LG Chem, Ltd. and Subsidiaries

Consolidated Interim Financial Statements March 31, 2022 and 2021

LG Chem, Ltd. and Subsidiaries Index March 31, 2022 and 2021

Page(s)

Report on Review of Interim Financial Statements	1 - 2
Consolidated Interim Financial Statements	
Consolidated Interim Statements of Financial Position	3 - 4
Consolidated Interim Statements of Profit or Loss	5
Consolidated Interim Statements of Comprehensive Income	6
Consolidated Interim Statements of Changes in Equity	7
Consolidated Interim Statements of Cash Flows	8
Notes to the Consolidated Interim Financial Statements	. 9 - 80



Report on Review of Interim Financial Statements

(English Translation of a Report Originally Issued in Korean)

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

Reviewed Financial Statements

We have reviewed the accompanying consolidated interim financial statements of LG Chem, Ltd. and its subsidiaries (collectively referred to as the "Group"). These financial statements consist of the consolidated interim statement of financial position of the Group as at March 31, 2022, and the related consolidated interim statements of profit or loss, comprehensive income, changes in equity and cash flows for the three-month periods ended March 31, 2022 and 2021, and notes to the consolidated interim financial statements, including a summary of significant accounting policies.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to issue a report on these consolidated interim financial statements based on our review.

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

Conclusion

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

Emphasis of Matter

Without modifying our conclusion, we draw attention to Note 4 to the consolidated interim financial statements. Note 4 to the interim consolidated financial statements describes uncertainty relating to the impact of Coronavirus disease 2019 (COVID-19) on the Group's productivity and ability to satisfy customer's orders.

Other Matters

We have audited the consolidated statement of financial position of the Group as at December 31, 2021, and the related consolidated statements of profit or loss, comprehensive income, changes in equity and cash flows for the year then ended, in accordance with Korean Standards on Auditing. We expressed an unqualified opinion on those financial statements, not presented herein, in our audit report dated March 8, 2022. The consolidated statement of financial position as at December 31, 2021, presented herein for comparative purposes, is consistent, in all material respects, with the above audited statement of financial position as at December 31, 2021.

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

May 16, 2022 Seoul, Korea

This report is effective as of May 16, 2022, the review report date. Certain subsequent events or circumstances, which may occur between the review report date and the time of reading this report, could have a material impact on the accompanying consolidated interim financial statements and notes thereto. Accordingly, the readers of the review report should understand that there is a possibility that the above review report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

LG Chem, Ltd. and Subsidiaries Consolidated Interim Statements of Financial Position March 31, 2022 and December 31, 2021

(in millions of Korean won)	Notes	March 31, 2022 (Unaudited)	December 31, 2021
Assets			
Current assets			
Cash and cash equivalents	3, 5, 6	9,052,010	3,760,834
Trade receivables	3, 5, 7, 31	7,018,529	6,386,979
Other receivables	3, 5, 7, 31	6,313,252	1,048,549
Other current financial assets	3, 5, 8	68,015	23,289
Prepaid income taxes		166,280	156,299
Other current assets	13	829,323	749,032
Inventories	9	9,311,896	8,283,474
Assets held for sale	34	5,367	5,364
Total current assets		32,764,672	20,413,820
Non-current assets			
Trade receivables	3, 5, 7	75,103	67,055
Other receivables	3, 5, 7	597,834	713,166
Other non-current financial assets	3, 5, 8	592,634	506,022
Investments in associates and joint ventures	1, 10, 33	530,920	535,310
Deferred tax assets	28	1,988,794	1,905,149
Property, plant and equipment	11	25,232,426	24,378,259
Intangible assets	12	2,491,565	2,444,303
Investment properties	36	56,511	56,297
Other non-current assets	13	86,996	115,921
Total non-current assets		31,652,783	30,721,482
Total assets		64,417,455	51,135,302
Liabilities			
Current liabilities			
Trade payables	3, 5, 31	4,690,565	3,742,132
Other payables	3, 5, 31	3,203,031	3,991,784
Borrowings	3, 5, 14	4,370,159	3,477,080
Provisions	15	1,430,404	1,572,755
Income tax payables	28	1,328,051	957,676
Other current liabilities	3, 5, 17	1,943,638	1,320,669
Total current liabilities		16,965,848	15,062,096
Non-current liabilities			
Other payables	3, 5	16,103	15,623
Borrowings	3, 5, 14	10,323,993	11,288,654
Other non-current financial liabilities	3, 5, 8	-	126
Provisions	15	559,226	636,953
Net defined benefit liabilities	13, 16	39,883	18,122
Deferred tax liabilities	28	846,190	713,862
Other non-current liabilities	17	175,112	189,878
Total non-current liabilities		11,960,507	12,863,218
Total liabilities		28,926,355	27,925,314

LG Chem, Ltd. and Subsidiaries Consolidated Interim Statements of Financial Position March 31, 2022 and December 31, 2021

(in millions of Korean won)	Notes	March 31, 2022 (Unaudited)	December 31, 2021
Equity			
Share capital	1, 19	391,406	391,406
Capital surplus		11,407,631	2,696,385
Other components of equity	21	(37,310)	(37,310)
Accumulated other comprehensive income		717,954	551,354
Retained earnings	20	17,842,157	18,091,949
Equity attributable to owners of the Parent Company		30,321,838	21,693,784
Non-controlling interests		5,169,262	1,516,204
Total equity		35,491,100	23,209,988
Total liabilities and equity		64,417,455	51,135,302

LG Chem, Ltd. and Subsidiaries Consolidated Interim Statements of Profit or Loss Three-Month Periods Ended March 31, 2022 and 2021

(in millions of Korean won, except per share amounts)	Notes	Period Ende	Period Ended March 31		
		2022	2021		
		(Unaudited)	(Unaudited)		
Revenue	31, 33, 35	11,608,071	9,644,693		
Cost of sales	23, 31	(9,110,372)	(7,186,507)		
Gross profit		2,497,699	2,458,186		
Selling and administrative expenses	22, 23, 31	(1,473,439)	(1,048,702)		
Operating profit	33	1,024,260	1,409,484		
Finance income	5, 25	196,258	158,456		
Finance costs	5, 25	(238,905)	(195,082)		
Share of net profit of associates and joint ventures					
accounted for using the equity method	10	(7,228)	1,934		
Other non-operating income	5, 26	286,845	315,869		
Other non-operating expenses	5, 27	(237,668)	(262,689)		
Profit before income tax	32	1,023,562	1,427,972		
Income tax expense	28	(253,652)	(384,034)		
Profit from continuing operations		769,910	1,043,938		
Profit (loss) from discontinued operations	34	(688)	327,034		
Profit for the period		769,222	1,370,972		
Profit is attributable to:					
Owners of the Parent Company					
Profit from continuing operations		688,866	979,668		
Profit (loss) from discontinued operations		(688)	327,034		
		688,178	1,306,702		
Non-controlling interests Profit from continuing operations		81,044	64,270		
Trong from containing operations		81,044	64,270		
Earnings per share for profit					
attributable to the owners					
of the Parent Company (in won)	29				
Basic and diluted earnings per ordinary share		8,832	16,776		
Basic and diluted earnings per preferred share		8,845	16,788		
3 1 1		,	,		
Earnings per share for profit from continuing operations					
attributable to the owners					
of the Parent Company (in won)	29				
Basic and diluted earnings per ordinary share		8,841	12,577		
Basic and diluted earnings per preferred share		8,853	12,589		

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

LG Chem, Ltd. and Subsidiaries Consolidated Interim Statements of Comprehensive Income Three-Month Periods Ended March 31, 2022 and 2021

(in millions of Korean won)	Notes	Period Ended March 31			
		2022	2021		
		(Unaudited)	(Unaudited)		
Profit for the period		769,222	1,370,972		
Other comprehensive income					
Items that will not be reclassified to profit or loss					
Remeasurements of net defined benefit liabilities	16	(2,867)	9,801		
Gain (loss) on valuation of financial assets at fair value through other comprehensive income		(312)	2,297		
Shares of remeasurements of					
net defined benefit liabilities of associates		-	(234)		
Income tax relating to these items		763	(3,332)		
Items that may be subsequently reclassified to profit or loss					
Exchange differences on translation of foreign operations		181,551	181,011		
Cash flow hedge		59,071	(4,257)		
Shares of other comprehensive income					
of accociates and joint ventures		8,145	3,574		
Income tax relating to these items		(40,896)	18,130		
Other comprehensive income for the period, net of tax		205,455	206,990		
Total comprehensive income for the period		974,677	1,577,962		
Total comprehensive income for the period is attributable to:					
Owners of the Parent Company		852,729	1,492,596		
Non-controlling interest		121,948	85,366		

(in millions of Korean won)		Attributable to owners of the Parent Company							
(III TIMMOTIC OF FRONCE FOR THOSE			7	<u> </u>	Accumulated			_	
				Other	other			Non-	
		Share	Capital	components	comprehensive	Retained		controlling	Total
	Notes	capital	surplus	of equity	income (loss)	earnings	Total	interests	equity
Balance at January 1, 2021		391,406	2,692,485	(54.998)	(165,076)	15,175,304	18.039.121	751,319	18,790,440
Comprehensive income				(= :,===/	(111)	,,			,
Profit for the period		_	_	_	_	1.306.702	1.306.702	64,270	1.370.972
Remeasurements of net defined									
benefit liabilities	16	-	-	_	_	7,101	7,101	-	7,101
Exchange differences on translation									
of foreign operations		-	-	_	176,875	-	176,875	21,096	197,971
Gain on valuation of financial assets									
at fair value through other comprehensive income		_	_	_	1.665	_	1.665	_	1.665
Cash flow hedge		-	-	_	(3,087)	-	(3,087)	-	(3,087)
Others		_	_	_	3,574	(234)	3,340	_	3,340
Total comprehensive income for the period					179.027	1.313.569	1,492,596	85,366	1.577.962
·	•								
Transactions with owners:									
Disposal of treasury shares		-	28,344	14,302	-	-	42,646	-	42,646
Dividends	30	-			-	(778,383)	(778,383)	(91,334)	(869,717)
Increase in paid-in capital of a subsidiary		_	_	_	_	-	-	110,339	110,339
Others		_	_	_	_	(2.006)	(2.006)	(1.588)	(3.594)
Total transactions with owners	•		28,344	14,302		(780,389)	(737,743)	17,417	(720,326)
Balance at March 31, 2021 (Unaudited)	•	391,406	2,720,829	(40,696)	13,951	15,708,484	18,793,974	854,102	19,648,076
				(
Balance at January 1, 2022		391,406	2,696,385	(37,310)	551,354	18,091,949	21,693,784	1,516,204	23,209,988
Comprehensive income									
Profit for the period		-	-	-	-	688,178	688,178	81,044	769,222
Remeasurements of net defined						(= = .=)			(= ===)
benefit liabilities	16	-	-	-	-	(2,049)	(2,049)	(40)	(2,089)
Exchange differences on translation									
of foreign operations		-	-	-	111,724	-	111,724	29,330	141,054
Gain (loss) on valuation of financial assets					(000)		(000)	050	(000)
at fair value through other comprehensive income		-	-	-	(686)	-	(686)	358	(328)
Cash flow hedge Others		-	-	-	48,317	-	48,317	10,356	58,673
					7,245		7,245	900	8,145
Total comprehensive income for the period					166,600	686,129	852,729	121,948	974,677
Transactions with owners:									
Dividends	30					(02E 275)	(02E 27E)		(02E 275)
Changes in ownership percentage of subsidiaries	30	-	- 8,711,246	-	-	(935,275)	(935,275)	2 207 244	(935,275)
		-	0,711,246	-	-	-	8,711,246	3,297,211	12,008,457 234.037
Increase in paid-in capital of a subsidiary Others		-	-	-	-	(646)		234,037 (138)	234,037 (784)
Total transactions with owners	•		8,711,246			(935,921)	7,775,325	3,531,110	11,306,435
Balance at March 31, 2022 (Unaudited)		391,406	11,407,631	(37,310)	717,954	17,842,157	30,321,838	5,169,262	35,491,100
Dalance at March 31, 2022 (Unaudited)	•	391,400	11,407,031	(31,310)	111,954	17,042,137	30,321,030	3,108,202	55,481,100

LG Chem, Ltd. and Subsidiaries Consolidated Inteirm Statements of Cash Flows Three-Month Periods Ended March 31, 2022 and 2021

(in millions of Korean won)	Notes	Period Ended March 31	
		2022	2021
		(Unaudited)	(Unaudited)
Cash flows from operating activities			
Cash generated from operations	32	665,327	1,313,259
Interest received		20,678	8,773
Interest paid		(61,065)	(39,807)
Dividends received		5,000	-
Income taxes paid		(473,804)	(216,021)
Net cash inflow from operating activities		156,136	1,066,204
Cash flows from investing activities			
Decrease in other receivables		18,651	412,255
Decrease in other non-current receivables		7,704	29,334
Proceeds from disposal of financial instruments		-	987
Proceeds from disposal of property, plant and equipment		2,915	81,704
Proceeds from disposal of intangible assets		15,343	125
Government grants received		33,069	163,934
Proceeds from disposal of assets held for sale		1,402	-
Proceeds from transfer of business		-	584,087
Increase in other receivables		(5,050,466)	(18,956)
Increase in other non-current receivables		(26,824)	(20,853)
Acquisition of financial assets		(29,502)	(63,767)
Acquisition of property, plant and equipment		(2,181,831)	(1,178,639)
Acquisition of intangible assets		(47,882)	(28,521)
Cash outflows from transfer of business		(6,565)	-
Net cash outflow from investing activities		(7,263,986)	(38,310)
Cash flows from financing activities			
Proceeds from borrowings		798,254	1,581,471
Capital contribution from non-controlling interests		12,854,293	110,339
Repayments of borrowings and others		(1,316,009)	(1,003,585)
Net cash inflow from financing activities		12,336,538	688,225
Net increase in cash and cash equivalents		5,228,688	1,716,119
Cash and cash equivalents at the beginning of the period		3,760,834	3,274,250
Effects of exchange rate changes on cash and cash equivaler	its	62,488	68,066
Cash and cash equivalents at the end of the period in			
the consolidated interim statement of financial position		9,052,010	5,058,435

1. General Information

General information about LG Chem, Ltd. (the Parent Company) and its 58 subsidiaries (collectively referred to as "the Group") is as follows:

1.1 The Parent Company

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

As at March 31, 2022, the Group has its manufacturing facilities in Yeosu, Daesan, Ochang, Cheongju, Ulsan, Naju, Iksan, Paju, Osong, Onsan, Gimcheon and overseas sites.

The Parent Company is authorized to issue 292 million shares of ordinary shares with par value of \$5,000 per share. As at March 31, 2022, the Parent Company has issued and outstanding 70,592,343 ordinary shares (\$352,962 million) and 7,688,800 preferred shares (\$38,444 million). The largest shareholder of the Parent Company is LG Corp., which owns 33.34% of the Parent Company's ordinary shares. Preferred shareholders have no voting rights but are entitled to receive dividends at a rate 1% more than those paid to ordinary shareholders.

