LG ENERGY SOLUTION, LTD. AND ITS SUBSIDIARIES

Interim Condensed Consolidated Financial Statements As of September 30, 2023, and December 31, 2022, and For the Three-Month and Nine-Month Periods Ended September 30, 2023 and 2022

(With the Independent Auditor's Report Thereon)



Table of Contents

	Page
Report on Review of Interim Condensed Consolidated Financial Statements	1
Interim Condensed Consolidated Financial Statements:	
Interim Condensed Consolidated Statements of Financial Position	7
Interim Condensed Consolidated Statements of Profit or Loss	9
Interim Condensed Consolidated Statements of Comprehensive Income	11
Interim Condensed Consolidated Statements of Changes in Equity	13
Interim Condensed Consolidated Statements of Cash Flows	15
Notes to the Interim Condensed Consolidated 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 Consolidated Financial Statements

English Translation of Independent Auditor's Review Report Originally Issued in Korean on November 10, 2023

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

Reviewed interim condensed consolidated financial statements

We have reviewed the accompanying interim condensed consolidated financial statements of LG Energy Solution, Ltd. and its subsidiaries (the "Group"). These interim condensed consolidated financial statements consist of the interim condensed consolidated statement of financial position as of September 30, 2023, and the related interim condensed consolidated statements of profit or loss, interim condensed consolidated statements of comprehensive income for the three-month and nine-month periods ended September 30, 2023 and 2022, and the interim condensed consolidated statements of changes in equity and interim condensed consolidated statements of cash flows for the nine-month periods ended September 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 consolidated financial statements

Management is responsible for the preparation and presentation of these interim condensed consolidated 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 consolidated 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 consolidated 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 consolidated 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 consolidated statement of financial position of the Group as of December 31, 2022, and the related consolidated statement of profit or loss, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended in accordance with KSAs. We expressed an unqualified opinion on those consolidated financial statements, not presented herein, in our audit report dated March 8, 2023.

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

Deloine idnjin uc

November 10, 2023

This review report is effective as of November 10, 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 consolidated financial statements and may result in modifications to this review report.

LG ENERGY SOLUTION, LTD. AND ITS SUBSIDIARIES

Interim condensed consolidated financial statements as of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

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

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

LG Energy Solution, Ltd. and its subsidiaries Interim condensed consolidated statements of financial position For the three-month and nine-month periods ended September 30, 2023 and 2022

(Korean	won	ın	mıll	lions))

(Korean won in millions)	Notes		September 30, 2023	December 31, 2022
Assets				
Current assets				
Cash and cash equivalents	3,5,6	₩	4,874,686 ₩	5,937,967
Trade receivables	3,5,7,29		5,504,146	4,771,846
Other receivables	3,5,7,29		621,013	462,188
Other current financial assets	3,5,8		41	9,167
Prepaid income taxes			24,787	46,205
Other current assets	13		599,772	581,267
Inventories	9		6,944,420	6,995,629
			18,568,865	18,804,269
Non-current assets				
Trade receivables	3,5,7		132,910	120,698
Other receivables	3,5,7,29		630,181	119,058
Other non-current financial assets	3,5,8		567,250	408,551
Investments in associates and joint ventures	10,31		228,038	203,696
Deferred tax assets	27		2,293,974	2,100,492
Property, plant and equipment	11,31		21,411,476	15,331,047
Intangible assets	12,31		762,541	642,090
Investment properties	31,33		211,867	213,042
Other non-current assets	13,16		361,407	356,502
			26,599,644	19,495,176
Total assets		₩	<u>45,168,509</u> ₩	38,299,445
Liabilities				
Current liabilities				
Trade payables	3,5	₩	4,324,073 ₩	3,841,766
Other payables	3,5,29		2,925,809	2,882,030
Borrowings	3,5,11,14,30		2,788,714	2,866,701
Provisions	15		576,735	976,949
Other current financial liabilities	3,5,8		6,388	3,923
Income tax payables	2,2,0		137,576	173,120
Other current liabilities	17,32		531,033	700,434
	17,52		11,290,328	11,444,923
Non-current liabilities			, ,	, ,
Other payables	3,5,29		100,617	36,606
Borrowings	3,5,11,14,30		7,818,016	5,242,552
Other non-current financial liabilities	3,5,8		8,630	742
Provisions	15		874,518	518,781
Net defined benefit liabilities	16		172	499
Deferred tax liabilities	27		69,829	108,350
Other non-current liabilities	17,32		338,433	353,230
			9,210,215	6,260,760
Total liabilities			20,500,543	17,705,683
Equity attributable to owners of				
the Parent Company				
Share capital	19		117,000	117,000
Capital surplus	19		17,164,627	17,164,627
Accumulated other comprehensive income			815,299	296,070
Retained earnings	20		2,417,775	1,154,518
			20,514,701	18,732,215
Non-controlling interest	1		4,153,265	1,861,547
Total equity			24,667,966	20,593,762
Total liabilities and equity		₩	<u>45,168,509</u> ₩	38,299,445

The accompanying notes are an integral part of the interim condensed consolidated financial statements

LG Energy Solution, Ltd. and its subsidiaries Interim condensed consolidated statements of profit or loss For the three-month and nine-month periods ended September 30, 2023 and 2022

(Korean won in millions)

		September 30, 2023		September	30, 2022
	Notes	Three months	Nine months	Three months	Nine months
Revenue	21,29,31,32	₩ 8,223,542	₩ 25,744,146	₩ 7,648,157 ₩	₹ 17,061,066
Cost of sales	21,22,29	6,881,973	21,774,291	6,253,208	14,069,185
Gross profit		1,341,569	3,969,855	1,394,949	2,991,881
Other operating income	21,31	215,587	426,797	-	-
Selling and administrative expenses	21,22,29	825,907	2,571,638	873,096	2,015,567
Operating profit	21,31	731,249	1,825,014	521,853	976,314
Finance income	5,24,29	(41,712)	600,514	221,451	484,059
Finance costs	5,24,29	203,697	686,491	417,207	725,623
Share of loss of associates and joint ventures	10	(5,668)	(23,960)	(8,470)	(25,350)
Other non-operating income	25	235,039	959,305	574,369	1,027,560
Other non-operating expenses	26	316,363	918,467	650,402	1,106,924
Profit before income tax expense		398,848	1,755,915	241,594	630,036
Income tax expense	27	(21,683)	308,257	53,884	125,778
Profit for the period		₩ 420,531	₩ 1,447,658	₩ 187,710 ₩	∀ 504,258
Profit (loss) for the period attributable to:					
Owners of the Parent Company		₩ 327,741	₩ 1,260,779	₩ 185,747 ₩	₹ 506,530
Non-controlling interests	1	92,790	186,879	1,963	(2,272)
Earnings per share attributable to the equity					
holders of the Parent Company (in Korean won)	28				
Basic or diluted earnings per share		1,401	5,388	794	2,189

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

LG Energy Solution, Ltd. and its subsidiaries Interim condensed consolidated statements of comprehensive income For the three-month and nine-month periods ended September 30, 2023 and 2022

(Korean won in millions)

		September 30, 2023		September 30, 2022		
	Notes	Three	months	Nine months	Three months	Nine months
Profit for the period		₩	420,531	₩ 1,447,658	₩ 187,710	₩ 504,258
Other comprehensive income:						
Items that will not be subsequently reclassified to profit or loss:						
Remeasurements of net defined benefit liabilities	16		1,676	3,367	171,926	170,042
Gain(loss) on valuation of financial assets at FVOCI	5	((13,730)	(11,635)	2,930	16,417
Income tax effect of other comprehensive income			3,150	2,040	(48,056)	(52,856)
			(8,904)	(6,228)	126,800	133,603
Items that may be subsequently reclassified to profit or loss:						
Exchange differences on translation of foreign operations		:	286,805	732,825	618,789	954,250
Loss on cash flow hedge	5		(1,701)	(17,176)	(15,715)	(33,119)
Share of other comprehensive income of associates and joint ventures			5,445	13,912	26,012	46,015
Income tax effect of other comprehensive income			1,331	12,481	3,173	(32,341)
			291,880	742,042	632,259	934,805
Other comprehensive income (loss) for the period, net of tax			282,976	735,814	759,059	1,068,408
Total comprehensive income for the period, net of tax		₩	703,507	₩ 2,183,472	₩ 946,769	₩ 1,572,666
Total comprehensive income for the period attributable to:						
Owners of the Parent Company		₩	479,084	₩ 1,782,486	₩ 767,623	₩ 1,297,408
Non-controlling interest			224,423	400,986	179,146	275,258

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

LG Energy Solution, Ltd. and its subsidiaries
Interim condensed consolidated statements of changes in equity
For the nine-month periods ended September 30, 2023 and 2022
(Korean won in millions)

				Accumulated	Retained			
2					earnings			
	Notes	Share capital	Capital carplus	nsive loss)		Non-Subtotal	Non-controlling interests	Total
As of January 1, 2022	*		7,122,437 W	406,092 W	W 7887	5,116 W	776,257 W	8,742,373
Comprehensive income for the period:								
Profit for the period		ı	1	1	506,530	506,530	(2,272)	504,258
Remeasurements of net defined benefit liabilities	16	ı	1		123,281	123,281		123,281
Exchange differences on translation of foreign operations		ı	1	637,761	1	637,761	277,528	915,289
Gain (Loss) on valuation of financial assets at FVOCI	ς.	1	1	10,323	1	10,323	1	10,323
Loss on cash flow hedge	S	1	1	(26,500)	1	(26,500)	1	(26,500)
Equity adjustments in equity method	10	ı	1	46,015	1	46,015	1	46,015
Total comprehensive income for the period		ı	1	662,599	629,811	1,297,410	275,256	1,572,666
Transactions with owners of the Parent Company recognized directly in equity:								
Capital increase		17,000	10,079,370		•	10,096,370	789,142	10,885,512
Others	ļ	"	(37,180)	•	1	(37,180)	1	(37,180)
		17,000	10,042,190		•	10,059,190	789,142	10,848,332
As of September 30, 2022	*	f 117,000 W	17,164,627 W	1,073,691 W	W 867,398	19,322,716 W	1,840,655 W	21,163,371
As of January 1, 2023	*	₹ 117,000 W	17,164,627 W	296,070 W	1,154,518 ₩	18,732,215 W	1,861,547 ₩	20,593,762
Comprehensive income for the period:								
Profit for the period		ı	1	1	1,260,779	1,260,779	186,879	1,447,658
Remeasurements of net defined benefit liabilities	16	1	1	1	2,478	2,478	1	2,478
Exchange differences on translation of foreign operations		1	1	526,899	ı	526,899	214,107	741,006
Gain (Loss) on valuation of financial assets at FVOCI	5	ı	ı	(8,707)	1	(8,707)	1	(8,707)
Loss on cash flow hedge	5	1	1	(12,875)	ı	(12,875)	ı	(12,875)
Equity adjustments in equity method	10	1	1	13,912	ľ	13,912	ı	13,912
Total comprehensive income for the period Transactions with owners of the Parent Company recognized directly in		1	•	519,229	1,263,257	1,782,486	400,986	2,183,472
equity:							6000	6000
Capital increase	ļ				 		1,890,732	1,890,732
As of September 30, 2023	*	f 117,000 W	17,164,627 W	W 815,299	2,417,775 W	20,514,701 W	4,153,265 W	24,667,966

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

(Korean won in millions)	Notes	Sente	ember 30, 2023 Sept	ember 30-2022
Cash flows from operating activities:	11000	<u> Берге</u>	Sinder co, 2020 Sept	0111501 00,2022
Cash generated from operations	30	₩	2,455,728 ₩	(1,175,356)
Interest received	30		115,714	51,410
Interest paid			(254,366)	(70,974)
Dividends received			99	(70,571)
Income tax paid			(545,013)	(232,207)
Net cash provided by (used in) operating activities			1,772,162	(232,207) $(1,427,127)$
rect cash provided by (asea in) operating activities			1,772,102	(1,127,127)
Cash flows from investing activities:				
Cash inflow from investing activities:				
Decrease in other receivables			221,015	19,844
Decrease in other non-current receivables			5,144	4,048
Proceeds from disposal of property, plant and equipment			66,697	8,026
Proceeds from disposal of intangible assets			1,271	9,184
Proceeds from disposal of financial instruments			-	1,287
Government grants received			297,567	119,879
			591,694	162,268
Cash outflow for investing activities:				
Increase in other receivables			(148,542)	(4,239,725)
Increase in other non-current receivables			(70,702)	(14,258)
Acquisition of investments in associates and joint ventures			(48,950)	-
Acquisition of financial instruments			(102,058)	(138,089)
Acquisition of property, plant and equipment			(7,003,988)	(4,427,013)
Acquisition of intangible assets			(77,353)	(58,440)
Business combination			-	(8,286)
Other cash outflow for investing activities			(4,431)	-
C			(7,456,024)	(8,885,811)
Net cash used in investing activities			(6,864,330)	(8,723,543)
Cash flows from financing activities:				
Cash inflow from financing activities:				
Proceeds from borrowings and others	30		4,100,160	1,786,228
Capital increase of Parent Company	30		-	10,096,371
Capital increase of Subsidiaries			1,890,732	789,140
Cupital increase of Subsidiaries			5,990,892	12,671,739
Cash outflow for financing activities:			2,550,052	1=,0,1,700
Repayments of borrowings and others	30		(2,094,442)	(1,172,398)
Capital decrease of a subsidiary	50		(=,** ·, · ·=)	(604,437)
Others			_	(37,180)
o mere			(2,094,442)	(1,814,015)
Net cash provided by financing activities			3,896,450	10,857,724
			- -	
Net increase(decrease) in cash and cash equivalents			(1,195,718)	707,054
Cash and cash equivalents at the beginning of the periods			5,937,967	1,282,880
Effects of exchange rate changes on cash and cash equivalents			132,437	199,540
Cash and cash equivalents at the end of the periods		₩	4,874,686 ₩	2,189,474

The accompanying notes are an integral part of the interim condensed consolidated financial statements.

