ 547,721
Transfer in	2,475	12,516
Transfer out	(1,572)	(2,426)
Current service cost	93,460	77,762
Interest expense	31,080	28,988
Remeasurements:		
Actuarial loss from change in financial assumption	(69,888)	45,794
Actuarial gain from change in demographic assumption	1,906	1,824
Actuarial gain due to the difference between the estimated and the actual	(3,502)	(8,634)
Others	-	(2,002)
Payments from plans	(60,226)	(30,168)
Ending	<u>₩ 665,108</u>	<u>₩ 671,375</u>

(6) Changes in the fair value of plan assets for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Beginning	₩ 827,884	₩ 770,240
Transfer out	(760)	(125)
Interest income	38,332	41,004
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(4,941)	1,665
Contribution:		
Employer contribution to plan assets	-	43,000
Payments from plans	(51,058)	(26,650)
Administrative costs	(1,615)	(1,250)
Ending	<u>₩ 807,842</u>	<u>₩ 827,884</u>

(7) The actual return on plan assets for the year ended December 31, 2024, was ₩33,391 million (for the year ended December 31, 2023, was ₩42,669 million).

(8) The significant actuarial assumptions as of December 31, 2024 and 2023, are as follows:

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Discount rate	4.10%	4.70%
Expected salary growth rate	3.96%	5.33%

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(9) The sensitivity analysis for changes in key actuarial assumptions as of December 31, 2024, is as follows (Korean won in millions):

		<u>Increase by 1.0%</u>	<u>Decrease by 1.0%</u>
Discount rate:			
(Decrease) increase in defined benefit obligations	₩	(75,057)	₩ 89,396
Expected salary growth rate:			
Increase (decrease) in defined benefit obligations		92,464	(78,637)

A decrease in corporate bond yields may lead most significantly to an increase in defined benefit liabilities.

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 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 assumptions used for the sensitivity analysis are the same as those of the previous period.

(10) Plan assets as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>		<u>December 31, 2023</u>	
	<u>Amount</u>	<u>Composition (%)</u>	<u>Amount</u>	<u>Composition (%)</u>
Insurance contracts with guaranteed yield	₩ 807,842	100	₩ 827,884	100

Plan assets consist of guaranteed debt instruments and others, which have no quoted market prices in an active market.

(11) The weighted-average remaining maturity of the defined benefit obligation at the end of the year ended December 31, 2024, is 13.11 years

The Company annually reviews the funding level of the plan and has a policy to support the plan in case of any funding shortfall. The expected contribution for the year ended December 31, 2024, is ₩87,913 million.

17. OTHER CURRENT AND NON-CURRENT LIABILITIES:

Details of other current and non-current liabilities as of December 31, 2024 and 2023, are as follows (Korean won in millions):

		<u>December 31, 2024</u>	<u>December 31, 2023</u>
Current:			
Advances from customers	₩	48,911	₩ 56,660
Withholdings		39,276	35,907
Unearned revenues		262,616	46,509
Accrued expenses and others		64,763	187,854
	₩	<u>415,566</u>	<u>₩ 326,930</u>
Non-current:			
Long-term employee benefits	₩	34,494	₩ 26,567
Long-term unearned revenues		1,625	-
Long-term advance received		21,482	33,545
	₩	<u>57,601</u>	<u>₩ 60,112</u>

18. COMMITMENTS AND CONTINGENCIES:

- (1) The Company is jointly liable with LG Chem, Ltd. for liabilities recognized before the split-off date.
- (2) As of December 31, 2024, the Company has been guaranteed by Seoul Guarantee Insurance Company for the execution of contracts and others.
- (3) As of December 31, 2024, the Company has various specific lines of credit agreements with several financial institutions as follows (Korean won in millions and foreign currencies in millions):

	<u>Currency</u>	<u>December 31, 2024</u>
Limit of the letter of credit	USD	12
Limit of discount of notes from export	USD	680
Limit of guaranteed payments in other foreign currency	USD	375
Derivatives	USD	2,366
	KRW	400,000
Business-to-business purchase arrangements	KRW	125,000
General loan agreements	KRW	600,000
Bond transfer transaction	KRW	150,000

- (4) As of December 31, 2024, the Company has entered into payment guarantee contracts of USD 44 million and EUR 5 million with financial institutions in relation to product warranties for certain installed products.
- (5) The Company provides performance guarantees of USD 17,048 million, EUR 1 million, CAD 1,110 million and others for subsidiaries.
- (6) The Company has been sued and is involved in 5 class actions by consumers in relation to the sales of mobile batteries and GM Bolt EV, and these actions are still in process as of December 31, 2024. The Company has also been sued in 42 other cases (amounting to ₩1,818 million) and has filed 5 lawsuit cases (amounted to USD 234 million and ₩646 million). The ultimate outcome of these pending cases cannot be determined at the reporting date.
- (7) 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.
- (8) As of December 31, 2024, the Company has entered into a joint venture agreement with Honda and has committed to invest USD 1,802 million and has contributed USD 1,317 million as of the end of December 31, 2024. The Company has decided to provide a payment guarantee of USD 450 million, determined by its proportionate ownership of the borrowed amount up to a maximum limit of USD 883 million. In addition, if one party defaults, the other party has the right to purchase shares from the other party.
- (9) As of December 31, 2024, the Company has entered into a joint venture agreement with Stellantis and has committed to invest USD 1,464 million and has contributed USD 1,020 million as of the end of December 31, 2024. In addition, if one party defaults, the other party has the right to purchase shares from the other party. The Company has decided to provide a payment guarantee of USD 686 million, determined by its proportionate ownership of the borrowed amount up to a maximum limit of USD 1,344 million.
- (10) As of December 31, 2024, the Company has entered into a joint venture agreement with HMG Global LLC and has committed to invest USD 1,108 million and has contributed USD 540 million as of the end of December 31, 2024. After the expiration of the contract period, each party can sell its shares to third parties. In addition, if one party defaults, the other party has the right to purchase shares from the other party.
- (11) As of December 31, 2024, the Company has decided to contribute USD 1,106 million to LG Energy Solution Arizona, Inc. and has contributed USD 208 million as of the end of December 31, 2024. Furthermore, the Company has decided to provide a payment guarantee up to a maximum limit of USD 1,106 million and lease-related payment obligation of USD 4,483 million.

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(12) As of December 31, 2024, the Company has decided to contribute USD 1,173 million to LG Energy Solution Arizona ESS, Inc. and has contributed USD 76 million as of the end of December 31, 2024. Furthermore, the Company has decided to provide a payment guarantee up to a maximum limit of USD 1,173 million.