1.2 Business Overview

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

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

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

The Advanced material business manufactures and supplies various kinds of IT materials such as automotive material, OLED film, semiconductor materials, OLED materials, battery materials and others including RO membranes, which will be the next growth engine for future.

The Life Sciences business manufactures and supplies pharmaceutical products, such as human growth hormone 'Eutropin', diabetes drug 'Zemiglo', bovine somatotropin 'Boostin', hyaluronic acid filler 'YVOIRE' and others, as well as fine chemical products, such as herbicide 'PYANCHOR' for rice farming and others.

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

March 31 2022

1.3 Consolidated Subsidiaries, Associates and Joint Ventures

	-		Marcl	n 31, 2022
	Percentage of ownership (%)	Business location	Closing month	Business activities
Consolidated subsidiaries				
LG Energy Solution, Ltd. ¹	82	Korea	December	Battery manufacturing and sales
Ningbo LG Yongxing Chemical Co., Ltd. ²	75	China	December	ABS/SBL manufacturing and sales
Ningbo Zhenhai LG Yongxing Trade Co., Ltd. ²	75	China	December	ABS sales
LG Chem America, Inc	100	USA	December	Sales and trading
LG Chemical India Pvt. Ltd. ^{3, 5}	100	India	December	Synthetic resin manufacturing and sales
LG Polymers India Pvt. Ltd. ^{3, 6} LG Chemical (Guangzhou) Engineering Plastics Co.,	100	India	December	PS manufacturing and sales
Ltd.	100	China	December	EP manufacturing and sales
LG Chem (Taiwan), Ltd.	100	Taiwan	December	Polarizer manufacturing and sales
Tianjin LG Bohai Chemical Co., Ltd.	75	China	December	PVC, VCM, EDC manufacturing and sales
Tianjin LG BOTIAN Chemical Co., Ltd.	58	China	December	SBS manufacturing and sales
LG Chem (China) Investment Co., Ltd.4,7	100	China	December	China holding company
LG Chem (Tianjin) Engineering Plastics Co., Ltd.	100	China	December	EP manufacturing and sales
LG Chem Europe GmbH	100	Germany	December	Sales and trading
LG Chem Poland Sp. z o.o.	100	Poland	December	EP manufacturing and sales
LGC Petrochemical India Private Ltd.	100	India	December	Synthetic resin manufacturing and sales
HAENGBOKNURI CO., LTD.	100	Korea	December	Facility management and general cleaning
LG CHEM TK Kimya SANAYI VE TIC. Ltd. STI.	100	Turkey	December	Sales and trading
LG Chem Japan Co., Ltd.	100	Japan	December	Sales and trading
LG NanoH2O, LLC	100	USA	December	Water processing membrane sales
LG Chem (Chongqing) Engineering Plastics Co., Ltd.	100	China	December	EP manufacturing and sales
LG Chem(HUIZHOU) Petrochemical Co., Ltd.	70	China	December	ABS manufacturing and sales
LG Chem Life Sciences India Pvt. Ltd.	100	India	December	Pharmaceutical products sales
LG Jiansheng Chem Life Sciences (Beijing) Co., Ltd.	60	China	December	Pharmaceutical products sales
LG Chem Life Sciences (Thailand) Ltd.	100	Thailand	December	Pharmaceutical products sales
LG Chem Hai Phong Vietnam Co., Ltd.	100	Vietnam	December	Polarizer manufacturing and sales
LG Chem Mexico S.A. de C.V.	100	Mexico	December	Sales and trading
LG Chem Hai Phong engineering Plastics LLC. LG Chem (Guangzhou) Information & Electronics	100	Vietnam	December	EP manufacturing and sales
Materials Co., Ltd. LEYOU NEW ENERGY MATERIALS(WUXI) Co.,	100	China	December	Polarizer manufacturing and sales
LTD.	51	China	December	Battery materials manufacturing and sales
LG Chem Fund I LLC ⁸	100	USA	December	Investments in venture companies
Uniseal,Inc.	100	USA	December	Adhesive manufacturing and sales
LG Chem Life Science Innovation Center, Inc.	100	USA	December	Pharmaceutical products research
LG Chem Asia Pte. Ltd.	100	Singapore	December	Asia BSC
LG Chem China Tech Center	100	China	December	Research on petrochemicals
Shanjin Optoelectronics (Taiwan) Co., Ltd.	100	Taiwan	December	Others

LG PETRONAS CHEMICALS Malaysia Sdn.Bhd.	51	Malaysia	December	NBL manufacturing and sales
LG Chem Hangzhou Advanced Materials Co., Ltd.	70	China	December	Polarizer sheet manufacturing and sales
LG BCM	100	Korea	December	Battery materials manufacturing and sales
LG Chem Ohio Petrochemical, Inc.	100	USA	December	ABS manufacturing and sales
LG Chem VietNam Co.,Ltd. ⁹	100	Vietnam	December	Sales and trading
				Agricultural pesticide manufacturing and
FarmHannong Co., Ltd. ¹⁰	100	Korea	December	sales
Farmhannong America, Inc. 10	100	USA	December	Agricultural pesticide sales
FarmHannong(Thailand) Ltd. 10	100	Thailand	December	Research and development on seeds
FARMHANNONG(MALAYSIA) SDN. BHD. 10	100	Malaysia	December	Agricultural pesticide licensing
PT FARM HANNONG INDONESIA 10	100	Indonesia	December	Agricultural pesticide licensing
FarmHannong do Brasil Limitada ¹⁰	100	Brazil	December	Agricultural pesticide sales
LG Energy Solution (Nanjing) Co., Ltd. ¹	100	China	December	Battery manufacturing and sales Automotive battery research and
LG Energy Solution Michigan Inc. 1	100	USA	December	manufacturing
LG Energy Solution Battery (Nanjing) Co., Ltd. ¹	100	China	December	Automotive battery manufacturing and sales
LG Energy Solution Wroclaw sp. z o.o. 1	100	Poland	December	Automotive battery manufacturing and sales
LG Energy Solution Australia Pty Ltd ¹	100	Australia	December	ESS sales
LG Energy Solution Technology (Nanjing) Co., Ltd. ¹	100	China	December	Battery manufacturing and sales
Ultium Cells LLC ¹³	50	USA	December	Automotive battery manufacturing and sales
LG Energy Solution Europe GmbH ¹	100	Germany	December	Sales and trading
LG Energy Solution (Taiwan), Ltd. 1	100	Taiwan	December	Sales and trading
Aremnuri. Co. Ltd ¹	100	Korea	December	Facility management and general cleaning
LG Energy Solution Fund I LLC ¹	100	USA	December	Investments in venture companies
LG Energy Solution Vertech Inc. 1	100	USA	December	ESS installation service
Associates				
				Environment solution and
TECHWIN Co., Ltd.	20	Korea	December	construction of chemical plant
LG Chem BRASIL INTERMEDIACAO DE NEGOCIOS				
DO SETOR QUIMICO LTDA. ¹²	100	Brazil	December	Sales and trading
LG Chem Malaysia SDN.BHD. ¹²	100	Malaysia	December	Sales and trading
LG Chem Life Sciences Poland Ltd. ¹²	100	Poland	December	Pharmaceutical products sales
HUAJIN NEW ENERGY	40	Oleima	D	Dette mense Anniels mense for Annie mensel and a de-
MATERIALS(QUZHOU)CO., LTD.	49	China	December	Battery materials manufacturing and sales
TL Chemical CO., Ltd	40	Korea	December	AN manufacturing and sales
VINFAST LITHIUM BATTERY PACK LLC. 1	35	Vietnam	December	Battery manufacturing and sales
Jiangxi VL Battery., Ltd. ¹	34	China	December	Battery manufacturing and sales
Joint ventures				
VINA Plasticizers Chemical Co.,Ltd.	50	Vietnam	December	DOP production and sales Plant utility and distribution,
SEETEC Co., Ltd.	50	Korea	December	research assistance service
PT.HLI Greenpower Co., Ltd. 1, 11	50	Indonesia	December	Automotive battery manufacturing and sales

¹ These are LG Energy Solution and its subsidiaries, associates, and joint venture. As at March 31, 2022, the Parent Company's percentage of ownership decreased to 82% due to IPO and sale of existing shares during the three-month period ended March 31, 2022.

² As at March 31, 2022, Ningbo LG Yongxing Chemical Co., Ltd. owns 100% of Ningbo Zhenhai LG Yongxing Trading Co., Ltd.'s shares.

³ As at March 31, 2022, LG Chemical India Pvt. Ltd. owns 100% of LG Polymers India Pvt. Ltd.'s shares.

⁴ As at March 31, 2022, LG Chem (China) Investment Co., Ltd. owns 100% of LG Chem China Tech Center's shares.

- ⁵ During the three-month period ended March 31, 2022, the Parent Company additionally acquired shares of LG Chemical India Pvt. Ltd. for ₩30,789 million.
- ⁶ During the three-month period ended March 31, 2022, the Parent Company additionally acquired shares of LG Polymers India Pvt. Ltd. for ₩17,820 million.
- ⁷ During the three-month period ended March 31, 2022, LG Chem (China) Investment Co., Ltd. decreased its capital with consideration of ₩240,480 million.
- ⁸ During the three-month period ended March 31, 2022, the Parent Company additionally acquired shares of LG CHEM FUND I LLC for ₩14,154 million.
- ⁹ LG Chem Vietnam Co., Ltd. was newly established during the three-month period ended March 31, 2022, and the Parent Company newly acquired 100% shares of LG Chem Vietnam Co., Ltd. for ₩359 million.
- ¹⁰ As at March 31, 2022, FarmHannong Co., Ltd. owns 100% of Farmhannong America, Inc., FarmHannong(Thailand) Ltd., FARMHANNONG(MALAYSIA) SDN.BHD., and PT FARM HANNONG INDONESIA's shares.
- ¹¹ PT.HKML Battery Indonesia was newly established in accordance with a joint arrangement in which the Group participated during the year ended December 31, 2021. This investment is classified as a joint venture since the joint arrangement is structured through a separate vehicle and the Group has rights to the net assets of the arrangement.
- ¹² Classified as an investment in associate due to its small size.
- ¹³ The Group possesses control over Ultium Cells LLC as the Group can exercise the majority voting rights in its decision-making process and has the ability to use power to affect the returns of the investee through its involvement in the production and cost management and other activities in accordance with the shareholders' agreement.

1.4 Summarized Financial Information of Subsidiaries, Associates and Joint Ventures

Summarized financial information (before elimination of intercompany transactions and adjustments for differences in accounting policies) of subsidiaries, associates and joint ventures is as follows:

Manak 24 2022

(in millions of Korean won)	March 31, 2022			2022		
	Assets	Liabilities	Equity	Revenue	Profit (loss) for the period	
Subsidiaries						
LG Energy Solution, Ltd. 1,2	34,975,888	15,536,318	19,439,570	4,342,348	226,622	
Ningbo LG Yongxing Chemical Co.,Ltd.	1,371,854	142,797	1,229,057	601,040	69,965	
Ningbo Zhenhai LG Yongxing Trade Co.,Ltd.	6,583	284	6,299	8,009	124	
LG Chem America, Inc.	518,561	477,334	41,227	321,818	(2,091)	
LG Chemical India Pvt. Ltd.	63,442	19	63,423	-	(274)	
LG Polymers India Pvt. Ltd.	56,774	32,481	24,293	1,383	(1,208)	
LG Chemical (Guangzhou) Engineering Plastics						
Co.,Ltd.	118,557	46,726	71,831	58,590	864	
LG Chem (Taiwan), Ltd.	102,890	29,423	73,467	27,015	1,804	
Tianjin LG Bohai Chemical Co.,Ltd.	500,033	76,062	423,971	142,002	13,652	
Tianjin LG BOTIAN Chemical Co.,Ltd.	51,522	22,590	28,932	36,580	1,699	
LG Chem (China) Investment Co.,Ltd.	1,277,788	812,451	465,337	18,143	1,765	
LG Chem (Tianjin) Engineering Plastics Co.,Ltd.	59,968	13,687	46,281	22,390	2,002	
LG Chem Europe GmbH	517,104	434,058	83,046	263,691	13,052	
LG Chem Poland Sp. z o.o.	229,809	140,550	89,259	72,861	1,563	
LGC Petrochemical India Private Ltd.	4,945	834	4,111	1,385	172	
HAENGBOKNURI CO., LTD.	4,097	1,023	3,074	2,046	(45)	
LG CHEM TK Kimya SANAYI VE TIC. Ltd. STI.	27,145	28,570	(1,425)	14,395	(1,225)	
LG Chem Japan Co.,Ltd.	4,910	1,049	3,861	1,189	289	
LG NanoH2O, LLC ³	57,114	25,030	32,084	24,793	1,972	
LG Chem (Chongqing) Engineering Plastics						
Co.,Ltd.	51,788	16,416	35,372	21,541	760	

LG Chem(HUIZHOU) Petrochemical Co., Ltd.	620,257	166,814	453,443	265,995	25,415
LG Chem Life Sciences India Pvt. Ltd.	3,356	2,301	1,055	1,582	104
LG Jiansheng Life Sciences (Beijing) Co.,Ltd.	13,374	7,931	5,443	6,966	473
LG Chem Life Sciences (Thailand) Ltd.	25,473	9,407	16,066	10,383	917
LG Chem Hai Phong Vietnam Company Ltd.	14,509	3,597	10,912	4,833	626
LG Chem Mexico S.A. de C.V.	1,679	231	1,448	667	67
LG Chem Hai Phong Engineering Plastics Ltd.	29,203	13,048	16,155	9,135	103
LG Chem (Guangzhou) Information & Electronics					
Materials Co.,Ltd. ²	297,820	84,650	213,170	44,112	512
LEYOU NEW ENERGY MATERIALS(WUXI)					
Co.,LTD	713,124	238,759	474,365	252,510	29,115
LG Chem Fund I LLC	61,385	27	61,358	-	(804)
Uniseal,Inc. ³	40,410	8,019	32,391	20,367	15
LG Chem Life Science Innovation Center, Inc.	3,609	1,152	2,457	1,923	116
LG Chem Asia Pte. Ltd.	2,631	1,767	864	824	(1)
LG Chem China Tech Center	35,476	597	34,879	858	255
Shanjin Optoelectronics (Taiwan) Co., Ltd.	58,690	31	58,659	131	39
LG PETRONAS CHEMICALS Malaysia Sdn.Bhd.	140,270	67,417	72,853	-	(740)
LG Chem Hangzhou Advanced Materials Co.,					
Ltd. ³	77,035	41,946	35,089	39,242	492
LG BCM	59,276	7,543	51,733	-	(1,080)
LG Chem Ohio Petrochemical, Inc.	26,527	3,489	23,038	-	3
LG Chem VietNam Co.,Ltd	267	1	266	-	(95)
FarmHannong Co., Ltd. ^{1,3}	1,192,845	772,151	420,694	260,833	31,032
Associates					
TECHWIN Co., Ltd.	132,871	45,377	87,494	9,764	(3,406)
LG Chem BRASIL INTERMEDIACAO DE					
NEGOCIOS DO SETOR Q UIMICO LTDA.	1,012	153	859	486	89
LG Chem Malaysia SDN.BHD.	508	2	506	472	31
LG Life Sciences Poland Ltd.	212	70	142	46	25
HUAJIN NEW ENERGY					
MATERIALS(QUZHOU)CO., LTD.	459,080	263,786	195,294	38,413	(1,213)
TL Chemical CO., Ltd	121,795	435	121,360	-	223
VINFAST LITHIUM BATTERY PACK LLC.	17,312	6,177	11,135	3,106	(330)
Jiangxi VL Battery.,Ltd	90,497	33,600	56,897	5,236	(3,998)
Joint ventures					
Vina Plasticizer Chemical Co.,Ltd.	81,058	52,586	28,472	51,674	2,804
SEETEC Co., Ltd.	314,880	46,744	268,136	164,165	2,098
PT.HLI Green Power	400,829	980	399,849	-	(11,669)

¹ Represent financial information of intermediate parent company consolidating its subsidiaries.