1. **GENERAL**:

General information about LG Energy Solution, Ltd. (the "Company" or the "Parent Company") and its 20 subsidiaries (collectively, the "Group") is as follows:

1.1 Company Information

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

As of September 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 September 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 (₩500 per share) and has issued 234 million of ordinary shares as of September 30, 2023.

1.2 Business Overview

The Group is engaged in providing energy solution services.

The Group 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, has been 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.

for the three-month and nine-month periods ended September 30, 2023 and 2022

1.3 Consolidated Subsidiaries and Investments in Associates and Joint Ventures

	Ownership (%)			Closing		
	<u>September 30, 2023</u>	<u>December 31, 2022</u>	Location	month	Business	
Subsidiaries:						
LG Energy Solution (Nanjing) Co., Ltd.	100	100	China	December	Mobile battery manufacturing, sales and others	
LG Energy Solution Michigan Inc. (*1)	100	100	USA	December	Automotive battery research and manufacturing	
LG Energy Solution Battery (Nanjing) Co., Ltd.	100	100	China	December	Automotive battery manufacturing and sales	
LG Energy Solution Wroclaw sp. z o.o.	100	100	Poland	December	Automotive battery manufacturing and sales	
LG Energy Solution Australia Pty Ltd.	100	100	Australia	December	ESS battery sales	
LG Energy Solution Technology (Nanjing) Co., Ltd.	100	100	China	December	Automotive battery manufacturing, sales and others	
Ultium Cells Holdings LLC (*2)	50	50	USA	December	Automotive battery manufacturing and sales	
Ultium Cells LLC (*2)	50	50	USA	December	Automotive battery manufacturing and sales	
LG Energy Solution Europe GmbH	100	100	Germany	December	ESS battery sales and others	
LG Energy Solution (Taiwan) Ltd.	100	100	Taiwan	December	Mobile battery sales and others	
Areum noori Co., Ltd.	100	100	Korea	December	Facility management and cleaning	
LG Energy Solution Fund I LLC	100	100	USA	December	Investment in ventures	
LG Energy Solution Vertech Inc.	100	100	USA	December	ESS battery installation service	
LG Energy Solution Arizona, Inc. (*3)	100	100	USA	December	Mobile battery manufacturing and sales	
Baterias De Castilla, S.L.	100	100	Spain	December	Others	
L-H Battery Company, Inc (*4)	51	-	USA	December	Automotive battery manufacturing and sales	
LG Energy Solution India Private Limited (*5)	100	-	India	December	Mobile battery sales and others	
LG Energy Solution Arizona ESS, Inc. (*6)	100	-	USA	December	ESS battery manufacturing and sales	
Nextstar Energy Inc.(*7)	51	-	Canada	December	Automotive battery manufacturing and sales	
LG Energy Solution Fund Ⅱ LLC(*8)	100	-	USA	December	Investment in ventures	
Associates and joint ventures:						
VINFAST LITHIUM BATTERY PACK LLC.(*9)	-	35	Vietnam	December	Mobile battery manufacturing, sales , and others	
Jiangxi VL Battery Co., Ltd	34	34	China	December	Mobile battery manufacturing, sales and others	
PT. HLI Green Power(*10)	50	50	Indonesia	December	Automotive battery manufacturing and sales	
Sama Aluminium (*11)	10.2	-	Korea	December	Aluminium manufacturing, sales and others	
Nexpo Co., Ltd.(*12)	19	-	Korea	December	Battery product manufacturing, sales and others	

^(*1) LG Energy Solution Michigan Inc. owns 50% of Ultium Cells LLC's shares.

^(*2) During the previous year, the Group acquired 50% ownership of Ultium Cells Holdings LLC by contributing the entire stake it held in Ultium Cells LLC. The Group does not hold a majority ownership interest in Ultium Cells LLC or Ultium Cells Holdings LLC. According to the arrangement between shareholders, however, the Group holds the majority of voting rights in the decision-making process of the entity and has the ability to affect the variable returns by engaging in the entity's production and cost management. This implies that the Group exercises control over the entity.

^(*3) During the current period, ES America LLC changed its name to LG Energy Solution Arizona, Inc.

- (*4) During the current period, the Group newly acquired 51% of L-H Battery Company, Inc for W515,606 million.
- (*5) During the current period, the Group newly acquired 100% of LG Energy Solution India Private Limited for ₩563 million.
- (*6) During the current period, the Group newly acquired 100% of LG Energy Solution Arizona ESS, Inc. for ₩39,936 million.
- (*7) During the current period, the Group newly acquired 51% of Nextstar Energy Inc. for ₩579,074 million.
- (*8) During the current period, the Group newly acquired 100% of LG Energy Solution Fund II LLC for ₩1,655 million.
- (*9) During the current period, the Group disposed of its entire ownership interest in VINFAST LITHIUM BATTERY PACK LLC.
- (*10) As a company established under a joint arrangement in which the Group participated, the investee is structured as a separate vehicle over which the Group has rights to the net assets. Therefore, it is classified as a joint venture.
- (*11) During the current period, the Group 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 Group 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.
- (*12) During the current period, the Group newly acquired 19% of the shares in Nexpo Co., Ltd. for ₩2,375 million. Although the ownership is less than 20%, the arrangement between shareholders ensures that the Group 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.

1.4 Summarized Financial Information of Subsidiaries, Associates and Joint Ventures

Summarized financial information of subsidiaries, associates and joint ventures (before the elimination of intercompany transactions and adjustments for differences in accounting policies) for the nine-month periods ended September 30, 2023 and 2022, is as follows (Korean won in millions):

	September 30, 2023				2023		
						Net	
		Asset	<u>Liability</u>	Equity	Revenue	income(loss)	
Subsidiaries:							
LG Energy Solution (Nanjing) Co., Ltd.	₩	6,396,040 ₩	3,086,236 ₩	3,309,804 ₩	6,867,832	₩ 587,965	
LG Energy Solution Michigan Inc.		5,096,523	1,154,064	3,942,459	2,712,011	497,918	
LG Energy Solution Battery (Nanjing) Co., Ltd.		901,062	379,438	521,624	1,264,099	85,823	
LG Energy Solution Wroclaw sp. z o.o.		9,769,284	7,072,416	2,696,868	10,721,687	153,323	
LG Energy Solution Australia Pty Ltd.		9,361	6,695	2,666	14,951	686	
LG Energy Solution Technology (Nanjing) Co., Ltd.		2,842,957	1,470,032	1,372,925	2,206,641	179,245	
Ultium Cells Holdings LLC(*1)		8,994,009	2,882,944	6,111,065	1,841,553	367,297	
Ultium Cells LLC		8,994,009	2,882,944	6,111,065	1,841,553	367,297	
LG Energy Solution Europe GmbH		204,984	144,791	60,193	165,927	10,372	
LG Energy Solution (Taiwan) Ltd.		3,788	862	2,926	3,990	336	
Areum noori Co., Ltd.		3,920	2,150	1,770	8,872	357	
LG Energy Solution Fund I LLC		36,775	3	36,772	-	(862)	
LG Energy Solution Vertech Inc.		95,834	48,738	47,096	109,675	8,140	
LG Energy Solution Arizona, Inc. (*2)		192,684	28,727	163,957	10,638	9,824	
Baterias De Castilla, S.L.		4	-	4	-	-	
L-H Battery Company, Inc		1,147,692	109,824	1,037,868	-	12,766	
LG Energy Solution India Private Limited		13,490	11,741	1,749	14,835	1,167	
LG Energy Solution Arizona ESS, Inc.		42,304	1,996	40,308	-	(36)	
Nextstar Energy Inc.		1,214,559	2,375	1,212,184	-	1,773	
LG Energy Solution Fund Ⅱ LLC		-	-	-	-	(1,651)	
Associates and joint ventures:							
PT. HLI Green Power		1,116,841	659,781	457,060	528	(11,716)	
Sama Aluminium		418,848	161,944	256,904	205,809	3,493	
Nexpo Co., Ltd		14,295	2,522	11,773	251	(728)	

^(*1) Ultium Cells Holdings LLC holds 100% of Ultium Cells LLC's shares. The information is on a consolidated basis.

^(*2) During the current period, ES America LLC changed its name to LG Energy Solution Arizona, Inc.

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

	December 31, 2022			2022		
					Net	
_	Asset	<u>Liability</u>	Equity	Revenue	income(loss)	
Subsidiaries:						
LG Energy Solution (Nanjing) Co., Ltd. ₩	5,486,991 ₩	₹ 2,474,044 ₩	3,012,947 ₩	6,089,554	₩ 528,130	
LG Energy Solution Michigan Inc.	3,573,800	1,031,654	2,542,146	1,659,731	38,491	
LG Energy Solution Battery (Nanjing) Co., Ltd.	972,715	578,513	394,202	1,394,990	76,238	
LG Energy Solution Wroclaw sp. z o.o.	9,845,139	7,654,235	2,190,904	6,637,011	6,429	
LG Energy Solution Australia Pty Ltd.	12,903	10,926	1,977	16,734	(343)	
LG Energy Solution Technology (Nanjing) Co., Ltd.	2,170,096	990,347	1,179,749	2,092,923	141,053	
Ultium Cells Holdings LLC (*)	5,255,664	1,532,150	3,723,514	-	(4,545)	
Ultium Cells LLC	5,255,664	1,532,150	3,723,514	-	(4,545)	
LG Energy Solution Europe GmbH	252,708	205,366	47,342	175,605	4,020	
LG Energy Solution (Taiwan) Ltd.	3,468	904	2,564	4,020	412	
Areumnoori Co., Ltd.	3,330	1,917	1,413	6,122	143	
LG Energy Solution Fund I LLC	22,225	2	22,223	-	(1,086)	
LG Energy Solution Vertech Inc.	89,508	46,357	43,151	28,177	(9,347)	
ES America LLC	107,288	38,507	68,781	-	(824)	
Baterias De Castilla, S.L.	4	-	4	-	-	
Associates and joint ventures:						
VINFAST LITHIUM BATTERY PACK LLC	13,297	5,888	7,409	8,830	(2,739)	
Jiangxi VL Battery Co., Ltd.	82,311	43,170	39,141	1,452	(14,087)	
PT. HLI Green Power	667,930	227,305	440,625	-	(4,113)	

^(*) Ultium Cells Holdings LLC holds 100% of Ultium Cells LLC's shares. The information is on a consolidated basis.

1.5 Information of Subsidiaries Whose Non-Controlling Interests are Important to the Reporting Company

Percentage of ownership held by non-controlling interests and cumulative non-controlling interests as of September 30, 2023 and 2022, and net income (loss) and total comprehensive income (loss) allocated to non-controlling interests for the nine-month periods ended September 30, 2023 and 2022, are as follows (Korean won in millions):

		2023	
	Ultium Cells Holdings LLC	L-H Battery Company, Inc.	Nextstar Energy Inc.
Percentage of ownership held by non-controlling interests	50.00%	49.00%	
Cumulative non-controlling interests	3,051,264	508,031	593,970
Net income allocated to noncontrolling interests	179,759	6,252	869
Total comprehensive income allocated to non-controlling interests	349,734	13,648	37,605
			2022
		<u> </u>	Cells LLC (*)
Percentage of ownership held by non-c	ontrolling interests		50.0%
Cumulative non-controlling interests		Ψ	1,861,547
Net income allocated to non-controlling	g interests		(2,272)
Total comprehensive income allocated	to non-controlling interests		275,256

^(*) The consolidated financial information of Ultium Cells LLC, which is 100% owned by Ultium Cells Holdings LLC.

The interim condensed consolidated statements of cash flows of subsidiaries whose non-controlling interests are material to the Group for the nine-month periods ended September 30, 2023 and 2022, are as follows (before the elimination of intercompany transactions) (Korean won in millions):

		2023	
	Ultium Cells Holdings LLC	L-H Battery Company, Inc.	Nextstar Energy Inc.
Cash flows from operating activities	₩ (242,053)	₩ 12,767	₩ (11,595)
Cash flows from investing activities	(2,203,597)	(583,642)	(577,802)
Cash flows from financing activities	2,208,420	1,000,027	1,157,670
Effects of exchange rate changes on cash and cash equivalents	28,389	9,784	31,622
Increase(Decrease) in cash and cash equivalents	(208,841)	438,936	599,895
Cash and cash equivalents at the beginning of the period	515,833		
Cash and cash equivalents at the end of the period	₩ 306,992	₩ 438,936	₩ 599,895

		2022
	<u>Ultium</u>	Cells LLC (*)
Cash flows from operating activities	₩	(141,572)
Cash flows from investing activities		(1,647,425)
Cash flows from financing activities		1,573,495
Effects of exchange rate changes on cash and cash equivalents		117,532
Increase(Decrease) in cash and cash equivalents		(97,970)
Cash and cash equivalents at the beginning of the period		471,494
Cash and cash equivalents at the end of the period	$\overline{\mathbb{W}}$	373,524

^(*) The consolidated financial information of Ultium Cells LLC, which is 100% owned by Ultium Cells Holdings LLC.

1.6 Changes in Scope for Consolidation

New subsidiaries included in the interim condensed consolidated financial statements for the nine-month period ended September 30, 2023, are as follows:

	Reason for the inclusion
L-H Battery Company, Inc	Incorporated during the current period
LG Energy Solution India Private Limited	Incorporated during the current period
LG Energy Solution Arizona ESS, Inc.	Incorporated during the current period
Nextstar Energy Inc.	Incorporated during the current period
LG Energy Solution Fund II LLC	Incorporated during the current period

2. BASIS OF PREPARATION AND CHANGES IN ACCOUNTING POLICIES:

2.1 Basis of Preparation

The Group's interim condensed consolidated 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 Group's K-IFRS annual consolidated financial statements. In order to be understood, these interim condensed consolidated financial statements should be read in conjunction with the annual consolidated financial statements as of and for the fiscal year ended December 31, 2022, prepared in accordance with K-IFRSs.

