LG ENERGY SOLUTION, LTD.

Interim Condensed Separate Financial Statements As of June 30, 2023, and December 31, 2022, and For the Three-Month and Six-Month Periods Ended June 30, 2023 and 2022

(With Independent Auditor's Review Report Thereon)



Table of contents

Report on Review of Interim Condensed Separate Financial Statement	Repor	rt on Review	of Interim	Condensed	Separate	Financial	Statements
--	-------	--------------	------------	-----------	----------	-----------	------------

	Page
Interim Condensed Separate Financial Statements	
Interim Condensed Separate Statements of Financial Position	7
Interim Condensed Separate Statements of Income	9
Interim Condensed Separate Statements of Comprehensive Income	11
Interim Condensed Separate Statements of Changes in Equity	13
Interim Condensed Separate Statements of Cash Flows	15
Notes to the Interim Condensed Separate Financial Statements	17



Deloitte Anjin LLC

9F., One IFC, 10, Gukjegeumyung-ro, Youngdeungpo-gu, Seoul 07326, Korea

Tel: +82 (2) 6676 1000 Fax: +82 (2) 6674 2114 www.deloitteanjin.co.kr

Report on Review of Interim Condensed Separate Financial Statements

English Translation of Independent Auditor's Review Report Originally Issued in Korean on August 11, 2023.

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

Reviewed financial statements

We have reviewed the accompanying interim condensed separate financial statements of LG Energy Solution, Ltd. (the "Company"). These interim condensed separate financial statements consist of the interim condensed separate statement of financial position as of June 30, 2023, and the related interim condensed separate statements of profit or loss and interim condensed separate statements of comprehensive income for the three-month and six-month periods ended June 30, 2023 and 2022, and the interim condensed separate statements of changes in equity and interim condensed separate statements of cash flows for the six-month periods ended June 30, 2023 and 2022, all expressed in Korean won, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the interim condensed separate financial statements

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

Auditor's responsibility

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

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

Conclusion

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

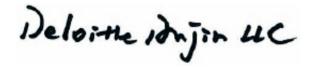
Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. Please see www.deloitte.com/kr/about to learn more about our global network of member firms.

Deloitte.

Other matters

We have audited the separate statement of financial position as of December 31, 2022, and the related separate statement of profit or loss, comprehensive income, changes in equity and cash flows for the year then ended in accordance with KSAs. We expressed an unqualified opinion on those financial statements, not presented herein, in our audit report dated March 8, 2023.

The accompanying separate statement of financial position as of December 31, 2022, presented for comparative purposes, is not different, in all material respects, from the above audited separate statement of financial position.



August 11, 2023

This review report is effective as of August 11, 2023, the independent auditor's review report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's review report date to the time this review report is used. Such events and circumstances could significantly affect the accompanying interim condensed separate financial statements and may result in modifications to this review report.

LG ENERGY SOLUTION, LTD.

Interim condensed separate financial statements as of June 30, 2023, and December 31, 2022, and for the three-month and six-month periods ended June 30, 2023 and 2022

Young Soo Kwon Chief Executive Officer LG Energy Solution, Ltd.

[&]quot;The accompanying interim condensed separate financial statements, including all footnotes and disclosures, have been prepared by, and are the responsibility of, the Company."

LG Energy Solution, Ltd. Interim condensed separate statements of financial position As of June 30, 2023, and December 31, 2022

(V	-			
(Korean won in millions)	Notes		June 30, 2023	December 31, 2022
Assets			<u> </u>	<u> </u>
Current assets				
Cash and cash equivalents	3,5,6	₩	2,855,900 ₩	4,828,152
Trade receivables	3,5,7,29		2,063,633	2,207,153
Other receivables	3,5,7,29		1,218,701	1,232,735
Prepaid income taxes			25,138	19,657
Other current assets	13		168,117	109,119
Inventories	9		1,759,367	1,598,728
			8,090,856	9,995,544
Non-current assets				
Trade receivables	3,5,7		127,903	120,698
Other receivables	3,5,7,29		150,694	168,940
Other non-current financial assets	3,5,8		481,480	360,295
Investments in subsidiaries	10		8,698,599	7,311,276
Investments in associates and joint ventures	10		255,708	236,270
Deferred tax assets	27		1,569,817	1,541,995
Property, plant and equipment	11		2,906,962	2,504,936
Intangible assets	12		571,635	513,483
Investment properties	32		212,766	213,289
Other non-current assets	13,16		195,960	236,084
			15,171,524	13,207,266
Total assets		₩	23,262,380 \\	₹ 23,202,810
Liabilities				
Current liabilities				
Trade payables	3,5,29	₩	1,703,023 ₩	₹ 1,605,551
Other payables	3,5,29		594,130	961,370
Borrowings	3,5,11,14,30		23,933	691,115
Other current financial liabilities	3,5,8		62,739	66,054
Current provisions	15		740,170	804,254
Income taxes payable			16,014	-
Other current liabilities	17,31		307,885	479,751
			3,447,894	4,608,095
Non-current liabilities				
Other payables	3,5,29		3,228	3,315
Borrowings	3,5,11,14,30		2,544,801	1,501,942
Other non-current financial liabilities	3,5,8		583	322
Non-current provisions	15		134,531	121,298
Other non-current liabilities	17,31		175,563	173,266
			2,858,706	1,800,143
Total liabilities			6,306,600	6,408,238
Equity				
Share capital	19		117,000	117,000
Capital surplus	19		17,589,722	17,589,722
Accumulated other comprehensive income			50,346	46,640
Accumulated deficit	20		(801,288)	(958,790)
Total equity			16,955,780	16,794,572
Total liabilities and equity		₩	23,262,380 \\	₹ 23,202,810

LG Energy Solution, Ltd. Interim condensed separate statements of profit or loss
For the three-month and six-month periods ended June 30, 2023 and 2022
(Korean won in millions)

(Korean	won 1	n millio	ns)

(Korean won in immons)		June 30, 2023		June 30	0, 2022	
	Note	Thr	ee months	Six months	Three months	Six months
Revenue	21,29,31	₩	3,030,170	₩ 6,328,853	₩ 2,138,591	₩ 4,152,798
Cost of sales	21,22,29		2,437,362	5,288,661	1,889,034	3,696,027
Gross profit			592,808	1,040,192	249,557	456,771
Selling and administrative expenses	21,22,23,29		745,783	1,286,958	459,325	822,665
Operating loss	21		(152,975)	(246,766)	(209,768)	(365,894)
Finance income	5,24,29		146,193	410,596	165,087	230,410
Finance costs	5,24,29		135,073	332,478	111,832	179,139
Other non-operating income	25		404,465	574,429	140,117	195,749
Other non-operating expenses	26		95,230	212,597	123,169	162,089
Profit (loss) before income tax benefit	t		167,380	193,184	(139,565)	(280,963)
Income tax expense (benefit)	27		33,281	36,927	(53,115)	(58,016)
Profit (loss) for the period		₩	134,099	₩ 156,257	₩ (86,450)	₩ (222,947)
Earnings (losses) per share attributable to the equity holders of the parent company (in Korean won) Basic earnings (losses) per share	28	₩	573 ³	₩ 668	₩ (369)	₩ (969)
Dasic carnings (1055es) per snare		v v	313	vv 000	(309)	(909)

LG Energy Solution, Ltd.

Interim condensed separate statements of comprehensive income
For the three-month and six-month periods ended June 30, 2023 and 2022

(Korean won in millions)

		June 3	0, 2023	June 3	0, 2022
	Notes	Three months	Six months	Three months	Six months
Profit (loss) for the period		₩ 134,099 ₹	₩ 156,257	₩ (86,450)	₩ (222,947)
Other comprehensive income:					
Items that will not be subsequently reclassified to profit or loss: $ \\$					
Remeasurements of net defined benefit liabilities	16	911	1,691	(1,638)	(1,885)
Gain (loss) on valuation of financial assets at fair value through other comprehensive income ("FVOCI")	5	(3,215)	5,638	(1,722)	2,525
Income tax effect of other comprehensive income		609	(1,934)	925	(175)
		(1,695)	5,395	(2,435)	465
Items that may be subsequently reclassified to profit or loss:					
Loss on cash flow hedge	3	(1,177)	(603)	(3,521)	(2,073)
Income tax effect of other comprehensive income		311	159	968	570
		(866)	(444)	(2,553)	(1,503)
Other comprehensive income for the period, net of tax		(2,561)	4,951	(4,988)	(1,038)
Total comprehensive income (loss) for the period, net of tax		₩ 131,538	₩ 161,208	₩ (91,438) ⁴	₩ (223,985)

LG Energy Solution, Ltd. Interim condensed separate statements of changes in equity For the six-month periods ended June 30, 2023 and 2022

(Korean won in millions)

	Notes		Share capital	Capital surplus	Accumulated other comprehensive income	Retained earnings (accumulated deficit)	Total
As of January 1, 2022		₩	100,000 ₩	7,510,351 W	3,943	₩ (480,338) ₩	7,133,956
Total comprehensive income (loss) for the period:							
Loss for the period			-	-	-	(222,947)	(222,947)
Remeasurements of net defined benefit liabilities	16		-	-	-	(1,366)	(1,366)
Gain on valuation of financial assets at FVOCI			-	-	1,831	=	1,831
Loss on cash flow hedge	3		_	<u>-</u>	(1,503)	-	(1,503)
Total comprehensive income (loss) for the period			-	-	328	(224,313)	(223,985)
Transactions with owners							
Capital increase			17,000	10,079,371		-	10,096,371
			17,000	10,079,371	-	-	10,096,371
As of June 30, 2022		₩	<u>117,000</u> ₩	17,589,722 ₩	4,271	₩ (704,651) ₩	17,006,342
As of January 1, 2023		₩	117,000 ₩	17,589,722 ₩	46,640	₩ (958,790) ₩	16,794,572
Total comprehensive income for the period:							
Profit for the period			-	-	-	156,257	156,257
Remeasurements of net defined benefit liabilities	16		-	-	-	1,245	1,245
Gain on valuation of financial assets at FVOCI			-	-	4,150	-	4,150
Loss on cash flow hedge	3		_	<u> </u>	(444)	<u>=</u>	(444)
Total comprehensive income for the period			-	-	3,706	157,502	161,208
As of June 30, 2023		₩	117,000 ₩	<u>17,589,722</u> ₩	50,346	₩ (801,288) ₩	16,955,780

(Korean won in millions)	Nistan		L 20, 2022	1 20 2022
Cash flows from operating activities:	Notes		June 30, 2023	June 30, 2022
Cash generated from operations	30	₩	(193,908) ₩	(1,271,538)
Interest received	30	* *	76,774	20,687
Interest paid			(28,971)	(27,273)
Dividends received			329,775	(27,273)
Income tax paid			(49,124)	99,344
Net cash provided (used in) by operating activities			134,546	(1,178,780)
Cash flows from investing activities:				
Cash inflow from investing activities:				
Decrease in other receivables			5,000	3,150
Decrease in other non-current receivables			2,138	-
Proceeds from disposal of property, plant and equipment			3,315	5,748
Proceeds from disposal of intangible assets			1,271	5,850
•			11,724	14,748
Cash outflow for investing activities:				
Increase in other receivables			=	(6,225,084)
Increase in other non-current receivables			(7,056)	-
Acquisition of investments in subsidiaries			(1,350,195)	(1,480,844)
Acquisition of investments in associates			(46,575)	-
Acquisition of financial instruments			(73,409)	(41,021)
Acquisition of property, plant and equipment			(855,676)	(482,129)
Acquisition of intangible assets			(42,133)	(34,844)
Other cash outflow for investing activities			(4,431)	<u> </u>
			(2,379,475)	(8,263,922)
Net cash used in investing activities			(2,367,751)	(8,249,174)
Cash flows from financing activities:				
Cash inflow from financing activities:				
Increase in borrowings	30		997,109	149,607
Capital increase			<u>-</u>	10,096,371
Cash outflow for financing activities:			997,109	10,245,978
Repayment of borrowings	30		(736,135)	(157,718)
			(736,135)	(157,718)
Net cash provided by financing activities			260,974	10,088,260
Net (decrease) increase in cash and cash equivalents			(1,972,231)	660,306
Cash and cash equivalents at the beginning of the periods			4,828,152	257,032
Effects of exchange rate changes on cash and cash equivalents		_	(21)	191
Cash and cash equivalents at the end of the periods		₩	2,855,900 ₩	917,529

1. GENERAL:

General information about LG Energy Solution, Ltd. is as follows:

1.1 Company Information

LG Energy Solution, Ltd. (the "Company"), a split-off of LG Chem, Ltd.'s battery division, was incorporated on December 1, 2020.