² LCD polarizer business and others of these entities was classified as discontinued operations and profit or loss from the business was included in profit from discontinued operations (Note 34).

³ Fair value adjustments due to business combination recorded in the consolidated financial statements are not included in the above information.

(in millions of Korean won)	ı	March 31, 2021		2021	
	Assets	Liabilities	Equity	Revenue	Profit (loss) for the period
Subsidiaries	Assets	Liabilities	Equity	Revenue	for the period
LG Energy Solution, Ltd. 1,2	23,764,139	15,021,765	8,742,374	4,254,116	442,970
Ningbo LG Yongxing Chemical Co.,Ltd.	1,394,894	258,879	1,136,015	583,579	135,912
Ningbo Zhenhai LG Yongxing Trade Co.,Ltd.	6,787	735	6,052	6,713	139
LG Chem America, Inc.	408,469	366,034	42,435	194,058	3,370
LG Chemical India Pvt. Ltd.	32,799	35	32,764	-	3
LG Polymers India Pvt. Ltd.	44,118	36,206	7,912	245	(4,325)
LG Chemical (Guangzhou) Engineering Plastics	11,110	00,200	1,012	2.10	(1,020)
Co.,Ltd.	119,231	42,590	76,641	63,230	3,297
LG Chem (Taiwan), Ltd.	109,772	35,905	73,867	28,486	870
LG Chem Display Materials (Beijing) Co.,Ltd. ²	-	-	-		276
Tianjin LG Bohai Chemical Co.,Ltd.	530,055	127,935	402,120	146,222	23,302
Tianjin LG BOTIAN Chemical Co.,Ltd.	46,289	19,597	26,692	28,287	360
LG Chem (China) Investment Co.,Ltd.	1,371,751	679,206	692,545	13,690	2,551
LG Chem (Tianjin) Engineering Plastics Co.,Ltd.	56,898	12,011	44,887	18,755	1,556
LG Chem Europe GmbH	358,459	288,909	69,550	118,937	5,910
LG Chem Poland Sp. z o.o.	222,263	133,527	88,736	36,883	4,830
LGC Petrochemical India Private Ltd.	4,918	988	3,930	934	135
HAENGBOKNURI CO., LTD.	4,503	1,385	3,118	2,838	(2)
LG CHEM TK Kimya SANAYI VE TIC. Ltd. STI.	10,416	10,685	(269)	6,939	(195)
LG Chem Japan Co.,Ltd.	5,109	1,391	3,718	1,519	143
LG NanoH2O, LLC ³	44,449	14,978	29,471	13,448	1,451
LG Chem (Chongqing) Engineering Plastics	,	,	,	,	,,,,,
Co.,Ltd.	49,879	15,955	33,924	19,324	1,423
LG Chem(HUIZHOU) Petrochemical Co., Ltd.	574,744	155,233	419,511	233,520	46,974
LG Chem Life Sciences India Pvt. Ltd.	3,191	2,242	949	1,143	98
LG Jiansheng Life Sciences (Beijing) Co.,Ltd.	11,742	6,854	4,888	439	20
LG Chem Life Sciences (Thailand) Ltd.	25,708	10,875	14,833	9,014	795
LG Chem Hai Phong Vietnam Company Ltd.	14,571	4,458	10,113	8,240	(606)
LG Chem Mexico S.A. de C.V.	1,619	267	1,352	415	54
LG Chem Hai Phong Engineering Plastics Ltd.	31,476	15,698	15,778	7,318	263
LG Chem (Guangzhou) Information & Electronics	·				
Materials Co.,Ltd. ²	317,592	109,131	208,461	34,978	(271)
LEYOU NEW ENERGY MATERIALS(WUXI)					,
Co.,LTD	608,961	172,607	436,354	138,830	16,635
LG Chem Fund I LLC	45,922	9	45,913	-	(1,026)
Ugimag Korea Co., Ltd. ²	-	-	-	5,338	(1,344)
Uniseal,Inc. ³	38,635	6,932	31,703	16,905	495
LG Chem Life Science Innovation Center, Inc.	3,446	1,153	2,293	1,403	85
LG Chem Asia Pte. Ltd.	2,927	2,079	848	-	(66)
LG Chem China Tech Center	34,327	390	33,937	-	-
Shanjin Optoelectronics (Taiwan) Co., Ltd.	59,149	5	59,144	-	-
LG PETRONAS CHEMICALS Malaysia Sdn.Bhd.	123,502	50,961	72,541	-	-
LG Chem Hangzhou Advanced Materials Co.,					
Ltd.	112,892	78,981	33,911	-	-
LG BCM	54,412	1,599	52,813	-	-
LG Chem Ohio Petrochemical, Inc.	24,132	1,578	22,554	-	-
FarmHannong Co., Ltd. ^{1,3}	1,047,277	657,687	389,590	210,913	20,744
Associates					
TECHWIN Co., Ltd.	142,066	51,893	90,173	-	-
LG Chem BRASIL INTERMEDIACAO DE	729	91	638	378	69

NEGOCIOS DO SETOR Q UIMICO LTDA.					
LG Chem Malaysia SDN.BHD.	525	2	523	155	19
FJ Composite Material Co., Ltd.	-	-	-	101	(58)
WUXI CL New Energy Technology Ltd.	-	-	-	-	(19)
LG Life Sciences Poland Ltd.	188	70	118	57	3
Combustion Synthesis Co., Ltd.	-	-	-	35	(115)
HUAJIN NEW ENERGY					
MATERIALS(QUZHOU)CO., LTD.	422,366	229,745	192,621	-	(680)
TL Chemical CO., Ltd	121,551	369	121,182	-	-
VINFAST LITHIUM BATTERY PACK LLC.	17,496	6,295	11,201	3,119	(308)
Jiangxi VL Battery.,Ltd	76,495	16,799	59,696	-	(940)
Joint ventures					
VINA Plasticizer Chemical Co., Ltd.	64,237	39,721	24,516	35,936	4,289
SEETEC Co., Ltd.	328,396	52,384	276,012	124,224	3,985
HL Greenpower Co., Ltd.	-	-	-	215,930	289
PT.HLI Green Power	404,131	1,156	402,975	-	-

¹ Represent financial information of intermediate parent company consolidating its subsidiaries.

1.5 Information of Non-Controlling Interests that are Material to the Group

(a) LG Energy Solution and its subsidiaries

- Percentage of ownership held by non-controlling interests and accumulated non-controlling interests

(in millions of Korean won)	March 31, 2022
Percentage of ownership held by non-controlling interests	18.2%
Accumulated non-controlling interests	4,373,494

- Profit and dividends attributable to non-controlling interests for the three-month period ended March 31, 2022, are as follows:

(in millions of Korean won)	2022
Profit allocated to non-controlling interests	40,144
Dividends paid to non-controlling interests	-

² LCD polarizer business and others of these entities was classified as discontinued operations and profit or loss from the business was included in profit from discontinued operations (Note 34).

³ Fair value adjustments due to business combination recorded in the consolidated financial statements are not included in the above information.

Summarized consolidated statements of financial positions of subsidiaries with material non-controlling interests, are as follows (before elimination of intercompany transaction):

(in millions of Korean won)	March 31, 2022
Current assets	19,663,197
Non-current assets	15,312,691
Total assets	34,975,888
Current liabilities	40 202 445
Non-current liabilities	10,383,145 5,153,173
Total liabilities	15,536,318
Total equity	19,439,570

Summarized consolidated statements of comprehensive income of subsidiaries with material non-controlling interests for the three-month period ended March 31, 2022, are as follows (before elimination of intercompany transaction):

(in millions of Korean won) 2022

Revenue	4,342,348
Profit for the period	226,622
Total comprehensive income	367,023

Summarized consolidated statements of cash flows of subsidiaries with material non-controlling interests for the three-month period ended March 31, 2022, are as follows (before elimination of intercompany transaction):

(in millions of Korean won)	2022
Cash flows from operating activities	398,779
Cash flows from investing activities	(6,525,414)
Cash flows from financing activities	9,960,205
Net increase in cash and cash equivalents	3,833,570
Cash and cash equivalents at beginning of the period	1,282,880
Effects of exchange rate changes on cash and cash equivalents	44,804
Cash and cash equivalents at end of the period	5,161,254
	·

1.6 Changes in Scope for Consolidation

Subsidiaries newly included in the consolidation for the three-month period ended March 31, 2022, are as follows:

Subsidiary Reason

LG Energy Solution Vertech Inc. LG Chem VietNam Co.,Ltd Newly acquired Newly established

2. Summary of Significant Accounting Policies

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

2.1 Basis of Preparation

The Group maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS). The accompanying consolidated interim financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

The Group's consolidated interim financial statements for the three-month period ended March 31, 2022, have been prepared in accordance with Korean IFRS 1034 *Interim Financial Reporting*. These consolidated interim financial statements have been prepared in accordance with Korean IFRS which is effective or early adopted as at March 31, 2022.

(a) New and amended standards adopted by the Group

The Group has applied the following standards for the first time for their annual reporting period commencing January 1, 2022.

- Amendment to Korean IFRS 1116 Leases - Covid-19 - Related Rent Concessions beyond June 30, 2021

The application of the practical expedient, a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification, is extended to lease payments originally due on or before June 30, 2022. A lessee shall apply the practical expedient consistently to eligible contracts with similar characteristics and in similar circumstances. The amendment does not have a significant impact on the consolidated interim financial statements.

- Amendments to Korean IFRS 1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities to be recognized in a business combination in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of Korea IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*, and Korean IFRS 2121 *Levies*. The amendments also clarify that contingent assets should not be recognized at the acquisition date. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The amendment does not have a

significant impact on the consolidated interim financial statements.

- Amendments to Korean IFRS 1016 Property, Plant and Equipment - Proceeds before intended use

The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, the entity will recognize the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendment does not have a significant impact on the consolidated interim financial statements.

- Amendments to Korean IFRS 1037 Provisions, Contingent Liabilities and Contingent Assets - Onerous Contracts: Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendment does not have a significant impact on the consolidated interim financial statements.

- Annual improvements to Korean IFRS 2018-2020

Annual improvements of Korean IFRS 2018-2020 Cycle should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The amendment does not have a significant impact on the consolidated interim financial statements.

- Korean IFRS 1101 First time Adoption of Korean International Financial Reporting Standards – Subsidiaries that are first-time adopters
- Korean IFRS 1109 Financial Instruments Fees related to the 10% test for derecognition of financial liabilities
- · Korean IFRS 1041 Agriculture Measuring fair value
- (b) New and amended standards not yet adopted by the Group

The following new and amended accounting standards and interpretations that have been published that are not mandatory for March 31, 2022 reporting periods and have not been early adopted by the Group.

- Amendments to Korean IFRS 1001 Presentation of Financial Statements - Classification of Liabilities as Current or Non-current

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability includes the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group is in review for the impact of these amendments on the consolidated interim financial statements.

- Korean IFRS 1001 Presentation of Financial Statements - Disclosure of Accounting Policies

The amendments to Korean IFRS 1001 define and require entities to disclose their material accounting policies. The IASB amended IFRS Practice Statement 2 *Disclosure of Accounting Policies* to provide guidance on how to apply the concept of materiality to accounting policy disclosures. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group is in review for the impact of these amendments on the consolidated interim financial statements.

- Korean IFRS 1008 Accounting policies, changes in accounting estimates and errors - Definition of Accounting Estimates

The amendments define accounting estimates and clarify how to distinguish them from changes in accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated interim financial statements.

- Korean IFRS 1012 Income Taxes - Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments include an additional condition to the exemption to initial recognition of an asset or liability that a transaction does not give rise to equal taxable and deductible temporary differences at the time of the transaction. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated interim financial statements.

- New Standard: Korean IFRS 1117 Insurance Contract

Korean IFRS 1117 *Insurance Contracts* replaces Korean IFRS 1104 *Insurance Contracts*. This Standard estimates future cash flows of an insurance contract and measures insurance liabilities using discount rates applied with assumptions and risks at the measurement date. The entity recognizes insurance revenue on an accrual basis including services (insurance coverage) provided to the policyholder by each annual period. In addition, investment components (Refunds due to termination/maturity) repaid to a policyholder even if an insured event does not occur, are excluded from insurance revenue, and insurance financial income or expense and the investment income or expense are presented separately to enable users of the information to understand the sources of income or expenses. This Standard should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted for entities that applied Korean IFRS 1109 *Financial Instruments*. The Group does not expect that these amendments have a significant impact on the consolidated interim financial statements.

2.2 Significant Accounting Policies

Significant accounting policies and method of computation used in the preparation of the condensed consolidated interim financial statements are consistent with those of the consolidated financial statements for the year ended December 31, 2021, except for the changes due to the application of amendment and enactments of standards described in Note 2.1.(a) and the ones described below.

2.2.1 Income Tax Expense

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

3. Financial Risk Management

3.1 Financial Risk Factors

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

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

(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 future commercial transactions, recognized assets and liabilities.

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

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation 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.