2.2 Application of the Amended and Enacted Standards

The significant accounting policies applied in the preparation of the interim condensed consolidated financial statements are consistent with the accounting policies adopted in the preparation of the annual consolidated 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 Judgments Disclosure of Accounting Policies (Amendments)

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

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

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

The amendments require disclosure of valuation gains or losses (limited to those recognized in the profit or loss) of the conversion options or warrants (or financial liabilities including them) if all or part of the financial instrument with an exercise price that is adjusted depending on the issuer's share price change is classified as a 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 (Amendments)

The amendments replace the definition of a change in accounting estimates with the 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 International Accounting Standards Board 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 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 (Amendments)

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

Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and a 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 board also adds an illustrative example to K-IFRS 1012 that explains how the amendments are applied. 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 (Amendments)

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period and 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 it 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 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 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 the 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.

3. FINANCIAL RISK MANAGEMENT:

3.1 Financial Risk Factors

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

Risk management is carried out by the Group's finance team under policies approved by the board of directors. The finance team identifies, evaluates and hedges financial risks in close cooperation with the Group'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 Group operates internationally and is exposed to foreign exchange risk arising from foreign currency exposures, primarily with respect to the US dollar. Foreign exchange risk arises from forecast transactions and recognized assets and liabilities.

Management has set up a policy to require each company in the Group to manage its foreign exchange risk against its functional currency. The Group manages maximum loss for currency risk exposures within an acceptable range using a currency risk management model and employs those who are exclusively responsible for currency risk management.

The Group has certain investments in foreign operations whose net assets are exposed to foreign exchange risk. Currency exposure arising from the net assets of the Group's foreign operations is managed primarily through borrowings denominated in the relevant foreign currencies.

Monetary assets and liabilities denominated in foreign currencies as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		September 30, 2023		December 31.	, 2022
		Assets	Liabilities	Assets	Liabilities
USD	₩	3,818,674 ₩	5,710,314 ₩	3,628,076 ₩	4,457,064
EUR		423,566	4,488,070	532,887	4,976,907
JPY		16,114	68,838	12,975	104,805
CNY and others		213,040	352	176,651	423

With all other variables held constant as of September 30, 2023, and December 31, 2022, a hypothetical change in exchange rates by 10% would have increased (decreased) the Group's profit before income tax as follows (Korean won in millions):

		September 3	0, 2023	December 31, 2022			
	100	% Increase	10% Decrease	10% Increase	10% Decrease		
USD	₩	(189,164) ₩	189,164 ₩	(82,899) ₩	82,899		
EUR		(406,450)	406,450	(444,402)	444,402		
JPY		(5,272)	5,272	(9,183)	9,183		
CNY and others		21,269	(21,269)	17,623	(17,623)		

The above sensitivity analysis has been performed for monetary assets and liabilities denominated in foreign currencies as of the end of the quarter.

As of September 30, 2023, the Group entered into foreign currency forward to hedge change in exchange rates and the details are as follows (Korean won in millions):

							Book a	mount
	Contractor	Contract amount (in millions)	Contract exchange rate	Contract inception date	Contract maturity		Assets	Liabilities
Cumanar	Shinhan Bank	USD 500	1,135.60	2020.10.14	2024.10.15	₩	86,263	₩ -
Currency forward (*)	KB Kookmin Bank	USD 500	1,102.83	2020.11.24	2029.04.16		68,343	-
	JP Morgan	USD 200	1337.60	2023.09.25	2026.09.25		736	-
Currency	Shinhan Bank	USD 200	1337.60	2023.09.25	2026.09.25		-	74
swap (*)	KDB Bank	USD 400	1337.60	2023.09.25	2028.09.25		-	5,094
	Woori Bank	USD 200	1337.60	2023.09.25	2028.09.25		-	2,537

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

2) Interest rate risk

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

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

The table below summarizes the impact of increases/decreases of interest rates on the Group's equity and profit before tax for the period. The analysis is based on the assumption that the interest rate has increased/decreased by 1% (100 bp) with all other variables held constant (Korean won in millions):

	I	Effect on profit and	l loss before tax	Impact on equity			
	Septe	ember 30, 2023	December 31, 2022	September 30, 2023	December 31, 2022		
Increase	₩	(52,965) ₩	(49,557) ₹	₩ (52,965)	₩ (49,557)		
Decrease		52,965	49,557	52,965	49,557		

3) Price risk

The Group is exposed to price risks from equity instruments. As of September 30, 2023, the fair value of equity instruments is \$268,035 million. With all other variables held constant, a price change in equity instruments by 10% would have changed the Group's equity by \$26,803 million before tax

(2) Credit risk

Credit risk arises from trade receivables that the Group holds as well as financial assets at amortized cost or at fair value through other comprehensive income ("FVOCI").

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

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

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

The Group has deposited its cash and cash equivalents and other long-term deposits in several financial institutions, such as Woori Bank and others. The Group has also entered into derivative contracts with several financial institutions. The Group 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 Group 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 September 30, 2023, and December 31, 2022, are as follows. Expected credit losses include forward-looking information (Korean won in millions):

		ceivables not ast due (*)	Receivables past due, but not impaired (*)	Receivables impaired (individually evaluated)	Total
September 30, 2023 (trade receivable	s)				
Gross carrying amount	₩	5,345,273	₩ 291,783 ₩	∀ - ₩	5,637,056
Expected loss rate		-	-	-	-
Provisions for receivables		-	-	-	-
December 31, 2022 (trade receivables)				
Gross carrying amount	₩	4,732,757	₩ 159,787 ₩	₹ 1,234 ₩	4,893,778
Expected loss rate		-	-	100%	0.03%
Provisions for receivables (*) See Note 7.(3) for aging analysis.		-	-	1,234	1,234

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

		2023	2022
Beginning	₩	1,234 ₩	11
Additions of provisions recognized in profit or loss during the current period		-	481
Business combination		-	724
Write-off		(1,234)	-
Exchange differences			18
Ending	₩	<u> </u>	1,234

As of September 30, 2023, the carrying amount of trade receivables representing the maximum exposure to credit risk amounts to \$\psi_5,637,056\$ million (as of December 31, 2022, was \$\psi_4,892,544\$ million).

2) Other financial assets at amortized cost

As of September 30, 2023, the provision for other financial assets at amortized cost does not exist (as of December 31, 2022, \(\pi\)54 million).

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

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 Group monitors rolling forecasts of the Group'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 Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. The Group's liquidity management policy considers the Group'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 Group's derivative financial liabilities into relevant maturity groupings based on the remaining period from the reporting period 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):

		September 30, 2023					
		Less than	Between	Between	More than		
No. 1. day and an analysis		1 year	1 year-2 years	2–5 years	5 years		
Non-derivative instruments:							
Borrowings		₩ 3,121,601	₩ 2,150,450	₩ 5,153,944 ₩	1,397,965		
Lease liabilities		51,308	44,020	34,584	-		
Trade and other payables		7,249,882	91,369	8,492	756		
		10,422,791	2,285,839	5,197,020	1,398,721		
Derivative instruments:							
Currency forwards and swaps settled in	gross:						
Inflows		-	(672,400)	(1,344,800)	(672,400)		
Outflows			567,800	1,337,600	551,415		
		-	(104,600)	(7,200)	(120,985)		
		₩ 10,422,791	₩ 2,181,239	₩ 5,189,820 <u>₩</u>	1,277,736		
			D	1 2022			
		Less than	December 3 Between	1, 2022 Between	More than		
			1 year-2 years	2–5 years	5 years		
Non-derivative instruments:					_		
Borrowings	₩	2,969,739 ₩	1,686,157 ₩	2,726,522 ₩	1,253,521		
Lease liabilities		41,833	38,891	48,955	539		
Trade and other payables		6,723,796	32,613	3,043	950		
		9,735,368	1,757,661	2,778,520	1,255,010		
Derivative instruments:							
Currency forwards settled in gross:							
Inflows		(135,120)	(633,650)	-	(633,650)		
Outflows		137,999	567,800	<u> </u>	551,415		
		2,879	(65,850)	-	(82,235)		
	₩	9,738,247 ₩	<u>1,691,811</u> ₩	2,778,520 ₩	1,172,775		

2) As of September 30, 2023, the Group 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	ancial September 30, 2023		Decemb	er 31, 2022	
_	the contracts	items	institution	Maturity	Assets	Liabilitie	s Assets	Liabilities
Merchandise	Cash flow	Non-ferrous	Citibank, etc.	2025.12	W 1	5 W 100	26 W 12 02	1 ₩ 2.143
(raw materials) swap (*)	hedge	metal	Citibalik, etc.	2023.12	vv 4	3 W 4,80	30 W 13,93	1 W 2,143

- (*) 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 guarantee contracts by maturity as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	September 30, 2023				
	I	Less than 1 year	Between 1 year-2 years	Between 2-5 years	More than 5 years
Financial guarantee contracts (*)	₩	478,076	₩	- ₩	- W
			Decemb	per 31, 2022	
	I	Less than	Between	Between	More than
		1 year	1 year-2 years	2-5 years	5 years
Financial guarantee contracts (*)	₩	450,525	₩	- ₩	- ₩

^(*) The Group has provided financial guarantees for joint ventures. The amount represents the maximum amount that can be guaranteed as of September 30, 2023, and December 31, 2022 (see Note 18).

3.2 Capital Risk Management

The Group's objectives for managing capital are to safeguard the Group's ability to continue to provide profits to shareholders and for 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 Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings, less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the interim condensed consolidated statements of financial position, plus net debt.

The gearing ratio and debt-to-equity ratio as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	Septembe	r 30, 2023	December 31, 2022
Total borrowings (Note 14) (A)	₩	10,606,730 ₩	8,109,253
Less: cash and cash equivalents (B)		(4,874,686)	(5,937,967)
Net debt (C=A+B)		5,732,044	2,171,286
Total liabilities (D)		20,500,543	17,705,683
Total equity (E)		24,667,966	20,593,762
Total capital (F=C+E)	₩	30,400,010	22,765,048
Gearing ratio (C/F)		18.9%	9.5%
Debt-to-equity ratio (D/E)		83.1%	86.0%

3.3 Fair Value Estimation

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

2022, are as follows (Korean won in i		September	30, 2023	December 31, 2022		
	Carrying				Carrying	
Financial assets (current):		amount	Fair value		amount	Fair value
Cash and cash equivalents	₩	4,874,686	(*)	₩	5,937,967	(*)
Trade receivables	**	5,504,146	(*)	٧٧	4,771,846	(*)
Other receivables (excluding deposits from financial institutions)		621,013	(*)		462,188	(*)
Current derivative financial assets		41		41	9,167	9,167
Financial assets (non-current):						
Deposits from financial institutions		66,154	(*)		70,997	(*)
Trade receivables		132,910	(*)		120,698	(*)
Other receivables (excluding deposits from financial institutions)		564,027	(*)		48,061	(*)
Other non-current financial assets (me	easure	ed at fair value):	;			
Marketable financial assets		46,758	46	,758	50,626	50,626
Non-marketable financial assets		360,308	360	,308	259,127	259,127
Non-current derivative financial assets		4,842	4	,842	9,323	9,323
Non-current derivative financial assets (currency forward)		154,606	154	,606	89,475	89,475
Non-current derivative financial assets (currency swap)		736		736	-	-
Financial liabilities (current):						
Trade and other payables		7,249,882	(*)		6,723,796	(*)
Current borrowings (excluding lease liabilities)		2,740,214	(*)		2,826,757	(*)
Current derivative financial liabilities		3,960	3	,960	1,401	1,401
Current derivative financial liabilities (currency forward)		-		-	2,522	2,522
Financial guarantee contract liabilities		2,428	(*)		-	-
Financial liabilities (non-current):						
Non-current borrowings (excluding lease liabilities)		7,742,455	7,764	,370	5,157,273	5,083,456
Other non-current payables		100,617	(*)		36,606	(*)
Non-current derivative financial liabilities		926		926	742	742
Non-current derivative financial liabilities(currency swap)		7,704	7	,704	-	-

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

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

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

	September 30, 2023	December 31, 2022
Discount rate	4.10% - 5.67%	4.94% - 5.33%

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

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

		Septembe	er 30, 2023	
	Level 1	Level 2	Level 3	Total
Financial assets/liabilities measured at fair v	alue:			
Current derivative financial assets W	- ₩	41 ₩	- W	41
Non-current derivative financial assets	-	4	4,838	4,842
Non-current derivative financial assets (currency forward)	-	154,606	-	154,606
Non-current derivative financial assets (currency swap)	-	736	-	736
Other non-current financial assets (marketable financial assets)	46,758	-	-	46,758
Other non-current financial assets (non-marketable financial assets)	-	-	360,308	360,308
Current derivative financial liabilities	-	3,960	-	3,960
Non-current derivative financial liabilities	-	926	-	926
Non-current derivative financial liabilities (currency swap) Financial assets/liabilities not measured at fi	- air valuo:	7,704	-	7,704
	an value.			
Non-current borrowings (excluding lease liabilities)	-	7,764,370	-	7,764,370

_	December 31, 2022							
_	Level 1	Level 2	Level 3	Total				
Financial assets/liabilities measured at fair	value:							
Current derivative financial assets \	- ₩	9,167 ₩	- W	9,167				
Non-current derivative financial assets	-	4,764	4,559	9,323				
Non-current derivative financial assets (currency forward)	-	89,475	-	89,475				
Other non-current financial assets (marketable financial assets)	50,626	-	-	50,626				
Other non-current financial assets (non-marketable financial assets)	-	-	259,127	259,127				
Current derivative financial liabilities	-	1,401	-	1,401				
Current derivative financial liabilities (currency forward)	-	2,522	-	2,522				
Non-current derivative financial liabilities	-	742	-	742				
Financial assets/liabilities not measured at	fair value:							
Non-current borrowings (excluding lease liabilities)	-	5,083,456	-	5,083,456				

4. SIGNIFICANT ACCOUNTING ESTIMATES AND ASSUMPTIONS:

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

The significant estimates and assumptions made by management on the application of the Group's interim condensed consolidated financial statements are the same as those of the annual consolidated financial statements as of and for the year ended December 31, 2022.