As of June 30, 2023, 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 \W117,000 million as of June 30, 2023. 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 (\W500 per share) and has issued 234 million of ordinary shares as of June 30, 2023.

1.2 Business Overview

The Company is engaged in providing energy solution services.

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's interim condensed separate financial statements were prepared in accordance with Korean International Financial Reporting Standard ("K-IFRS") 1034, *Interim Financial Reporting*, as part of the period covered by the Company's K-IFRS annual separate financial statements, and these are separate financial statements prepared in accordance with K-IFRS 1027, *Separate Financial Statements*. In order to be understood, these interim condensed separate financial statements should be read in conjunction with the annual separate financial statements for the fiscal year ended December 31, 2022, prepared in accordance with the K-IFRSs.

2.2 Application of the Amended and Enacted Standards

The significant accounting policies applied in the preparation of the interim condensed separate financial statements are consistent with the accounting policies adopted in the preparation of the annual separate financial statements as of and for the fiscal year ended December 31, 2022, except for the impacts related to the adoption of the standards or interpretations described below.

- 1) New and amended K-IFRSs and new interpretations that are effective for the current period
- K-IFRS 1001, Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements Disclosure of Accounting Policies (Amendment)

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

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

- K-IFRS 1001 *Presentation of Financial Statements* - Disclosure of financial liabilities with condition to adjust exercise price (Amendment)

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

- K-IFRS 1008, Accounting Policies, Changes in Accounting Estimates and Errors - Definition of Accounting Estimates (Amendment)

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

The definition of a change in accounting estimates was deleted. However, the IASB retained the concept of changes in accounting estimates in the Standard with the following clarifications:

- A change in accounting estimate that results from new information or new developments is not the correction of an error.
- The effects of a change in an input or a measurement technique used to develop an accounting estimate are changes in accounting estimates if they do not result from the correction of prior period errors.
- K-IFRS 1012, *Income Taxes* Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendment)

The amendments introduce a further exception from the initial recognition exemption. Under the amendments, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences.

Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting nor taxable profit. For example, this may arise upon recognition of a lease liability and the corresponding right-of-use asset applying K-IFRS 1116 at the commencement date of a lease.

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

The amendments apply to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period, an entity recognizes:

- A deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilized) and a deferred tax liability for all deductible and taxable temporary differences associated with:
 - Right-of-use assets and lease liabilities
 - Decommissioning, restoration and similar liabilities and the corresponding amounts recognized as part of the cost of the related asset
- The cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at that date.
- 2) New and revised K-IFRSs in issue but not yet effective
- K-IFRS 1001 Presentation of Financial Statements Classification of Liabilities as Current or Non-current (Amendment)

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

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

The amendments are applied retrospectively for annual reporting periods beginning on or after January 1, 2024, with early application permitted.

As of June 30, 2023, and December 31, 2022, and

for the three-month and six-month periods ended June 30, 2023 and 2022

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 to require each division of the Company to manage its foreign exchange risk against its functional currency. The Company manages maximum loss for currency risk exposures within an acceptable range by using a currency risk management model and employees who are exclusively responsible for currency risk management.

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 June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023		December 31.	., 2022	
		Assets	Liabilities	Assets	Liabilities	
USD	₩	3,600,224 ₩	3,006,506 ₩	3,281,276 ₩	2,916,172	
EUR		342,067	75,072	365,069	754,930	
JPY		2,576	16,407	12,873	14,243	
CNY and others		271,436	3,322	177,069	3,807	

With all other variables held constant as of June 30, 2023, and December 31, 2022, 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):

		June 30, 2	2023	December 31, 2022			
	10	0% Increase	10% Decrease	10% Increase	10% Decrease		
USD	₩	59,372 ₩	(59,372) ₩	36,510 ₩	(36,510)		
EUR		26,700	(26,700)	(38,986)	38,986		
JPY		(1,383)	1,383	(137)	137		
CNY and others		26,811	(26,811)	17,326	(17,326)		

The above sensitivity analysis has been performed for monetary assets and liabilities denominated in foreign currencies as of June 30, 2023, and December 31, 2022.

As of June 30, 2023, and December 31, 2022, and

for the three-month and six-month periods ended June 30, 2023 and 2022

As of June 30, 2023, the Company entered into foreign currency forwards to hedge change 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 a Assets	mount Liabilities	_
Currency	Shinhan Bank	USD 500	1,135.60	2020.10.14	2024.10.15	₩	67,386	₩	-
forward (*)	KB Kookmin Bank	USD 500	1,102.83	2020.11.24	2029.04.16		61,793		-

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

2) Price risk

The Company is exposed to price risks from equity instruments. As of June 30, 2023, the fair value of equity instruments is \$225,170 million. With all other variables held constant, a price change in equity instruments by 10% would have changed the Company's equity by \$22,517 million before tax.

(2) Credit risk

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

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

To manage credit risks relating to trade receivables, the Company evaluates the credit rating of customers and determines credit limit for each customer based on the information provided by credit rating agencies and other available financial information before commencing business with new customers. The credit risks relating to trade receivables are also mitigated by insurance contracts, collaterals, and 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. 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 the days past due. The provisions for receivables as of June 30, 2023, and December 31, 2022, are as follows. Expected credit losses include forward-looking information (Korean won in millions):

for the three-month and six-month periods ended June 30, 2023 and 2022

		Receivables not past due (*)	Receivables past due but not impaired (*)	Total
June 30, 2023 (Trade receivable	es)			
Gross carrying amount	₩	2,148,356 ₩	43,180 ₩	2,191,536
Expected loss rate		-	-	-
Provisions for receivables		-	-	-
December 31, 2022 (Trade rece	ivables)			
Gross carrying amount		2,191,068	136,783	2,327,851
Expected loss rate		-	-	-
Provisions for receivables (*) See Note 7.(3) for aging analysis.		-	-	-

Changes in the provisions for trade receivables for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

	202		022
Beginning	₩	- ₩	4
Reversal of provisions recognized in profit or loss during the period			(4)
Ending	$\underline{\mathbf{W}}$	<u> </u>	

As of June 30, 2023, the carrying amount of trade receivables representing the maximum exposure to credit risk amounts to \(\pi_{2,191,536}\) million (as of December 31, 2022, \(\pi_{2,327,851}\) million).

2) Other financial assets at amortized cost

As of June 30, 2023, the provision for other financial assets measured at amortized cost does not exist (as of December 31, 2022, were \$\text{\psi}54\$ million).

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.

1) The table below analyzes the Company 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 interests (Korean won in millions):

	June 30, 2023						
		Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years		
Non-derivative instruments:							
Borrowings	₩	91,907	₩ 862,640 ₩	1,230,344 ₩	680,195		
Lease liabilities		25,069	24,136	18,368	-		
Trade and other payables		2,297,153	1,427	1,801	<u>-</u>		
		2,414,129	888,203	1,250,513	680,195		
Derivative instruments:							
Currency forwards settled in gross:							
Inflows		-	(656,400)	-	(656,400)		
Outflows			567,800	<u>-</u>	551,415		
		-	(88,600)	-	(104,985)		
	₩	2,414,129	<u>₩ 799,603</u> <u>₩</u>	1,250,513 ₩	575,210		
	December 31, 2022						
		Less than	Between	Between	More than		
		1 year	1 year-2 years	2-5 years	5 years		
Non-derivative instruments:							
Borrowings	₩	726,969	₩ 681,641 ₩	274,444 ₩	668,105		
Lease liabilities		16,855	20,223	22,798	106		
Trade and other payables		2,566,921	3,001	314	<u>-</u>		
		3,310,745	704,865	297,556	668,211		
Derivative instruments:							
Currency forwards settled in gross:							
Inflows		-	(633,650)	-	(633,650)		
Outflows		-	567,800		551,415		
		-	(65,850)	-	(82,235)		
	$\underline{\mathbb{W}}$	3,310,745	<u>₩ 639,015</u> <u>₩</u>	297,556 ₩	585,976		

2) As of June 30, 2023, and December 31, 2022, 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	Hedged	Financial		June	30, 202	3	Decemb	er 31, 2	.022
	the contracts	items	institution	Maturity	Assets	Lial	bilities	Assets	Liab	ilities
Merchandise (raw materials) swap (*)	Cash flow hedge	Non-ferrous metal	Citibank, SC	2025.12	₩	- ₩	1,423	₩	- W	819

^(*) 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.

3) Details of financial guaranteed contracts by maturity as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	June 30, 2023					
	I	Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years	
Financial guarantee contracts (*)	₩	4,232,797 ₩	₹	- ₩	- W	
			Decemb	er 31, 2022		
	I	Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years	
Financial guarantee contracts (*)	₩	4,152,813 ₹	\forall	- ₩	- ₩	

^(*) The Company has provided financial guarantees for subsidiaries. The amount represents the maximum amount that can be guaranteed as of June 30, 2023, and December 31, 2022 (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 June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Total borrowings (Note 14) (A)	₩	2,568,734	₩ 2,193,057
Less: cash and cash equivalents (B)		(2,855,900)	(4,828,152)
Net debt (C=A+B)		(287,166)	(2,635,095)
Total liabilities (D)		6,306,600	6,408,238
Total equity (E)		16,955,780	16,794,572
Total capital (F=C+E)	₩	16,668,614	₩ 14,159,477
Gearing ratio (C/F)		(*)	(*)
Debt-to-equity ratio (D/E)		37.20%	38.20%

^(*) The gearing ratios as of June 30, 2023, and December 31, 2022, were not computed since the net debt was negative.