As at March 31, 2022 and December 31, 2021, the Group's monetary assets and liabilities denominated in currencies other than its functional currency, are as follows:

(in millions of Korean won)	ions of Korean won) March 31, 2022		December 31, 2021		
	Assets	Liabilities	Assets	Liabilities	
USD	5,714,457	6,596,254	5,708,219	5,741,611	
EUR	364,500	4,904,182	441,123	4,804,639	
JPY	8,643	202,045	18,315	96,238	
CNY and others	328,365	3,820	523,907	4,131	

As at March 31, 2022 and December 31, 2021, if the Group's functional currency had weakened / strengthened by 10% against the US dollar and Euro with all other variables held constant, profit before income tax would have been affected as follows:

(in millions of Korean won)	March 3	31, 2022	December 31, 2021		
	10% Increase	10% Decrease	10% Increase	10% Decrease	
USD	(39,821)	39,821	31,708	(31,708)	
EUR	(417,406)	417,406	(413,462)	413,462	

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

As at March 31, 2022 and December 31, 2021, the Group entered into foreign currency forward and currency swap contracts to manage risk from changes in exchange rates and the details are as follows:

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

March	31.	2022
-------	-----	------

	-						
		Contract	Contract exchange	Contract inception	Contract	Book a	mount
	Contractor	amount	rate	date	maturity	Assets	Liabilities
Currency	KDB	USD 35	1,135.60	2021.6.24	2022.6.24	2,590	-
Forward ¹	Shinhan Bank	USD 500	1,135.60	2020.10.14	2024.10.15	28,241	-
	KB Kookmin Bank	USD 500	1,102.83	2020.11.24	2029.4.16	33,945	-
	Citi	EUR 150	4.5900^{2}	2021.5.12	2022.4.29	3,438	-
	SC	EUR 250	4.5861 ²	2021.5.14	2022.4.29	5,116	-
	CACIB	EUR 100	4.6055 ²	2021.8.5	2022.8.4	3,302	-
	KDB	EUR 165	4.6036 ²	2021.8.5	2022.8.4	5,902	-
	ING	EUR 100	4.7120 ²	2021.10.22	2022.10.21	2,455	-
	ING	EUR 100	4.7800^2	2022.1.5	2023.1.5	2,224	-
Currency swap	SMBC	USD 200	1,118.00	2021.5.28	2024.5.28	15,417	-
·	KDB	USD 130	1,135.60	2021.6.24	2025.6.24	16,465	-
	KDB	USD 35	1,135.60	2021.6.24	2026.6.24	4,740	-
	Shinhan Bank	USD 300	1,131.80	2021.7.7	2026.7.7	16,061	-
	Woori Bank	USD 100	1,131.80	2021.7.7	2026.7.7	5,666	-
	Industrial and Commercial Bank of China	USD 100	1,131.80	2021.7.7	2026.7.7	5,750	-
	Shinhan Bank	USD 100	1,131.80	2021.7.7	2031.7.7	6,710	-
	Woori Bank	USD 200	1,131.80	2021.7.7	2031.7.7	14,084	-
	KDB	USD 200	1,131.80	2021.7.7	2031.7.7	14,161	-

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

December 31, 2021

		Contract	Contract	Contract	Contract	Book a	mount
	Contractor	amount	exchange rate	inception date	maturity	Assets	Liabilities
Currency Forward ¹	KDB	USD 35	1,135.60	2021.6.24	2022.6.24	1,789	-
Forward	Shinhan Bank	USD 500	1,135.60	2020.10.14	2024.10.15	24,687	-
	KB Kookmin Bank	USD 500	1,102.83	2020.11.24	2029.4.16	30,232	-
	Citi	EUR 150	4.5900^2	2021.5.12	2022.4.29	2,881	-
	SC	EUR 250	4.5861 ²	2021.5.14	2022.4.29	4,703	-

	CACIB	EUR 100	4.6055 ²	2021.8.5	2022.8.4	2,964	-
	KDB	EUR 165	4.6036 ²	2021.8.5	2022.8.4	4,925	-
	ING	EUR 100	4.7120 ²	2021.10.22	2022.10.21	1,420	-
Currency swap	SMBC	USD 200	1,118.00	2021.5.28	2024.5.28	13,556	-
	KDB	USD 130	1,135.60	2021.6.24	2025.6.24	8,817	-
	KDB	USD 35	1,135.60	2021.6.24	2026.6.24	2,319	-
	Shinhan Bank	USD 300	1,131.80	2021.7.7	2026.7.7	12,196	-
	Woori Bank	USD 100	1,131.80	2021.7.7	2026.7.7	4,380	-
	Industrial and Commercial Bank of China	USD 100	1,131.80	2021.7.7	2026.7.7	4,653	-
	Shinhan Bank	USD 100	1,131.80	2021.7.7	2031.7.7	4,804	-
	Woori Bank	USD 200	1,131.80	2021.7.7	2031.7.7	10,032	-
	KDB	USD 200	1,131.80	2021.7.7	2031.7.7	10,429	-

¹ Derivatives that are not qualified for hedge accounting.

2) Price risk

The Group is exposed to equity securities price risk arises from investments held by the Group and classified in the consolidated interim statement of financial position as non-current financial assets. The Group's equity investments are publicly traded and are related to the NASDAQ and ASX index.

The table below summarizes the impact of increases/decreases of the listed stock price index on the Group's equity before tax effects as at March 31, 2022 and December 31, 2021. The analysis is based on the assumption that the equity index has increased/decreased by 10% with all other variables held constant, and that all the Group's equity instruments moved in line with the index.

(in millions of Korean won)	March	31, 2022	December 31, 2021		
	10% Increase 10% Decrease		10% Increase	10% Decrease	
NASDAQ	(48)	48	909	(909)	
ASX	2,230	(2,230)	676	(676)	
Total	2,182	(2,182)	1,585	(1,585)	

3) Interest rate risk

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

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

² Cross exchange rate between PLN and EUR.

The table below summarizes the impact of increases/decreases of interest rate on the Group's equity and post-tax profit for the three-month periods ended March 31, 2022 and 2021. The analysis is based on the assumption that the interest rate has increased/decreased by 1% (100 basis points) with all other variables held constant.

(in millions of Korean won)	Impact on pos	Impact on post-tax profit Impact on equity		
	2022	2021	2022	2021
Increase	(42,144)	(37,095)	(42,144)	(37,095)
Decrease	42,144	37,095	42,144	37,095

The Group has entered into a currency interest rate swap contract amounting to USD 165 million (equivalent to ₩199,782 million) to hedge interest rate risk of variable interest rate borrowings from Korea Development Bank and others.

(2) Credit risk

Credit risk arises from trade receivables and that the Group holds, as well as debt instruments at amortized cost or fair value through other comprehensive income.

1) Trade receivables

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

(in millions of Korean won)	Receivables	Receivables past due but	Impaired	
	not past due ¹	not impaired ¹	receivables ²	Total
March 31, 2022 (trade receivables)				
Gross carrying amount	6,903,108	192,869	2,688	7,098,665
Expected loss rate	0.0%	0.3%	49.8%	0.1%
Loss allowance provision	3,122	573	1,338	5,033
December 31, 2021 (trade receivables)				
Gross carrying amount	6,118,779	338,693	1,656	6,459,128
Expected loss rate	0.1%	0.2%	81.5%	0.1%
Loss allowance provision	3,152	592	1,350	5,094

¹ See Note 7.(3) for aging analysis.

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

Movements in the loss allowance provision for trade receivables for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won)	Trade receivables				
	March 31, 2022	December 31, 2021			
Beginning balance	5,094	4,391			
Increase in reversal of loss allowance recognized in profit or loss	(489)	(127)			
Receivables written off as uncollectible	-	(447)			
Exchange differences	428	1,277			
Ending balance	5,033	5,094			

As at March 31, 2022, the carrying amount of trade receivables representing the maximum exposure to credit risk amounts to $\forall 7,093,632$ million (December 31, 2021: $\forall 6,454,034$ million).

2) Other financial assets at amortized cost

Movements in loss allowance provision for other financial assets at amortized cost for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

Other receivables			
March 31, 2022	December 31, 2021		
2,165	2,165		
-	-		
	_		
2,165	2,165		
	March 31, 2022 2,165		

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

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

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

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

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

accordingly, credit risks associated with these financial institutions are limited.

(3) Liquidity risk

Finance team of the Group monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. The Group's liquidity management policy involves projecting cash flows in major currencies and considering the level of liquid assets necessary to meet these, monitoring balance sheet liquidity ratios against internal and external regulatory requirements and maintaining debt financing plans.

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

(in millions of Korean won)	March 31, 2022					
	Less than	Between	Between			
	1 year	1-2 years	2-5 years	Over 5 years		
Non-derivative financial						
instruments						
Borrowings (excluding lease	4,443,335	2 424 202	4.074.520	2 460 270		
liabilities)		2,431,302	4,974,539	3,469,279		
Lease liabilities	84,977	59,475	91,206	149,349		
Trade and other payables Other current liabilities	7,893,596	14,237	1,694	172		
(dividends payable)	935,275	-				
-	13,357,183	2,505,014	5,067,439	3,618,800		
Derivative instruments						
Gross settlement currency						
forwards and swaps						
(Inflows)	(1,260,076)	(29,700)	(1,713,293)	(1,255,463)		
Outflows	1,232,189	26,842	1,607,739	1,174,727		
	(27,887)	(2,858)	(105,554)	(80,736)		
	13,329,296	2,502,156	4,961,885	3,538,064		
(in millions of Korean won)		December	31. 2021			
(Less than	Between	Between			
	1 year	1-2 years	2-5 years	Over 5 years		
Non-derivative financial instruments						
Borrowings (excluding lease						
liabilities)	3,548,442	2,403,648	5,984,843	3,551,215		
Lease liabilities	82,568	54,416	87,498	156,494		
Trade and other payables ¹	7,733,917	13,757	1,694	171		
	11,364,927	2,471,821	6,074,035	3,707,880		
Derivative instruments						
Gross settlement currency						
forwards and swaps	(4.000.000)	(07.570)	(4.000.05.1)	(4.055.000)		
(Inflows)	(1,096,082)	(27,579)	(1,690,054)	(1,255,889)		

Outflows	1,096,734	26,825	1,613,263	1,181,161
	652	(754)	(76,791)	(74,728)
	11,365,579	2,471,067	5,997,244	3,633,152

¹ Included ₩301,946 million of financial liabilities due to a financial institution relating to reverse factoring arrangement as at December 31, 2021. The Group has entered into reverse factoring arrangement (interest rate CD 91 days + 0.93~1.20%) with a financial institution whereby suppliers receive payments from the financial institution on the due date of each invoice and the Group pays to the financial institution at the end of extended credit period as agreed in the reverse factoring arrangement. As at March 31, 2022, there is no utilized amount in the reverse factoring arrangement.

As at March 31, 2022, the Group has entered into swap contracts for which cash flow hedge accounting is applied, to avoid market price fluctuation of raw materials.

(in millions of Korean	March 31, 2022					
won)	Purpose of the contracts	Hedged items	Financial institution	Maturity	Fair value	
Merchandise (raw materials) swap ¹	Cash flow hedge	Non-ferrous metal	Citibank and others	~2024. 12	64,652	

Details of derivative assets and liabilities as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022		December 31, 2021		
	Assets	Liabilities	Assets	Liabilities	
Merchandise (raw materials)					
swap¹	64,652	-	5,911	126	

¹ Gain (loss) resulting from the contracts to avoid cash flow fluctuation risk of expected future transaction is accounted for as accumulated other comprehensive income which corresponds to an effective portion of the hedges (Note 5).

3.2 Capital Risk Management

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

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

The gearing ratio and debt-to-equity ratio as at March 31, 2022 and December 31, 2021, were as follows:

(in millions of Korean won, except for ratios)	March 31, 2022	December 31, 2021
Total borrowings (Note 14) (A)	14,694,152	14,765,734
Less: cash and cash equivalents (B)	(9,052,010)	(3,760,834)
Net debt (C=A+B)	5,642,142	11,004,900
Total liabilities (D)	28,926,355	27,925,314
Total equity (E)	35,491,100	23,209,988
Total capital (F=C+E)	41,133,242	34,214,888
Gearing ratio (C/F)	13.7%	32.2%
Debt-to-equity ratio (D/E)	81.5%	120.3%

3.3 Fair Value

(1) Carrying amount and fair value of financial instruments by category as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31	I, 2022	December 31, 2021	
	Carrying	-	Carrying	
	amount	Fair value	amount	Fair value
Financial assets (current)				
Cash and cash equivalents	9,052,010	1	3,760,834	1
Deposits held by financial institutions	5,085,518	1	64,583	1
Trade receivables	7,018,529	1	6,386,979	1
Other receivables (excluding deposits				
held by financial institutions)	1,227,734	1	983,966	1
Current derivative financial assets				
(currency forward)	25,027	25,027	18,683	18,683
Current derivative financial assets				
(excluding currency forward)	42,988	42,988	4,606	4,606
Financial assets (non-current)				
Deposits held by financial institutions	277,214	1	267,116	1
Trade receivables	75,103	1	67,055	1
Other receivables (excluding deposits				
held by financial institutions)	320,620	1	446,050	1
Other non-current financial assets				
(carried at fair value)				
Marketable financial assets	39,064	39,064	21,630	21,630
Non-marketable financial assets ²	354,160	354,160	340,823	340,823
Non-current derivative financial assets				
(currency forward)	62,187	62,187	54,918	54,918
Non-current derivative financial assets				
(excluding currency forward)	137,223	137,223	88,651	88,651
Financial liabilities (current)				
Trade and other payables	7,893,596	1	7,733,916	1
Current borrowings	4,295,302	1	3,405,215	1

(in millions of Korean won)	March 31, 2022		December 31, 2021	
	Carrying amount	Fair value	Carrying amount	Fair value
(excluding lease liabilities)				
Current lease liabilities	74,857	3	71,865	3
Other current liabilities (dividend payable)	935,275	1	-	-
Financial liabilities (non-current)				
Non-current borrowings				
(excluding lease liabilities)	10,073,057	9,704,276	11,041,274	10,923,942
Non-current lease liabilities	250,936	3	247,380	3
Other non-current payables Non-current derivative financial liabilities	16,103	1	15,623	1
(excluding currency forward)	-	-	126	126

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

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

Fair values of financial liabilities (non-current) are based on cash outflows discounted by using Korean won currency note yield in the same credit grade with the Parent Company (AA+), and the applied discount rates as at March 31, 2022 and December 31, 2021, are as follows:

(in percentage)	March 31, 2022	December 31, 2021
Discount rate	2.01% ~ 3.66%	1.77% ~ 2.99%

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

² Acquisition costs of these financial assets approximate their fair values.

³ Fair values for these financial assets and liabilities are not disclosed above in accordance with related Korean IFRS.