(13) Capital expenditure arrangements that have not been incurred as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Property, plant and equipment	₩ 631,492	₩ 573,345

(14) Investment commitments as of December 31, 2024, are as follows (Korean won and USD in millions):

	<u>Currency</u>	<u>Contractual amount</u>	<u>Total investments</u>	<u>Remaining amount</u>
BNZ (Beyond Net Zero) Fund	USD	75	43	32
Secondary Battery Growth Fund	KRW	6,700	4,677	-
KBE (Korea Battery ESG) Fund	KRW	75,000	55,893	19,107
BCM Global Battery Fund	KRW	30,000	19,143	10,857
Yonsei Technology Holdings IP Fund	KRW	3,000	2,040	960

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(15) Details of guarantees the Company provides for the borrowings as of December 31, 2024 and 2023, are as follows
(Korean won in millions):

Guarantor	Guarantee beneficiary	Financial institution	Loan amount (*1)		Credit limit (*2)	
			December 31, 2024	December 31, 2023	December 31, 2024	December 31, 2023
		MUFG	₩ -	₩ 71,330	₩ -	₩ 71,330
		KEB Hana Bank	-	285,318	-	285,318
		Citibank	-	71,330	-	71,330
		Citibank	-	71,330	-	71,330
		EBRD	45,862	71,330	152,873	142,659
		SMBC	34,396	46,364	76,437	71,330
		DBS	152,873	142,659	152,873	142,659
		EIB	407,662	532,593	733,790	684,763
	LG Energy Solution	EBRD	91,724	128,393	229,310	213,989
	Wroclaw sp. z o.o.	KDB Bank/ Korea Exim Bank	354,474	378,046	405,113	378,046
LG Energy Solution Ltd.		KDB Bank/ Korea Exim Bank/ NH Bank	840,802	784,625	840,802	784,625
		KDB Bank/ Korea Exim Bank	-	285,318	-	285,318
		KDB Bank/ Korea Exim Bank	133,764	142,659	152,873	142,659
		KDB Bank/ Korea Exim Bank	66,882	71,330	76,437	71,330
		KDB Bank/ Korea Exim Bank	66,882	71,330	76,437	71,330
	LG Energy Solution Michigan Inc.	KDB Bank/ Korea Exim Bank and others	73,500	64,470	1,617,000	1,418,340
	PT. HLI Green Power	ANZ and others	462,315	285,602	522,585	458,382
			<u>₩ 2,731,136</u>	<u>₩ 3,504,027</u>	<u>₩ 5,036,530</u>	<u>₩ 5,364,738</u>

(*1) The amounts represent the borrowed amount as of December 31, 2024 and 2023.

(*2) The limits indicate the aggregate amount of payment guarantees.

In addition, the Company provides letter of comfort in relation to certain borrowings of subsidiaries.

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19. SHARE CAPITAL:

Changes in share capital and share premium for the year ended December 31, 2024, are as follows (Korean won in millions and in shares):

	Ordinary shares		
	Number of shares	Share capital	Share premium
December 31, 2023	₩ 234,000,000	₩ 117,000	₩ 17,589,722
Changes	-	-	-
December 31, 2024	<u>₩ 234,000,000</u>	<u>₩ 117,000</u>	<u>₩ 17,589,722</u>

20. ACCUMULATED DEFICIT:

(1) Details of accumulated deficit as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024	December 31, 2023
Unappropriated retained earning (Undisposed accumulated deficit)	₩ (1,938,044)	₩ (1,051,712)

(2) The statement of the disposition of accumulated deficits for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024	December 31, 2023
	Expected appropriation date: March 20, 2025	Appropriation date: March 25, 2024
Unappropriated accumulated deficit		
Unappropriated accumulated deficit carried over from prior years	₩ (1,051,712)	₩ (958,790)
Loss for the year	(937,643)	(65,689)
Remeasurement items of net defined benefit liability	51,311	(27,233)
	<u>(1,938,044)</u>	<u>(1,051,712)</u>
Unappropriated accumulated deficit to be carried forward to the subsequent year	<u>₩ (1,938,044)</u>	<u>₩ (1,051,712)</u>

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21. OPERATING LOSSES:

(1) The major items encompassed in the calculation of operating income/loss for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>		<u>2023</u>
Revenue (*)	₩ 7,926,651	₩	12,288,439
Cost of sales	<u>6,842,993</u>		<u>9,881,450</u>
Gross profit	1,083,658		2,406,989
Selling and administrative expenses:			
Wages and salaries	₩ 651,643	₩	671,151
Retirement benefits	50,351		41,111
Employee benefits	178,798		163,107
Travel expenses	54,510		52,020
Water and utilities	80,145		67,211
Rental expenses	49,089		70,935
Commission expenses	786,437		622,528
Depreciation	165,847		130,919
Advertising expenses	26,295		22,657
Freight expenses	37,500		27,176
Training expenses	26,247		28,384
Amortization	115,336		85,120
Sample expenses	10,206		3,732
Development costs	228,365		205,869
Addition of warranty provisions	745,611		251,654
Others	<u>182,456</u>		<u>282,329</u>
	3,388,836		2,725,903
Operating losses	₩ <u>(2,305,178)</u>	₩	<u>(318,914)</u>

(*) Revenue includes customer compensation amounting to ₩450,984 million. The Company considers the nature of the compensation and the terms of the agreements and determines the timing of revenue recognition by identifying performance obligations in each customer contract.

(2) Sales for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>		<u>2023</u>
Sales recognized at a point in time	₩ 6,870,519	₩	10,908,359
Sales recognized over time	<u>1,056,132</u>		<u>1,380,080</u>
	<u>₩ 7,926,651</u>	₩	<u>12,288,439</u>

22. CLASSIFICATION OF EXPENSES BY NATURE:

Cost of sales and selling and administrative expenses by nature for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Changes in inventories of merchandise, finished goods, semifinished goods and work in process	₩ 329,388	₩ (4,410)
Raw materials and consumables used	4,203,950	7,549,341
Purchase of merchandise	608,382	1,059,523
Employee benefit expenses	1,341,830	1,356,292
Advertising expenses	26,309	22,775
Freight expenses	38,798	30,459
Commission expenses	885,093	687,648
Depreciation and amortization	539,550	444,537
Rent expenses and usage fee	9,924	10,213
Addition of warranty provisions	745,611	251,654
Other expenses	1,502,994	1,199,321
	<u>₩ 10,231,829</u>	<u>₩ 12,607,353</u>

23. EMPLOYEE BENEFIT EXPENSES:

Details of employee benefit expenses for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Salaries	₩ 1,074,391	₩ 1,127,059
Retirement benefits: defined benefit plan	86,208	65,746
Retirement benefits: defined contribution plan	5,077	2,495
Others	176,154	160,992
	<u>₩ 1,341,830</u>	<u>₩ 1,356,292</u>