3.3 Fair Value Estimation

(1) The carrying amount and fair value of financial instruments by category as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	June 30, 2023				December 31, 2022			
		Carrying amount	Fair value		Carrying amount	Fair value		
Financial assets (current):								
Cash and cash equivalents	₩	2,855,900	(*)	₩	4,828,152	(*)		
Trade receivables		2,063,633	(*)		2,207,153	(*)		
Other receivables (excluding deposits from financial institutions)		1,218,701	(*)		1,232,735	(*)		
Financial assets (non-current):								
Deposits from financial institutions		65,014	(*)		70,014	(*)		
Trade receivables		127,903	(*)		120,698	(*)		
Other receivables (excluding deposits from financial institutions)		85,680	(*)		98,926	(*)		
Other non-current financial assets:								
Marketable financial assets		27,934	27,93	4	25,358	25,358		
Non-marketable financial assets		319,644	319,64	4	240,903	240,903		
Non-current derivative financial assets		4,723	4,72	.3	4,559	4,559		
Non-current derivative financial assets (currency forward)		129,179	129,17	9	89,475	89,475		
Financial liabilities (current):								
Trade and other payables		2,297,153	(*)		2,566,921	(*)		
Current borrowings (excluding lease liabilities)		-	(*)		675,078	(*)		
Current derivative financial liabilities		840	84	0	497	497		
Financial guarantee contracts liabilities		61,899	(*)		65,557	(*)		
Financial liabilities (non-current):								
Non-current borrowings (excluding lease liabilities)		2,503,259	2,460,58	2	1,459,956	1,386,138		
Other non-current payables		3,228	(*)		3,315	(*)		
Non-current derivative financial liabilities	S	583	58	3	322	322		

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

Fair values of financial liabilities (non-current) are calculated by discounting the expected cash outflows by yield from corporate bonds. These bonds are Korean won denominated, with the bonds' credit ratings same as the Company (AA0). The applied discount rates as of June 30, 2023, and December 31, 2022, are as follows:

	June 30, 2023	December 31, 2022
Discount rate	3.98% - 5.38%	4.94% - 5.33%

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

(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 June 30, 2023, and December 31, 2022, fair value hierarchy of the financial instruments that are consistently measured and recognized at fair value is as follows (Korean won in millions):

	June 30, 2023				
_	Level 1	Level 2	Level 3	Total	
Financial assets/liabilities measured at fair	value:				
Non-current derivative financial assets	₩ - ₩	- ₩	4,723 ₩	4,723	
Non-current derivative financial assets (currency forward)	-	129,179	-	129,179	
Other non-current financial assets (marketable financial assets)	27,934	-	-	27,934	
Other non-current financial assets (non-marketable financial assets)	-	-	319,644	319,644	
Current derivative financial liabilities	-	840	-	840	
Non-current derivative financial liabilities	=	583	-	583	
Financial assets/liabilities not measured at f	air value:				
Non-current borrowings (excluding lease liabilities)	-	2,460,582	-	2,460,582	

	December 31, 2022				
	Level 1	Level 2	Level 3	Total	
Financial assets/liabilities measured at fair	value:				
Non-current derivative financial assets	₩ - ₩	- ₩	4,559 ₩	4,559	
Non-current derivative financial assets (currency forward)	-	89,475	-	89,475	
Other non-current financial assets (marketable financial assets)	25,358	-	-	25,358	
Other non-current financial assets (non-marketable financial assets)	-	-	240,903	240,903	
Current derivative financial liabilities	-	497	-	497	
Non-current derivative financial liabilities	=	322	-	322	
Financial assets/liabilities not measured at	fair value:				
Non-current borrowings (excluding lease liabilities)	-	1,386,138	-	1,386,138	

4. SIGNIFICANT ACCOUNTING ESTIMATES AND ASSUMPTIONS:

The preparation of interim condensed 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 on the application of the Company's interim condensed separate financial statements are the same as those of the annual separate financial statements as of and for the year ended December 31, 2022, except for estimates used in determining income tax expenses.

The followings are the management's estimates and assumptions for their judgments regarding significant risks that may result in adjustments to the carrying amounts of assets and liabilities in the next fiscal year.

(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 the investments, increases in wages and dividends, there is an uncertainty in 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 past experience. 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 by using valuation techniques. The Company uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at June 30, 2023 (see Note 3.3).

(4) Impairment of financial assets

The provision for impairment of financial assets is based on assumptions about the 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 liability (asset)

The present value of net defined benefit liability (asset) 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 the lease is reasonably certain to be extended (or not terminated).

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

5. FINANCIAL INSTRUMENTS BY CATEGORY:

(1) Categorizations of financial instruments are as follows (Korean won in millions):

Financial assets	Financial assets at amortized cost	Financial assets at FVPL	Financial assets at FVOCI (*1)	Total
Cash and cash equivalents	₩ 2,855,900	₩ -	₩ - ₩	2,855,900
Trade receivables	2,063,633	-	-	2,063,633
Non-current trade receivables	127,903	-	-	127,903
Other receivables	1,218,701	-	-	1,218,701
Other non-current receivables	150,694	-	-	150,694
Other non-current financial assets	<u>-</u>	256,310	225,170	481,480
	₩ 6,416,831	₩ 256,310	<u>₩ 225,170</u> <u>₩</u>	6,898,311

	Financial liabilities		Other financial			
Financial liabilities	at amo	rtized cost	liabilities (*2)		Total	
Trade payables	₩	1,703,023 ₩		- ₩	1,703,023	
Other payables		594,130		-	594,130	
Other non-current payables		3,228		-	3,228	
Borrowings (current)		-	23,93	33	23,933	
Borrowings (non-current)		2,503,259	41,54	12	2,544,801	
Other current financial liabilities		61,899	84	10	62,739	
Other non-current financial liabilities		<u>-</u>	58	33	583	
	₩	4,865,539 ₩	66,89	98 ₩	4,932,437	

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

^(*2) Other financial liabilities include lease liabilities and derivative liabilities.

Financial assets	Financial assets at amortized cost		Financial assets at FVPL	Financial assets at FVOCI(*1)		Total
Cash and cash equivalents	₩	4,828,152	₩ -	- ₩	- ₩	4,828,152
Trade receivables		2,207,153	-	-	-	2,207,153
Non-current trade receivables		120,698	-	-	-	120,698
Other receivables		1,232,735	-	=	-	1,232,735
Other non-current receivables		168,940	-	=	-	168,940
Other non-current financial assets		_	158,201	202,09	94	360,295
	₩	8,557,678	₩ 158,201	₩ 202,09	94 ₩	8,917,973

	Financial liabilities Other		Other financial		
Financial liabilities	at an	nortized cost	liabilities (*2)		Total
Trade payables	₩	1,605,551 ₩		- ₩	1,605,551
Other payables		961,370		-	961,370
Other non-current payables		3,315		-	3,315
Borrowings (current)		675,078	16,03	7	691,115
Borrowings (non-current)		1,459,956	41,98	6	1,501,942
Other current financial liabilities		65,557	49	7	66,054
Other non-current financial liabilities		<u>-</u>	32	2	322
	₩	4,770,827 ₩	58,84	2 ₩	4,829,669

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

⁽²⁾ Net gains (losses) on each category of financial instruments for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

	June 30, 2023			June 30, 2022			
	Thre	ee months	Six months	Three months	Six months		
Interest income:							
Financial assets at amortized cost	₩	33,918 ₩	₹ 72,862	₩ 37,182	₩ 67,838		
Interest expense:							
Financial liabilities at amortized cost		(13,627)	(28,102)	(13,974)	(27,398)		
Other financial liabilities		(199)	(448)	(385)	(673)		
Gains or loss on valuation:							
Financial assets at FVOCI (*)		(3,215)	5,638	(7,540)	(3,293)		
Derivative instruments		(917)	39,101	56,406	65,122		
Exchange differences:							
Financial assets at amortized cost		28,919	198,578	123,963	162,058		
Financial liabilities at amortized cost		(32,934)	(152,721)	(170,378)	(225,107)		
Financial assets at FVPL		1,425	2,433	1,118	1,463		

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

^(*2) Other financial liabilities include lease liabilities and derivative liabilities.

6. CASH AND CASH EQUIVALENTS:

(1) Details of cash and cash equivalents as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Bank deposits and cash on hand	₩	3,612 ₩	8,326
Cash equivalents		2,852,288	4,819,826
	₩	2,855,900 ₩	4,828,152

(2) As of June 30, 2023, 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):

		June 30, 2023				December 31, 2022					
		Gross amount	Provision for impairment		Carrying amount		Gross amount		ovision for pairment	(Carrying amount
Trade receivables	₩	2,063,633	₩	- ₩	2,063,633	₩	2,207,153	₩	-	₩	2,207,153
Non-current trade receivables		127,903		-	127,903		120,698		-		120,698
Other current receivables		1,218,701		-	1,218,701		1,232,789		(54)		1,232,735
Other non-current receivables		150,694			150,694		168,940				168,940
	₩	3,560,931	W	- ₩	3,560,931	₩	3,729,580	₩	(54)	₩	3,729,526

(2) Details of other receivables as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Current:			
Non-trade receivables	₩	1,200,133 ₩	1,213,949
Accrued income		1,156	5,068
Loan		9,088	8,773
Guarantee deposits provided		8,324	4,945
		1,218,701	1,232,735
Non-current:			
Non-trade receivables		54,635	69,421
Due from financial institutions (*)		65,014	70,014
Guarantee deposits provided		31,045	29,505
		150,694	168,940
	$\underline{\mathbb{W}}$	1,369,395 ₩	1,401,675

^(*) As of June 30, 2023, the due from financial institutions (non-current) is subject to withdrawal restrictions, which includes ₩60,000 million for the Agreement on the Win-Win Growth Cooperation and ₩5,000 million for the loans in relation to the employee stock ownership.

(3) The aging analysis of trade and other receivables as of June 30, 2023, and December 31, 2022, is as follows (Korean won in millions):

		June 30, 2	2023	December 3	1, 2022
		Trade receivables	Other receivables	Trade receivables	Other receivables
Receivables not past due	₩	2,148,356 ₩	1,340,249 ₩	2,191,068 ₩	1,369,119
Past due but not impaired:					
Up to 3 months		37,362	25,121	136,783	21,943
Between 3-6 months		-	1,992	-	10,613
More than 6 months		5,818	2,033	<u>-</u> ,	_
		43,180	29,146	136,783	32,556
Impaired receivables		<u>-</u>		<u>-</u>	54
	₩	2,191,536 ₩	1,369,395 ₩	2,327,851 ₩	1,401,729

(4) Changes in the provision for impairment of trade and other receivables for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023			2022				
	Trade receivables		Other receivables	Trade receivables	Other receivables				
Beginning	₩	- ₩	54 ₩	4	₩	54			
Additions (reversal)		-	-	(4)		-			
Write-off			(54)	<u>-</u>					
Ending	$\underline{\mathbb{W}}$	_ ₩	<u>-</u>		₩	54			

⁽⁵⁾ The fair values of trade receivables and other receivables as of June 30, 2023, and December 31, 2022, are not significantly different from their carrying amounts.