Fair value hierarchy of the financial instruments that are either measured at fair value or their fair values are disclosed for as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022			
	Level 1	Level 2	Level 3	Total
Financial assets/liabilities				
measured at fair value Other non-current financial assets				
(marketable financial assets)	39,064	_	-	39,064
Other non-current financial assets	,			,
(non-marketable financial assets)	-	-	354,160	354,160
Current derivative financial assets		25 027		25.027
(currency forward) Current derivative financial assets	-	25,027	-	25,027
(excluding currency forward)	_	42,988	_	42,988
Non-current derivative financial assets		,		,
(currency forward)	-	62,187	-	62,187
Non-current derivative financial assets		100 710	40.505	407.000
(excluding currency forward)	-	120,718	16,505	137,223
Financial assets/liabilities				
not measured at fair value				
Non-current borrowings				
(excluding lease liabilities)	-	9,704,276	-	9,704,276
(in millions of Korean won)		December	r 31 2021	
(iii iiiiiiiiii)	Level 1	Level 2	Level 3	Total
Financial assets/liabilities				
measured at fair value				
Other non-current financial assets	04.000			
(marketable financial assets) Other non-current financial assets				04.000
	21,630	-	-	21,630
	21,030	-	340.823	
(non-marketable financial assets) Current derivative financial assets	-	-	340,823	21,630 340,823
(non-marketable financial assets) Current derivative financial assets (currency forward)		- - 18,683	- 340,823 -	
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets			- 340,823 -	340,823 18,683
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward)	- - -	- 18,683 4,606	- 340,823 - -	340,823
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets	- - -	4,606	- 340,823 - -	340,823 18,683 4,606
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward)	- - -		- 340,823 - - -	340,823 18,683
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets (currency forward) Non-current derivative financial assets (excluding currency forward)	- - - -	4,606	- 340,823 - - - - 16,160	340,823 18,683 4,606
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets (currency forward) Non-current derivative financial assets (excluding currency forward) Non-current derivative financial		4,606 54,918	- - -	340,823 18,683 4,606 54,918
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets (currency forward) Non-current derivative financial assets (excluding currency forward) Non-current derivative financial liabilities		4,606 54,918 72,491	- - -	340,823 18,683 4,606 54,918 88,651
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets (currency forward) Non-current derivative financial assets (excluding currency forward) Non-current derivative financial		4,606 54,918	- - -	340,823 18,683 4,606 54,918
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets (currency forward) Non-current derivative financial assets (excluding currency forward) Non-current derivative financial liabilities		4,606 54,918 72,491	- - -	340,823 18,683 4,606 54,918 88,651
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets (currency forward) Non-current derivative financial assets (excluding currency forward) Non-current derivative financial liabilities (excluding currency forward)		4,606 54,918 72,491	- - -	340,823 18,683 4,606 54,918 88,651
(non-marketable financial assets) Current derivative financial assets (currency forward) Current derivative financial assets (excluding currency forward) Non-current derivative financial assets (currency forward) Non-current derivative financial assets (excluding currency forward) Non-current derivative financial liabilities (excluding currency forward) Financial assets/liabilities		4,606 54,918 72,491	- - -	340,823 18,683 4,606 54,918 88,651

(4) Valuation technique and the inputs

Valuation techniques and inputs used in the fair value measurements categorized within Level 3 of the fair value hierarchy as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022				
	Fair		Valuation		Coverage of
	value	Level	Technique	Inputs	Level 3 inputs
Equity instrument					
Non-listed shares	99,193	3	Discounted cash flows model	Long-term growth rate through subsequent cash flows	1.00%
				Weighted average cost of equity	10.98% ~ 12.2%
Derivative instruments					
Option	16,505	3	Binominal option pricing model	Volatility	2.36 ~ 2.4%
(in millions of Korean won)			December 3	31, 2021	
· -	Fair		Valuation		Coverage of
	value	Level	Technique	Inputs	Level 3 inputs
Equity instrument			•	-	•
Non-listed shares	97,121	3	Discounted cash flows model	Long-term growth rate through subsequent cash flows	1.00%
				Weighted average cost of equity	10.98% ~ 12.2%
Derivative instruments					
Option	16,160	3	Binominal option pricing model	Volatility	2.36 ~ 2.4%

4. Critical Accounting Estimates and Assumptions

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

Significant accounting estimates and assumptions applied in the preparation of these condensed consolidated interim financial statements are the same as those applied to the consolidated financial statements for the year ended December 31, 2021, except for the estimates used to determine income tax expense.

The spread of COVID-19 has a significant impact on the domestic and international economies. This may affect the Group's financial position and business performance. and the impact is expected to be continued to the consolidated annual financial statements in 2022.

Significant accounting estimates and assumptions used in the preparation of consolidated interim financial statements may be adjusted according to fluctuations in uncertainty arising from COVID-19, and the ultimate impact of COVID-19 on the Group's business, financial position, and performance is currently unpredictable.

5. Financial Instruments by Category

Categorizations of financial instruments as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)			March 31, 2022		
Financial assets	Financial assets at amortized cost	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Other financial assets ¹	Total
Cash and cash equivalents	9,052,010	-	-	-	9,052,010
Trade receivables	6,690,200	-	328,329	-	7,018,529
Non-current trade receivables	75,103	-	-	-	75,103
Other receivables	6,312,902	-	350	-	6,313,252
Other non-current receivables	597,834	-	-	-	597,834
Other current financial assets	-	-	-	68,015	68,015
Other non-current financial assets		164,399	228,826	199,409	592,634
Total	22,728,049	164,399	557,505	267,424	23,717,377

(in thousands of Korean won)		March 31, 2022	
Financial liabilities	Financial liabilities at amortized cost	Other financial liabilities ²	Total
Trade payables	4,690,565	-	4,690,565
Other payables	3,203,031	-	3,203,031
Borrowings (current)	4,295,302	74,857	4,370,159
Other current liabilities			
(dividend payable)	935,275	-	935,275
Other non-current payables	16,103	-	16,103
Borrowings (non-current)	10,073,057	250,936	10,323,993
Total	23,213,333	325,793	23,539,126

(in millions of Korean won)	December 31, 2021				
			Financial assets		
	Financial assets at amortized	Financial assets at fair value through	at fair value through other comprehensive	Other financial	
Financial assets	cost	profit or loss	income	assets ¹	Total
Cash and cash equivalents	3,760,834	-	-	-	3,760,834
Trade receivables	5,898,369	-	488,610	-	6,386,979
Non-current trade receivables	67,055	-	-	-	67,055
Other receivables	1,047,224	-	1,325	-	1,048,549
Other non-current receivables	713,166	-	-	-	713,166
Other current financial assets	-	-	-	23,289	23,289
Other non-current financial assets		160,145	202,308	143,569	506,022
Total	11,486,648	160,145	692,243	166,858	12,505,894

(in thousands of Korean won)		December 31, 2021	
Financial liabilities	Financial liabilities at amortized cost	Other financial liabilities ²	Total
Trade payables	3,742,132	-	3,742,132
Other payables	3,991,784	-	3,991,784
Borrowings (current)	3,405,215	71,865	3,477,080
Other non-current financial liabilities	-	126	126
Other non-current payables	15,623	-	15,623
Borrowings (non-current)	11,041,274	247,380	11,288,654
Total	22,196,028	319,371	22,515,399

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

Net gains or losses on each category of financial instruments for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Dividend income		
Financial assets at fair value through other comprehensive income	-	378
Interest income		
Financial assets at amortized cost	58,226	10,852
Interest expense		
Financial liabilities at amortized cost	(64,101)	(55,562)
Other financial liabilities	(2,228)	(2,093)
Financial assets at amortized cost ¹	(379)	-
Financial assets at fair value through other comprehensive income ¹	-	(62)
Gain (loss) on valuation		
Financial assets at fair value through profit or loss	81	10,973
Financial assets at fair value through other comprehensive income	(312)	2,297
Derivative instruments	101,885	10,394

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

LG Chem, Ltd. and Subsidiaries

Notes to the Consolidated Interim Financial Statements March 31, 2022 and 2021 (Unaudited), and December 31, 2021

Exchange differences

Financial assets at amortized cost	141,460	244,461
Financial liabilities at amortized cost	(183,998)	(239, 164)
Other financial liabilities	(4,226)	-

¹ Fees paid to financial institutions for factoring.

6. Cash and Cash Equivalents

Details of cash and cash equivalents as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Bank deposits and cash on hand	1,551,145	1,943,818
Deposits held by financial institutions and others	7,500,865	1,817,016
Total	9,052,010	3,760,834

As at March 31, 2022, cash and cash equivalents include $\mbox{$$$$$$$$$$$$$$$$$$$$$$$$$ as march 31, 2022, cash and cash equivalents include $\mbox{$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

7. Trade and Other Receivables

(in millions of Korean won)

Trade and other receivables and its provisions for impairment, as at March 31, 2022 and December 31, 2021, are as follows:

March 31, 2022

(,		
	Gross amount	Provision for impairment	Carrying amount	
Trade receivables	7,023,562	(5,033)	7,018,529	
Non-current trade receivables	75,103	-	75,103	
Other current receivables	6,315,417	(2,165)	6,313,252	
Other non-current receivables	597,834	-	597,834	
Total	14,011,916	(7,198)	14,004,718	
(in millions of Korean won)	December 31, 2021			
	Gross amount	Provision for impairment	Carrying amount	
Trade receivables	6,392,073	(5,094)	6,386,979	
Non-current trade receivables	67,055	-	67,055	
Other current receivables	1,050,714	(2,165)	1,048,549	
Other non-current receivables	713,166	-	713,166	
Total	8,223,008	(7,259)	8,215,749	

Details of other receivables as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021	
Current			
Non-trade receivables	909,351	865,984	
Deposits held by financial institutions	5,085,518	64,583	
Accrued income	69,053	31,955	
Loans	209,600	65,266	
Guarantee deposits provided	39,730	20,761	
	6,313,252	1,048,549	
Non-current			
Non-trade receivables	29,876	29,195	
Deposits held by financial institutions ¹	277,214	267,116	
Loans	197,135	330,643	
Guarantee deposits provided	93,609	86,212	
	597,834	713,166	
Total	6,911,086	1,761,715	

¹ As at March 31, 2022, ₩266,100 million (December 31, 2021: ₩266,100 million) is withdrawal restricted in relation to large, small and medium-sized companies cooperation agreement and others. In addition, ₩121 million is withdrawal restricted in connection with maintaining checking accounts (December 31, 2021: ₩120 million). Also, PLN 3 million is withdrawal restricted in relation to overseas transportation of hazardous waste.

The aging analysis of trade and other receivables as at March 31, 2022 and December 31, 2021, is as follows:

(in millions of Korean won)	March 31, 2022		December 31, 2021	
	Trade receivables	Other receivables	Trade receivables	Other receivables
Receivables not past due	6,903,108	6,806,484	6,118,779	1,690,123
Past due but not impaired	_			
Up to 3 months	170,447	97,401	236,860	70,136
Between 3-6 months	2,775	6,110	15,811	457
Over 6 months	19,647	1,091	86,022	999
	192,869	104,602	338,693	71,592
Impaired receivables	2,688	2,165	1,656	2,165
Total	7,098,665	6,913,251	6,459,128	1,763,880

Movements on the provision for impairment of trade and other receivables for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022				
,	Trade red	eivables	Other receivables		
	Current	Non-current	Current	Non-current	
Beginning balance	5,094	-	2,165	-	
Reversal	(489)	-	-	-	
Write-off	-	-	-	-	
Exchange differences	428	-	-	-	
Ending balance	5,033		2,165		
(in millions of Korean won)	December 31, 2021				
	Trade red	eivables	Other red	receivables	
	Current	Non-current	Current	Non-current	
Beginning balance	4,391	-	2,165	-	
Reversal	(127)	-	-	-	
Write-off	(447)	-	-	-	
Exchange differences	1,277				
Ending balance	5,094	-	2,165		

As at March 31, 2022 and December 31, 2021, the carrying amounts of trade and other receivables are approximation of their fair values.

The Group transferred trade and other receivables to financial institutions for \$51,678 million at March 31, 2022 (December 31, 2021: \$3,469 million), and derecognized the trade and other receivables from the financial statements at the date of disposal, as substantial all the risks and rewards were transferred.

8. Other Financial Assets and Liabilities

Details of other financial assets and liabilities as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Other financial assets		
Financial assets at fair value through other comprehensive income		
(derivative instruments) (current)	42,988	4,606
Financial assets at fair value through profit or loss		
(derivative instruments) (current)	25,027	18,683
Financial assets at fair value through other comprehensive income		
(derivative instruments) (non-current)	21,664	1,305
Financial assets at fair value through other comprehensive income		
(excluding derivative instruments) (non-current)	228,826	202,308

(in millions of Korean won)	March 31, 2022	December 31, 2021
Financial assets at fair value through profit or loss (derivative instruments) (non-current) Financial assets at fair value through profit or loss	177,745	142,264
(excluding derivative instruments) (non-current)	164,399	160,145
	660,649	529,311
Other financial liabilities Financial liabilities at fair value through other comprehensive income		400
(derivative instruments) (non-current)	<u>-</u>	126
		126

Changes in equity and debt instruments included in other financial assets for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Beginning balance	362,452	81,532
Acquisitions / transfer	29,482	248,354
Disposals	-	(16,388)
Gain (loss) on valuation through other comprehensive income		
(before income tax effects)	(312)	15,990
Gain on valuation through profit or loss	81	29,810
Others	1,521	3,154
Ending balance	393,224	362,452

During the three-month period ended March 31, 2022 and for the year ended December 31, 2021, the Group did not recognize impairment for other financial assets.

9. Inventories

Details of inventories as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)		March 31, 2022	
	Gross amount	Valuation allowance	Carrying amount
Merchandise	193,642	(13,325)	180,317
Finished / Semi-finished products	5,059,647	(235,539)	4,824,108
Work-in-process	27,826	-	27,826
Raw materials	2,333,608	(24,207)	2,309,401
Supplies	282,185	-	282,185
Goods-in-transit	1,688,059	<u>-</u>	1,688,059
Total	9,584,967	(273,071)	9,311,896

(in millions of Korean won)	ı	December 31, 2021	
•	Gross amount	Valuation allowance	Carrying amount
Merchandise	192,580	(6,131)	186,449
Finished / Semi-finished products	4,715,464	(233,613)	4,481,851
Work-in-process	25,587	-	25,587
Raw materials	2,040,432	(24,104)	2,016,328
Supplies	266,487	-	266,487
Goods-in-transit	1,306,772	<u> </u>	1,306,772
Total	8,547,322	(263,848)	8,283,474

During the three-month period ended March 31, 2022, the cost of inventories recognized as expense and included in 'cost of sales' amounted to $\mbox{$\mbox{$$\mbox{$$$}$}$}7,121,079$ million (2021: $\mbox{$\mbox{$$\mbox{$$$}$}$}4,698,498$ million).