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24. FINANCE INCOME AND COSTS:

Details of finance income and costs for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Finance income:		
Interest income (*1)	₩ 78,390	₩ 128,027
Exchange differences	324,644	451,680
Gain on derivatives	402,671	35,589
Gain on disposal of financial assets at FVPL	728	-
Gain on valuation of financial assets at FVPL	5,500	-
	<u>₩ 811,933</u>	<u>₩ 615,296</u>
Finance costs:		
Interest expense (*2)	₩ 241,806	₩ 77,025
Exchange differences	644,553	430,261
Loss on derivatives	744	67,862
Loss on valuation of financial assets at FVPL	15,051	-
	<u>₩ 902,154</u>	<u>₩ 575,148</u>

(*1) Details of interest income for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Cash and cash equivalents and others	₩ 70,319	₩ 121,457
Other loans and receivables	8,071	6,570
	<u>₩ 78,390</u>	<u>₩ 128,027</u>

(*2) Details of interest expense for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Interest on lease liabilities	₩ 2,247	₩ 1,122
Interest on debentures	271,931	93,008
Other interest expenses	1	14
Capitalized interest for qualifying assets	(32,373)	(17,119)
	<u>₩ 241,806</u>	<u>₩ 77,025</u>

25. OTHER NON-OPERATING INCOME:

Details of other non-operating income for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Exchange differences	₩ 484,886	₩ 366,813
Gain on disposal of property, plant and equipment	922	643
Gain on disposal of intangible assets	-	191
Dividend income	1,067,939	329,775
Others	99,432	32,114
	<u>₩ 1,653,179</u>	<u>₩ 729,536</u>

26. OTHER NON-OPERATING EXPENSES:

Details of other non-operating expenses for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>		<u>2023</u>
Exchange differences	₩ 269,523	₩	354,932
Loss on disposal of property, plant and equipment	33,236		30,322
Loss on disposal of intangible assets	365		472
Loss on impairment of investments in associates and disposal loss	-		27,137
Donations	9,520		7,825
Others	20,843		3,856
	<u>₩ 333,487</u>	₩	<u>424,544</u>

27. INCOME TAX EXPENSE (BENEFIT) AND DEFERRED TAX:

(1) Details of income tax expense (benefit) for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>		<u>2023</u>
Current income tax on profit for the period	₩ 192,312	₩	110,621
Adjustment for past income tax	84		-
Deferred tax – movement in temporary differences	(49,460)		309,553
Changes in deferred tax – tax credit carryforwards	(245,894)		(223,002)
Non-recognition of deferred tax on tax credit carryforwards	318,081		-
Changes in deferred tax – tax loss carryforwards	(337,386)		(143,072)
	<u>(122,263)</u>		<u>54,100</u>
Deferred tax changed directly to equity	(15,801)		37,815
	<u>₩ (138,064)</u>	₩	<u>91,915</u>

(2) The aggregate current and deferred taxes charged directly to equity (other comprehensive income) for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions)

	<u>2024</u>		<u>2023</u>
Remeasurements of net defined benefit liabilities	₩ (15,231)	₩	8,084
(Losses) gains on valuation of financial assets at FVOCI and others	(570)		29,731
	<u>₩ (15,801)</u>	₩	<u>37,815</u>

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(3) Changes in deferred tax assets (liabilities) for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024			
	Increase (decrease)			Ending
	Beginning	Profit(loss) for the period	Other comprehensive Income(loss)	
Net defined benefit liabilities	₩ 139,706	₩ 15,504	₩ (15,231)	₩ 139,979
Plan assets	(157,905)	7,209	-	(150,696)
Property, plant and equipment	7,840	2,323	-	10,163
Accrued income	(252)	199	-	(53)
Provision	103,880	16,780	-	120,660
Others	62,387	23,168	(570)	84,985
Succession of assets (property, plant and equipment)	55,338	2,649	-	57,987
Succession of assets (patents)	485,420	(2,571)	-	482,849
Succession of assets (membership)	533	-	-	533
	<u>696,947</u>	<u>65,261</u>	<u>(15,801)</u>	<u>746,407</u>
Tax credit carryforwards	412,185	(72,188)	-	339,997
Tax loss carryforwards	489,384	337,386	-	826,770
Deferred tax assets	<u>₩ 1,598,516</u>	<u>₩ 330,459</u>	<u>₩ (15,801)</u>	<u>₩ 1,913,174</u>

	2023			
	Increase (decrease)			Ending
	Beginning	Profit (loss) for the period	Other comprehensive Income (loss)	
Net defined benefit liabilities	₩ 130,252	₩ 1,370	₩ 8,084	₩ 139,706
Plan assets	(185,722)	27,817	-	(157,905)
Property, plant and equipment	11,001	(3,161)	-	7,840
Accrued income	(659)	407	-	(252)
Provision	250,429	(146,549)	-	103,880
Others	168,682	(136,026)	29,731	62,387
Succession of assets (property, plant and equipment)	67,476	(12,138)	-	55,338
Succession of assets (patents)	564,426	(79,006)	-	485,420
Succession of assets (membership)	615	(82)	-	533
	<u>1,006,500</u>	<u>(347,368)</u>	<u>37,815</u>	<u>696,947</u>
Tax credit carryforwards	189,183	223,002	-	412,185
Tax loss carryforwards	346,312	143,072	-	489,384
Deferred tax assets (liabilities)	<u>₩ 1,541,995</u>	<u>₩ 18,706</u>	<u>₩ 37,815</u>	<u>₩ 1,598,516</u>

LG Energy Solution, Ltd.**Notes to the separate financial statements****As of and for the years ended December 31, 2024 and 2023**

(4) The reconciliations between income tax benefit and accounting loss for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Net (loss) income before tax	₩ (1,075,707)	₩ 26,226
Tax at domestic tax rates	(271,261)	6,260
Tax effects:		
Income not subject to tax	(279,759)	(150,506)
Expenses not deductible for tax purposes	1,698	1,965
Effect of non-recognition of deferred tax on temporary differences	50,060	84,085
Tax credit	(245,894)	-
Effect of non-recognition of deferred tax on tax credit carryforwards	318,081	-
Foreign tax	192,312	110,621
Others	96,699	39,490
Income tax (benefit) expenses	<u>₩ (138,064)</u>	<u>₩ 91,915</u>

(5) The future feasibility of deferred tax assets depends on a variety of factors, including the Company's ability to generate taxable income during the period when the temporary differences are realized, and the overall economic environment and industry prospects. The Company reviews these factors periodically.