The following are the management's estimates and assumptions for its 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

The Group's taxable income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain. If certain portion of the taxable income is not used for investments, increase in wages or dividends, the Group 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 Group's income tax is dependent on investments, increase in wages and dividends, there is an uncertainty in measuring the final tax effects.

(2) Provisions

The Group 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 Group's customers are estimated based on the number of vehicles subject to recall, estimated total repair cost and cost-sharing ratio.

(3) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at September 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 Group uses judgment in making these assumptions and selecting the inputs to the impairment calculation based on the Group'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 Group 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):

		September 30, 2023									
Financial assets		Financial assets at mortized cost	as	nancial sets at FVPL	Financial assets at FVOCI (*1)	Other financial assets (*2)		Total			
Cash and cash equivalents	₩	4,874,686	₩	- V	V -	₩ -	₩	4,874,686			
Trade receivables		4,916,791		_	587,355	-		5,504,146			
Non-current trade receivables		132,910		-	-	-		132,910			
Other receivables		621,013		-	-	-		621,013			
Other non-current receivables		630,181		_	-	-		630,181			
Other current financial assets		_		_	-	41		41			
Other non-current financial assets				299,211	268,035	4		567,250			
	₩	11,175,581	₩	299,211 ₹	₹ 855,390	₩ 45	₩	12,330,227			
					Sentember 30	2023					

			September 30,	2023		
	F	inancial liabilities	Financial liabilities at	Other fin	nancial	
Financial liabilities	2	nt amortized cost	FVPL	liabilit	ties (*3)	Total
Trade payables	₩	4,324,073	₩ -	₩	- ₩	4,324,073
Other payables		2,925,809	-		-	2,925,809
Other non-current payables		100,617	-		-	100,617
Current borrowings		2,740,214	-		48,500	2,788,714
Non-current borrowings		7,742,455	-		75,561	7,818,016
Other current financial liabilities		2,428	-		3,960	6,388
Other non-current financial liabilities		<u>-</u>	7,704		926	8,630
	₩	17,835,596	₩ 7,704	₩	128,947 ₩	17,972,247

^(*1) At initial recognition, the Group made an irrevocable election to designate investments in equity instruments as at FVOCI. These instruments are held for strategic purposes, not for short-term trading. In addition, the Group classified trade receivables under the 'hold to collect and sell' business model as financial assets at FVOCI.

^(*2) Other financial assets include derivative assets.

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

for the three-month and nine-month periods ended September 30, 2023 and 2022

	December 31, 2022									
Financial assets		ncial assets nortized cost	Fi	nancial assets at FVPL		nancial assets t FVOCI (*1)		r financial sets (*2)	Total	
Cash and cash equivalents	₩	5,937,967	₩	-	₩	-	₩	- W	5,937,967	
Trade receivables		4,534,502		-		237,344		-	4,771,846	
Non-current trade receivables		120,698		-		-		-	120,698	
Other receivables		462,188		-		-		-	462,188	
Other non-current receivables		119,058		-		-		-	119,058	
Other current financial assets		-		-		-		9,167	9,167	
Other non-current financial assets				158,202		245,585		4,764	408,551	
	₩	11,174,413	₩	158,202	₩	482,929	₩	13,931 ₩	11,829,475	

			December 31, 20	22	
Financial liabilities		Financial liabilities at amortized cost	Financial liabilities at FVPL	Other financial liabilities (*3)	Total
Trade payables	₩	3,841,766	₩ -	₩ - ₩	3,841,766
Other payables		2,882,030	-	-	2,882,030
Other non-current payables		36,606	-	-	36,606
Current borrowings		2,826,757	-	39,944	2,866,701
Non-current borrowings		5,157,273	-	85,279	5,242,552
Other current financial liabilities		-	2,522	1,401	3,923
Other non-current financial liabilities		<u>-</u>		742	742
	₩	14,744,432	₩ 2,522	₩ 127,366 ₩	14,874,320

^(*1) At initial recognition, the Group made an irrevocable election to designate investments in equity instruments as at FVOCI. These instruments are held for strategic purposes, not for short-term trading. In addition, the Group classified trade receivables under the 'hold to collect and sell' business model as financial assets at FVOCI.

^(*2) Other financial assets include derivative assets.

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

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

	September 30, 2023			September 30, 2022			
	Thr	ee months	Nine months	Three months	Nine months		
Interest income:							
Financial assets at amortized cost	₩	46,405	₩ 128,265	₩ 41,940) ₩ 113,172		
Interest expense:							
Financial liabilities at amortized cost		(102,534)	(255,471)	(33,561)	(74,661)		
Other financial liabilities		(609)	(1,806)	(447)	(1,613)		
Financial assets at amortized cost (*)		(203)	(5,427)	(1,416)	(1,621)		
Financial assets at FVOCI (*)		-	-	-	(31)		
Gains or losses on valuation:							
Financial assets at FVOCI (*)		(13,730)	(11,635)	2,930	10,598		
Derivative instruments		16,758	40,987	102,937	150,310		
Exchange differences:							
Financial assets at amortized cost		63,858	266,813	522,599	876,495		
Financial liabilities at amortized cost		(359,143)	(200,055)	(898,168)	(1,398,583)		
Financial assets at FVPL		1,833	4,266	4,934	6,398		

^(*) Fees paid to financial institutions for factoring.

6. CASH AND CASH EQUIVALENTS:

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

	Septe	ember 30, 2023	December 31, 2022
Bank deposits and cash on hand	₩	2,153,884 ₩	1,062,442
Cash equivalents		2,720,802	4,875,525
	₩	4,874,686 ₩	5,937,967

(2) As of September 30, 2023, cash and cash equivalents include \(\psi \) 3,467 million, which is subject to a restriction on the use and remittance (as of December 31, 2022, were \(\psi \)472 million).

7. TRADE AND OTHER RECEIVABLES:

(1) Trade and other receivables and their provisions for impairment as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

			September 30, 2		December 31, 2022				
		Gross amount	Provision for impairment		Carrying amount	Gross amount	Provision for impairment		Carrying amount
Trade receivables	₩	5,504,146	₩	- ₩	5,504,146	₩ 4,773,080	₩ (1,234)	₩	4,771,846
Non-current trade receivables		132,910		-	132,910	120,698	-		120,698
Other receivables		621,013		-	621,013	462,242	(54)	1	462,188
Other non-current receivables		630,181		<u>-</u>	630,181	119,058		<u> </u>	119,058
	₩	6,888,250	₩	- ₩	6,888,250	₩ 5,475,078	₩ (1,288)	₩ (5,473,790

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

	Septe	mber 30, 2023	December 31, 2022
Current:			
Non-trade receivables	₩	590,118 ₩	437,182
Accrued income		5,220	2,963
Guarantee deposits provided		25,675	22,043
		621,013	462,188
Non-current:			
Non-trade receivables		515,496	5,201
Deposits from financial institutions (*)		66,154	70,997
Loans		5,976	3,900
Guarantee deposits provided		42,555	38,960
		630,181	119,058
	₩	1,251,194 W	581,246

^(*) As of September 30, 2023, the deposits from financial institutions are subject to withdrawal restrictions, which include \$\psi 60,000\$ million for the Agreement on the Win-Win Growth Cooperation, \$\psi 5,000\$ million for the loans in relation to the employee stock ownership and PLN 4 million in relation to guarantee deposit for transfer of dangerous waste abroad.

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

		September 30	, 2023	December 31, 2022				
		Trade receivables	Other receivables	Trade receivables	Other receivables			
Receivables not past due	₩	5,345,273 ₩	1,223,556 ₩	4,732,757 ₩	536,530			
Past due, but not impaired:		291,783	27,638	159,787	44,716			
Up to 3 months		291,783	21,890	159,348	27,297			
Between 3–6 months		-	2,769	439	10,843			
More than 6 months		-	2,979	-	6,576			
Impaired receivables		<u> </u>	<u>-</u>	1,234	54			
	₩	5,637,056 ₩	1,251,194 ₩	4,893,778 ₩	581,300			

(4) Changes in the provision for impairment of trade and other receivables for the nine-month period ended September 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	₩	1,234 ₩	54 W	11 ₹	₹ 54					
Additions		-	-	481	-					
Business combination		-	-	724	-					
Write-off		(1,234)	(54)	-	-					
Exchange differences		<u>-</u>	<u>-</u>	18	<u>-</u>					
Ending	₩	_ ₩		1,234 \\	√ 54					

- (5) As of September 30, 2023, and December 31, 2022, the carrying amounts of trade and other receivables are approximations of their fair values.
- (6) The Group transferred trade receivables along with substantially all the risks and rewards of ownership. Therefore, the amount was derecognized on the date of transfer, and there are no trade receivables transferred as of September 30, 2023. (as of December 31, 2022, ₩196,954 million of trade receivables)

8. OTHER FINANCIAL ASSETS AND LIABILITIES:

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

	<u>Septen</u>	nber 30, 2023	December 31, 2022
Other financial assets:			
Financial assets at FVOCI	$\overline{\mathbb{W}}$	268,035 ₹	₹ 245,585
Cash flow hedge		45	13,931
Financial assets at FVPL		299,211	158,202
	$\overline{\mathbb{W}}$	567,291	V 417,718
Other financial liabilities:			
Financial guarantee contracts	₩	2,428 ₹	₩ -
Cash flow hedge		4,886	2,143
Financial liabilities at FVPL		7,704	2,522
	$\underline{\mathbb{W}}$	15,018	∀ 4,665

(2) Details of changes in equity securities included in other financial assets for the nine-month period ended September 30, 2023, and the year ended December 31, 2022, are as follows (Korean won in millions):

		2023	2022
Beginning	₩	245,585 ₩	120,767
Acquisitions/transfer		30,834	75,328
Valuation gain(loss) (before income tax deduction), other comprehensive income item		(11,635)	54,743
Valuation gain(loss) (before income tax deduction), profit or loss item		-	(5,818)
Others		3,251	565
Ending	₩	268,035 ₩	245,585

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

- Exercise date: From three years after the acceptance date (initial investment date, January 27, 2021) to the following three years.
- Exercise price: The amount contributed, less any dividends received from the date of contribution up to the exercise.
- Other term: The option cannot be exercised once Volta Energy Solutions S.a.r.l is listed.
- (3) No impairment losses on other financial assets were recognized for the nine-month periods ended September 30, 2023 and 2022.

9. <u>INVENTORIES:</u>

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

		Ser	December 31, 2022								
		Gross amount	Valuation allowance		Carrying amount		Gross amount		Valuation allowance		Carrying amount
Merchandise	₩	288,764 ₩	(22,085)	₩	266,679	₩	184,285	₩	$(12,040)^{-3}$	₩	172,245
Finished/semifinished products		3,919,334	(155,625)		3,763,709		4,393,089		(160,231)		4,232,858
Raw materials		1,828,662	(9,684)		1,818,978		1,630,837		(5,921)		1,624,916
Supplies		120,703	(5,200)		115,503		111,566		-		111,566
Materials in transit		979,551	<u> </u>		979,551		854,044		<u> </u>		854,044
	₩	7,137,014 ₩	(192,594)	₩	6,944,420		7,173,821	₩	(178,192)	₩	6,995,629

(2) The amount of inventories recognized as cost of sales for the three-month periods ended September 30, 2023 and 2022, was $$\mathbb{W}$16,823,043$$ million and $$\mathbb{W}$10,685,916$$ million, respectively.

10. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES:

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

		September 30, 2023										
		Beginning Acquisition			Share of loss of associates and is joint ventures		Share of other comprehensive income of associates and joint ventures				Ending	
VINFAST LITHIUM BATTERY PACK LLC (*1)	₩	2,428	₩	-	₩	(482)	₩	65	₩	(2,011)	₩	-
Jiangxi VL Battery Co., Ltd (*2).		13,323		-		(1,317)		543		(12,549)		-
PT. HLI Green Power		187,945		-		(22,085)		13,304		-		179,164
Sama Aluminium (*3)		-	4	6,575		62		-		-		46,637
Nexpo Co., Ltd (*4)	_			2,375		(138)						2,237
	₩	203,696	₩ 4	8,950	₩	(23,960)	₩	13,912	₩	(14,560)	₩	228,038

^(*1) During the current period, the Group disposed of its entire ownership interest in VINFAST LITHIUM BATTERY PACK LLC.

Although the ownership is less than 20%, the capacity to participate in the decision-making process through a shareholder agreement has been identified, leading to the determination of a significant influence.

(*4) During the current period, the Group acquired a 19% stake in the Nexpo Co., Ltd for KRW 2,374 million. Although the ownership interest in Nexpo Co., Ltd by the consolidated entity is less than 20%, the ability to participate in the decision-making process has been established through a shareholder agreement, leading to the determination of a significant influence.

^(*2) During the current year, the Group recognized the impairment due by deciding to transfer Jiangxi VL Battery Co., Ltd free of charge.

^(*3) During the current period, the Group newly acquired 10.2% of Sama Aluminum for ₩46,575 million.