10. Investments in Associates and Joint Ventures

Changes in investments in associates and joint ventures for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of				March	31, 2022			
Korean won)	Beginning balance	Acquisitions / transfer	Dividends	Share of profit (loss) of associates and joint ventures	Share of other comprehensive income (loss) of associates and joint ventures	Impairment / disposals	Others	Ending balance
VINA Plasticizers Chemical								
Co.,Ltd.	12,822	-	-	1,700	804	-	-	15,326
TECHWIN Co., Ltd.	19,024	-	-	(582)	(69)	-	-	18,373
SEETEC Co., Ltd	134,843	-	(5,000)	1,063	-	-	(307)	130,599
LG Chem BRASIL INTERMEDIACAO DE NEGOCIOS DO SETOR								
QUIMICO LTDA.	579	-	-	-	-	-	_	579
LG Chem Malaysia								
SDN.BHD	150	-	-	-	-	-	-	150
LG Life Sciences Poland								
Ltd. HUAJIN NEW ENERGY MATERIALS(QUZHOU)C	17	-	-	-	-	-	-	17
O., LTD. VINFAST LITHIUM BATTERY PACK LIMITED	93,835	-	-	(1,363)	2,453	-	-	94,925
LIABILITY COMPANY	3,769	-	-	(163)	278	-	-	3,884
Jiangxi VL Battery Co.,Ltd	20,310	-	-	(1,586)	407	-	-	19,131
PT.HLI Green Power	201,488	-	-	(6,368)	4,272	-	-	199,392
TL Chemical CO., Ltd	48,473	-	-	71	-	-	-	48,544
	535,310		(5,000)	(7,228)	8,145		(307)	530,920

(in millions of				Decemb	er 31, 2021			
Korean won)	Beginning balance	Acquisitions / transfer	Dividends	Share of profit (loss) of associates and joint ventures	Share of other comprehensive income (loss) of associates and joint ventures	Impairment / disposals	Others	Ending balance
VINA Plasticizers Chemical								
Co., Ltd.	5,875	-	(334)	7,204	77	-	-	12,822
HL Greenpower Co., Ltd.	22,710	-	-	1,847	-	(24,323)	(234)	-
TECHWIN Co., Ltd.	20,113	-	-	(1,106)	17		` -	19,024
SEETEC Co., Ltd LG Chem BRASIL INTERMEDIACAO DE NEGOCIOS DO SETOR	140,116	-	(10,000)	4,727	-	-	-	134,843
QUIMICO LTDA. LG Chem Malaysia	579	-	-	-	-	-	-	579
SDN.BHD FJ Composite Materials	150	-	-	-	-	-	-	150
Co., LTD. WUXI CL New Energy	2,737	-	-	(544)	652	(2,576)	(269)	-
Technology Ltd LG Life Sciences Poland	-	-	-	-	-	-	-	-
Ltd. Combustion Synthesis Co.,	17	-	-	-	-	-	-	17
Ltd. HUAJIN NEW ENERGY MATERIALS(QUZHOU)C	1,867	-	-	273	(106)	(1,969)	(65)	-
O., LTD. VINFAST LITHIUM BATTERY PACK LIMITED	89,525	-	-	(5,537)	9,847	-	-	93,835
LIABILITY COMPANY	4,179	-	_	(730)	320	-	_	3,769
Jiangxi VL Battery Co.,Ltd	21,461	_	_	(3,471)	2,320	_	_	20,310
PT.HLI Green Power	,	209,132	_	(9,201)	1,557	_	_	201,488
TL Chemical CO., Ltd	_	48,544	_	(71)	.,507	_	_	48,473
551111641 55., Eta	309,329	257,676	(10,334)	(6,609)	14,684	(28,868)	(568)	535,310

11. Property, Plant and Equipment

Changes in property, plant and equipment for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Beginning balance	24,378,259	20,567,475
Business combination (Note 37)	7,251	250,128
Acquisitions / transfer	2,430,324	12,512,008
Disposals / transfer	(959,138)	(6,864,140)
Exchange differences	103,943	560,958
Depreciation	(727,295)	(2,617,458)
Impairment	(918)	(30,712)
Ending balance	25,232,426	24,378,259

Line items including depreciation in the consolidated statements of profit or loss for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Cost of sales	656,774	520,725
Selling and administrative expenses	70,288	54,466
Others	121	325
Discontinued operations	112	2,005
Total	727,295	577,521

Lease

(i) Amounts recognized in the consolidated statement of financial position

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

(in millions of Korean won)	March 31, 2022	December 31, 2021
Right-of-use assets ¹		
Real-estate	329,376	329,920
Machinery	22,580	23,258
Vehicles	27,197	21,475
Tools	2,638	2,083
Equipment	659	473
	382,450	377,209

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

Additions to the right-of-use assets during the three-month ended March 31, 2022, were $\mbox{$\frac{4}{3}$}$ 31,398 million (2021: $\mbox{$\frac{4}{3}$}$ 132,653 million).

(in millions of Korean won)	March 31, 2022	December 31, 2021
Lease liabilities ¹		
Current	74,857	71,865
Non-current	250,936	247,380
	325,793	319,245

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

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

Lease related expenses recognized in the consolidated statement of profit or loss for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Depreciation of right-of-use assets		
Real-estate	16,542	13,475
Machinery	1,431	1,403
Vehicles	4,039	3,202
Tools	475	366
Equipment	65	123
	22,552	18,569
Interest expense relating to lease liabilities (included in finance cost)	2,228	2,093
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	6,831	6,879
Expense relating to leases of low-value assets that are not short-term leases (included in cost of goods sold and administrative expenses)	3,598	3,213

Total cash outflow for leases during the three-month period ended March 31, 2022, was $\mbox{$$\seta$}33,480$ million (2021: $\mbox{$$\%$}29,500$ million).

12. Intangible Assets

Changes in intangible assets for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Beginning balance	2,444,303	2,279,917
Business combination (Note 37)	1,503	251,856
Separate acquisitions/ transfer	149,538	427,080
Additions – internal development	-	220
Disposals/ transfer	(35,449)	(15,425)
Exchange differences	(2,535)	23,042
Amortization	(65,755)	(223,178)
Impairment	(40)	(298,849)
Transfer to assets held for sale (Note 34)		(360)
Ending balance	2,491,565	2,444,303

Line items including amortization of intangible assets for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Cost of sales	15,189	11,978
Selling and administrative expenses	50,566	38,032
Discontinued operations	<u> </u>	157
Total	65,755	50,167

Total research and development costs recognized as expenses amounted to \$357,237 million (2021: \$280,032 million) for the three-month periods ended March 31, 2022 and 2021.

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

Greenhouse gas emission permits held for the purpose of fulfilling obligations

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

(in thousands of tons)	2021	2022	2023	2024	2025	Total
Allocation with nil consideration	9,407	9,432	9,432	9,344	9,344	46,959

Changes in greenhouse gas emission permits during the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in thousands of	March 31, 2022								
tons and millions	202	0	202	2021		2022		2023	
of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount	
Beginning balance /Allocation with nil									
consideration	8,666	-	9,407	-	9,432	-	9,432	-	
Purchase/Sale	(69)	1,111	(90)	-	-	-	-	-	
Exchange Borrowings/Carry forwards between	100	-	(100)	-	-	-	-	-	
years Surrendered to the	(49)	(388)	49	388	-	-	-	-	
government	(8,648)	(723)	-	-	-	-	-	-	
Ending balance ¹	-	-	9,266	388	9,432	-	9,432	-	

(in thousands of tons and	March 31, 2022							
millions of Korean won)	202	2024		2025		al		
	Quantity	Amount	Quantity	Amount	Quantity	Amount		
Beginning balance / Allocation with nil								
consideration	9,344	-	9,344	-	55,625	-		
Purchase/Sale	-	-	-	-	(159)	1,111		
Exchange	-	-	-	-	-	-		
Borrowings/Carry forwards between years	-	-	-	-	-	-		
Surrendered to the government	<u>-</u>	<u> </u>	<u>-</u> _	<u>-</u>	(8,648)	(723)		
Ending balance ¹	9,344	_	9,344	-	46,818	388		

¹ The emission permits for 2021 is expected to be surrendered to the government after getting a certification in the current year.

(in thousands of	December 31, 2021							
tons and millions	2020 2021		1	202	2	2023		
of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance /Allocation with nil	0.000		0.405		0.400		0.400	
consideration	8,666	-	9,405	-	9,430	-	9,430	-
Purchase/Sale	(69)	1,111	(54)	-	-	-	-	-
Exchange Borrowings/Carry	100	-	(100)	-	-	-	-	-
forwards between								
years	(49)	(388)	49	388	-	-	-	-
Surrendered to the								
government	(8,648)	(723)	<u> </u>		<u> </u>	-	<u>-</u>	
Ending balance	<u>-</u>	<u>-</u>	9,300	388	9,430	<u>-</u>	9,430	_

(in thousands of tons and	December 31, 2021							
millions of Korean won)	2024		202	2025		al		
	Quantity	Amount	Quantity	Amount	Quantity	Amount		
Beginning balance /								
Allocation with nil								
consideration	9,343	-	9,343	-	55,617	-		
Purchase/Sale	-	-	-	-	(123)	1,111		
Exchange	-	-	-	-	-	-		
Borrowings/Carry								
forwards between years	-	-	-	-	-	-		
Surrendered to the								
government			<u> </u>	<u> </u>	(8,648)	(723)		
Ending balance	9,343	-	9,343	_	46,846	388		

During the three-month period ended March 31, 2022 and for the year ended December 31, 2021, there are no greenhouse gas emission permits held for short-term trading purpose.

13. Other Current and Non-Current Assets

Details of other current and non-current assets as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Current		
Prepayments to suppliers and prepaid expenses	243,096	201,019
Prepaid value added tax	468,754	465,660
Others	117,473	82,353
Total	829,323	749,032
Non-current		
Net defined benefit assets	12,773	45,050
Long-term prepayments and long-term prepaid expenses	74,085	70,775
Others	138	96
Total	86,996	115,921

14. Borrowings

Borrowings as at March 31, 2022 and December 31, 2021, consist of:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Current		
Short-term borrowings	1,706,842	1,688,383
Current portion of long-term borrowings	1,479,050	1,056,963
Current portion of debentures	1,109,410	659,869
Current lease liabilities	74,857	71,865
	4,370,159	3,477,080
Non-current		
Long-term borrowings	3,313,323	3,628,563
Debentures	6,759,734	7,412,711
Lease liabilities	250,936	247,380
	10,323,993	11,288,654
Total	14,694,152	14,765,734

Details of short-term borrowings as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	Bank	Latest maturity date	Interest rate(%) as at March 31, 2022	March 31, 2022	December 31, 2021
Bank loans	Citi and others	March 10, 2023	3.00 and others	1,674,293	1,237,430
Negotiated borrowings in foreign curreny ¹	Woori Bank and others	April 30, 2022	EURIBOR + 0.62 and others	32,549	450,953
Total				1,706,842	1,688,383

¹ The above borrowings in foreign currency are accounted for as collateralized borrowings for trade receivables.

Details of long-term borrowings as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of	March 31, 2022						
Korean won)	Bank	Annual interest rate (%)	Amount in Korean won	Current	Non-current		
Borrowings in Korean won	KDB	3.05	300,000	-	300,000		
	BOA	1.95	150,000	-	150,000		
Borrowings in foreign	HSBC	USD: 3M LIBOR + 1.40	4,225	4,225	-		
currencies	SMBC	USD : 1.30 EUR : 0.32~0.48 Euribor(3M) + 0.8	458,276	148,963	309,313		
	Construction Bank of China	PBOC ×0.90	8,473	8,473	-		
	Agriculture Bank of China	LPR(1Y)+0.7	74,126	4,560	69,566		
	CITI	EUR: 3M EURIBOR + 0.62~0.70 PLN: 3M Wibor+0.85	248,246	-	248,246		
	ING	6M EURIBOR + 0.70 ~0.83	162,504	67,710	94,794		
	RHB	3M KLIBOR + 70bp	21,292	-	21,292		
	Bank of China	CD(91D) + 100bp	50,000	-	50,000		
	EBRD	6M EURIBOR+0.62	325,009	67,710	257,299		
	MUFG	6M EURIBOR + 0.60~0.80	67,710	-	67,710		
	Industrial and Commercial Bank of China	PBOC ×1.00	36,891	15,473	21,418		
	Hana Bank	3M EURIBOR + 0.62	270,841	-	270,841		
	KDB	USD: 3M LIBOR+ 0.77~0.95 EUR: 3M EURIBOR + 1.00~1.50	1,006,235	507,405	498,830		
	The Export-Import Bank of Korea	3M EURIBOR + 1.00~1.50	548,739	297,925	250,814		
	NongHyup Bank	3M EURIBOR + 1.00~1.50	274,369	148,962	125,407		
	EIB	3M EURIBOR + 0.47	650,017	72,224	577,793		
	DBS	6M EURIBOR + 0.60	135,420	135,420			
Total			4,792,373	1,479,050	3,313,323		

LG Chem, Ltd. and Subsidiaries Notes to the Consolidated Interim Financial Statements March 31, 2022 and 2021 (Unaudited), and December 31, 2021

(in millions of		December 31, 2	2021		
Korean won)	Bank	Annual interest rate (%)	Amount in Korean won	Current	Non-current
Borrowings in Korean won	KDB	3.05	300,000	-	300,000
	BOA	1.95	150,000	-	150,000
Borrowings in foreign currencies	HSBC	USD: 3M LIBOR + 1.40 CNY: PBOC × 0.95, LPR(5Y) - 0.3375	8,313	8,313	-
	SMBC	USD : 1.30 EUR : 3M EURIBOR + 0.8, 0.32~0.48	451,478	10,076	441,402
	Construction Bank of China	PBOC ×0.90	8,305	8,305	-
	Agriculture Bank of China	LPR(1Y)+0.7	74,504	4,470	70,034
	CITI	EUR: 3M EURIBOR + 0.62~0.70 PLN: 3M Wibor+0.85	246,807	-	246,807
	ING	6M EURIBOR + 0.70 ~0.83	161,224	67,177	94,047
	EBRD	6M EURIBOR+0.62	322,448	67,177	255,271
	MUFG	6M EURIBOR + 0.60~0.80	134,354	67,177	67,177
	Industrial and Commercial Bank of China	PBOC ×1.00	39,666	14,785	24,881
	KEB Hana Bank	3M EURIBOR + 0.62	268,706	-	268,706
	KDB	USD: 3M LIBOR+ 0.77~0.95 EUR: 3M EURIBOR + 0.75~1.50	964,255	366,118	598,137
	The Export-Import Bank of Korea	3M EURIBOR + 0.75~1.50	517,479	295,577	221,902
	NongHyup Bank	3M EURIBOR + 0.75~1.50	258,739	147,788	110,951
	EIB	3M EURIBOR + 0.47	644,895	-	644,895
	DBS	6M EURIBOR + 0.60	134,353	_	134,353
Total			4,685,526	1,056,963	3,628,563