(6) The temporary difference related to investments in subsidiaries, associates and joint ventures that is not recognized as deferred tax assets (liabilities) for the years ended December 31, 2024 and 2023, is as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Investments in subsidiaries, associates and joint ventures	₩ 1,782,968	₩ 1,564,395

(7) Non-recognition of deferred tax on tax credit carryforwards

The amount and expiration date of non-recognition of deferred tax on tax credit carryforwards as of December 31, 2024 are as follows (Korean won in millions):

	<u>2033</u>	<u>2034</u>	<u>Total</u>
Non-recognition of deferred tax on tax credit carryforwards	₩ 132,635	₩ 185,446	₩ 318,081

28. LOSSES PER SHARE:

Basic losses per share are calculated by dividing the losses attributable to ordinary shares by weighted-average number of ordinary shares issued.

(1) Basic losses per ordinary share for the years ended December 31, 2024 and 2023, are computed as follows (Korean won in millions and in number of shares):

Basic losses per ordinary share (Korean won in millions and in number of shares)

	<u>2024</u>	<u>2023</u>
Losses attributable to ordinary shares	₩ (937,643)	₩ (65,689)
Weighted-average number of ordinary shares outstanding	234,000,000	234,000,000
Basic losses per ordinary share (in Korean won)	<u>₩ (4,007)</u>	<u>₩ (281)</u>

(2) The Company has not issued any potential ordinary shares. Therefore, basic losses per share are identical to diluted losses per share.

LG Energy Solution, Ltd.**Notes to the separate financial statements****As of and for the years ended December 31, 2024 and 2023****29. DIVIDEND:**

The Company did not pay any dividends for the accounting period that ended on December 31, 2024.

30. RELATED-PARTY TRANSACTIONS:

(1) As of December 31, 2024, the parent company is LG Chem, Ltd. (percentage of ownership: 81.84%), over which LG Corp. exercises a significant influence.

(2) Details of other related parties that have sales and other transactions with the Company or have receivable and payable balances, other than subsidiaries, associates and joint ventures (see Note 10), as of December 31, 2024, are as follows:

Related party	Related party's subsidiary (domestic)	Related party's subsidiary (overseas)	Details
LG Chem, Ltd.	HAENGBOKNURI CO., LTD. and others	LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd. and others	Subsidiary of LG Chem, Ltd.
D&O Co., Ltd.	D&O CM, Ltd. and others	D&O CM NANJING and others	
LG CNS Co., Ltd.	Biz Tech I Co., Ltd. and others	LG CNS America Inc. and others	Subsidiary of LG Corp.
LG Management Development Institute			
LG Display, Inc.	NANUMNURI CO., LTD	LG Display (China) Co., Ltd. and others	
LG Electronics, Inc.	LG Innotek Co., Ltd. and others	LG Electronics Philippines, Inc. and others	
LG Household & Health Care Ltd.	Coca-Cola Beverage Co. and others	LG Household & Health Care Trading (Shanghai) CO., LTD. and others	LG Enterprise group (*1)
LG Uplus Corp.	LG HelloVision Corp. and others	LG UPLUS FUND I LLC and others	
HS AD Inc.		GIIR America Inc. and others	
Mintech Co., Ltd. (*2)			

(*1) Although these entities are not related parties of the Company in accordance with K-IFRS 1024, they belong to a large enterprise group in accordance with the Monopoly Regulation and Fair-Trade Act.

(*2) Although the Company holds less than 20% of the shares in the form of redeemable convertible preference shares, it has significant influence as it holds the right to appoint directors. Meanwhile, the Company classifies these shares as financial assets at FVPL, taking into account the nature of the shares held and K-IFRS 1109.

LG Energy Solution, Ltd.

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(3) Transactions with related parties for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024				
	Sales and others	Purchase and others			
		Purchase of raw materials /merchandises	Acquisition of property, plant and equipment and intangibles	Interest expense	Others
Parent:					
LG Chem, Ltd.	₩ 43,011	₩ 43,631	₩ -	₩ 19	₩ 2,996
Subsidiaries:					
LG Energy Solution (Nanjing) Co., Ltd.	976,228	2,001,411	-	-	62
LG Energy Solution Michigan, Inc.	285,580	560	-	-	65,337
LG Energy Solution Battery (Nanjing) Co., Ltd.	111,053	510,656	-	-	-
LG Energy Solution Wroclaw sp. z o.o.	769,954	14,991	-	-	3,447
LG Energy Solution Australia Pty Ltd.	(119)	-	-	-	43,053
LG Energy Solution Technology (Nanjing) Co., Ltd.	244,296	1,504,321	-	-	361
Ultium Cells LLC	206,560	-	-	-	-
LG Energy Solution Europe GmbH	16,552	-	-	-	62,591
LG Energy Solution (Taiwan), Ltd.	827	-	-	-	3,901
Areum noori Co., Ltd.	15	-	-	-	12,458
LG Energy Solution Vertech Inc.	381,876	-	-	-	73,295
L-H Battery Company, Inc.	6,857	-	-	-	-
LG Energy Solution India Private Ltd.	-	-	-	-	1,324
LG Energy Solution Japan Co., Ltd.	-	-	-	-	1,685
HL-GA BATTERY COMPANY LLC	920	-	-	-	-
PT. HLI Green Power (*1)	18,584	33	-	-	368
NextStar Energy Inc.	6,025	404	-	-	-
Associates and joint ventures:					
PT. HLI Green Power (*1)	38,094	363	-	-	6,393
Sama Aluminium	-	1,436	-	-	-
Nexpo Co., Ltd.	-	94	-	-	-
Other related parties:					
LG Corp.	20	-	-	-	39,469
HAENGBOKNURI CO., LTD.	7	-	-	-	1,239
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.	-	31,964	-	-	-
LG HY BCM Co., Ltd.	-	675	-	-	-
Techwin, Inc.	-	-	10,403	-	72
LG Management Development Institute	-	-	-	-	33,816
D&O Co., Ltd. and its subsidiaries	86	-	5,796	-	5,656
LG CNS Co., Ltd. and its subsidiaries	24,854	56	361,265	-	141,811
Others	-	-	-	-	795
Others:					
LG Electronics Inc., Ltd. and its subsidiaries	153,811	16,609	78,196	-	150,967
Xi C&A and its subsidiaries (*2)	-	2,725	15,169	-	70
S&I Corporation (*2)	-	3,027	7,610	-	18,230
Others	37	-	223	15	5,417
	<u>₩ 3,285,128</u>	<u>₩ 4,132,956</u>	<u>₩ 478,662</u>	<u>₩ 34</u>	<u>₩ 674,813</u>

(*1) During the current period, the Company reclassified PT. HLI Green Power from a joint venture to a subsidiary due to amendments in the shareholders' agreement.

(*2) During the current period, the Company has been excluded from the large enterprise group after its separation from LG Group during the year ended December 31, 2024. The amount includes transactions before the separation.