As of June 30, 2023, and December 31, 2022, and

for the three-month and six-month periods ended June 30, 2023 and 2022

8. OTHER FINANCIAL ASSETS AND LIABILITIES:

(1) Details of other financial assets and liabilities as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Other financial assets:			
Financial assets at FVOCI	₩	225,170	₩ 202,094
Financial assets at fair value through profit or loss		256,310	158,201
	$\underline{\mathbb{W}}$	481,480	₩ 360,295
Other financial liabilities:			
Financial guarantee contracts	₩	61,899	₩ 65,557
Cash flow hedge		1,423	819
	$\underline{\mathbb{W}}$	63,322	₩ 66,376

(2) Changes in equity securities included in other financial assets for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023	2022
Beginning	₩	202,094 ₩	111,184
Acquisitions/transfer		17,438	36,681
Valuation gain (before income tax deduction), other comprehensive income item		5,638	60,047
Valuation loss (before income tax deduction), profit or loss item		_	(5,818)
Ending	₩	225,170 ₩	202,094

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 for above equity securities. The major terms of the agreements are as follows:

- Exercise date: 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.
- (3) No impairment losses on other financial assets were recognized for the six-month period ended June 30, 2023, and the year ended December 31, 2022.

9. INVENTORIES:

(1) Details of inventories as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023				December 31, 2022			
		Gross	Valuation	Carrying		Gross	1	Valuation	Carrying
		amount	allowance	amount		amount	a	llowance	amount
Merchandise	₩	86,215 ₩	(3,398)	₩ 82,8	317 ₩	71,268	₩	$(2,350)^{-3}$	₩ 68,918
Finished/semifinished products		1,363,611	(124,053)	1,239,5	58	1,183,533		(115,993)	1,067,540
Raw materials		284,654	(2,411)	282,2	43	249,960		(1,094)	248,866
Supplies		15,730	-	15,7	30	15,404		-	15,404
Materials in transit		139,019	<u> </u>	139,0	19	198,000		<u>-</u>	198,000
	₩	1,889,229 ₩	(129,862)	₩ 1,759,3	67 ₩	1,718,165	₩	(119,437)	₹ 1,598,728

(2) The amount of inventories expensed as cost of sales for the six-month periods ended June 30, 2023 and 2022, was ₩3,922,879 million and ₩3,086,515 million, respectively.

10. INVESTMENTS IN SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES:

(1) Changes in investments in subsidiaries, associates and joint ventures for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023	2022
Beginning	₩	7,547,546 ₩	5,492,181
Acquisitions		1,433,898	2,055,365
Disposals		(27,137)	
Ending	₩	8,954,307 ₩	7,547,546

(2) Details of investments in subsidiaries, associates and joint ventures as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		Percentage of ownership(%)		Carrying	
	Location	June 30, 2023	December 31, 2022	June 30, 2023	December 31, 2022
Subsidiaries:	Location	30, 2023	01,2022	50, 2025	01, 2022
LG Energy Solution (Nanjing) Co., Ltd.	China	100	100	₩ 1,138,401 ₹	₹ 1,138,401
LG Energy Solution Michigan Inc.	USA	100	100	3,393,109	2,832,502
LG Energy Solution Battery (Nanjing) Co., Ltd.	China	100	100	323,438	286,310
LG Energy Solution Wroclaw sp. Z.o.o.	Poland	100	100	2,299,898	2,112,409
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	46,402	33,192
LG Energy Solution Vertech Inc.	USA	100	100	16,168	16,168
LG Energy Solution Arizona, Inc.(*1)	USA	100	100	99,374	66,590
Baterias De Castilla S.L.	Spain	100	100	4	4
L-H Battery Company, Inc.(*2)	USA	51	-	515,606	-
LG Energy Solution India Private Limited (*3)	India	100	-	563	-
LG Energy Solution Arizona ESS, Inc.(*4)	USA	100	-	39,936	
				8,698,599	7,311,276
Associates and joint ventures:					
VINFAST LITHIUM BATTERY PACK LLC (*5)	Vietnam	35	35	-	5,323
Jiangxi VL Battery Co., Ltd.(*6)	China	34	34	-	21,814
PT.HLI Green Power	Indonesia	50	50	209,133	209,133
Sama Aluminium (*7)	Korea	10.20	-	46,575	
				255,708	236,270
				₩ 8,954,307	₹ 7,547,546

^(*1) During the current period, ES America LLC changed its name to LG Energy Solution Arizona, Inc.

^(*2) During the current period, the Company newly acquired 51% of L-H Battery Company, Inc for ₩515,606 million.

^(*3) During the current period, the Company newly acquired 100% of LG Energy Solution India Private Limited for ₩563 million.

^(*4) During the current period, the Company newly acquired 100% of LG Energy Solution Arizona ESS, Inc. for ₩39,936 million.

- (*5) Although the Company holds 35% ownership interest in VINFAST LITHIUM BATTERY PACK LLC, it has been classified as a joint venture as it meets the classification criteria of a joint venture, including the existence of contractual arrangements that effectively result in unanimous consent. And during the current period, the Company decided to transfer VINFAST LITHIUM BATTERY PACK LLC free of charge and recognized impairment loss.
- (*6) During the current period, the Company decided to transfer Jiangxi VL Battery Co., Ltd free of charge and recognized impairment loss.
- (*7) During the current period, the Company newly acquired 10.2% of the shares in Sama Aluminium for ₩46,575 million. Although the ownership is less than 20%, the arrangement between shareholders ensures that the Company has the ability to participate in the decision-making process, thus exerting significant influence over the entity. As a result, the entity is classified as an associate.

11. PROPERTY, PLANT AND EQUIPMENT:

(1) Changes in property, plant and equipment for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023	2022
Beginning:	₩	2,504,936 ₩	1,878,942
Acquisition/transfer		984,103	1,658,250
Disposal/transfer		(422,859)	(751,741)
Depreciation		(159,218)	(280,515)
Ending	$\overline{\mathbb{W}}$	2,906,962 ₩	2,504,936

- (2) The current ending balance includes ₩771,243 million of construction in progress, and some of it will subsequently be transferred to intangible assets (for the year ended December 31, 2022, was ₩593,293 million).
- (3) The Company capitalized \$\text{W4,643}\$ million of borrowing costs in relation to the acquisition of property, plant and equipment (for the six-month period ended June 30, 2022, were \$\text{W1,168}\$ million). The capitalization rate of borrowings used to determine the amount of borrowing costs eligible for capitalization is 3.02% (for the six-month period ended June 30, 2022, was 2.77%).
- (4) Line items, including depreciation in the interim condensed separate statements of income for the three-month and sixmonth periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023	3	2022		
	Thre	ee months	Six months	Three months	Six months	
Cost of sales	₩	51,250 ₹	V 101,329	₩ 41,364	₩ 78,597	
Selling and administrative expenses		31,031	57,889	24,369	49,756	
	₩	82,281 7	V 159,218	₩ 65,733	₩ 128,353	

(5) Lease

1) Amounts recognized in the interim condensed separate statements of financial position

Details of amounts recognized in the interim condensed separate statements of financial position in relation to the lease for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Right-of-use assets (*):			
Real estate	₩	49,653	₩ 48,104
Vehicles		11,099	7,467
	$\underline{\Psi}$	60,752	₩ 55,571

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

Additions to the right-of-use assets for the six-month period ended June 30, 2023, are $$\mathbb{W}$18,032$ million (the year ended December 31, 2022, was <math>\mathbb{W}13,329$ million)$.

		June 30, 2023	December 31, 2022
Lease liabilities (*):			
Current	₩	23,933 ₩	16,037
Non-current		41,542	41,986
	<u>₩</u>	65,475 ₩	58,023

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

Details of amounts recognized in the interim condensed separate statements of income in relation to the lease for the sixmonth periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

	2023			2022		
	Three	months	Six months	Three	e months	Six months
Depreciation of right-of-use assets:						
Buildings	₩	4,709	₩ 9,298	₩	3,077	₩ 5,852
Land		443	465		46	92
Vehicles and others		1,399	2,642		876	1,446
	₩	6,551	₩ 12,405	₩	3,999	₩ 7,390
Interest expense relating to lease liabilities (included in finance cost)	₩	199	₩ 448	₩	385	₩ 673
Expenses relating to short-term leases (included in cost of goods sold and administrative expenses)		568	1,417	,	433	957
Expenses relating to leases of low-value assets that are not short-term leases (included in cost of goods sold and administrative expenses)		1,774	3,312		1,204	2,350

Total cash outflow for leases for the six-month period ended June 30, 2023, is $$\mathbb{W}$13,118$ million (for the six-month period ended June 30, 2022, was <math>\mathbb{W}12,297$ million).$

²⁾ Amounts recognized in the interim condensed separate statements of income

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

(1) Changes in intangible assets for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023	2022
Beginning	₩	513,483 ₩	360,119
Acquisition/transfer		106,698	233,930
Disposal/transfer		(1,663)	(7,339)
Amortization		(46,883)	(73,227)
Ending	$\underline{ ext{$ootnote{W}$}}$	<u>571,635</u> ₩	513,483

(2) Line items including amortization of intangible assets for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		202	3	2022		
	Thre	ee months	Six months	Three months	Six months	
Cost of sales	₩	4,226	₩ 8,657	₩ 4,689	₩ 8,843	
Selling and administrative expenses	-	19,600	38,226	12,868	25,017	
	₩	23,826	₩ 46,883	₩ 17,557	₩ 33,860	

Notes to the interim condensed separate financial statements

As of June 30, 2023, and December 31, 2022, and

for the three-month and six-month periods ended June 30, 2023 and 2022

(3) Greenhouse gas emission rights

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

	2021	2022	2023	2024	2025
Allocated emission rights	281	300	300	297	297

2 Changes in greenhouse gas emission rights included in intangible assets for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (ton in thousands and Korean won in millions):

					2023					
	202	2	20	123		2024	1	2	2025	
	Ton	Amount	Ton	Amount		Ton	Amount	Ton	Amou	nt
Beginning /allocated	303	₩ -	30	0 ₩	-	297	₩ -	- 2	97 ₩	-
Purchase /sale	-	-	-	-	-	-	-	-	-	-
Borrowing /carried over	-	-	-	-	-	-	-	-	-	-
Government submission			-	<u>-</u>			-	-		
Ending	303	₩ -	30	0 ₩	=	297	₩ -	2	97 ₩	

					2022	2				
	20	21	2022		2023	3	2024		202	25
	Ton	Amount	Ton Ar	nount	Ton	Amount	Ton A	mount	Ton	Amount
Beginning /allocated	281	₩ -	300 ₩	-	300 ₩	<i>-</i>	297 ₩	-	297	₩ -
Purchase /sale	(2)	(20)	-	-	-	-	-	-	-	-
Borrowing /carried over	22	388	3	-	-	-	-	-	-	-
Government submission	(301)	(368)	<u>-</u>				<u>-</u>	<u>-</u>		<u>-</u>
Ending		W -	303 ₩		300 ₩	-	297 ₩		297	₩ -

13. OTHER CURRENT AND NON-CURRENT ASSETS:

Details of other current and non-current assets as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Current:			
Prepayments and prepaid expenses	₩	57,567 ₩	47,372
Prepaid value-added tax		49,760	10,742
Others		60,790	51,005
	₩	168,117 W	109,119
Non-current:			
Long-term prepayments and long-term prepaid expenses	₩	12,359 ₩	13,565
Net defined benefit assets		183,601	222,519
	₩	195,960 W	236,084