Details of debentures as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)		March 31, 2022				
		Annual	Latest	Amount in		
		interest rate	maturity	Korean		Non-
	Financial institution	(%)	date	won	Current	current
50-2 nd Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.28	2022.5.19	400,000	400,000	-
50-3 rd Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.53	2024.5.19	280,000	-	280,000
51-2 nd Debenture (non- guaranteed/public) ²	NH Investment & Securities	2.00	2022 2 20	240,000	240,000	
51-3 rd Debenture (non-	Co., Ltd. and others NH Investment & Securities	2.88	2023.2.20	240,000	240,000	-
guaranteed/public)	Co., Ltd. and others	3.07	2025.2.20	270,000	_	270,000
51-4 th Debenture (non-	NH Investment & Securities	0.0.	_0_00	0,000		0,000
guaranteed/public)	Co., Ltd. and others	3.29	2028.2.20	300,000	-	300,000
52-2 nd Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.11	2024.3.13	240,000	-	240,000
52-4 th Debenture (non-	NH Investment & Securities	0.40	0000 0 40	400.000		400.000
guaranteed/public) 53-1 st Debenture (non-	Co., Ltd. and others NH Investment & Securities	2.40	2029.3.13	400,000	-	400,000
guaranteed/public) ²	Co., Ltd. and others	1.57	2023.2.19	350,000	350,000	_
53-2 nd Debenture (non-	NH Investment & Securities	1.07	2020.2.10	000,000	330,000	
guaranteed/public)	Co., Ltd. and others	1.65	2025.2.19	250,000	-	250,000
53-3 rd Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	1.72	2027.2.19	50,000	-	50,000
53-4 th Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	1.91	2030.2.19	250,000	-	250,000
54-1 st Debenture (non- guaranteed/public)	KB Securities Co., Ltd and others	1.14	2024.2.19	350,000		350,000
54-2 nd Debenture (non-	KB Securities Co., Ltd and	1.14	2024.2.19	330,000	-	330,000
guaranteed/public)	others	1.51	2026.2.19	270,000	_	270,000
54-3 rd Debenture (non-	KB Securities Co., Ltd and			,		,
guaranteed/public)	others	1.76	2028.2.19	200,000	-	200,000
54-4 th Debenture (non-	KB Securities Co., Ltd and					
guaranteed/public)	others	2.14	2031.2.19	260,000	-	260,000
54-5 th Debenture (non-	KB Securities Co., Ltd and	0.00	2020 0 40	100.000		100.000
guaranteed/public) 55-1 st Debenture (non-	others KB Securities Co., Ltd and	2.22	2036.2.19	120,000	-	120,000
guaranteed/public)	others	2.39	2031.5.7	90,000	_	90,000
55-2 nd Debenture (non-	KB Securities Co., Ltd and	2.00		33,333		33,333
guaranteed/public)	others	2.52	2036.5.7	60,000	-	60,000
5Y USD Green Bond (non-						
guaranteed/private)	Citi Securities and others	1.38	2026.7.7	605,400	-	605,400
10Y USD Green Bond	0 0 1	0.00	000477	005 400		005 400
(non-guaranteed/private) 1st Debenture (non-	Citi Securities and others NH Investment & Securities	2.38	2031.7.7	605,400	-	605,400
quaranteed/public)	Co., Ltd. and others	2.21	2026.03.13	200,000	_	200,000
USD foreign currency	oo., Eta. and others	2.2 1	2020.00.10	200,000		200,000
debenture with maturity						
in 2024	Citi and others	3.25	2024.10.15	605,400	-	605,400
USD foreign currency						
debenture with maturity			0000 4 45	227 122		00= 100
in 2029	Citi and others	3.63	2029.4.15	605,400	-	605,400
EUR foreign currency debenture with maturity						
in 2023	Citi and others	0.50	2023.4.15	675,564	-	675,564
Debentures in Korean	NH Investment & Securities			•		•
won (non-guaranteed)	Co., Ltd. ²	3.00	2023.3.2	40,000	40,000	-
	NH Investment & Securities Co., Ltd. ²	1.95	2023.2.14	80 000	80,000	
	GO., LIU.	1.83	2023.2.14	80,000	00,000	-

(in millions of Korean won)	March 31, 2022					
		Annual interest rate	Latest maturity	Amount in Korean		Non-
	Financial institution NH Investment & Securities	(%)	date	won	Current	current
	Co., Ltd. NH Investment & Securities	2.22	2025.2.14	30,000	-	30,000
	Co., Ltd.	1.56	2024.2.08	70,000	-	70,000
Less: discount on debenture	es			(28,020)	(590)	(27,430)
Total				7,869,144	1,109,410	6,759,734

(in millions of Korean won)		December 31, 2021				
		Annual	Latest	Amount in		
		interest rate	maturity	Korean		Non-
	Financial institution	(%)	date	won	Current	current
50-2 nd Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.28	2022.5.19	400,000	400,000	_
50-3 rd Debenture (non-	NH Investment & Securities			,	,	
guaranteed/public)	Co Ltd. and others	2.53	2024.5.19	280,000	_	280,000
51-2 nd Debenture (non-	NH Investment & Securities			,		,
guaranteed/public)	Co., Ltd. and others	2.88	2023.2.20	240,000	_	240,000
51-3 rd Debenture (non-	NH Investment & Securities			,		,
guaranteed/public)	Co., Ltd. and others	3.07	2025.2.20	270,000	-	270,000
51-4 th Debenture (non-	NH Investment & Securities			-,		-,
guaranteed/public)	Co., Ltd. and others	3.29	2028.2.20	300,000	-	300,000
52-1st Debenture (non-	NH Investment & Securities			,		,
guaranteed/public)1	Co., Ltd. and others	2.02	2022.3.13	160,000	160,000	_
52-2 nd Debenture (non-	NH Investment & Securities			,	,	
guaranteed/public)	Co Ltd. and others	2.11	2024.3.13	240,000	_	240,000
1 st Debenture (non-	NH Investment & Securities			,		_:-,
guaranteed/public)	Co., Ltd. and others	2.21	2026.03.13	200,000	_	200,000
52-4 th Debenture (non-	NH Investment & Securities			,		,
guaranteed/public)	Co., Ltd. and others	2.40	2029.3.13	400,000	_	400,000
53-1st Debenture (non-	NH Investment & Securities			,		,
quaranteed/public)	Co., Ltd. and others	1.57	2023.2.19	350,000	_	350,000
53-2 nd Debenture (non-	NH Investment & Securities			,		,
guaranteed/public)	Co., Ltd. and others	1.65	2025.2.19	250,000	_	250,000
53-3 rd Debenture (non-	NH Investment & Securities			,		,
guaranteed/public)	Co., Ltd. and others	1.72	2027.2.19	50,000	_	50,000
53-4 th Debenture (non-	NH Investment & Securities			,		,
guaranteed/public)	Co., Ltd. and others	1.91	2030.2.19	250,000	_	250,000
54-1st Debenture (non-	KB Securities Co., Ltd and			,		,
guaranteed/public)	others	1.14	2024.2.19	350,000	_	350,000
54-2 nd Debenture (non-	KB Securities Co., Ltd and			,		,
guaranteed/public)	others	1.51	2026.2.19	270,000	_	270,000
54-3 rd Debenture (non-	KB Securities Co., Ltd and			-,		-,
guaranteed/public)	others	1.76	2028.2.19	200,000	_	200.000
54-4 th Debenture (non-	KB Securities Co., Ltd and			,		,
guaranteed/public)	others	2.14	2031.2.19	260,000	_	260,000
54-5 th Debenture (non-	KB Securities Co., Ltd and			,		,
guaranteed/public)	others	2.22	2036.2.19	120,000	_	120,000
USD foreign currency				-,		-,
debenture with maturity						
in 2024	Citi and others	3.25	2024.10.15	592,750	_	592,750
USD foreign currency		=0				222,.00
debenture with maturity						
in 2029	Citi and others	3.63	2029.4.15	592,750	-	592,750
EUR foreign currency						
	Citi and others	0.50	2023.4.15	671,170	-	671,170

(in millions of Korean won)		Dece	mber 31, 202	1		
		Annual	Latest	Amount in		_
		interest rate	maturity	Korean		Non-
	Financial institution	(%)	date	won	Current	current
debenture with maturity						
in 2023						
5Y USD Green Bond (non-		4.00	0000 7 7	500 750		500 750
guaranteed/private)	Citi Securities and others	1.38	2026.7.7	592,750	-	592,750
10Y USD Green Bond	Citi Caraniti a and all all and	0.00	0004 7 7	500 750		500 750
(non-guaranteed/private)	Citi Securities and others	2.38	2031.7.7	592,750	-	592,750
1-2 nd EUR Overseas	Credit Suisse		2021.1.14			
Exchangeable bonds Debentures in Korean	*	-	2021.1.14	-	-	-
	NH Investment & Securities	0.00	0000 0 40	400.000	400.000	
won (non-guaranteed)	Co., Ltd. ¹	2.26	2022.2.16	100,000	100,000	-
	NH Investment & Securities	0.00	0000 0 0	40.000		40.000
	Co., Ltd.	3.00	2023.3.2	40,000	-	40,000
	NH Investment & Securities	1.95	2022 2 44	00.000		00.000
	Co., Ltd.	1.95	2023.2.14	80,000	-	80,000
	NH Investment & Securities	0.00	2025 2 44	20,000		20.000
	Co., Ltd.	2.22	2025.2.14	30,000	-	30,000
	NH Investment & Securities	1.56	2024.2.0	70.000		70.000
FF 4st Dahantuna (nan	Co., Ltd.	1.50	2024.2.8	70,000	-	70,000
55-1st Debenture (non-	KB Securities Co., Ltd and others	2.39	2024 5 7	00 000		00.000
guaranteed/private) 55-2 nd Debenture (non-		2.39	2031.5.7	90,000	-	90,000
guaranteed/private)	KB Securities Co., Ltd and others	2.52	2036.5.7	60,000	_	60,000
Less: discount on debenture		2.02	_000.0.7	(29,590)	(131)	(29,459)
	, 5					<u> </u>
Total				8,072,580	659,869	7,412,711

¹ Redeemed during the three-month period ended March 31, 2022.

Details of lease liabilities as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)			March 31, 2022		
Leaser	Annual interest rate (%)	Latest maturity date	Total amount	Current	Non-current
Hyundai Oil Bank and others	1.98 ~ 3.01	2082.2.28	325,793	74,857	250,936
(in millions of Korean won)			December 31, 2021		
Leaser	Annual interest rate (%)	Latest maturity date	Total amount	Current	Non-current
Hyundai Oil Bank and others	1.98 ~ 3.01	2068.3.31	319,245	71,865	247,380

² Reclassified to current portion during the three-month period ended March 31, 2022.

15. Provisions

Changes in provisions for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean

won)	March 31, 2022						
		Greenhouse				_	
	Warranty ¹	gas emission²	Legal claims³	Restoration ⁴	Repair warranty⁵	Total	
Beginning balance Business Combination	2,110,180	79	15,642	83,807	-	2,209,708	
(Note 37)	-	-	-	-	4,999	4,999	
Additions (reversal)	64,766	5,813	50	1,069	(220)	71,478	
Used	(287,601)	-	(1,037)	(7,917)	-	(296,555)	
Ending balance	1,887,345	5,892	14,655	76,959	4,779	1,989,630	
Less: current portion	(1,382,717)	(5,892)	-	(41,702)	(93)	(1,430,404)	
Total	504,628		14,655	35,257	4,686	559,226	

(in millions of Korean

won)	December 31, 2021					
		Greenhouse				
	Warranty ¹	gas emission ²	Legal claims³	Restoration ⁴	Total	
Beginning balance Business Combination	1,244,017	4,875	8,286	112,829	1,370,007	
(Note 37)	2,406	-	-	-	2,406	
Additions (reversal)	1,477,429	(4,072)	14,013	14,186	1,501,556	
Used	(613,672)	(724)	(6,657)	(43,208)	(664,261)	
Ending balance	2,110,180	79	15,642	83,807	2,209,708	
Less: current portion	(1,532,356)	(79)		(40,320)	(1,572,755)	
Total	577,824		15,642	43,487	636,953	

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

² Greenhouse gas emission provisions have been accrued for estimated expenditures to be obligated for any excess emission. The estimated emission as at March 31, 2022 amounts to 2,459 thousand tons (March 31, 2021: 2,150 thousand tons).

³ Lawsuit provisions have been accrued for certain pending cases.

⁴ As at March 31, 2022, restoration provisions have been accrued for the estimated expenses to restore land pollutions and others.

⁵ Repair warranty provisions have been accrued based on historical experience for the estimated warranty costs to be incurred with regard to repairs.

16. Net Defined Benefit Liabilities

Details of net defined benefit liabilities(assets) recognized in the consolidated statements of financial position as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Present value of defined benefit obligations ¹ Fair value of plan assets	1,644,168 (1,617,058)	1,616,781 (1,643,709)
Liabilities (assets) in the consolidated statement of financial position ²	27,110	(26,928)

¹ The present value of retirement benefit obligations is net of existing contributions to the National Pension Plan of ₩658 million as at March 31, 2022 (December 31, 2021: ₩708 million).

The amounts recognized in the consolidated statements of profit or loss for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Current service cost ¹ Interest cost	52,673 (168)	47,527 698
Total, included in employee benefit expenses	52,505	48,225

¹ The above amounts excluded ₩273 million (2021: ₩1,027 million) of expenses capitalized to construction in progress and development costs.

Post-employment benefits recognized for defined contribution plan for the three-month period ended March 31, 2022, amounted to $\mbox{$\mbox{$$\sc W$}$}3,450$ million (2021: $\mbox{$\mbox{$$\mbox{$$\sc W$}$}$}2,972$ million).

Post-employment benefits recognized in the consolidated statements of profit or loss for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Cost of sales	32,927	30,833
Selling and administrative expenses	23,028	20,120
Discontinued operations	-	244
Total	55,955	51,197

² Includes net defined benefit assets.

Movements in the present value of defined benefit obligations for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Beginning balance Increase in defined benefit obligations	1,616,781	1,454,596
due to business combination	<u>-</u>	54,897
Transfer in	2,072	39,334
Transfer out	(1,682)	(8,314)
Current service cost	52,946	193,938
Interest expense	11,582	37,257
Remeasurements:		
Actuarial loss from change in		
demographic assumptions	-	4,586
Actuarial gain from change in financial		
assumptions	-	(76,261)
Actuarial loss (gain) from experience		0.440
adjustments	-	9,142
Others	-	11,336
Exchange differences	477	(4,600)
Payments from plans	(38,008)	(99,130)
Ending balance	1,644,168	1,616,781

Movements in the fair value of plan assets for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Beginning balance	1,643,709	1,336,637
Increase in plan assets due to business		
combination	-	45,275
Transfer in	=	1,135
Transfer out	(402)	(1,238)
Interest income	11,750	35,198
Remeasurements:		
Return on plan assets (excluding amounts		
included in interest income)	(2,885)	(13,326)
Contributions:		
Employers	272	332,299
Payments from plans	(34,178)	(89,445)
Administrative costs	(1,208)	(2,826)
Ending balance	1,617,058	1,643,709

The actual return on plan assets for the three-month period ended March 31, 2022, was $\mbox{$$\set8$},865$ million and for the year ended December 31, 2021, was $\mbox{$$\%$}21,872$ million.