LG Energy Solution, Ltd.

Notes to the separate financial statements

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	2023				
	Sales and others	Purchase and others			
		Purchase of raw materials /merchandises	Acquisition of property, plant and equipment and intangible assets	Interest expense	Others
Parent:					
LG Chem, Ltd.	₩ 72,314	₩ 57,665	₩ 1,146	₩ 30	₩ 3,600
Subsidiaries:					
LG Energy Solution (Nanjing) Co., Ltd.	613,311	2,770,631	-	-	1,190
LG Energy Solution Michigan, Inc.	1,054,705	-	-	-	27,433
LG Energy Solution Battery (Nanjing) Co., Ltd.	5,987	796,656	-	-	961
LG Energy Solution Wroclaw sp. Z o.o.	1,651,436	60,912	-	-	4,750
LG Energy Solution Australia Pty Ltd.	117	-	-	-	21,268
LG Energy Solution Technology (Nanjing) Co., Ltd.	1,154	2,335,298	-	-	76
Ultium Cells LLC	46,396	-	-	-	-
LG Energy Solution Europe GmbH	91,060	-	-	-	84,782
LG Energy Solution (Taiwan), Ltd.	-	-	-	-	5,306
Areum Noori Co., Ltd.	14	-	-	-	-
LG Energy Solution Vertech Inc.	2,910	-	-	-	13,283
L-H Battery Company, Inc.	64,552	-	-	-	-
Associates and joint ventures:					
PT. HLI Greenpower	46,252	-	-	-	3,327
VINFAST LITHIUM BATTERY PACK LLC (*)	256	-	-	-	-
Sama Aluminium Co., Ltd.	-	2,375	-	-	-
Mintech Co., Ltd.	-	-	206	-	10
Other related parties:					
LG Corp.	-	-	-	-	61,325
LG Chem America, Inc.	-	-	-	-	3
HAENGBOKNURI CO., LTD.	5	-	-	-	560
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.	-	130,595	-	-	-
LG-HY BCM Co., Ltd.	-	28	-	-	-
TECWIN Co., Ltd.	-	-	14,970	-	7,414
LG Management Development Institute	11	-	-	-	29,818
D&O Co., Ltd. and its subsidiaries	83	-	5,789	-	3,959
LG CNS Co., Ltd. and its subsidiaries	36,850	224	309,888	-	132,263
Others	-	-	-	-	2,822
Others:					
LG Electronics Inc., Ltd. and its subsidiaries	167,153	49,820	62,388	-	15,806
Xi C&A and its subsidiaries	-	2,693	67,267	-	690
S&I Corporation	-	8,970	43,451	-	64,580
Others	43	2	1,179	30	4,629
	<u>₩ 3,854,609</u>	<u>₩ 6,215,869</u>	<u>₩ 506,284</u>	<u>₩ 60</u>	<u>₩ 489,855</u>

(*) During the year ended December 31, 2023, the Company disposed of its entire ownership interest and was excluded from the related parties.

LG Energy Solution, Ltd.
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(4) Balances of receivables and payables from related parties as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	December 31, 2024							
	Receivables			Payables				
	Trade receivables	Other receivables	Total	Trade payables	Lease liabilities	Other payables	Total	
Parent:								
LG Chem, Ltd.	₩	-	₩ 8,644	₩ 8,644	₩ 9,545	₩ 550	₩ 3,305	₩ 13,400
Subsidiaries:								
LG Energy Solution (Nanjing) Co., Ltd.		891	178,899	179,790	447,745	-	62,768	510,513
LG Energy Solution Michigan, Inc.		22,816	79,913	102,729	12,925	-	27,691	40,616
LG Energy Solution Battery (Nanjing) Co., Ltd.		-	-	-	97,287	-	-	97,287
LG Energy Solution Wroclaw sp. z o.o.		161,466	293,411	454,877	4,433	-	5,739	10,172
LG Energy Solution Australia Pty Ltd.		16	(13)	3	-	-	3,957	3,957
LG Energy Solution Technology (Nanjing) Co., Ltd.		-	223	223	219,271	-	28,881	248,152
Ultium Cells LLC		11,319	73,570	84,889	-	-	-	-
LG Energy Solution Europe GmbH		46,846	2,874	49,720	-	-	58,338	58,338
LG Energy Solution (Taiwan), Ltd.		-	-	-	-	-	267	267
Areum noori Co., Ltd.		-	-	-	-	-	1,154	1,154
LG Energy Solution Vertech Inc.		320,310	7,865	328,175	-	-	15	15
L-H Battery Company, Inc.		2,201	2,770	4,971	-	-	-	-
LG Energy Solution India Private Ltd.		-	-	-	-	-	(146)	(146)
LG Energy Solution Japan Co., Ltd.		-	-	-	-	-	273	273
PT. HLI Green Power (*1)		-	23,318	23,318	-	-	158	158
NextStar Energy Inc.		-	6,519	6,519	438	-	-	438
Associates and joint ventures:								
Sama Aluminium		-	-	-	430	-	-	430
Nexpo Co., Ltd.		-	-	-	17	-	-	17
Other related parties:								
LG Corp.		-	22,043	22,043	-	-	-	-
HAENGBOKNURI CO., LTD		-	-	-	-	-	99	99
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd		-	-	-	8,560	-	-	8,560
LG HY BCM Co., Ltd.		-	-	-	2	-	1,050	1,052
TECWIN Co., Ltd.		-	-	-	-	-	302	302
LG Management Development Institute		-	-	-	-	-	750	750
D&O Co., Ltd. and its subsidiaries		-	-	-	-	-	2,389	2,389
LG CNS Co., Ltd. and its subsidiaries		5,149	-	5,149	-	-	144,483	144,483
Others:								
LG Electronics Inc., Ltd. and its subsidiaries (*2)		37,084	2,233	39,317	4,982	-	43,024	48,006
Others		-	559	559	-	335	5,191	5,526
	₩	608,098	₩ 702,828	₩ 1,310,926	₩ 805,635	₩ 885	₩ 389,688	₩ 1,196,208

(*1) During the current period, the Company reclassified PT. HLI Green Power from a joint venture to a subsidiary due to amendments in the shareholders' agreement.

(*2) Provisions for GM Bolt recall is not included in the balance of receivables and payables above.

LG Energy Solution, Ltd.