14. **BORROWINGS**:

(1) Borrowings as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Current:			
Current portion of debentures	₩	- ₩	675,078
Current lease liabilities		23,933	16,037
		23,933	691,115
Non-current:			
Debentures		2,503,259	1,459,956
Non-current lease liabilities		41,542	41,986
		2,544,801	1,501,942
	₩	2,568,734 ₩	2,193,057

- (2) Details of borrowings as of June 30, 2023, and December 31, 2022, are as follows:
- 1) Debentures (USD in thousands, EUR in thousands and Korean won in millions)

	June 30, 2023					
	Financial	Interest	Latest		Current	Non-current
	<u>institution</u>	<u>rate (%)</u>	<u>maturity date</u>	<u>Amount</u>	portion	<u>portion</u>
	NH					
1st Debenture	Investment &					
(non-guaranteed/public)	Securities	2.214	2026.03.13	₩ 200,000 ₩	₩.	- ₩ 200,000
(non-guaranteed/public)	Co., Ltd.					
	And others					
2-1st Debenture	KB Securities					
(non-guaranteed/public)	Co., Ltd.	4.097	2025.06.29	125,000		- 125,000
(non-guaranteed/public)	And others					
2-2 nd Debenture	KB Securities					
(non-guaranteed/public)	Co., Ltd.	4.196	2026.06.29	370,000		- 370,000
(non guaranteed/public)	And others					
2-3 rd Debenture	KB Securities					
(non-guaranteed/public)	Co., Ltd.	4.298	2028.06.29	505,000		- 505,000
, , ,	And others					
USD foreign currency	Citibank	3.250	2024.10.15	656,400		- 656,400
debenture (non-guaranteed)	eed) and others	3.230	2024.10.13	(USD 500,000)		050,400
USD foreign currency	Citibank	3.625	2029.04.15	656,400		- 656,400
debenture (non-guaranteed)	and others	3.023	2027.01.13	(USD 500,000)		•
Less: discount on debentures	-	-	-	(9,541)		<u>- (9,541)</u>
				₩ 2,503,259	₩	<u>-</u> <u>₩ 2,503,259</u>

	December 31, 2022						
	Financial institution	Interest rate (%)	Latest <u>maturity date</u>	Amount	Current No	on-current portion	
	NH						
1st Debenture	Investment &						
(non-guaranteed/public)	Securities	2.214	2026.03.13	₩ 200,000 ₩	<i>†</i> - ₩	200,000	
(non guaranteed public)	Co., Ltd.						
	And others						
USD foreign currency	Citibank	3.250	2024.10.15	633,650		633,650	
debenture (non-guaranteed)	and others	3.230	2024.10.13	(USD 500,000)	-	033,030	
USD foreign currency	Citibank	2 625	2020 04 15	633,650		622 650	
debenture (non-guaranteed)	and others	3.625 2029.04.15		(USD 500,000)	-	633,650	
EUR foreign currency	Citibank	0.500	2022 04 15	675,600	(75 (00		
debenture (non-guaranteed)	and others	0.500 2023.04.15		(EUR 500,000)	675,600	-	
Less: discount on debentures	-	-	-	(7,866)	(522)	(7,344)	
				₩ 2,135,034 ₩	₹ 675,078 ₩	1,459,956	

2) Lease liabilities (Korean won in millions)

				June 30, 2023		
	Interest rate(%)	Latest maturity date		Amount	Current portion	Non-current portion
Baeksan industry and others	2.01–2.34	2028.06.07	₩	65,475 ₩	23,933 ₩	41,542
			D	ecember 31, 2022		
	Interest rate(%)	Latest maturity date		Amount	Current portion	Non-current portion
Baeksan industry and others	2.01–2.34	2042.06.09	₩	58,023 ₩	16,037 W	41,986

15. PROVISIONS:

Changes in provisions for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

	2023				
		Warranty(*1)	Greenhouse gas emission(*2)	Provision for restoration(*3)	Total
Beginning	₩	920,184 ₩	1,250 ₩	4,118 ₩	925,552
Provision transfer		209,225	220	1,618	211,063
Used		(261,914)	-	-	(261,914)
Ending		867,495	1,470	5,736	874,701
Less: current portion		(738,700)	(1,470)	<u>=</u>	(740,170)
	₩	128,795 ₩	- W	5,736 ₩	134,531

			2022		
	Warranty(*1)	Greenhouse gas emission(*2)	Provision for restoration(*3)	Legal claims	Total
Beginning	₩ 1,883,4	89 ₩ 79	3,069	987	₩ 1,887,624
Provision transfer	298,1	04 1,171	1,049	-	300,324
Used	(1,261,40	9)	-	(987)	(1,262,396)
Ending	920,1	1,250	4,118	-	925,552
Less: current portion	(803,00	(1,250)	<u> </u>	<u> </u>	(804,254)
	₩ 117,1	<u>80</u> ₩ -	<u>₩</u> 4,118	<u>₩</u> -	<u>₩ 121,298</u>

^(*1) Warranty provisions have been accrued for the estimated warranty costs to be incurred due to quality control, exchange and refunds with regard to products based on historical experience. In addition, provisions related to replacement costs due to ESS fire accidents and voluntary automotive battery recalls are included. The amount recognized as a provision shall be the best estimate of the expenditure required to settle the present obligation at the end of the reporting period.

^(*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 172 thousand tons for the six-month period ended June 30, 2023 (for the year ended December 31, 2022, was 313 thousand tons).

^(*3) The Company estimates the cost of restoring the leased office to its original state and records it as a provision.

16. NET DEFINED BENEFIT LIABILITIES (ASSETS):

(1) Details of net defined benefit liabilities (assets) recognized in the interim condensed separate statements of financial position as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	Jı	ine 30, 2023 I	December 31, 2022
Present value of defined benefit liabilities (*1)	₩	592,503 ₩	547,721
Fair value of plan assets (*2)		(776,104)	(770,240)
	$\overline{\mathbb{W}}$	(183,601) ₩	(222,519)

- (*1) The present value of defined benefit obligations is the amount after deducting the contributions to the National Pension Plan of W35 million as of June 30, 2023 (as of December 31, 2022, was W42 million).
- (*2) The ₩183,601 million of net defined benefit asset is included in the 'Other non-current assets' as of June 30, 2023 (as of December 31, 2022, was ₩222,519 million).
- (2) The amounts recognized in the interim condensed separate statements of income for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		2022		
	Thre	e months Si	x months	Three months	Six months	
Current service cost	₩	19,440 ₩	38,881	₩ 19,331	₩ 38,661	
Interest cost		(3,005)	(6,008)	(3)	(5)	
	$\underline{\mathbb{W}}$	<u>16,435</u> ₩	32,873	₩ 19,328	₩ 38,656	

- (3) Retirement benefits recognized for the defined contribution plan for the six-month period ended June 30, 2023, amounted to \$\pm\783\$ million (for the six-month period ended June 30, 2022, amounted to \$\pm\758\$ million).
- (4) Retirement benefits recognized in the interim condensed separate statements of income for the three-month and sixmonth periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		202	23	2022		
	Three months		Six months	Three months	Six months	
Cost of sales	₩	9,391	₩ 18,934	₩ 9,509	₩ 19,078	
Selling and administrative expenses		7,399	14,722	10,129	20,336	
	₩	16,790	₩ 33,656	<u>₩</u> 19,638	₩ 39,414	

(5) Changes in the present value of defined benefit obligations for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023	2022
Beginning	₩	547,721 ₩	552,888
Transfer in		8,988	8,141
Transfer out		(442)	(2,991)
Current service cost		38,881	77,322
Interest expense		14,494	16,409
Remeasurements:			
Actuarial loss from change in financial assumption		-	(102,359)
Actuarial gain from change in demographic assumption		-	(3,256)
Actuarial gain due to the difference between the estimated and the actual		-	31,915
Others		-	792
Payments from plans		(17,139)	(31,140)
Ending	₩	592,503 ₩	547,721

(6) Changes in the fair value of plan assets for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023	2022
Beginning	₩	770,240 ₩	553,217
Interest income		20,502	16,419
Remeasurements:			
Return on plan assets		1,691	(4,390)
(excluding amounts included in interest income)		1,091	(4,370)
Contribution:			
Employer contribution to plan assets		-	235,000
Payments from plans		(15,603)	(28,988)
Administrative costs		(726)	(1,018)
Ending	$\overline{\mathbb{W}}$	776,104 ₩	770,240

- (7) The actual return on plan assets for the six-month period ended June 30, 2023, was \$\footnote{W}\$22,193 million (for the six-month period ended June 30, 2022, was \$\footnote{W}\$6,325 million).
- (8) The significant actuarial assumptions as of June 30, 2023, and December 31, 2022, are as follows:

	June 30, 2023	December 31, 2022
Discount rate	5.40%	5.40%
Salary growth rate	5.96%	5.96%

(9) The sensitivity analysis for changes in key actuarial assumptions as of June 30, 2023, is as follows (Korean won in millions):

		Increase by 1.0%	Decrease by 1.0%
Discount rate:			
(Decrease) increase in defined benefit liabilities	₩	(66,391) ₩	79,305
Salary growth rate:			
Increase (decrease) in defined benefit liabilities		82,934	(70,191)

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 interim condensed 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 June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023		<u>December 31, 2022</u>	
		Amount	Composition (%)	Amount	Composition (%)
Insurance contracts with guaranteed yield	₩	776,104	100	₩ 770,24	0 100

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

17. OTHER CURRENT AND NON-CURRENT LIABILITIES:

Details of other current and non-current liabilities as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Current:		_	_
Advances from customers	₩	90,847 \	₹ 64,939
Withholdings		7,484	32,188
Unearned revenues		53,329	49,972
Accrued expenses		156,225	332,652
	<u>₩</u>	307,885	₹ 479,751
Non-current:			
Long-term employee benefits	₩	24,088 ₹	₹ 23,041
Long-term unearned revenues		19,151	150,225
Long-term advance received		132,324	
	$\underline{\Psi}$	175,563	∀ 173,266

18. <u>COMMITMENTS AND CONTINGENCIES:</u>

- (1) The Company is jointly liable with LG Chem, Ltd. for liabilities recognized before the split-off date.
- (2) As of June 30, 2023, the Company has been guaranteed by Seoul Guarantee Insurance Company for the execution of contracts and others.
- (3) As of June 30, 2023, the Company has various specific lines of credit agreements with several financial institutions as follows (Korean won in millions and foreign currencies in millions):

	Currency	June 30, 2023
Limit of bank overdraft	KRW	8,700
Limit of the letter of credit	USD	12
Limit of discount of notes from export	USD	1,070
Limit of guaranteed payments in other foreign currency	USD	245
Derivatives	USD	663
B2B purchase arrangements	KRW	125,000
General loan agreements	KRW	350,000
Bond transfer transaction	KRW	150,000