			Decembe	er 31, 2022		
		Beginning	Share of profit (loss) of associates and joint ventures	Share of other comprehensive income of associates and joint ventures		Ending
VINFAST LITHIUM BATTERY PACK LLC	₩	3,769	₩ (1,611)	₩ 270	₩	2,428
Jiangxi VL Battery Co., Ltd.		20,310	(6,821)	(166)	,	13,323
PT. HLI Green Power		201,488	(28,210)	14,667		187,945
	₩	225,567	₩ (36,642)	₩ 14,771	₩	203,696

(2) As of September 30, 2023, and December 31, 2022, the processes of adjusting the financial information to the carrying amounts of shares in associates and joint ventures are as follows (Korean won in millions):

	September 30, 2023											
		Net assets	Group's percentage of ownership	va	Net asset lue for shares	opei	erseas rations eslation	Impairment /Disposal	Carrying amount			
VINFAST LITHIUM BATTERY PACK LLC	₩	5,739	35	₩	2,009	₩	2 ₩	(2,011)	₩ -			
Jiangxi VL Battery Co., Ltd.		12,800	34		4,352		8,197	(12,549)	-			
PT. HLI Green Power		457,060	50		228,530		(49,366)	-	179,164			
Sama Aluminium		256,904	10.2		26,204		20,433	-	46,637			
Nexpo Co., Ltd		11,772	19		2,237				2,237			
	₩	744,275		₩	263,332	₩	(20,734) ₩	(14,560)	₩ 228,038			

				Dece	ember 31, 2022		
		Net assets	Group's percentage of ownership	Net asset value for shares		Overseas operations translation	Carrying amount
VINFAST LITHIUM BATTERY PACK LLC	₩	7,409	35	₩	2,593 ₩	(165)	₩ 2,428
Jiangxi VL Battery Co., Ltd.		39,141	34		13,308	15	13,323
PT. HLI Green Power		440,625	50		220,313	(32,368)	187,945
	₩	487,175		₩	236,214 ₩	(32,518)	₩ 203,696

11. PROPERTY, PLANT AND EQUIPMENT:

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

		2023	2022
Beginning	₩	15,331,047 ₩	11,050,777
Business combination		-	7,251
Acquisition/replacement		9,585,140	10,786,190
Disposal/replacement		(2,657,455)	(4,644,768)
Exchange differences		711,235	(128,791)
Depreciation		(1,547,778)	(1,739,612)
Impairment		(10,713)	<u>-</u>
Ending	$\underline{\mathbb{W}}$	21,411,476 ₩	15,331,047

- (2) The current ending balance includes ₩9,619,187million of construction in progress, and some of it will subsequently be transferred to intangible assets (for the year ended December 31, 2022, was ₩4,557,301 million).
- (3) The Group capitalized \$\pmu 35,309\text{million}\$ of borrowing costs in relation to acquisition of property, plant and equipment (for the nine-month period ended September 30, 2022, were \$\pmu 5,732\text{ million}\$). The capitalization rate of borrowings used to determine the amount of borrowing costs eligible for capitalization is 4.07% (for the nine-month period ended September 30, 2022, was 1.16%).
- (4) Line items, including depreciation, in the interim condensed consolidated statements of profit or loss for the three-month and nine-month periods ended September 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		2022		
	Thr	ee months_	Nine months	Three months	Nine months	
Cost of sales	₩	498,761 ₩	1,422,599	₩ 419,514	₩ 1,157,036	
Selling and administrative expenses		44,536	125,179	34,990	97,807	
	₩	<u>543,297</u> ₩	1,547,778	₩ 454,504	₩ 1,254,843	

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

(5) Lease

1 Amounts recognized in the interim condensed consolidated statements of financial position

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

	Septe	mber 30, 2023	December 31, 2022
Right-of-use assets (*):			
Real estate	₩	124,624 ₩	132,480
Machinery		582	465
Vehicles		15,041	11,700
Tools		2,055	1,258
Equipment		818	457
	$\underline{\mathbb{W}}$	143,120 <u>W</u>	146,360

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

Additions to the right-of-use assets for the nine-month period ended September 30, 2023, are \$\pmu42,755\$ million (for the nine-month period ended September 30, 2022, were \$\pmu71,271\$ million).

	Ser	tember 30, 2023	December 31, 2022
Lease liabilities (*):			
Current	₩	48,500 ₩	39,944
Non-current		75,561	85,279
	₩	124,061 W	125,223

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

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

2 Amounts recognized in the interim condensed consolidated statements of profit or loss

Details of amounts recognized in the interim condensed consolidated statements of profit or loss in relation to lease for the nine-month periods ended September 30, 2023 and 2022, are as follows (Korean won in millions):

	2023			2022		
	Three	months	Nine months	Three months	Nine months	
Depreciation of right-of-use assets:						
Real estate	₩	11,784	₩ 34,395	₩ 12,851	₩ 26,845	
Machinery		63	271	95	243	
Vehicles		2,390	6,923	1,620	4,995	
Tools		243	680	92	200	
Equipment		79	189	77	220	
	₩	14,559	₩ 42,458	₩ 14,735	₩ 32,503	
Interest expense relating to lease liabilities (included in finance cost)	₩	609	₩ 1,806	₩ 447	₩ 1,613	
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	•	7,435	14,635	2,854	6,561	
Expense relating to leases of low-value assets that are not short-term leases (included in cost of goods sold and administrative expenses)		1,849	5,414	1,407	4,007	

Total cash outflow for leases for the nine-month period ended September 30, 2023, is \$\footnote{\psi}\$61,267 million (for the nine-month period ended September 30, 2022, was \$\footnote{\psi}\$39,653 million).

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

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

		2023	2022
Beginning	₩	642,090 ₩	455,360
Business combination		-	1,503
Acquisition/replacement		213,274	291,633
Disposal/replacement		(2,858)	(7,522)
Exchange differences		7,050	(1,664)
Amortization	-	(97,015)	(97,220)
Ending	$\overline{\mathbb{W}}$	762,541 ₩	642,090

(2) Line items, including amortization of intangibles, are as follows (Korean won in millions):

	2023			2022		
	Thre	ee months	Nine months	Three months	Nine months	
Cost of sales	₩	7,670	₩ 23,707	₩ 6,461	₩ 22,574	
Selling and administrative expenses		26,790	73,308	16,527	46,603	
	₩	34,460	₩ 97,015	₩ 22,988	₩ 69,177	

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

_	2021	2022	2023	2024	2025
Allocated emission rights	281	332(*)	300	297	297

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

② Based on the Korea Emission Trading Scheme, changes in greenhouse gas emission rights (included in other intangible assets) for the nine-month period ended September 30, 2023, and the year ended December 31, 2022, are as follows (ton in thousands and Korean won in millions):

	2023							
	2022	2	2023		202	4	202	25
	Ton	Amount	Ton	Amount	Ton	Amount	Ton	Amount
Beginning /allocated	332	₩ -	300 ₹	∀ -	297	₩ -	297	₩ -
Purchase /sale	23	179	-	-	-	-	-	-
Borrowing /carried over	3	-	-	-	-	-	-	-
Government submission	(358)	(179)						
Ending		₩ -	300 ₩	∀ -	297	₩ -	297	₩ -

					202	2				
-	20	21	2022		202	3	20	24	2	025
-	Ton	Amount	Ton A	Amount	Ton	Amount	Ton	Amount	Ton	Amount
Beginning /allocated	281	₩ -	300 ₩	-	300 3	₩ -	297	₩ -	297	′ ₩ -
Purchase /sale	(2)	(20)	-	-	-	-	-	-	-	-
Borrowing /carried over	22	388	3	-	-	-	-	-	-	-
Government submission	(301)	(368)			<u> </u>					<u> </u>
Ending		₩ -	303 ₩	<u> </u>	300	₩ -	297	₩ -	297	₩ -

3 Based on the European Union Emission Trading System, changes in greenhouse gas emission rights (included in other intangible assets) for the nine-month period ended September 30, 2023, and the year ended December 31, 2022, are as follows (ton in thousands and Korean won in millions):

	2023		2022		
	Ton	Amount	Ton	Amount	
Beginning	87 ₩	8,002	- W	-	
Increase	141	13,055	121	11,794	
Decrease	(104)	(11,068)	(34)	(3,792)	
Ending	<u>124</u> ₩	9,989	<u>87</u> ₩	8,002	

13. OTHER CURRENT AND NON-CURRENT ASSETS:

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

	Septe	ember 30, 2023	December 31, 2022
Current:			
Prepayments and prepaid expenses	₩	204,767 ₹	₹ 310,004
Prepaid value-added tax		217,907	112,973
Others		177,098	158,290
	₩	599,772 ₹	₹ 581,267
Non-current:			
Long-term prepayments and long-term prepaid expenses	₩	192,363 ₹	₹ 133,914
Net defined benefit assets		168,971	222,519
Others		73	69
	₩	361,407 ₹	₹ 356,502

14. **BORROWINGS**:

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

		September 30, 2023	December 31, 2022
Current:		-	
Short-term borrowings	₩	1,623,822 ₩	1,243,992
Current portion of long-term borrowings		1,116,392	907,687
Current portion of debentures		-	675,078
Current lease liabilities		48,500	39,944
	$\overline{\mathbb{W}}$	2,788,714 W	2,866,701
Non-current:			
Long-term borrowings	₩	3,873,511 ₩	3,697,317
Debentures		3,868,944	1,459,956
Non-current lease liabilities		75,561	85,279
		7,818,016	5,242,552
	₩	10,606,730 W	8,109,253

⁽²⁾ Details of borrowings as of September 30, 2023, and December 31, 2022, are as follows:

1) Short-term borrowings (Korean won in millions)

		Latest					
	Bank	maturity date	Interest rate (%)	Septembe	r 30, 2023	December	31, 2022
Bank loans	KB Kookmin	2024.06.20	2.40-6.62	₩	1,623,822	₩	1,243,992

2) Long-term borrowings (Korean won in millions)

			September 30	, 2023		
			Latest		Current	Non-current
	Bank	Interest rate (%)	maturity date	Amount	portion	portion
	Citibank	EUR: 3M EURIBOR + 0.62–0.70	2024.08.19	₩ 214,485 ₩	214,485	₩ -
	DBS	3M EURIBOR + 0.90	2026.03.10	142,990	-	142,990
	DOE	3.65–3.78	2031.12.15	1,271,400	-	1,271,400
	EBRD	6M EURIBOR + 0.62	2026.10.15	235,933	71,495	164,438
	EIB	3M EURIBOR + 0.47	2027.03.31	533,827	152,521	381,306
	ING	6M EURIBOR + 0.70	2023.11.23	100,093	100,093	-
	KDB	USD: 3M LIBOR + 0.91	2025.06.25	151,849	98,702	53,147
Borrowings in	KDB/Korea Exim/Nonghyup	EUR: 3M EURIBOR + 0.89–1.04	2027.04.26	1,447,152	-	1,447,152
foreign	KEB Hana	3M EURIBOR + 0.62	2024.02.15	285,979	285,979	-
currencies	MUFG	6M EURIBOR + 0.80	2024.01.18	71,495	71,495	-
	SMBC	EUR: 0.48	2027.02.04	50,046	14,299	35,747
	China: Agricultural Bank	LPR(1Y) - 0.70	2024.11.25	65,250	54,286	10,964
	China	LPR(1Y) - 0.60-1.00	2026.03.21	192,647	53,037	139,610
	China: Bank of Communications	LPR(1Y) - 0.75-1.00	2025.07.14	123,092	-	123,092
	China Construction Bank	LPR(1Y)-1.00	2026.05.24	103,665		103,665
				₩ 4,989,903 ₩	1,116,392	₩ 3,873,511

			December 31,	2022		
	Bank	Interest rate (%)	Latest maturity date	Amount	Current portion	Non-current portion
	Citibank	EUR: 3M EURIBOR + 0.62–0.70	2024.08.20	₩ 203,096 ₩	₹ 67,699	₩ 135,397
	DBS	6M EURIBOR + 0.60	2023.03.10	135,397	135,397	-
	DOE	3.65	2031.12.15	705,620	-	705,620
	EBRD	6M EURIBOR + 0.62	2026.10.15	257,255	67,698	189,557
	EIB	3M EURIBOR + 0.47	2027.03.31	649,908	144,424	505,484
	ING	6M EURIBOR + 0.70	2023.11.23	94,778	94,778	-
	KDB	USD: 3M LIBOR + 0.91–0.93	2025.06.25	296,581	214,165	82,416
	KDB/Korea Exim/Nonghyup	EUR: 3M EURIBOR + 0.89–1.04	2027.04.26	1,369,049	-	1,369,049
Borrowings in	KEB Hana	3M EURIBOR + 0.62	2024.02.15	270,795	-	270,795
foreign currencies	MUFG	6M EURIBOR + 0.80	2024.01.18	67,699	-	67,699
currencies	SMBC	EUR: 0.32-0.48	2027.02.04	192,941	148,937	44,004
	China: Agricultural Bank	LPR(1Y) - 0.70	2024.11.25	68,222	4,355	63,867
	China	LPR(1Y) - 0.60-1.00	2025.06.14	172,462	30,234	142,228
	China: Bank of Communications	LPR(1Y) - 0.75-1.00	2025.07.14	121,201		121,201
				₩ 4,605,004	∀ 907,687	₩ 3,697,317

3) Debentures (USD in thousands, EUR in thousands and Korean won in millions)

	September 30, 2023							
	Financial institution				Current portion	Non-current portion		
1st Debenture (non-guaranteed/public)	NH Investment & Securities Co., Ltd. and others	2.214	2026.03.13	₩ 200,000 ₹	₩	- ₩	200,000	
2-1st Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.097	2025.06.29	125,000		-	125,000	
2-2nd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.196	2026.06.29	370,000		-	370,000	
2-3rd Debenture (non-guaranteed/public)	KB Securities Co., Ltd. and others	4.298	2028.06.29	505,000		-	505,000	
USD foreign currency debenture (non-guaranteed)	Citibank and others	3.250	2024.10.15	672,400 (USD 500,000)		-	672,400	
USD foreign currency debenture (non-guaranteed)	Citibank and others	3.625	2029.04.15	672,400 (USD 500,000)		-	672,400	
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.625	2026.09.25	537,920 (USD 400,000)		-	537,920	
USD foreign currency debenture (non-guaranteed)	Citibank and others	5.750	2028.09.25	806,880 (USD 600,000)		-	806,880	
Less: discount on debentures	-	-	-	(20,656) ₩ 3,868,944	₩	<u>-</u> - ₩	(20,656) 3,868,944	

			December	r 31, 2022		
	Financial institution	Interest rate (%)	Latest maturity date	Amount	Current portion	Non-current portion
	NH					
1st Debenture	Investment &					
(non-guaranteed/public)	Securities	2.214	2026.03.13	₩ 200,000	₩ -	₩ 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)	_	055,050
USD foreign currency	Citibank	3.625	2029.04.15	633,650	_	633,650
debenture (non-guaranteed)	and others	3.023	2027.04.13	(USD 500,000)		055,050
EUR foreign currency	Citibank	0.500	2023.04.15	675,600	675,600	
debenture (non-guaranteed)	and others	0.500	2023.04.13	(EUR 500,000)	075,000	_
Less: discount on debentures	-	-	-	(7,866)	(522)	(7,344)
				₩ 2,135,034	₩ 675,078	₩ 1,459,956