Notes to the separate financial statements

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	December 31, 2023						
	Receivables			Payables			
	Trade receivables	Other receivables	Total	Trade payables	Lease liabilities	Other payables	Total
Parent:							
LG Chem, Ltd.	₩ 19,063	₩ 15,319	₩ 34,382	₩ 21,184	₩ 1,100	₩ 3,581	₩ 25,865
Subsidiaries:							
LG Energy Solution (Nanjing) Co., Ltd.	1,210	200,519	201,729	353,933	-	239	354,172
LG Energy Solution Michigan, Inc.	45,594	265,361	310,955	-	-	13,455	13,455
LG Energy Solution Battery (Nanjing) Co., Ltd.	-	479	479	69,581	-	-	69,581
LG Energy Solution Wroclaw sp. Z o.o.	39,616	307,828	347,444	18,477	-	5,976	24,453
LG Energy Solution Australia Pty Ltd.	4,258	46	4,304	-	-	4,926	4,926
LG Energy Solution Technology (Nanjing) Co., Ltd.	-	-	-	364,291	-	15,644	379,935
Ultium Cells LLC	-	35,843	35,843	-	-	-	-
LG Energy Solution Europe GmbH	88,746	-	88,746	-	-	11,451	11,451
LG Energy Solution (Taiwan), Ltd.	-	-	-	-	-	634	634
Areum Noori Co., Ltd.	-	-	-	-	-	1,030	1,030
LG Energy Solution Vertech Inc.	-	1,718	1,718	-	-	666	666
L-H Battery Company, Inc.	-	1,645	1,645	-	-	-	-
LG Energy Solution India Private Ltd.	-	-	-	-	-	1,715	1,715
Associates and joint ventures:							
PT.HLI Green Power	-	4,006	4,006	-	-	45,778	45,778
Sama Aluminium Co., Ltd.	-	-	-	545	-	-	545
Other related parties:							
LG Corp.	-	-	-	-	-	15,025	15,025
LG Chem (Taiwan), Ltd.	-	-	-	-	-	1	1
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.	-	-	-	14,504	-	-	14,504
TECWIN Co., Ltd.	-	-	-	-	-	2,186	2,186
LG Management Development Institute	-	-	-	-	-	680	680
D&O Co., Ltd. and its subsidiaries	-	23	23	-	-	2,771	2,771
LG CNS Co., Ltd. and its subsidiaries	7,859	108	7,967	-	-	187,718	187,718
Others	-	-	-	-	-	213	213
Others:							
LG Electronics Inc., Ltd. and its subsidiaries (*)	40,482	4,320	44,802	5,535	-	32,820	38,355
Xi C&A and its subsidiaries	-	-	-	-	-	27,320	27,320
S&I Corporation	-	-	-	-	-	35,304	35,304
Others	-	559	559	-	1,006	4,713	5,719
	<u>₩ 246,828</u>	<u>₩ 837,774</u>	<u>₩ 1,084,602</u>	<u>₩ 848,050</u>	<u>₩ 2,106</u>	<u>₩ 413,846</u>	<u>₩ 1,264,002</u>

(*) Provisions for GM Bolt recall is not included in the balance of receivables and payables above.

LG Energy Solution, Ltd.

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(5) Fund transactions with related parties for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024							
	Dividends received	Dividends paid	Equity contribution in cash and others	Loan transactions		Borrowing transactions (*)		
				Loan	Repayment	Borrowing	Repayment	
Parent:								
LG Chem, Ltd.	₩	- ₩	- ₩	- ₩	- ₩	- ₩	- ₩	531
Subsidiaries:								
LG Energy Solution (Nanjing) Co., Ltd.	731,087		-	-	-	-	-	-
LG Energy Solution Technology (Nanjing) Co., Ltd.	241,959		-	-	-	-	-	-
LG Energy Solution Michigan, Inc.	-		1,177,503	-	-	-	-	-
LG Energy Solution Fund I LLC.	-		1,763	-	-	-	-	-
L-H Battery Company, Inc.	-		1,215,870	-	-	-	-	-
LG Energy Solution Battery (Nanjing) Co., Ltd.	93,916		-	-	-	-	-	-
LG Energy Solution Arizona ESS, Inc.	-		62,799	-	-	-	-	-
LG Energy Solution Arizona, Inc.	-		80,076	-	-	-	-	-
LG Energy Solution Japan Co., Ltd.	-		535	-	-	-	-	-
NextStar Energy Inc.	-		763,010	-	-	-	-	-
LG Energy Solution Fund II LLC	-		21,528	-	-	-	-	-
LG Energy Solution (Taiwan) , Ltd.	827		-	-	-	-	-	-
Associates and joint ventures:								
Sama Aluminium	150		-	-	-	-	-	-
Nexpo Co., Ltd.	-		1,900	-	-	-	-	-
Bricks Capital Management Global Battery Private Equity Fund I	-		5,761	-	-	-	-	-
Others:								
LG Household & Health Care Ltd.	-	-	-	-	-	-	-	656
	<u>₩ 1,067,939</u>	<u>₩ -</u>	<u>₩ 3,330,745</u>	<u>₩ -</u>	<u>₩ -</u>	<u>₩ -</u>	<u>₩ -</u>	<u>1,187</u>

(*) The amounts represent lease liabilities that were recognized or repaid during the year ended December 31, 2024.

LG Energy Solution, Ltd.
Notes to the separate financial statements
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	2023							
	Dividends received	Dividends paid	Equity contribution in cash (capital reduction)	Loans transaction		Borrowings transaction (*)		
				Loans	Repayment	Borrowings	Repayment	
Parent:								
LG Chem, Ltd.	₩	- ₩	- ₩	- ₩	- ₩	- ₩	- ₩	520
Subsidiaries:								
LG Energy Solution (Nanjing) Co., Ltd.	329,775	-	-	-	-	-	-	-
LG Energy Solution Michigan, Inc.	-	-	983,181	-	-	-	-	-
LG Energy Solution Fund I LLC	-	-	14,649	-	-	-	-	-
L-H Battery Company, Inc.	-	-	548,958	-	-	-	-	-
LG Energy Solution Wroclaw sp. z o.o.	-	-	187,489	-	-	-	-	-
LG Energy Solution Battery (Nanjing) Co., Ltd.	-	-	37,129	-	-	-	-	-
LG Energy Solution India Private Ltd.	-	-	563	-	-	-	-	-
LG Energy Solution Arizona ESS, Inc.	-	-	39,936	-	-	-	-	-
LG Energy Solution Arizona, Inc. (formerly ES America LLC)	-	-	122,061	-	-	-	-	-
Nextstar Energy Inc.	-	-	579,075	-	-	-	-	-
LG Energy Solution Fund II LLC	-	-	22,985	-	-	-	-	-
Associates and joint ventures:								
Sama Aluminium Co., Ltd.	-	-	46,575	-	-	-	-	-
Nexpo Co., Ltd.	-	-	2,374	-	-	-	-	-
Mintech Co., Ltd.	-	-	7,020	-	-	-	-	-
Bricks Capital Management Global Battery Private Equity Fund I	-	-	13,381	-	-	-	-	-
Others:								
LG Household & Health Care Ltd.	-	-	-	-	-	-	-	641
	<u>₩ 329,775</u>	<u>₩ -</u>	<u>₩ 2,605,376</u>	<u>₩ -</u>	<u>₩ -</u>	<u>₩ -</u>	<u>₩ -</u>	<u>1,161</u>

(*) The amounts represent lease liabilities that were recognized or repaid during the year ended December 31, 2023.