- (4) As of June 30, 2023, the Company has entered into payment guarantee contracts of USD 98 million, EUR 1 million and KRW 7,755 million with financial institutions in relation to product warranty for certain installed products.
- (5) The Company provides performance guarantees of USD 6,937 million, CAD 775 million and others for subsidiaries.
- (6) The Company has been sued in two class actions by consumers in relation to price-fixing of mobile batteries and General Motors ("GM") Bolt EV, and two cases are still in process as of June 30, 2023. The Company has also been sued in 77 other cases (amounted to ₩3,425 million) and has filed four lawsuit cases (amounted to USD 90 million and ₩162 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 June 30, 2023, the Company has entered into a joint venture agreement with Honda and has committed to invest USD 1,802 million. Also, 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.
- (9) As of June 30, 2023, the Company has entered into a joint venture agreement with Stellantis and has committed to invest USD 1,464 million.
- (10) As of June 30, 2023, the Company has entered into a joint venture agreement with HMG Global LLC and has committed to invest USD 1,108 million.
- (11) As of June 30, 2023, the Company has decided to contribute USD 1,106 million to LG Energy Solution Arizona, Inc. and provide a payment guarantee up to a maximum limit of USD 1,106 million.
- (12) As of June 30, 2023, the Company has decided to contribute USD 1,173 million to LG Energy Solution Arizona ESS, Inc. and provide a payment guarantee up to a maximum limit of USD 1,173 million.
- (13) Capital expenditure arrangements that have not incurred as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Property, plant and equipment	₩	455,846	₹ 553,210

(14) Investment commitments as of June 30, 2023, are as follows (Korean won and USD in millions):

	Currency	Contractual amount	Total investments	Remaining amount
BNZ (Beyond Net Zero) Fund	USD	75	24	51
Secondary Battery Growth Fund	KRW	6,700	4,690	2,010
KBE (Korea Battery ESG) Fund	KRW	75,000	33,732	41,268
BCM Global Battery Fund	KRW	30,000	5,979	24,021
Yonsei Technology Holdings IP Fund	KRW	3.000	1,020	1,980

(15) As of June 31, 2023 and December 31, 2022, the details of the payment guarantee for the borrowings by the Company are as follows (Korean won in millions):

			June 30, 2023		December 31, 2022		
<u>Guarantor</u>	Guarantee beneficiary	Financial institution	Loan amount(*1)	Credit limit(*2)	Loan amount(*1)	Credit limit(*2)	
LG Energy	LG Energy	Citibank	₩ 21,398	₩ 106,991	₩ 20,268	₩ 101,340	
Solution	Solution	Citibank	71,328	71,328	67,560	67,560	
Ltd.	Wroclaw sp. Z.o.o.	ING	71,328	71,328	67,560	67,560	
	2.0.0.	ING	28,531	28,531	27,024	27,024	
		MUFG	71,328	71,328	67,560	67,560	
		KEB Hana Bank	285,310	285,310	270,240	270,240	
		Citibank	71,328	71,328	67,560	67,560	
		Citibank	71,328	71,328	67,560	67,560	
		EBRD	85,593	142,655	94,584	135,120	
		SMBC	53,496	71,328	60,804	67,560	
		SMBC	_	-	135,120	135,120	
		DBS	142,655	142,655	135,120	135,120	
		EIB	608,662	684,744	648,576	648,576	
		EBRD	149,788	213,983	162,144	202,680	
		KDB Bank/					
		The Export-Import Bank of Korea KDB Bank/	378,036	378,036	358,068	358,068	
		The Export-Import Bank of Korea/ NH Bank KDB Bank/	784,603	784,603	743,160	743,160	
		The Export-Import Bank of Korea KDB Bank/	285,310	285,310	270,240	270,240	
		The Export-Import Bank of Korea KDB Bank/	142,655	142,655	135,120	135,120	
		The Export-Import Bank of Korea KDB Bank/	71,328	71,328	67,560	67,560	
		The Export-Import Bank of Korea	71,328	71,328	67,560	67,560	
	PT. HLI						
	Green	ANZ and others	177,228	466,700	88,711	450,525	
	Power		₩ 3,642,561	₩ 4,232,797	₩ 3,622,099	₩ 4,152,813	

^(*1) The amounts represent the borrowed amount as of June 30, 2023, and December 31, 2022.

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

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

19. SHARE CAPITAL:

Changes in share capital and share premium for the six-month period ended June 30, 2023, are as follows (Korean won in millions and in shares):

_	Ordinary sha	res	
-	Number of shares	Share capital	Share premium
December 31, 2022	234,000,000 ₩	117,000 ₩	17,589,722
Changes	-	-	-
June 30, 2023	234,000,000 ₩	117,000 ₩	17,589,722

20. ACCUMULATED DEFICIT:

(1) Details of accumulated deficit as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Undisposed accumulated deficit	₩	(801,288) ₩	(958,790)

21. OPERATING LOSSES:

(1) Selling and administrative expenses for the six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023	3	2022		
	Thi	ree months	Six months	Three months	Six months	
Revenue	₩	3,030,170 ¥	¥ 6,328,853	₩ 2,138,59	1 ₩ 4,152,798	
Cost of sales		2,437,362	5,288,661	1,889,03	4 3,696,027	
Gross profit		592,808	1,040,192	249,55	7 456,771	
Selling and administrative expenses:						
Wages and salaries	₩	164,748 ₩	¥ 324,443	₩ 135,009	9 ₩ 271,653	
Retirement benefits		7,399	14,722	10,129	9 20,336	
Employee benefits		42,867	77,875	30,26	7 54,250	
Travel expenses		14,470	21,716	12,604	19,853	
Water and utilities		14,593	32,754	8,412	2 20,090	
Rental expenses		19,735	39,373	13,21	7 25,606	
Commission expenses		132,437	244,544	98,482	2 178,637	
Depreciation		32,531	60,874	25,81	52,633	
Advertising expenses		6,309	9,643	4,650	7,955	
Freight expenses		6,196	9,503	22,433	36,783	
Training expenses		7,678	14,208	4,60	7,380	
Amortization		19,600	38,226	12,86	3 25,017	
Sample expenses		297	2,552	60:	5 906	
Development costs		56,489	95,919	37,330	64,880	
Transfers to (reversal of) provisions for service warranties		187,824	209,225	8,08	4 (33,205)	
Others		32,610	91,381	34,80	69,891	
		745,783	1,286,958	459,32	822,665	
Operating losses	₩	<u>(152,975)</u> ₩	¥ (246,766)	₩ (209,768	<u>₩ (365,894)</u>	

(2) Sales for the six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		2022		
	<u>Th</u>	ree months	Six months	Three months	Six months	
Sales recognized at a point in time	₩	2,647,555 ₩	5,574,087	₩ 1,942,021	₩ 3,778,481	
Sales recognized over time		382,615	754,766	196,570	374,317	
	₩	3,030,170 ₩	6,328,853	₩ 2,138,591	₩ 4,152,798	

22. CLASSIFICATION OF EXPENSES BY NATURE:

Cost of sales and selling and administrative expenses by nature for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

_	2023		2022		
_	Three months	Six months	Three months	Six months	
Changes in inventories of merchandise, finished goods, semifinished goods and work in process	₩ (140,708) ₩	₹ (185,916)	₩ (260,933) ₹	₩ (265,608)	
Raw materials and consumables used	1,760,277	3,701,362	1,660,027	3,010,255	
Purchase of merchandise	214,335	407,433	158,171	341,868	
Employee benefit expenses	340,603	662,811	283,379	572,145	
Advertising expenses	6,367	9,745	4,738	8,103	
Freight expenses	7,242	11,778	23,698	39,478	
Commission expenses	149,505	275,762	110,846	203,405	
Depreciation and amortization	107,607	209,086	84,732	165,090	
Rent expenses and usage fee	2,527	5,012	1,909	3,900	
Transfers to provisions for service warranties	187,824	209,225	8,084	(33,205)	
Other expenses	547,566	1,269,321	273,708	473,261	
$ar{t}$	₹ 3,183,145	∀ 6,575,619	₩ 2,348,359 ₹	V 4,518,692	

23. <u>EMPLOYEE BENEFIT EXPENSES:</u>

Details of employee benefit expenses for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

	2023			2022		
	Thre	ee months	Six months	Three months	Six months	
Wages and salaries	₩	279,475	₩ 550,861	₩ 230,952	₩ 474,167	
Retirement benefits: defined benefit plan		16,435	32,873	19,328	38,656	
Retirement benefits: defined contribution plan		355	783	310	758	
Others		44,338	78,294	32,789	58,564	
	₩	340,603	₩ 662,811	₩ 283,379	₩ 572,145	

24. FINANCE INCOME AND COSTS:

Details of finance income and costs for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

	2023			2022		
	<u>Thr</u>	ee months	Six months	Three months	Six months	
Finance income:						
Interest income (*1)	₩	33,918 ₹	V 72,862	₩ 37,182	₩ 67,838	
Dividend income		-	-	37,180	37,180	
Exchange differences		112,016	298,030	30,798	58,197	
Gain on derivative instruments		259	39,704	59,927	67,195	
	₩	146,193	∀ 410,596	₩ 165,087	₩ 230,410	
Finance costs:						
Interest expense (*2)	₩	10,806 ₹	₹ 23,907	₩ 13,693	₩ 26,903	
Exchange differences		124,267	308,571	98,139	152,236	
	₩	135,073	∀ 332,478	₩ 111,832	<u>₩ 179,139</u>	

^(*1) Details of interest income for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		2022			
	_Thre	ee months S	Six months	Three months	Six months		
Due from financial institutions	₩	32,234 ₩	<i>₹</i> 69,509	₩ 35,426	₩ 63,777		
Other loans and receivables	-	1,684	3,353	1,756	4,061		
	₩	33,918 ₩	₹ 72,862	₩ 37,182	₩ 67,838		

^(*2) Details of interest expense for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		2022			
	Three months		Six months	Three months	Six months		
Interest on lease liabilities	₩	199 ₩	₹ 448	₩ 385	₩ 673		
Interest on debentures		13,613	28,088	13,973	27,367		
Other interest expenses		14	14	-	31		
Capitalized interest for qualifying assets		(3,020)	(4,643)	(665)	(1,168)		
	₩	<u>10,806</u> ₩	23,907	₩ 13,693	₩ 26,903		

As of June 30, 2023, and December 31, 2022, and

for the three-month and six-month periods ended June 30, 2023 and 2022

25. OTHER NON-OPERATING INCOME:

Details of other non-operating income for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023	3	2022		
	Th	ree months	Six months	Three months	Six months	
Exchange differences	₩	67,248	₩ 227,825	₩ 129,296	₩ 175,213	
Gain on disposal of property, plant and equipment		6	360	358	389	
Gain on disposal of investments in associates		191	191	-	-	
Dividend income		329,775	329,775	-	-	
Others		7,245	16,278	10,463	20,147	
	₩	404,465	₩ 574,429	₩ 140,117	₩ 195,749	

26. OTHER NON-OPERATING EXPENSES:

Details of other non-operating expenses for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		202	22
	Three	months	Six months	Three months	Six months
Exchange differences	₩	57,588 ₩	168,994	₩ 107,253	₩ 142,760
Loss on disposal of property, plant and equipment		2,658	7,735	1,345	2,847
Loss on disposal of intangible assets		-	13	2	149
Loss on disposal of investments in associates		27,137	27,137	-	-
Donations		3,298	3,829	72	572
Others		4,549	4,889	14,497	15,761
	₩	95,230 ₩	212,597	₩ 123,169	₩ 162,089

27. INCOME TAX EXPENSE AND DEFERRED TAX:

Income tax expense was recognized based on the best estimate of the weighted-average annual income tax rate for the entire fiscal year.