4) Lease liabilities (Korean won in millions)

			Se	ptember 30, 2023		
	Interest rate (%)	Latest maturity date		Amount	Current portion	Non-current portion
Baeksan industry and others	0.67-5.01	2042.06.09	₩	124,061 ₩ 48,50		75,561
			D	ecember 31, 2022		
	Interest rate (%)	Latest maturity date		Amount	Current portion	Non-current portion
Baeksan industry and others	0.67–5.01	2042.06.09	₩	125,223 ₩	39,944 ₩	85,279

15. PROVISIONS:

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

	2023						
			Greenhouse				
		Warranty(*1)	gas emission(*2)	Other provisions (*3)	Total		
Beginning	₩	1,482,900 ₩	8,712	₩ 4,118	₩ 1,495,730		
Provision transfer		615,924	9,773	102,478	728,175		
Used		(761,404)	(11,248)	-	(772,652)		
Ending		1,337,420	7,237	106,596	1,451,253		
Less: current portion		(468,638)	(7,237)	(100,860)	(576,735)		
	₩	868,782 ₩		₩ 5,736	₩ 874,518		

	2022						
			Greenhouse				
		Warranty(*1)	gas emission(*2)	Other provisions (*3)	<u>Total</u>		
Beginning	₩	2,103,880 ₩	79	₩ 4,056 ₹	₹ 2,108,015		
Business combination		4,999	-	-	4,999		
Additions		630,174	12,493	1,049	643,716		
Used		(1,256,153)	(3,860)	(987)	(1,261,000)		
Ending		1,482,900	8,712	4,118	1,495,730		
Less: current portion		(968,237)	(8,712)	<u> </u>	(976,949)		
	₩	514,663 ₩	<u> </u>	₩ 4,118	₩ 518,781		

^(*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 replacement costs 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 Group estimates the expected future costs of emissions exceeding the Group's emission rights for the year and recognizes them as provisions. Estimated emissions are 338 thousand tons for the nine-month period ended September 30, 2023 (for the year ended December 31, 2022, were 417 thousand tons).

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

16. NET DEFINED BENEFIT LIABILITIES (ASSETS):

(1) Details of net defined benefit liabilities (assets) as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

		<u>September 30, 2023</u>	December 31, 2022
Present value of defined benefit obligations (*1)	₩	616,121 ₩	549,225
Fair value of plan assets		(784,921)	(771,244)
	$\overline{\mathbb{W}}$	(168,800)	(222,019)
Net defined benefit liabilities		171	499
Net defined benefit assets (*2)	-	(168,971)	(222,518)
	$\overline{\mathbb{W}}$	(168,800) ₩	(222,019)

- (*1) The present value of retirement benefit obligations is the amount after deducting contributions to the National Pension Plan of W35 million as of September 30, 2023 (as of December 31, 2022, was W42 million).
- (*2) The ₩168,971 million of plan assets exceeding the defined benefit obligations of the Parent Company is included in other non-current assets as of September 30, 2023 (as of December 31, 2022, was ₩222,518 million).
- (2) The amounts recognized in the interim condensed consolidated statements of income for the nine-month periods ended September 30, 2023 and 2022, are as follows (Korean won in millions):

		2023		2022		
	<u>Thr</u>	ee months	Nine months	Three months	Nine months	
Current service cost	₩	19,629 ₩	58,869	₩ 19,469	₩ 58,389	
Interest cost		(3,004)	(9,012)	(2)	(7)	
	$\underline{\mathbb{W}}$	16,625 ₩	49,857	₩ 19,467	₩ 58,382	

- (3) Retirement benefits recognized for defined contribution plan for the nine-month period ended September 30, 2023, amounted to \\ \psi 1,709\ \text{million}\) (the nine-month period ended September 30, 2022, were \\ \psi 1,377\ \text{million}\)).
- (4) Retirement benefits recognized in the interim condensed consolidated statements of income for the nine-month periods ended September 30, 2023 and 2022, are as follows (Korean won in millions):

		2023				2022			
	Thre	ee months		Nine months		Three months		Nine months	
Cost of sales	₩	903	₩	20,221	₩	9,521	₩	28,859	
Selling and administrative expenses	-	16,524		31,345		10,309		30,900	
	₩	17,427	₩	51,566	₩	19,830 4	₩	59,759	

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

		2023	2022
Beginning	₩	549,225 ₩	554,014
Transfer in		9,217	8,212
Transfer out		(766)	(2,991)
Current service cost		58,869	77,785
Interest expense		21,741	16,409
Remeasurements:			
Actuarial gain(loss) from change in financial assumption		-	(102,359)
Actuarial gain(loss) from change in demographic assumption		-	(3,256)
Actuarial gain(loss) due to the difference between the estimated and the actual		-	31,915
Others		-	792
Foreign currency conversion difference		(1)	(30)
Payments from plans		(22,164)	(31,266)
Ending	₩	616,121 ₩	549,225

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

		2023	2022
Beginning	₩	771,244 ₩	554,142
Interest income		30,753	16,419
Remeasurements:			
Return on plan assets (excluding amounts included in interest income)		3,367	(4,390)
Contribution:			
Employer contribution to plan assets		880	235,213
Payments from plans		(20,235)	(29,120)
Administrative costs		(1,088)	(1,020)
Ending	$\overline{\mathbb{W}}$	784,921 ₩	771,244

⁽⁷⁾ The actual return on plan assets for the nine-month period ended September 30, 2023, was \$\pm 34,120\$ million (the nine-month period ended September 30, 2022, was \$\pm 9,676\$ million).

(8) The significant actuarial assumptions as of September 30, 2023, and December 31, 2022, are as follows:

	September 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 September 30, 2023, is as follows (Korean won in millions):

	<u>Incr</u>	ease by 1.0%	Decrease by 1.0%
Discount rate:			
Increase (decrease) in defined benefit liabilities	₩	(68,820) ₩	82,206
Salary growth rate:			
Increase (decrease) in defined benefit liabilities		85,967	(72,758)

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

		September 30, 2023			December 31, 2022		
		Amount	Composition (%)		Amount	Composition (%)	
Insurance contracts with guaranteed vield	₩	784,921	100	₩	771,244	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 September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	Sep	tember 30, 2023	December 31, 2022	
Current:				
Advances from customers	₩	137,346 ₩	131,482	
Withholdings		35,374	52,642	
Unearned revenues		77,437	68,225	
Accrued expenses		280,876	448,085	
	$\underline{\mathbb{W}}$	531,033 ₩	700,434	
Non-current:				
Long-term accrued expenses	lacksquare	26,566 ₩	23,041	
Long-term unearned revenues		89,332	215,645	
Long-term advance received		222,535	114,544	
	$\underline{\mathbb{W}}$	338,433 ₩	353,230	

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

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

		0, 2023	
<u> </u>	Currency	The Parent Company	Certain subsidiaries
Limit of bank overdraft	KRW	8,700	-
	EUR	-	200
Limit of the letter of credit	USD	12	124
	CNY	-	1,909
Limit of discount of notes from export	USD	1,070	-
Limit of guaranteed payments in other foreign currency	USD	245	-
B2B purchase arrangements	KRW	125,000	-
General loan agreements	USD	-	4,919
	CNY	-	10,990
	EUR	-	2,808
	KRW	500,000	-
Derivatives	USD	779	656
	EUR	-	220
	KRW	60,000	30,000
Factoring arrangements	KRW	150,000	-
	CNY	-	610

- (4) As of September 30, 2023, the Group has entered into payment guarantee contracts of USD 126 million, EUR 1 million and KRW 7,755 million with financial institutions in relation to product warranty for certain installed products. Also, certain subsidiaries have entered into payment guarantee contracts of CNY 494 million with financial institutions in relation to customs clearance of imported raw materials.
- (5) As of September 30, 2023, the Group has entered into an arrangement with General Motors ("GM") regarding joint investment in Ultium Cells LLC, whereby each party can sell its shares to third parties in eight years after the inception of the contract. In addition, if one party defaults, the other party has the right to purchase shares from the other party. In this regard, the Group has completed the government's approval process for the use of core technologies in accordance with the Industrial Technology Protection Act.
- (6) The Group has been sued and related in 5 class actions by consumers in relation to price fixing of mobile batteries and GM Bolt EV, and actions are still in process as of September 30, 2023. The Group has also been sued in other 78 cases (amounted to KRW 2,525 million) and has filed 4 lawsuit cases (amounted to USD 90 million and KRW 162 million). The ultimate outcome of these pending cases cannot be determined at the reporting date.

- (7) The Group has entered into a license agreement with LG Corp. to use trademarks on the products that the Group manufactures and sells, and on the services the Group provides in relation to its business.
- (8) As of September 30, 2023, the Group has entered into a joint venture agreement with Honda and has committed to invest USD 1,802 million and has contributed USD 389 million as of the end of September 30, 2023. In addition, the Parent 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 September 30, 2023, the Group has entered into a joint venture agreement with Stellantis and has committed to invest USD 1,464 million and has contributed USD 459 million as of the end of September 30, 2023.
- (10) As of September 30, 2023, the Group has entered into a joint venture agreement with HMG Global LLC and has committed to invest USD 1,108 million.
- (11) Capital expenditure arrangements that have not incurred as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

Property, plant and equipment $\frac{\text{September 30, 2023}}{\forall \forall} \frac{\text{December 31, 2022}}{5,907,926}$ $\frac{}{\forall \forall}$ 4,938,173

(12) Investment commitments as of September 30, 2023, are as follows (Korean won in millions and USD in million):

		Contractual	Total	Remaining
	Currency	amount	investments	amount
BNZ (Beyond Net Zero) Fund	USD	75	24	51
Secondary Battery Growth Fund	KRW	6,700	5,360	1,340
KBE (Korea Battery ESG) Fund	KRW	75,000	38,326	36,674
BCM Global Battery Fund	KRW	30,000	8,751	21,249
Yonsei Technology Holdings IP Fund	KRW	3,000	1,020	1,980

(13) As of September 30, 2023, and December 31, 2022, the details of the payment guarantee for the borrowings by the Group are as follows (Korean won in millions):

			Loan a	mount (*1)	<u> </u>	mit (*2)
Guarantor	Guarantee beneficiary	Financial institution	September 30, 202	23 December 31, 2022	September 30, 2023	December 31, 2022
LG Energy Solution Ltd.	PT. HLI Green Power	ANZ and others	₩ 258,87	4 ₩ 88,71	1 ₩ 478,076	450,525

- (*1) The amounts represent the borrowed amount as of September 30, 2023, and December 31, 2022.
- (*2) The limits indicate the aggregate amount of payment guarantees.

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

19. SHARE CAPITAL:

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

_	Ordinary sha	res	
_	Number of shares	Share capital	Share premium
January 1, 2023	234,000,000 ₩	117,000 ₩	17,589,721
Changes	-	-	-
September 30, 2023	234,000,000	117,000	17,589,721

20. <u>RETAINED EARNINGS:</u>

Details of retained earnings as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

	Sept	ember 30, 2023	December 31, 2022
Unappropriated retained earnings	₩	2,417,775 ₩	1,154,518

21. OPERATING PROFITS:

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

		2023		2022		
	Thi	ree months 1	Nine months	Three months	Nine months	
Revenue	₩	8,223,542 ₩	25,744,146	₩ 7,648,157 ₩	∀ 17,061,066	
Cost of sales		6,881,973	21,774,291	6,253,208	14,069,185	
Gross profit		1,341,569	3,969,855	1,394,949	2,991,881	
Other operating income (*)		215,587	426,797	-	-	
Selling and administrative expenses:						
Wages and salaries	₩	228,977 ₩	643,332	₩ 251,683 ₩	∀ 582,764	
Retirement benefits		16,524	31,345	10,309	30,900	
Employee benefits		52,433	152,872	36,267	104,955	
Travel expenses		18,811	46,083	14,076	35,834	
Water and utilities		18,241	51,742	13,274	34,010	
Rental expenses		16,086	54,870	20,519	47,173	
Commission expenses		148,854	398,250	144,831	323,259	
Depreciation		46,040	129,664	36,340	102,036	
Advertising expenses		6,433	16,780	3,881	12,430	
Freight expenses		33,700	93,917	77,147	184,038	
Training expenses		8,203	24,029	6,627	15,097	
Amortization		26,790	73,308	16,527	46,603	
Sample expenses		1,493	4,653	660	2,428	
Development costs		46,325	135,604	35,104	93,167	
Transfers to provisions for service warranties		108,900	615,924	143,754	237,409	
Others		48,097	99,265	62,097	163,464	
		825,907	2,571,638	873,096	2,015,567	
Operating profits	₩	731,249 ₩	1,825,014	<u>₩ 521,853</u> <u>₩</u>	∀ 976,314	

^(*) Under Advanced Manufacturing Production Tax Credit of the U.S. Inflation Reduction Act, effective January 1, 2023, tax credit can be received for battery cells/modules produced and sold in the U.S., and the amount is revenue expected to be received by the Group for the nine-month period ended September 30, 2023.

⁽²⁾ Consolidated revenue of the Group consists of sales of battery-related products and service sales, such as research and development, of which most of the sales are recognized at a time in relation to the sales of goods.