(6) Compensation for key management of the Company for the years ended December 31, 2024 and 2023, is as follows (Korean won in millions):

	2024		2023	
Short-term employee benefits	₩	34,835	₩	66,528
Retirement benefits		9,044		7,548
	<u>₩</u>	<u>43,879</u>	<u>₩</u>	<u>74,076</u>

Key management includes directors (including non-executive) having duties and responsibilities over planning, operations and controlling of the Company's business activities.

(7) The details of the payment guarantees provided by the Company for related parties and other as of December 31, 2024, are disclosed in Note 18.

31. SEPARATE STATEMENTS OF CASH FLOWS:

(1) Details of cash generated from operations for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
(Loss) profit before income tax	₩ (1,075,707)	₩ 26,226
Adjustments for:		
- Depreciation	402,714	341,735
- Amortization	136,836	102,802
- Retirement benefits	86,208	65,746
- Financial income	(741,202)	(239,057)
- Financial costs	776,918	216,852
- Foreign exchange differences	(8,312)	51,068
- Loss on valuations of inventories	5,215	(5,941)
- Gain on disposal of property, plant and equipment	(922)	(643)
- Gain on disposal of intangible assets	-	(191)
- Loss on disposal of property, plant and equipment	33,236	30,322
- Loss on disposal of intangible assets	365	472
- Impairment of property, plant and equipment	14,624	2,621
- Impairment of intangible assets	-	9
- Loss on disposal and impairment of investments in associates	-	27,137
- Contribution to provisions	755,915	349,883
- Dividend income	(1,067,939)	(329,775)
- Other income	1,710	843
- Changes in inventories	31,665	339,111
- Changes in trade receivables	108,479	(113,607)
- Changes in other receivables	180,630	9,812
- Changes in other current assets	(65,904)	(9,379)
- Changes in trade payables	(22,052)	(494,310)
- Changes in other payables	480,796	8,965
- Changes in other current liabilities	86,290	(283,500)
- Changes in net defined benefit liabilities	(5,890)	(35,053)
- Changes in provisions	(479,014)	(748,097)
- Other cash flows from operations	-	1,846
Cash generated from operations	<u>₩ (365,341)</u>	<u>₩ (684,103)</u>

(2) Changes in liabilities arising from financial activities for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>						
	<u>Beginning</u>	<u>Cash flows from financing activities (*)</u>	<u>Reclassification of current portion</u>	<u>Amortization</u>	<u>Lease liabilities</u>	<u>Others</u>	<u>Ending</u>
Short-term borrowings	₩ 26,523	₩ (32,976)	₩ 39,492	₩ -	₩ -	₩ -	₩ 33,039
Long-term borrowings	33,094	-	(39,492)	-	35,177	-	28,779
Debentures	3,760,184	3,652,604	-	8,739	-	478,913	7,900,440
	<u>₩ 3,819,801</u>	<u>₩ 3,619,628</u>	<u>₩ -</u>	<u>₩ 8,739</u>	<u>₩ 35,177</u>	<u>₩ 478,913</u>	<u>₩ 7,962,258</u>

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Notes to the separate financial statements

As of and for the years ended December 31, 2024 and 2023

	2023						
	Beginning	Cash flows from financing activities	Reclassification of current portion	Amortization	Lease liabilities	Others	Ending
Short-term borrowings	₩ 16,037	₩ (20,413)	₩ 30,899	₩ -	₩ -	₩ -	₩ 26,523
Long-term borrowings	41,986	-	(30,899)	-	22,007	-	33,094
Debentures	2,135,034	1,597,493	-	3,470	-	24,187	3,760,184
	<u>₩ 2,193,057</u>	<u>₩ 1,577,080</u>	<u>₩ -</u>	<u>₩ 3,470</u>	<u>₩ 22,007</u>	<u>₩ 24,187</u>	<u>₩ 3,819,801</u>

(*) The difference from cash flows from financing activities is due to the settlement of derivative transactions arising from the redemption of bonds.

(3) Significant non-cash transactions for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	2024	2023
Reclassification of construction in progress	₩ 932,901	₩ 1,103,403
Changes in other payables related to acquisition of property, plant and equipment and intangible assets	(17,135)	(420)
Reclassification of machinery in transit	22,912	34,069
Reclassification of debentures into current portion	124,911	643,895
Reclassification of investments in joint ventures into investments in subsidiaries	209,132	-
Reclassification of dividend receivables into investments in subsidiaries	-	37,128

32. ASSETS AND LIABILITIES RELATED TO CONTRACTS WITH CUSTOMERS:

(1) Liabilities related to contracts with customers as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Contract liabilities:		
Advances from customers received as part of the Company's main business activities	₩ 60,396	₩ 74,886
Expected customer incentives	1,535	1,660
Unearned revenue	<u>264,173</u>	<u>46,425</u>
	<u>₩ 326,104</u>	<u>₩ 122,971</u>

(2) Revenue recognized in relation to contract liabilities

Revenue recognized from the carried-forward contract liabilities for the years ended December 31, 2024 and 2023, is as follows (Korean won in millions):

	<u>2024</u>	<u>2023</u>
Revenue recognized in the current period from the beginning contract liabilities:		
Revenue in relation to advances from customers received as part of the Company's main business activities	₩ 44,095	₩ 115,467
Unearned revenue	<u>42,587</u>	<u>46,595</u>
	<u>₩ 86,682</u>	<u>₩ 162,062</u>

33. INVESTMENT PROPERTIES:

(1) Details of investment properties as of December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>				<u>December 31, 2023</u>			
	<u>Acquisition cost</u>	<u>Accumulated depreciation</u>	<u>Accumulated impairment</u>	<u>Book value</u>	<u>Acquisition cost</u>	<u>Accumulated depreciation</u>	<u>Accumulated impairment</u>	<u>Book value</u>
Buildings	₩ 309,299	₩ (81,804)	₩ (1,629)	₩ 225,866	₩ 296,079	₩ (81,948)	₩ (1,721)	₩ 212,410
Land	<u>274</u>	<u>(11)</u>	<u>(35)</u>	<u>228</u>	<u>283</u>	<u>(8)</u>	<u>(35)</u>	<u>240</u>
	<u>₩ 309,573</u>	<u>₩ (81,815)</u>	<u>₩ (1,664)</u>	<u>₩ 226,094</u>	<u>₩ 296,362</u>	<u>₩ (81,956)</u>	<u>₩ (1,756)</u>	<u>₩ 212,650</u>