28. EARNINGS(LOSS) PER SHARE:

Basic earnings (loss) per share are calculated by dividing the earnings (loss) attributable to ordinary shares by the weighted-average number of shares issued.

Basic earnings (loss) per ordinary share for the three-month and six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		2022		
	<u>T</u>	hree months	Six months		hree months	Six months
Profits (losses) attributable to ordinary shares	₩	134,099 ₩	156,257	₩	(86,450) ₩	(222,947)
Weighted-average number of ordinary shares outstanding		234,000,000	234,000,000		234,000,000	230,055,249
Basic earnings (loss) per ordinary share (in Korean won)	₩	573 ₩	668	₩	(369) ₩	(969)

The Company has not issued any potential ordinary shares. Therefore, basic earnings (loss) per share is identical to diluted earnings (loss) per share.

29. RELATED-PARTY TRANSACTIONS:

- (1) As of June 30, 2023, 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 separate subsidiaries, associates and joint ventures (see Note 10), as of June 30, 2023, are as follows:

	Related party's subsidiary	Related party's subsidiary	
Related party	(domestic)	(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	
LG Household & Health Care Ltd.	Coca-Cola Beverage Co. and others	Care Trading(Shanghai) CO., LTD. And others	LG Enterprise Group (*)
LG Uplus Corp.	LG HelloVision Corp. and others	LG UPLUS FUND I LLC. And others	
GllR Inc.	HS AD Inc. and others	GIIR America Inc. and others	

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

(3) Transactions with related parties for the six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

			2023					
		Purchase and others						
	Sales and others	Purchase of raw materials /merchandises	Acquisition of property, plant and equipment and intangible assets	Interest expense	Others			
Parent:								
LG Chem, Ltd.	₩ 4,58	0 ₩ 37,321	₩ - ₩	16 ₩	1,750			
Subsidiaries:								
LG Energy Solution (Nanjing) Co., Ltd.	487,39	3 1,506,323	-	-	484			
LG Energy Solution Michigan, Inc.	622,38	7 132	-	-	7,581			
LG Energy Solution Battery (Nanjing) Co., Ltd.	1,02	2 478,570	-	-	961			
LG Energy Solution Wroclaw sp. Z o.o.	1,103,66	9 34,348	=	-	84			
LG Energy Solution Australia Pty Ltd.		7 82	-	-	7,998			
LG Energy Solution Technology (Nanjing) Co., Ltd.	82	5 1,098,499	-	-	64			
Ultium Cells LLC	11,37	-6	=	-	-			
LG Energy Solution Europe GmbH	89,11	2 -	=	-	40,832			
LG Energy Solution (Taiwan), Ltd.			-	-	2,981			
Areum Noori Co., Ltd.		6 -	-	-	-			
LG Energy Solution Vertech Inc.	5,19	-6	-	-	8,124			
Associates and joint ventures:								
PT. HLI Greenpower	23,08	1 -	-	-	-			
VINFAST LITHIUM BATTERY PACK LLC	25	6 -	-	-	-			
Sama Aluminium		- 1,132	-	-	-			
Other related parties:								
LG Corp.			-	-	34,891			
LG Chem America, Inc.			-	-	1			
HAENGBOKNURI CO., LTD.		5 -	-	-	560			
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.		- 115,878	-	-	-			
TECWIN Co., Ltd.			-	-	46			
LG Management Development Institute	1	1 -	-	-	16,543			
D&O Co., Ltd. And its subsidiaries	4	2 -	2,685	-	1,841			
LG CNS Co., Ltd. And its subsidiaries	24,84	5 101	93,086	-	53,344			
Others			-	-	1,775			
Others:								
LG Electronics Inc., Ltd. And its subsidiaries	104,46	34,046	24,981	-	6,967			
Xi C&A and its subsidiaries		- 2,326	25,874	-	483			
S&I Corporation		- 4,872	22,086	-	23,217			
Others	2	3	399	17	1,418			
	₩ 2,478,30	1 ₩ 3,313,630	<u>₩ 169,111</u> <u>₩</u>	33 ₩	211,945			

LG Energy Solution, Ltd.

Notes to the interim condensed separate financial statements

As of June 30, 2023, and December 31, 2022, and

for the three-month and six-month periods ended June 30, 2023 and 2022

				2022					
			Purchase and others						
		Sales and others	Purchase of raw materials /merchandises	Acquisition of property, plant and equipment and intangible assets	Interest expense	Others			
Parent:									
LG Chem, Ltd.	₩	3,294	₩ 91,292	₩ 98 ₩	26 ₩	5,516			
Subsidiaries:									
LG Energy Solution (Nanjing) Co., Ltd.		131,823	1,333,200	-	-	-			
LG Energy Solution Michigan, Inc.		339,208	4,882	-	-	21,272			
LG Energy Solution Battery (Nanjing) Co., Ltd.		18,873	402,806	-	-	-			
LG Energy Solution Wroclaw sp. Z o.o.		453,099	1,530	-	-	24,149			
LG Energy Solution Australia Pty Ltd.		9,448	-	-	-	3,408			
LG Energy Solution Technology (Nanjing) Co., Ltd.		8,253	655,857	-	-	94			
Ultium Cells LLC		39	-	-	-	-			
LG Energy Solution Europe GmbH		82,258	469	_	-	26,994			
LG Energy Solution (Taiwan), Ltd.		-	-	-	-	2,717			
Areum Noori Co., Ltd.		4	-	-	-	3,482			
LG Energy Solution Vertech Inc.		23	-	_	-	5,038			
Associates and joint ventures:									
PT. HLI Greenpower		22,981	-	=	-	-			
VINFAST LITHIUM BATTERY PACK LLC		1,069	-	=	-	-			
Other related parties:									
LG Corp.		-	-	1,273	-	18,767			
LG Chem America, Inc.		_	-	· -	_	3			
LG Chem Poland Sp. Z o.o.		-	-	-	-	3			
HAENGBOKNURI CO., LTD.		7	-	_	_	562			
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.		_	204,526	_	_	45			
TECWIN Co., Ltd.		_	-	100	_	27			
LG Management Development Institute		_	-	_	_	9,859			
D&O Co., Ltd. And its subsidiaries		40	_	549	_	1,055			
LG CNS Co., Ltd. And its subsidiaries		9,186	48		_	33,915			
Others		_	_		_	1,645			
Others:						-,			
LG Electronics Inc., Ltd. And its subsidiaries		117,883	45,521	17,223	_	6,524			
LX Holdings., Ltd. And its subsidiaries		262	11,762	ŕ	-	78,110			
Xi C&A (former S&I Construction) and its subsidiaries		-		18,962	_				
S&I Corporation (*)		_	2,668	· ·	_	12,487			
Others		22	2,300	4	_	1,922			
	₩	1,197,772	₩ 2,754,561		26 ₩	257,594			
		1,171,112	2,137,301	70,712 11	20 11	<u> </u>			

^(*) During the six-month period ended June 30, 2022, the entity was classified as an associate from a subsidiary of D&O Co., Ltd. Due to the sale of its shares, and the amount includes the transactions before classification.

(4) Balances of receivables and payables from related parties as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	June 30, 2023								
		Receivables		Payables					
	Trade receivables	Other receivables	Total	Trade payables	Lease liabilities	Other payables	Total		
Parent:									
LG Chem, Ltd.	₩ -	₩ 23,053 ₩	₹ 23,053	₩ 36,995 ₩	₩ 1,375 ₩	2,443 ₩	40,813		
Subsidiaries:									
LG Energy Solution (Nanjing) Co., Ltd.	4,979	229,934	234,913	571,476	-	1,889	573,365		
LG Energy Solution Michigan, Inc.	151,565	168,611	320,176	118	-	39,715	39,833		
LG Energy Solution Battery (Nanjing) Co., Ltd.	-	567	567	132,698	-	-	132,698		
LG Energy Solution Wroclaw sp. Z o.o.	63,436	451,234	514,670	9,486	-	9,386	18,872		
LG Energy Solution Australia Pty Ltd.	8,337	3	8,340	-	-	2,759	2,759		
LG Energy Solution Technology (Nanjing) Co., Ltd.	819	-	819	395,997	-	-	395,997		
Ultium Cells LLC	-	15,282	15,282	-	-	-	-		
LG Energy Solution Europe GmbH	159,246	-	159,246	-	-	13,016	13,016		
LG Energy Solution (Taiwan), Ltd.	-	-	-	-	-	380	380		
Areum Noori Co., Ltd.	-	-	-	-	-	981	981		
LG Energy Solution Vertech Inc.	3,723	7,894	11,617	-	-	4,919	4,919		
Associates and joint ventures:									
PT.HLI Green Power	-	2,538	2,538	-	-	65,112	65,112		
VINFAST LITHIUM BATTERY PACK LLC	-	-	-	-	-	458	458		
Sama Aluminium	-	-	-	577	-	-	577		
Other related parties:									
LG Corp.	-	-	-	-	-	9,451	9,451		
HAENGBOKNURI CO., LTD.	-	-	-	-	-	97	97		
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.	-	-	-	31,436	-	-	31,436		
LG Management Development Institute	-	-	-	-	-	990	990		
D&O Co., Ltd. And its subsidiaries	-	-	-	-	-	1,777	1,777		
LG CNS Co., Ltd. And its subsidiaries	16,908	-	16,908	-	-	47,458	47,458		
Others	-	-	-	-	-	154	154		
Others:									
LG Electronics Inc., Ltd. And its subsidiaries (*)	72,069	1,460	73,529	22,571	-	28,839	51,410		
Xi C&A and its subsidiaries	-	-	-	-	-	12,224	12,224		
S&I Corporation	-	-	-	-	-	19,898	19,898		
Others	=	559	559		1,342	3,807	5,149		
	₩ 481,082	₩ 901,135	V 1,382,217	₩ 1,201,354 ₩	<u>₩ 2,717</u> ₩	265,753 ₩	1,469,824		

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

LG Energy Solution, Ltd.