22. CLASSIFICATION OF EXPENSES BY NATURE:

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

_	2023		2022		
_		Nine months	Three months	Nine months	
Changes in inventories of merchandise, finished goods, semifinished goods and work in process	₹ 139,240 ₹	₹ 374,715	₩ (908,909) ₩	(2,526,161)	
Raw materials and consumables used	4,812,035	15,555,668	5,585,897	12,355,712	
Purchase of merchandise	379,105	892,660	404,581	856,365	
Employee benefit expenses	675,522	1,960,310	686,790	1,705,386	
Advertising expenses	6,516	16,988	3,904	12,601	
Freight expenses	39,458	112,565	84,753	202,910	
Commission expenses	267,305	740,333	250,114	613,647	
Depreciation and amortization	579,261	1,649,278	478,842	1,328,249	
Rent expenses and usage fee	17,487	45,674	13,202	36,744	
Transfers to provisions for service warranties	108,900	615,924	143,754	237,409	
Other expenses	683,051	2,381,814	383,376	1,261,890	
$\overline{\ell}$	∀ 7,707,880 ∀	∀ 24,345,929	₩ 7,126,304 ₩	16,084,752	

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

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

	2023			2022		
	Thre	e months	Nine months	Three months	Nine months	
Wages and salaries	₩	559,341	₩ 1,618,879	₩ 594,681	₩ 1,439,447	
Retirement benefits: defined benefit plan		16,625	49,857	19,467	58,382	
Retirement benefits: defined contribution plan		802	1,709	363	1,377	
Others		98,754	289,865	72,279	206,180	
	₩	675,522	₩ 1,960,310	<u>₩</u> 686,790	₩ 1,705,386	

24. FINANCE INCOME AND COSTS:

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

		2023		2022		
	Thr	ee months	Nine months	Three months	Nine months	
Finance income:						
Interest income (*1)	₩	46,405 ₹	₹ 128,265	₩ 41,940 ₹	₩ 113,172	
Dividends income		_	99	-	-	
Exchange differences		(114,280)	406,283	60,860	187,457	
Gain on derivative instruments		26,163	65,867	118,651	183,430	
	$\underline{\mathbb{W}}$	(41,712)	₹ 600,514	<u>₩ 221,451</u>	₩ 484,059	
Finance costs:						
Interest expense (*2)	₩	88,113 ₹	₹ 221,968	₩ 32,140 ₹	₩ 70,542	
Exchange differences		107,676	451,392	383,651	653,430	
Loss on disposal of trade receivables		203	5,427	1,416	1,652	
Loss on derivative instruments		7,705	7,704		(1)	
	₩	203,697 ₹	∀ 686,491	₩ 417,207	₩ 725,623	

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

		2023	3	2022		
	Three	e months	Nine months	Three months	Nine months	
Deposits from financial institutions	₩	37,016	₩ 107,281	₩ 39,129	₩ 106,296	
Other loans and receivables		9,389	20,984	2,811	6,876	
	₩	46,405	₩ 128,265	₩ 41,940	₩ 113,172	

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

		202	3	2022		
	Thre	ee months	Nine months	Three months	Nine months	
Interest on financial institutions	₩	74,562	₩ 194,867	₩ 15,722	₩ 28,525	
Interest on financial lease liabilities		609	1,806	447	1,613	
Interest on debentures		25,193	53,281	16,254	43,621	
Other interest expenses		2,779	7,323	1,585	2,515	
Capitalized interest for qualifying assets		(15,030)	(35,309)	(1,868)	(5,732)	
	₩	88,113	₩ 221,968	₩ 32,140	₩ 70,542	

25. OTHER NON-OPERATING INCOME:

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

		202	3	2022		
	Thre	ee months	Nine months	Three months	Nine months	
Exchange differences	₩	227,795	₩ 933,840	₩ 569,506	₩ 977,469	
Gain on disposal of property, plant and equipment		1,715	2,451	18	606	
Others		5,529	23,014	4,845	49,485	
	₩	235,039	₩ 959,305	₩ 574,369	₩ 1,027,560	

26. OTHER NON-OPERATING EXPENSES:

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

		202	3	2022		
	Three	months	Nine months	Three months	Nine months	
Exchange differences	₩	299,290	₩ 817,706	₩ 617,351	₩ 1,027,187	
Losses on disposal of property, plant and equipment		16,265	58,159	27,208	44,507	
Losses on disposal of intangible asset		13	355	(97)	153	
Impairment and losses on disposal of investments in associates		-	14,560	-	-	
Others		795	27,687	5,940	35,077	
	₩	316,363	₩ 918,467	₩ 650,402	₩ 1,106,924	

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 PER SHARE:

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

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

2022

2022

		2023				2022		
	Tl	hree months		Nine months	Th	ree months		Nine months
Profits attributable to ordinary shares of the Parent Company	₩	327,741	₩	1,260,779	₩	185,747	₩	506,530
Weighted-average number of ordinary shares outstanding		234,000,000		234,000,000		234,000,000		231,384,615
Basic earnings per ordinary share (in Korean won)	₩	1,401	₩	5,388	₩	794	₩	2,189

The Group has not issued any potential ordinary shares. Therefore, basic earnings per share are identical to diluted earnings per share.

29. <u>RELATED-PARTY TRANSACTIONS:</u>

- (1) As of September 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 related parties and others that have sales and other transactions with the Group or have receivable and payable balances, other than associates and joint ventures (see Note 10) as of September 30, 2023, are as follows:

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

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

101 the three-month and mine-month periods ended september 30, 2023 and 2022

(3) Transactions with related parties for the nine-month periods ended September 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 intangibles	Interest expense	Others			
Parent:									
LG Chem Ltd.	₩	50,415	₩ 2,611,065	₩ - ₩	₩ 24 ₩	3,365			
Associates and joint ventures:									
PT. HLI Green Power		34,639	-	-	-	9,512			
VINFAST LITHIUM BATTERY PACK LLC		256	-	-	-	-			
(*1) Sama Aluminium		_	25,270	_	_	_			
Mintech Co., Ltd. (*2)		_	23,270	206	_	10			
Other related parties:				200		10			
LG Corp.		_	_	_	_	47,613			
LG Chem America, Inc.		-	_	_	_	2			
LG Chem (Taiwan), Ltd.		-	_	_	1	-			
LG Chem (China) Investment Co., Ltd.		-	_	-	_	185			
LG Chem Europe GmbH		-	-	-	-	34			
HAENGBOKNURI CO., LTD.		5	-	-	-	560			
LEYOU NEW ENERGY MATERIALS		_	1,477,804	_	_	_			
(WUXI) Co., Ltd.									
LG HY BCM Co., Ltd.		-	28	-	-	-			
Techwin, Inc		-	-	-	-	46			
LG Chem Poland Sp. z o.o		-	158,807	-	-	-			
LG Management Development Institute		11	-	-	-	23,336			
D&O Co., Ltd. and its subsidiaries		62	-	15,492	-	2,094			
LG CNS Co., Ltd. and its subsidiaries		29,607	136	396,335	-	112,625			
Others		-	-	-	-	3,165			
Others:									
LG Display Co., Ltd. and its subsidiaries		-	-	-	7	-			
LG Electronics Inc. and its subsidiaries		1,727,872	244,914	529,234	-	34,228			
Xi C&A and its subsidiaries		-	2,693	215,012	-	483			
S&I Corporation		-	7,969	35,803	-	38,556			
Others		35		474	23	2,141			
	₩	1,842,902	₩ 4,528,686	₩ 1,192,556	₩ 55 <u>₩</u>	277,955			

^(*1) During the current period, the sale was completed and was excluded from the related party.

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

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

				2022		
		Sales and others	Purchase of raw materials /merchandises	Purchase and of Acquisition of property, plant and equipment and intangible assets	Interest expense	Others
Parent:						
LG Chem Ltd.	₩	4,303	₩ 1,688,996	₩ 83,990	₩ 37	₩ 7,423
Associates and joint ventures: PT. HLI Green Power		34,471	-	-	-	-
VINFAST LITHIUM BATTERY PACK LLC		3,338	-	-	-	-
Other related parties:						
LG Corp.		-	-	1,273	-	34,025
LG Chem America, Inc.		-	-	-	-	5
LG Chem (Taiwan), Ltd.		-	-	-	4	-
LG Chem (China) Investment Co., Ltd.		-	-	-	-	181
LG Chem Europe GmbH		-	-	-	-	43
HAENGBOKNURI CO., LTD.		10	11	-	-	833
LEYOU NEW ENERGY MATERIALS (WUXI) Co., Ltd.		-	1,554,186	-	-	45
Techwin, Inc		-	-	100	-	27
LG Chem Hangzhou Advanced Materials Co., Ltd.		-	15,006	-	-	-
LG Chem Poland Sp. z o.o		-	128,284	-	-	8
LG Management Development Institute		-	-	-	-	14,701
D&O Co., Ltd. and its subsidiaries		60	-	11,497	-	1,321
LG CNS Co., Ltd. and its subsidiaries		14,771	78	221,736	-	76,660
Others		-	-	-	-	2,860
Others:						
LG Display Co., Ltd. and its subsidiaries		-	-	-	10	-
LG Electronics Inc., Ltd. and its subsidiaries		681,946	294,611	342,584	-	12,406
LX Holdings., Ltd. and its subsidiaries (*1)		262	58,703	79,157	9	146,434
Xi C&A (formerly S&I Construction) and its subsidiaries (*2)		-	-	188,209	-	170
S&I Corporation (*2)		-	2,859	12,560	-	23,330
Others		29		4	=	2,783
	₩	739,190	₩ 3,742,734	₩ 941,110	₩ 60	₩ 323,255

^(*1) It includes companies with LX Holdings., Ltd. as a holding company. In addition, they have been excluded from the large enterprise group after their separation from LG Group during the nine-month period ended September 30, 2022. The amount includes transactions before the separation.

^(*2) During the nine-month period ended September 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 September 30, 2023 and December 31, 2022 are as follows (Korean won in millions):

			Se	ptember 30, 2023			
	Receivables						
	Trade receivables	Other receivables	Total	Trade payables	Lease liabilities	Other payables	Total
Parent:				pooryonaton		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
LG Chem Ltd.	₩ 44,735	5 ₩ 26,089	₩ 70,824 ₩	745,057 ₩	₹ 1,237 ₩	3,508 ₩	749,802
Associates and joint ventures:							
PT. HLI Green Power		2,596	2,596	-	-	63,133	63,133
Sama Aluminium	-		-	5,366	-	-	5,366
Other related parties:							
LG Corp.	-		-	-	-	14,108	14,108
LG Chem (Taiwan), Ltd.	-	-	-	-	-	9	9
LG Chem (China) Investment Co., Ltd.	-	-	-	-	-	29	29
LG Chem Europe GmbH	-	-	-	-	-	20	20
LEYOU NEW ENERGY MATERIALS(WUXI) Co., Ltd.	-	-	-	247,748	-	5	247,753
LG HY BCM Co., Ltd.	-		-	-	-	28	28
LG Chem Poland Sp. z o.o.	-	-	-	25,798	-	-	25,798
LG Management Development Institute	-	-	-	-	-	871	871
D&O Co., Ltd. and its subsidiaries	-	-	-	-	-	7,056	7,056
LG CNS Co., Ltd. and its subsidiaries	5,037	-	5,037	247	-	201,450	201,697
Others	-	-	-	-	-	247	247
Others:							
LG Display Co., Ltd. and its subsidiaries	-	-	-	-	340	18	358
LG Electronics Inc. and its subsidiaries (*)	425,909	4,416	430,325	78,605	-	222,472	301,077
Xi C&A and its subsidiaries	-	-	-	-	-	79,392	79,392
S&I Corporation	-	-	-	-	-	40,114	40,114
Others		562	562	<u> </u>	1,175	2,855	4,030
	₩ 475,681	₩ 33,663	₩ 509,344 <u>₩</u>	1,102,821	∀ 2,752 ₩	635,315 ₩	1,740,888

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

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and

for the three-month and nine-month periods ended September 30, 2023 and 2022

	December 31, 2022								
		Receivables			Payables				
	Trade receivables	Other receivables	Total	Trade payables	Lease liabilities	Other payables	Total		
Parent:	receivables	receivables	Total	payables	nabilities	payables	Total		
LG Chem Ltd.	₩ -	₩ 23,163	₩ 23,163	₩ 571,271	₩ 1,650	₩ 2,904 ₩	₹ 575,825		
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 (Taiwan), Ltd.	-	-	-	-	106	41	147		
LG Chem (China) Investment Co., Ltd.	-	-	-	-	-	48	48		
LG Chem Europe GmbH	-	-	-	-	-	1	1		
HAENGBOKNURI CO., LTD.	-	1	1	-	-	120	120		
LEYOU NEW ENERGY	_	_	_	316,606	_	26	316,632		
MATERIALS(WUXI) Co., Ltd. TECWIN Co., Ltd.				,		54	54		
LG Chem Poland Sp. z o.o.	-	-	-	59,336	-	1	59,337		
•	-	-	-	39,330	-	544	544		
LG Management Development Institute	-	-	-	-	-				
D&O Co., Ltd. and its subsidiaries	-	-	-	-	-	3,957	3,957		
LG CNS Co., Ltd. and its subsidiaries	5,782	205	5,987	526	-	335,380	335,906		
Others	-	-	-	-	-	363	363		
Others:									
LG Display Co., Ltd. and its subsidiaries	-	-	-	-	454	17	471		
LG Electronics Inc. and its subsidiaries (*1)	275,784	26,322	302,106	77,580	-	142,674	220,254		
Xi C&A (formerly S&I Construction) and its subsidiaries (*2)	-	-	-	-	-	125,451	125,451		
S&I Corporation (*2)	-	-	-	-	-	48,679	48,679		
Others		561	561			3,930	3,930		
	₩ 281,566	₩ 51,609	₩ 333,175	₩ 1,025,319	₩ 2,210	₩ 771,010	<i>₹</i> 1,798,539		

^(*1) Provisions for 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 nine-month periods ended September 30, 2023 and 2022, are as follows (Korean won in millions):

	2023								
Parent:	Dividends received	Dividends paid	contr in	quity ibution cash others	Loan Loan	transactions Repayment		g transactio	
LG Chem Ltd.	₩	- ₩	- ₩		₩	- ₩	- ₩	- ₩	389
Associates and joint ventures:	VV	- ٧٧	- vv	-	vv	- vv	- ٧٧	- vv	309
Sama Aluminium		-	-	46,575		-	-	-	-
Nexpo Co., Ltd		-	-	2,375		-	-	-	-
Mintech Co., Ltd		-	-	7,020		-	-	-	-
Other related parties:									
LG Chem (Taiwan), Ltd.		-	-	-		-	-	-	108
Others:									
LG DISPLAY AMERICA, INC		-	-	-		-	-	-	130
LG Household & Health Care	-	<u>- </u>		<u> </u>		<u>-</u>	<u></u>		479
	₩	<u>-</u> W	<u>-</u> ₩	55,970	₩	<u>-</u> ₩	- W	- ₩	1,106

(*) The amounts represent lease liabilities that were recognized or repaid during the current period.