(2) Changes in investment properties for the years ended December 31, 2024 and 2023, are as follows (Korean won in millions):

	<u>2024</u>				<u>2023</u>			
	<u>Land</u>	<u>Buildings</u>	<u>Land</u>	<u>Buildings</u>	<u>Land</u>	<u>Buildings</u>	<u>Land</u>	<u>Buildings</u>
Beginning	₩ 240	₩ 212,410	₩ 245	₩ 213,044				
Acquisition/transfer		-	28,057	-	6,501			
Disposal/transfer		(8)	(8,000)	-	(1,112)			
Depreciation		<u>(4)</u>	<u>(6,601)</u>	<u>(5)</u>	<u>(6,023)</u>			
Ending	<u>₩ 228</u>	<u>₩ 225,866</u>	<u>₩ 240</u>	<u>₩ 212,410</u>				

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(3) The fair value of investment properties is measured either by independent professional appraisers with certified qualification or 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, 2024, is ₩241,145 million (for the year ended December 31, 2023, it was ₩245,385 million).

Rental income from investment properties under operating lease for the year ended December 31, 2024, is ₩7,734 million, and operating expenses incurred for investment properties that generated rental income (including maintenance and repair expenses) for the year ended December 31, 2024, are ₩6,605 million.

(4) 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, 2024 and 2023, are as follows (Korean won in millions):

	<u>December 31, 2024</u>	<u>December 31, 2023</u>
Less than one year	₩ 7,654	₩ 160
Between one year-two years	2,293	151
Between two years-five years	174	299
	<u>₩ 10,121</u>	<u>₩ 610</u>

34. EVENT AFTER THE REPORTING PERIOD:

(1) The Company resolved to issue unsecured KRW bonds at the Management Committee meeting held on January 24, 2025. The Company issued bonds worth ₩1,600,000 million in February 14, 2025.

4-1st Debenture: ₩640,000 million(maturity date: February 14, 2027)

4-2nd Debenture: ₩590,000 million(maturity date: February 14, 2028)

4-3rd Debenture: ₩310,000 million(maturity date: February 14, 2030)

4-4th Debenture: ₩60,000 million(maturity date: February 14, 2032)

(2) The Company entered into a payment guarantee agreement for a USD 729 million loan of LG Energy Solution Michigan Inc. in February 2025.

35. DATE OF APPROVAL FOR ISSUANCE OF SEPARATE FINANCIAL STATEMENTS:

The Company’s separate financial statements were approved by the board of directors on January 24, 2025, and may be revised at the general meeting of shareholders.

Independent Auditor's Report on Internal Control over Financial Reporting

English Translation of Independent Auditor's Report on Internal Control over Financial Reporting Originally Issued in Korean on March 5, 2025

**To the Shareholders and the Board of Directors of
LG Energy Solution, Ltd.:**

Audit Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of LG Energy Solution, Ltd. (the "Company") as of December 31, 2024, based on 'Conceptual Framework for Design and Operation of Internal Control over Financial Reporting.'

In our opinion, the Company's internal control over financial reporting is designed and operated effectively as of December 31, 2024, in all material respects, in accordance with the 'Conceptual Framework for Design and Operation of Internal Control over Financial Reporting.'

We have also audited, in accordance with the Korean Standards on Auditing ("KSAs"), the separate financial statements of the Company, which comprise the separate statement of financial position as of December 31, 2024, and the separate statement of profit or loss, separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flows for the year then ended, and notes to the separate financial statements, including material accounting policy information, and our report dated March 5, 2025, expressed an unqualified opinion.

Basis for Audit Opinion

We conducted our audit in accordance with the KSAs. Our responsibilities under those 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 that are relevant to our audit of the internal control over financial reporting in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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

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

Those Charged with Governance are responsible for the oversight of internal control over financial reporting of the Company.

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

Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We conducted our audit in accordance with the KSAs. 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.

The 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. The 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 risks.

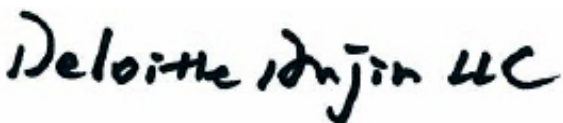
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Definition and Limitations of Internal Control over Financial Reporting

The Company's internal control over financial reporting is a process implemented by those charged with governance, management and other personnel, and designed to provide reasonable assurance regarding the preparation of reliable financial statements in accordance with Korean International Financial Reporting Standards ("K-IFRSs"). The Company's internal control over financial reporting includes 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 Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with K-IFRS, and that receipts and expenditures of the Company are made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect material misstatements in the financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that evaluation of and projections to the future periods may change as internal control over financial reporting becomes 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 Kiu Seok Seo.



March 5, 2025

This report is effective as of March 5, 2025, the auditor's report date. Certain subsequent events or circumstances may have occurred between the auditor's report date and the time the auditor's report is read. Such events or circumstances could significantly affect the Company's internal control over financial reporting and may result in modifications to the auditor's report.

Report on the Operation of Internal Control over Financial Reporting

English translation of a Report Originally Issued in Korean on January 24, 2025

**To the Shareholders and the Board of Directors of
LG Energy Solution, Ltd.:**

We, as the Chief Executive Officer (“CEO”) and Internal Control over Financial Reporting (“ICFR”) Officer of LG Energy Solution, Ltd. (the “Company”), assessed the status of the design and operation of the Company’s ICFR for the year ending December 31, 2024.

The Company’s management including the CEO and ICFR Officer is responsible for designing and operating ICFR. We, as the CEO and ICFR Officer (collectively, “We,” “Our” or “Us”), evaluated whether the ICFR has been appropriately designed and is effectively operating to prevent and detect error or fraud which may cause material misstatement of the financial statements to ensure preparation and disclosure of reliable financial information.

We used the ‘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”)’ as the criteria for design and operation of the Company’s ICFR. We also conducted an evaluation of ICFR based on the ‘Management Guideline for Evaluating and Reporting Effectiveness of Internal Control over Financial Reporting’ established by the ICFR Committee.

Based on our assessment result, we concluded that the Company’s ICFR has been appropriately designed and is operating effectively in all material respects as of December 31, 2024, in accordance with the ‘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 statements, which might cause material misunderstandings of the readers, and we have reviewed and verified this report with sufficient due care.

January 24, 2025

Chang Sil Lee
Internal Control over Financial Reporting Officer

Dong Myung Kim
Chief Executive Officer