Notes to the interim condensed separate financial statements

As of June 30, 2023, and December 31, 2022, and

for the three-month and six-month periods ended June 30, 2023 and 2022

	December 31, 2022							
		Receivables		Payables				
	Trade receivables	Other receivables	Total	Trade payables	Lease liabilities	Other payables	Total	
Parent:								
LG Chem, Ltd.	₩ -	₩ 23,163	₩ 23,163	₩ 40,278 ₩	7 1,650 ₩	2,904 ₩	44,832	
Subsidiaries:								
LG Energy Solution (Nanjing) Co., Ltd.	5	209,664	209,669	519,311	-	863	520,174	
LG Energy Solution Michigan, Inc.	96,822	118,651	215,473	-	-	25,626	25,626	
LG Energy Solution Battery (Nanjing) Co., Ltd.	1,315	62,347	63,662	160,277	-	4	160,281	
LG Energy Solution Wroclaw sp. z o.o.	401,096	587,175	988,271	7,587	-	6,678	14,265	
LG Energy Solution Australia Pty Ltd.	9,611	12	9,623	-	-	3,448	3,448	
LG Energy Solution Technology (Nanjing) Co., Ltd.	3,337	36	3,373	295,443	-	145	295,588	
Ultium Cells LLC	-	1,339	1,339	-	-	-	-	
LG Energy Solution Europe GmbH	169,812	-	169,812	-	-	13,033	13,033	
LG Energy Solution (Taiwan), Ltd.	-	-	-	-	-	550	550	
Areum Noori Co., Ltd.	-	1	1	-	-	776	776	
LG Energy Solution Vertech Inc.	1	6,419	6,420	-	-	9,663	9,663	
Associates and joint ventures:								
PT. HLI Green Power	-	1,311	1,311	-	-	88,093	88,093	
Other related parties:								
LG Corp.	-	46	46	-	-	18,727	18,727	
LG Chem Poland Sp. z o.o.	-	-	-	-	-	1	1	
HAENGBOKNURI CO., LTD.	-	1	1	-	-	120	120	
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.	-	-	-	34,738	-	26	34,764	
TECWIN Co., Ltd.	-	-	-	-	-	54	54	
LG Management Development Institute	-	-	-	-	-	544	544	
D&O Co., Ltd. and its subsidiaries	-	-	-	-	-	1,729	1,729	
LG CNS Co., Ltd. and its subsidiaries	5,782	205	5,987	-	-	177,696	177,696	
Others	-	_	-	_	_	203	203	
Others:								
LG Electronics Inc., Ltd. and its subsidiaries (*1)	51,731	26,301	78,032	25,908	-	37,120	63,028	
Xi C&A (former S&I Construction) and its subsidiaries	-	_	, -	, <u> </u>	_	27,385	27,385	
S&I Corporation(*2)	-	-	_	-	-	48,679	48,679	
Others	-	561	561	_	_	3,930	3,930	
	₩ 739,512			₩ 1,083,542	₹ 1,650 ₩	467,997 ₩		

^(*1) Provisions for the GM Bolt EV recall are not included in the balance of receivables and payables above.

^(*2) During the year ended December 31, 2022, the entity was classified as an associate from a subsidiary of D&O Co., Ltd. due to the sale of its shares, and the amount includes the transactions before classification.

(5) Fund transactions with related parties for the six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

						2023			
	Dividends received	Dividends paid	coi	Equity ntribution in cash (capital eduction)		Loans transactio		Sorrowings tr	ransaction(*) Repayment
Parent:									
LG Chem, Ltd.	₩ -	· ₩	- ₩	-	₩	- ₩	- ₩	-	₩ 258
Subsidiaries:									
LG Energy Solution (Nanjing) Co., Ltd.	329,775	i	-	-		-	-	-	-
LG Energy Solution Michigan, Inc.	-	-	-	560,607		-	-	-	-
LG Energy Solution Fund I LLC	-	=	-	13,209		-	-	-	-
L-H Battery Company, Inc.	-		-	515,606		-	-	-	-
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)	-	-	-	32,785		-	-	-	-
Associates and joint ventures:									
Sama Aluminium	-	=	-	46,575		-	-	-	-
Others:									
LG Household & Health Care Ltd.		-	_	_		<u> </u>			319
	₩ 329,775	₩	<u>-</u> ₩	1,433,899	₩	<u> </u>	- W		₩ 577

(*) The amounts represent lease liabilities that were recognized or repaid for the six-month period ended June 30, 2023.

					2022				
			cor	Equity ntribution in cash	Loans t	ransaction	Borrowings	Borrowings transaction(*)	
	Dividend received		((capital eduction)	Loans	Repayment	Borrowings	Repayment	
Parent:									
LG Chem, Ltd.	₩	- W	- ₩	- ₩		- W	- W -	₩ 411	
Subsidiaries:									
LG Energy Solution Michigan, Inc.		-	-	1,094,989				-	
LG Energy Solution (Nanjing) Co., Ltd.	37,	180	-	-				-	
LG Energy Solution Wroclaw sp. z o.o.		-	-	302,401				-	
LG Energy Solution Fund LLC		-	-	692				-	
LG Energy Solution Vertech Inc.		-	-	16,168				-	
ES America LLC		-	-	66,590				-	
Baterias De Castilla, S.L.		<u>-</u>		4		<u>- </u>	<u> </u>	<u> </u>	
	₩ 37,	180 ₩	- ₩	1,480,844 ₩		- ₩ -	₩ -	₩ 411	

^(*) The amounts represent lease liabilities that were recognized or repaid during the six-month period ended June 30, 2022.

(6) Compensation for key management of the Company for the six-month periods ended June 30, 2023 and 2022, is as follows (Korean won in millions):

		2023	2022
Short-term employee benefits	₩	32,967 ₩	16,648
Retirement benefits		4,016	1,697
	₩	36,983 ₩	18,345

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

- (7) There are no provisions recognized against receivables from related parties as of June 30, 2023. Therefore, there is no bad debt expense recognized for the six-month period ended June 30, 2023.
- (8) As of June 30, 2023, the payment guarantees provided by the Company for related parties are filed in Note 18.

30. INTERIM CONDENSED SEPARATE STATEMENTS OF CASH FLOWS:

(1) Details of cash generated from operations for the six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

		2023	2022
Profit (loss) before income tax	₩	193,184 ₩	(280,963)
Adjustments for:		1.62.202	101 000
- Depreciation		162,203	131,230
- Amortization		46,883	33,860
- Retirement benefits		32,873	38,656
- Financial income		(474,632)	(242,329)
- Financial costs		85,239	168,758
- Loss on valuations of inventories		10,425	32,643
- Gain on disposal of property, plant and equipment		(360)	(389)
- Gain on disposal of intangible assets		(191)	-
- Loss on disposal of property, plant and equipment		7,735	2,847
- Loss on disposal of intangible assets		13	149
- Impairment of investments in associates and joint ventures		27,137	-
- Gains or losses on valuation of financial assets		-	5,818
- Contribution to provisions		209,445	9,620
- Other income		51,293	34
- Changes in inventories		(171,064)	(412,315)
- Changes in trade receivables		152,947	(159,719)
- Changes in other receivables		(20,873)	(22,873)
- Changes in other current assets		(58,852)	(107,624)
- Changes in trade payables		97,101	148,757
- Changes in other payables		(120,736)	88,008
- Changes in other current liabilities		(170,615)	13,410
- Changes in net defined benefit liabilities		7,736	3,078
- Changes in provisions		(261,914)	(722,194)
- Other cash flows from operations		1,115	-
Cash generated from operations	₩	(193,908) ₩	(1,271,538)

(2) Changes in liabilities arising from financial activities for the six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

					2023			
	Begin	:	Cash flows from financing activities	Reclassification of current portion	Amortization	Lease liabilities	Others	Ending
Short-term borrowings	₩	16,037 ₩	(7,940)	₩ 15,836	₩ -	₩ - ₩	V - W	23,933
Long-term borrowings		41,986	-	(15,836)	-	15,392	-	41,542
Debentures	2,1	35,034	268,914		1,430		97,881	2,503,259
	₩ 2,1	93,057 ₩	260,974	₩ -	₩ 1,430	₩ 15,392 ₩	<u>₹ 97,881</u>	2,568,734
			Cash flows		2022			
	Begin	:	from financing activities	Reclassification of current portion	Amortization	Lease liabilities	Others	Ending
Short-term borrowings	₩	9,149 ₩	(8,111)	₩ 6,468	₩ -	₩ - ₩	∀ (206) ₩	7,300
Long-term borrowings		35,259	-	(6,468)	-	12,899	-	41,690
Debentures	2,0	45,808			1,708		110,587	2,158,103

(3) Significant non-cash transactions for the six-month periods ended June 30, 2023 and 2022, are as follows (Korean won in millions):

(8,111) ₩

1,708 W 12,899 W 110,381 W 2,207,093

		2023	2022
Reclassification of construction in progress	₩	411,774 ₩	298,205
Changes in other payables related to acquisition of property, plant and equipment and intangible assets		(243,591)	126,812
Reclassification of debentures into current portion		-	673,589
Reclassification of dividend receivables into investments in subsidiaries		37,128	-

31. <u>LIABILITIES RELATED TO CONTRACTS WITH CUSTOMERS:</u>

for the three-month and six-month periods ended June 30, 2023 and 2022

(1) Liabilities related to contracts with customers as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Contract liabilities:			
Advances from customers received as part of the Company's main business activities	₩	201,304	₩ 170,218
Expected customer incentives		952	2,497
Unearned revenue		72,331	92,080
	₩	274,587	₩ 264,795

(2) Revenue recognized in relation to contract liabilities

Revenue recognized from the carried-forward contract liabilities for the three-month and six-month periods ended June 30, 2023 and 2022, is as follows (Korean won in millions):

	202	3	2022	
	Three months	Six months	Three months	Six months
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	₩ 20,731	₩ 44,164	₩ 25,269	₩ 53,709
activities				
Unearned revenue	9,091	20,922	13,752	28,861
	₩ 11,640	₩ 23,242	₩ 11,517	₩ 24,848

32. INVESTMENT PROPERTIES:

(1) Details of investment properties as of June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	June 30, 2023				December 31, 2022				
	Acquisition Accumu		Accumulated	umulated Accumulated		Acquisition Accumulated		Accumulated	Book
		cost	depreciation	impairment	value	cost	depreciation	impairment	value
Buildings	₩	293,163	₩ (78,918)	₩ (1,721)	₩ 212,524	₩ 290,799	₩ (76,030)	₩ (1,725)	₩ 213,044
Land		283	(6)	(35)	242	283	(3)	(35)	245
	₩	293,446	₩ (78,924)	₩ (1,756)	₩ 212,766	₩ 291,082	₩ (76,033)	₩ (1,760)	₩ 213,289

(2) Changes in investment properties for the six-month period ended June 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023		2022	
	Land		Buildings	Land	Buildings
Beginning	₩	245 ₩	213,044 ₩	161 ₩	224,311
Acquisition/transfer		-	3,547	122	7,267
Disposal/transfer		-	(1,085)	-	(11,321)
Depreciation		(3)	(2,982)	(3)	(5,884)
Impairment		<u>-</u>	<u>-</u>	(35)	(1,329)
Ending	$\underline{\mathbb{W}}$	242 ₩	212,524 ₩	245 ₩	213,044

(3) The fair value of investment properties is measured either by independent professional appraisers with certified qualifications or measured based on the 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 June 30, 2023, is \(\pmu245,404\) million (as of December 31, 2022, were \(\pmu245,668\) million).

Rental income from investment properties under an operating lease for the six-month period ended June 30, 2023, is W4,380 million, and operating expenses incurred for investment properties that generated rental income (including maintenance and repair expenses) for the six-month period ended June 30, 2023, are W2,985 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 June 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		June 30, 2023	December 31, 2022
Less than one year	₩	4,406 ₩	11,862
Between one year and two years		166	160
Between two years and five years		401	478
	₩	4,973 ₩	12,500

33. EVENT AFTER THE REPORTING PERIOD:

In July 2023, the Company made a capital payment for a joint venture with Stellantis in Canada to respond to the growing demand for electric automotive batteries in the North American market.