				2022			
	Dividends received	Dividends paid	Equity contribution in cash (capital reduction)		transaction Repayment		transaction (*) s Repayment
Parent:							
LG Chem Ltd.	₩	- ₩	- W	- ₩	- W	. ₩	- ₩ 619
Other related parties:							
LG Chem (Taiwan), Ltd.		-	-	-			- 140
LG Chem (China) Investment Co., Ltd.		-	-	-			
Others:							
LG DISPLAY AMERICA, INC		-	-	-			- 129
LX Pantos Poland sp. z.o.o (*2)		-	-	-		. 6	2 7
Pantos Logistics Mexico S.A. de C.V (*2)		-	-	-		2,38	4 320
LX PANTOS TURKEY LOJISTIK (*2)		_		<u>-</u>	<u>-</u>	33	741
	₩	- ₩	<u>-</u> ₩	- ₩	<u>-</u> ₩	₩ 2,78	3 ₩ 1,256

^(*1) The amounts represent lease liabilities that were recognized or repaid during the previous period.

^(*2) They have been excluded from the large enterprise group after their separation from LG Group during the nine-month period ended September 30, 2022. The amount includes transactions before the separation.

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

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

		2023	2022
Short-term employee benefits	₩	50,131 ₩	31,208
Retirement benefits		6,402	3,126
	$\overline{\Psi}$	56,533 ₩	34,334

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

- (7) There are no provisions recognized for receivables from related parties as of September 30, 2023. Therefore, no bad debt expense was recognized for the nine-month period ended September 30, 2023.
- (8) As of September 30, 2023, the payment guarantees provided by the Group for related parties are disclosed in Note 18.
- (9) During the nine-month period ended September 30, 2022, LG Energy Solution (Nanjing) Co., Ltd., a subsidiary of the Group, has paid ₩604,437 million to LG Chem (China) Investment Co., Ltd. due to capital reduction through share repurchase.

30. <u>CONSOLIDATED STATEMENTS OF CASH FLOWS:</u>

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

		2023	2022
Profit before income tax:	₩	1,755,915 ₩	630,036
Adjustments for:			
- Depreciation	₩	1,552,263 ₩	1,259,072
- Amortization		97,015	69,177
- Retirement benefits		49,857	58,382
- Financial income		(373,146)	(805,280)
- Financial costs		483,413	1,057,443
- Foreign currency conversion differences		61,272	2,557
- Loss on valuations of inventories		14,402	48,223
- Gain on disposal of property, plant and equipment and intangible assets		(2,642)	(606)
- Loss on disposal of property, plant and equipment and intangible assets		58,514	44,660
- Impairment and losses on disposal of investments in associates		14,560	-
- Contribution to provisions		726,557	291,517
- Other income		29,733	31,798
- Changes in inventories		340,068	(3,812,142)
- Changes in trade receivables		(361,893)	(1,813,815)
- Changes in other receivables		(600,196)	(1,222)
- Changes in other current assets		84,766	(235,300)
- Settlement of derivatives		(2,509)	-
- Changes in trade payables		172,501	2,621,685
- Changes in other payables		(413,551)	282,384
- Changes in other current liabilities		(492,129)	253,277
- Changes in provisions		(772,652)	(1,078,389)
- Changes in net defined benefit liabilities		6,604	3,684
- Other cash flows from operations		27,006	(82,497)
Cash generated from operations	₩	2,455,728 ₩	(1,175,356)

LG Energy Solution, Ltd. and its subsidiaries Notes to the interim condensed consolidated financial statements As of September 30, 2023, and December 31, 2022, and for the three-month and nine-month periods ended September 30, 2023 and 2022

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

				2023			
	Beginning	Cash flows from financing activities	Reclassification of current portion	Amortization	Lease liabilities	Exchange differences and others	Ending
Short-term borrowings	₩ 2,191,623	₩ 300,973	₩ 669,898	₩ -	₩ -	₩ (373,780) ₩	2,788,714
Long-term borrowings	3,782,596	107,252	(669,898)	-	34,098	695,024	3,949,072
Debentures	2,135,034	1,597,493		2,121		134,296	3,868,944
	₩ 8,109,253	₩ 2,005,718	₩ -	₩ 2,121	₩ 34,098	₩ 455,540 ₩	10,606,730
		Cash flows		2022			
		from financing	Reclassification of		Lease	Exchange differences	
	Beginning	activities	current portion	Amortization	liabilities	and others	Ending
Short-term borrowings	₩ 2,203,376	₩ 147,616	750,898	₩ -	₩ -	₩ (594,542) ₩	2,507,348
Long-term borrowings	2 520 000		(550,000)				
Long term borrowings	2,720,009	466,214	(750,898)	-	69,021	980,356	3,484,702
Debentures Debentures	2,720,009 2,045,808		(750,898)	2,575	,	980,356 281,063	3,484,702 2,329,446
c c	, ,	-	· -		,	The state of the s	

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

		2023	2022
Reclassification of construction in progress	₩	2,377,166 ₩	3,250,205
Reclassification of machinery in transit		9,038	33,516
Reclassification of debentures into current portion		-	703,386
Changes in other payables related to acquisitions of property, plant and equipment and intangible assets		248,648	(180,052)

LG Energy Solution, Ltd. and its subsidiaries
Notes to the interim condensed consolidated financial statements
As of September 30, 2023, and December 31, 2022, and
for the three-month and nine-month periods ended September 30, 2023 and 2022

31. <u>SEGMENT INFORMATION:</u>

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

Segment	Major products and services
LG Energy solution (*)	Mobile batteries, Automotive batteries, ESS batteries and others

- (*) The Group has determined the reporting segment as a single reporting segment based on the performance evaluation reported to the board of directors, the chief operating decision maker.
- (2) Segment information on revenue and profit for the nine-month periods ended September 30, 2023 and 2022, is as follows (Korean won in millions):

		202	23	2022		
	Th	ree months	Nine months	Three months	Nine months	
Total segment revenue	₩	8,223,542 ₹	<i>₹</i> 25,744,146	₩ 7,648,157	₩ 17,061,066	
Revenue from external customers (*1)		8,223,542	25,744,146	7,648,157	17,061,066	
Other operation income (*2)		215,587	426,797	-	-	
Operating profit of reportable segment (*3)		731,249	1,825,014	521,853	976,314	

- (*1) Revenue from external customers consists of sales of goods. Interest income and dividend income are included in finance income.
- (*2) Under the Advanced Manufacturing Production Tax Credit of the U.S. Inflation Reduction Act, effective January 1, 2023, the tax credit can be received for battery cells/modules produced and sold in the U.S., and the amount is revenue expected to be received by the Group for the nine-month period ended September 30, 2023.
- (*3) Management assesses the performance of the operating segments based on a measurement of operating profit of segment.
- (3) Segment information on assets and liabilities as of September 30, 2023, and December 31, 2022, is as follows (Korean won in millions):

	8	<u>September 30, 2023</u>	<u> </u>	December 31, 2022			
		Investments in		Investments in			
		associates and		associates and			
	Assets	joint ventures	Liabilities	Assets	joint ventures	Liabilities	
Reportable segment assets H	45,168,509	₩ 228,038 ₩	₹ 20,500,543	38,299,445	₩ 203,696	₩ 17,705,683	

for the three-month and nine-month periods ended September 30, 2023 and 2022

(4) Sales for the nine-month periods ended September 30, 2023 and 2022, and non-current assets as of September 30, 2023, and December 31, 2022, by geographical segments, are as follows (Korean won in millions):

				Sal	es							
		20	23			20	2022			Non-current assets (*1)		
	Three mo	<u>nths</u>	Nin	ne months	Thr	ree months	Nin	ne months	Se	ptember 30, 2023	Decer	nber 31, 2022
Korea (*2)	₩ 605	,683	₩	2,032,425	₩	648,146	₩	1,426,457	₩	3,877,522	₩	3,243,244
China	1,536	,958		4,864,980		1,928,546		4,361,977		4,341,445		3,786,273
Asia/Oceania	401	,796		1,102,590		323,931		973,104		1,174		923
America	3,246	,677		7,914,854		1,501,801		3,038,972		9,392,491		4,670,440
Europe	2,432	,428		9,829,297		3,245,733		7,260,542		4,773,252		4,485,299
Africa								14				
	₩ 8,223	,542	₩ 2	25,744,146	₩	7,648,157	₩	17,061,066	₩	22,385,884	₩	16,186,179

^(*1) Represents aggregate amount of property, plant and equipment; intangible assets; and investment properties.

32. ASSETS AND LIABILITIES RELATED TO CONTRACTS WITH CUSTOMERS:

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

	Septe	mber 30, 2023	December 31, 2022
Contract assets:			
Due from customers	₩	44,433	₩ 11,570
	₩	44,433	₩ 11,570
Contract liabilities:			
Advances from customers received as part of the Group's main business activities	₩	203,835	₩ 282,418
Expected customer incentives		1,465	2,497
Unearned revenue		82,942	112,240
Due to customers		2,846	14,315
	₩	291,088	₩ 411,470

(2) Revenue recognized in relation to contract liabilities

Revenues recognized from the carried-forward contract liabilities for the nine-month periods ended September 30, 2023 and 2022, are as follows (Korean won in millions):

	2023			2022				
	Thre	e months	N	line months	Three	months	Nine	months
Revenue recognized in the current period from the								
beginning contract liabilities:								
Revenues in relation to advances from customers received as part of the Group's main business activities	₩	104,072	₩	152,306	₩	28,522	₩	95,431
Unearned revenue		14,099		39,113		11,521		36,369
	₩	118,171	₩	191,419	₩	40,043	₩	131,800

^(*2) Domestic sales include exports made through local letters of credit.

⁽⁵⁾ For the nine-month period ended September 30, 2023, revenues from single external customers, representing more than 10% of the Group's revenue, are \$\pmu4,564,657\$ million, \$\pmu3,908,656\$ million, and \$\pmu3,465,921\$ million, respectively (the nine-month period ended September 30, 2022, were \$\pmu3,403,034\$ million, \$\pmu679,741\$ million, and \$\pmu1,508,966\$ million).

33. <u>INVESTMENT PROPERTIES:</u>

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

		September 30, 2023				December 31, 2022				
	Ac	quisition	Accumulated			Acquisition	Accumulated		_	
		cost	depreciation	<u>impairment</u>	Book value	cost	depreciation	impairment	Book value	
Buildings	₩	293,687	7 ₩ (80,340	(1,721) ₩ 211,626	₩ 290,43	7 ₩ (75,916	(1,724)	₩ 212,797	
Land		283		7)(35) 241	28:	3 (3)(35)	245	
	₩	293,970	<u>₩</u> (80,347	7) ₩ (1,756) ₩ 211,867	₩ 290,72	<u>0</u> ₩ (75,919	(1,759) ₩	₩ 213,042	

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

		2023		2022	
	Land		Building	Land	Building
Beginning	₩	245 ₩	212,797 ₩	161 ₩	224,164
Acquisition/replacement		-	4,339	122	7,160
Disposal/replacement		-	(1,029)	-	(11,320)
Depreciation		(4)	(4,481)	(3)	(5,878)
Impairment			<u>-</u>	(35)	(1,329)
Ending	₩	241 ₩	211,626 ₩	245 ₩	212,797

(3) The fair value of investment properties is measured either by independent professional appraisers with certified qualification or measured based on official appraised value of land and available information from recent transactions of similar properties, and it is classified as 'Level 3' of the fair value hierarchy. The fair value of investment properties as of September 30, 2023, is \(\pma^2245,247\) million (as of December 31, 2022, was \(\pma^2245,471\) million). Rental income from investment properties under an operating lease for the nine-month period ended September 30, 2023, is \(\pma^6,533\) million, and operating expenses incurred for investment properties that generated rental income (including maintenance and repair expenses) for the nine-month period ended September 30, 2023, are \(\pma^4,485\) 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 Group may obtain bank guarantees for the term of the lease.

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

The future minimum lease payments expected to be received in relation to the above operating lease agreement for investment properties as of September 30, 2023, and December 31, 2022, are as follows (Korean won in millions):

Contombou 20 2022

December 21 2022

	<u>Septem</u>	ber 50, 2025 Decemb	<u> </u>
Less than one year	₩	2,268 ₩	11,858
Between one year and two years		150	160
Between two years and five years		336	478
	$\overline{\mathbb{W}}$	2,754 ₩	12,496

34. **BUSINESS COMBINATION:**

- (1) During the previous period, the Group acquired 100% shares of LG Energy Solution Vertech Inc., a US power storage battery installation service provider. As a result of the business combination, the Group expects to increase sales through expanded vertical integration by strengthening contact points with customers of power storage batteries.
- 1) The consideration transferred to LG Energy Solution Vertech Inc., and the values of assets and liabilities acquired at the acquisition date are as follows (Korean won in millions).
- 2) The bargain purchase difference of \W30,673 million arising from the acquisition is recognized as other non-operating income item in the condensed consolidated statements of profit or loss.

	A	mount
Consideration		
Cash and cash equivalents	₩	16,168
	W	16,168
Accumulated amount of acquired assets and assumed liabilities		
Cash and cash equivalents	₩	7,748
Trade receivables and other receivables (*)		56,333
Inventories		5,477
Property, plant and equipment		7,251
Intangible assets		1,503
Other assets		12,295
Trade payables and other payables		(25,859)
Other liabilities		(15,543)
Deferred tax liabilities		(2,364)
Fair value of acquired net assets		46,841
Goodwill (gain on bargain purchase)		(30,673)
	₩	16,168

^(*) The fair value of trade receivables and other receivables is equal to the contractual amount.