The significant actuarial assumptions as at March 31, 2022 and December 31, 2021, are as follows:

	March 31, 2022	December 31, 2021
Discount rate	2.9% ~ 3.0%	2.9% ~ 3.0%
Salary growth rate	5.0%	5.0%

The sensitivity analysis for changes in key actuarial assumptions as at March 31, 2022, is as follows:

(in millions of Korean won)	Increase by 0.5%	Decrease by 0.5%
Discount rate: Increase (decrease) in defined benefit obligations	(127,403)	147,850
Salary growth rate: Increase (decrease) in defined benefit obligations	143,601	(125,976)

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

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

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

Plan assets as at March 31, 2022 and December 31, 2021, consist of:

(in millions of Korean won)	March 31, 2022		December 31, 2021		
	Amount	Composition (%)	Amount	Composition (%)	
Insurance contracts with					
guaranteed yield	1,603,321	99.1	1,629,239	99.1	
Equity linked bonds	12,370	0.8	12,988	0.8	
Time deposits	1,367	0.1	1,482	0.1	
_	1,617,058	100.0	1,643,709	100.0	

Plan assets consist of various debt instruments with principal and interest protection and others which 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 at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Current		
Advances from customers	447,674	373,356
Dividends payable	935,275	-
Withholdings	126,356	143,600
Unearned revenues	165,810	104,121
Accrued expenses	268,523	699,592
Total	1,943,638	1,320,669
Non-current		
Long-term accrued expenses	74,598	73,880
Long-term unearned revenues	87,153	99,169
Long-term advanced received	13,361	16,829
Total	175,112	189,878

18. Commitments and Contingencies

- (1) The Parent Company is jointly liable for liabilities of LG Energy Solutions Co., Ltd. as at December 1, 2020, a newly established company through the split-off from the Parent Company.
- (2) As at March 31, 2022, the Parent Company and certain subsidiaries have been guaranteed from Seoul Guarantee Insurance Company for the execution of contracts and others.
- (3) As at March 31, 2022, the Parent Company and certain subsidiaries have various specific line of credit agreements with several financial institutions, as follows:

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

•		_		•						
Classification	The Parent	Company			Certai	n Oversea	s Subsidia	ries		
	KRW	USD	KRW	USD	CNY	EUR	PLN	INR	ТНВ	MYR
Limit of bank overdraft	20,400	-	8,700	140	1,000	97	-	-	10	-
Limit of the letter of credit Limit of discount of notes	20,000	278	-	297	2,309	-	-	763	-	-
from export Limit of guaranteed payments	-	329	-	481	2,900	-	-	-	-	-
in other foreign currency	-	405	-	122	400	-	-	-	-	-
Limit of loan arrangements	800,000	760	110,000	3,543	4,404	2,815	155	4,521	-	450
Derivatives	-	-	-	1,204	-	-	-	-	-	-
Limit of other loans	_	-	_	70	_	_	-	_	-	_

The Group also entered into comprehensive credit line agreements with other financial institutions relating to trade finance and import/export amounting to $\mbox{$\psi 20,000$ million}$ (including bank overdraft of $\mbox{$\psi 5,000$ million}$) and USD 300 million. Certain subsidiaries entered into factoring agreements with limit of $\mbox{$\psi 230,000$ million}$ and USD 175 million.

- (4) As at March 31, 2022, the Parent Company and certain subsidiaries have B2B purchase arrangements with several financial institutions with limit of ₩235,000 million and ₩150,000 million, respectively.
- (5) As at March 31, 2022, the Parent Company has reverse factoring agreements, and there is no utilized amount.
- (6) As at March 31, 2022, in connection with styrene monomer gas leakage accident, several lawsuits against LG Polymer India Pvt. Ltd., a subsidiary, have been filed with National Green Tribunal of India (NGT) and Andhra Pradesh High Court (APHC). The ultimate outcome of these cases cannot be determined at the reporting date. LG Polymer India Pvt. Ltd deposited INR 500 million under the order from NGT, and deposited INR 898 million generated from sales of inventories, under the order from APHC in connection with this accident. The manufacturing facility is currently closed with limited access in accordance with the order from APHC.
- (7) As at March 31, 2022, in relation to price fixing of mobile batteries, the consumers in Israel have filed two class actions against the Parent Company and certain overseas subsidiaries. However, the ultimate outcome of these cases cannot be determined at the reporting date.
- (8) As at March 31, 2022, in relation to General Motors (GM) Bolt EV, the class action against General Motors (GM) Bolt EV including the Group is still pending. However, the ultimate outcome of the case cannot be determined at the reporting date.
- (9) In addition, as at March 31, 2022, the Parent Company and certain subsidiaries have been named as a plaintiff in 8 and 22 legal actions, respectively, involving ₩26,494 million and ₩11,945 million in claims, respectively. They have been named as a defendant in 14 and 151 legal actions, respectively, with ₩43,345 million and ₩3,647 million in claims, respectively. The ultimate outcome of these cases cannot be determined at the reporting date.
- (10) As at March 31, 2022, the Parent Company is under investigation by the related authorities in relation to the manipulation of the emission of fine dust-causing substance in the Yeosu Industrial Complex, and the final outcome of these investigations cannot be determined at the reporting date. As at March 31, 2022, the Parent Company shut down the relevant production facilities.
- (11) The Parent Company has entered into manufacture and production technical contracts with ExxonMobil and others.
- (12) The Parent Company has entered into a license agreement with LG Corp. to use trademarks on the products that the Group manufactures and sells, and on the services the Group provides in relation to its business.
- (13) As at March 31, 2022, the Parent Company has entered into payment guarantee contract of USD 273 million, and certain subsidiaries have entered into payment guarantee contracts of USD 25 million, EUR 2 million and ₩7,755 million with financial institutions to guarantee the warrant of products and payment. Also, certain subsidiaries have entered into payment guarantee contract of CNY 341 million with financial institutions in relation to custom of imported raw materials.

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

(in millions of Korean won) March 31, 2022 December 31, 2021

Property, plant and equipment 4,039,372 3,822,461

- (15) As at March 31, 2022, the Group has entered into an agreement with General Motors (GM) regarding joint investment in Ultium Cells LLC, whereby each party can sell its shares to third parties in 8 years after the inception of the contract. In addition, if one party defaults, the other party has the right to purchase shares from the other party. The Group completed the process of approval by the government for the use of core technologies according to the Industrial Technology Protection Act.
- (16) As at March 31, 2022, Stellantis, the Group's customer, has recalled Chrysler PHEV vehicles over a potential fire risk. There has been no confirmed root cause of fires in the Stellantis vehicles that are subject to the recall.

19. Share Capital

Changes in share capital and share premium for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of Korean won and in shares)	Ordinary s	shares	Preferred	shares	
	Number of shares	Share capital	Number of shares	Share capital	Share premium
January 1, 2021	70,592,343	352,962	7,688,800	38,444	2,014,036
December 31, 2021	70,592,343	352,962	7,688,800	38,444	2,014,036
March 31, 2022	70,592,343	352,962	7,688,800	38,444	2,014,036

Changes in treasury shares for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

	Number of shares			Gain on	
(in millions of Korean won and in shares)	Ordinary shares	Preferred shares	Carrying amount	disposal of treasury shares	
January 1, 2021 Treasury shares reduction due to the exercise of	464,842	16,368	35,699	431,720	
exchange rights Disposal of treasury	(91,228)	-	(14,302)	28,344	
shares ¹	(6,085)	(10,327)	(3,386)	3,744	
December 31, 2021	367,529	6,041	18,011	463,808	
March 31, 2022	367,529	6,041	18,011	463,808	

¹ After the exchange of exchangeable bonds, all of the remaining treasury shares purchased in early 2017 due to the exercise of share purchase rights by the dissenting shareholders who objected to the merger with LG Life Sciences, Ltd. have been disposed of during the year ended December 31, 2021.

20. Retained Earnings

Retained earnings as at March 31, 2022 and December 31, 2021, consist of:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Legal reserve ¹	527,848	540,492
Discretionary reserve ²	14,570,240	12,945,537
Retained earnings before appropriation	2,744,069	4,605,920
Total	17,842,157	18,091,949

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

21. Other Components of Equity

Details of other components of equity as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Treasury shares (Note 19)	(18,011)	(18,011)
Capital transactions within the Group ¹	(19,299)	(19,299)
Total	(37,310)	(37,310)

¹ Includes gain or loss on disposal of investments and investment differences due to changes in equity, net of deferred tax.

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

22. Selling and Administrative Expenses

Selling and administrative expenses for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Wages and salaries	346,365	252,288
Post-employment benefits (Note 16)	23,028	20,120
Employee benefits	64,153	54,176
Travel expense	12,419	7,278
Water & utilities	24,693	18,653
Packaging expense	1,951	1,438
Rental expenses	34,991	28,484
Commission expenses	206,243	171,703
Depreciation	70,646	54,770
Advertising expense	7,229	5,600
Freight expenses	446,514	208,606
Training expense	7,075	3,930
Amortization (Note 12)	50,566	38,032
Sample expense	5,224	3,245
Development costs	57,880	50,869
Others	114,462	129,510
Total	1,473,439	1,048,702

23. Classification of Expenses by Nature

Cost of sales, and selling and administrative expenses by nature for the three-month periods ended March 31, 2022 and 2021, consist of:

(in millions of Korean won)	2022	2021
Changes in inventories of merchandise, finished goods, semi-		
finished goods and work in process	(338,364)	(276,884)
Raw materials and consumables used	7,133,481	4,663,888
Purchase of merchandise	325,962	311,494
Employee benefit expenses (Note 24)	994,105	726,990
Advertising expenses	7,378	5,850
Freight expenses	459,638	219,118
Commission expenses	359,707	304,386
Depreciation and amortization	793,175	625,508
Rent expenses and usage fee	23,988	18,765
Other expenses	824,741	1,636,094
Total	10,583,811	8,235,209

24. Employee Benefit Expenses

Details of employee benefit expenses for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Salaries	843,094	609,747
Post-employment benefits – Defined benefit plan (Note 16)	52,505	47,981
Post-employment benefits – Defined contribution plan (Note 16)	3,450	2,972
Others	95,056	66,290
Total	994,105	726,990

25. Finance Income and Costs

Details of finance income and costs for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Finance income		
Interest income ¹	58,226	10,852
Dividend income	-	376
Exchange differences	94,357	113,523
Gain related to derivative instruments	42,814	22,730
Others	861	10,975
Total	196,258	158,456
Finance costs		
Interest expense ²	62,188	40,356
Exchange differences	175,937	146,645
Loss related to derivative instruments	-	8,079
Others	780	2
Total	238,905	195,082

¹ Details of interest income for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Deposits held by financial institutions	41,759	8,016
Other loans and receivables	16,467	2,836
Total	58,226	10,852

² Details of interest expense for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Interest on financial institutions	13,993	8,326
Interest on lease liabilities	2,228	2,093
Interest on debentures	45,224	36,695
Other interest expenses	5,263	10,602
Capitalized interest for qualifying assets	(4,520)	(17,360)
Total	62,188	40,356

26. Other Non-Operating Income

Details of other non-operating income for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Exchange differences	229,378	274,729
Gain on disposal of property, plant and equipment	10,894	24,977
Gain on disposal of intangible assets	8	15
Reversal of negative goodwill	33,302	-
Insurance income	3,935	8,155
Others	9,328	7,993
Total	286,845	315,869

27. Other Non-Operating Expenses

Details of other non-operating expenses for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Exchange differences	194,562	236,310
Loss on disposal of property, plant and equipment	14,677	8,686
Loss on disposal of intangible assets	19,543	103
Impairment loss on property, plant and equipment (Note 11)	918	2,931
Impairment loss on intangible assets (Note 12)	40	14
Donations	2,097	561
Others	5,831	14,084
Total	237,668	262,689

28. Tax Expense and Deferred Tax

Income tax expense is recognized based on the best estimate of weighted average annual income tax rate expected for the full financial year. The estimated average annual income tax rate used for the year ending December 31, 2022, is 22.5% (the estimated tax rate for the year ended December 31, 2021: 26.9%).

29. Earnings per Share

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

Basic earnings per share for profit from continuing operations and earnings per share attributable to the owners of the Parent Company for the three-month periods ended March 31, 2022 and 2021, are computed as follows:

Basic earnings per ordinary share from continuing operation	ons	
(in millions of Korean won and in number of shares)	2022	2021
Profit from continuing operations attributable to ordinary shares ¹	620,848	883,076
Weighted average number of ordinary shares outstanding ²	70,224,814	70,213,855
Basic earnings per ordinary share from continuing operations (in won)	8,841	12,577
Basic earnings per ordinary share		
(in millions of Korean won and in number of shares)	2022	2021
Profit attributable to ordinary shares ¹	620,228	1,177,894
Weighted average number of ordinary shares outstanding ²	70,224,814	70,213,855
Basic earnings per ordinary shares (in won)	8,832	16,776
Basic earnings per preferred share from continuing operati	ons	
(in millions of Korean won and in number of shares)	2022	2021
Profit from continuing operations attributable to preferred		
share ¹ Weighted average number of preferred shares outstanding ²	68,018 7,682,759	96,592 7,672,433
Basic earnings per preferred share from continuing operations (in won)	8,853	12,589
Basic earnings per preferred share		
(in millions of Korean won and in number of shares)	2022	2021
Profit attributable to preferred shares ¹	67,950	128,808
Weighted average number of preferred shares outstanding ²	7,682,759	7,672,433
Basic earnings per preferred shares (in won)	8,845	16,788
¹ Profit attributable to ordinary and preferred shares are as follows:	ws:	
(in millions of Korean won)	2022	2021
Profit from continuing operations attributable to the owners	s	
of the Parent Company	688,866	979,668
Ordinary shares dividends (A)	210,674	175,535
Preferred shares dividends (B) Undistributed earnings from continuing operation for the	23,145	19,277
period	455,047	784,856
Undistributed earnings available for ordinary shares (C)	410,174	707,541
Undistributed earnings available for preferred shares (D)	44,873	77,315
Profit from continuing operations for the period attributable		
to ordinary shares (A+C)	620,848	883,076
Profit from continuing operations for the period attributable to preferred shares (B+D)	e 68,018	96,592
h	30,010	55,552

(in millions of Korean won)	2022	2021
Profit attributable to the owners of the Parent Company	688,178	1,306,702
Ordinary shares dividends (A)	210,674	175,535
Preferred shares dividends (B)	23,145	19,277
Undistributed earnings for the period	454,360	1,111,890
Undistributed earnings available for ordinary shares (C)	409,554	1,002,359
Undistributed earnings available for preferred shares (D)	44,805	109,531
Profit for the period attributable to ordinary shares (A+C)	620,228	1,177,894
Profit for the period attributable to preferred shares (B+D)	67,950	128,808

² Weighted average numbers of shares are calculated as follows:

		202	2	
Ordinary shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance	2022. 1. 1 - 2022. 3. 31	70,224,814	90	6,320,233,260
Total				6,320,233,260

Weighted average number of ordinary shares outstanding: 6,320,233,260 / 90 = 70,224,814 shares

Preferred shares outstanding		2022	2	
	Period	Number of shares	Number of days	Number of shares x days
Beginning balance Total	2022. 1. 1 - 2022. 3. 31	7,682,759	90	691,448,310 691,448,310

Weighted average number of preferred shares outstanding: 691,448,310 / 90 = 7,682,759 shares

		202	1	
Ordinary shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance	2021. 1. 1 - 2021. 3. 31	70,163,895	90	6,314,750,550
Conversion of treasury shares	2021. 1. 9 - 2021. 3. 31	54,834	82	4,496,388
Total				6,319,246,938

Weighted average number of ordinary shares outstanding: 6,319,246,938 / 90 = 70,213,855 shares

		2021	1	
Preferred shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance Total	2021. 1. 1 - 2021. 3. 31	7,672,433	90	690,518,970 690,518,970

Weighted average number of preferred shares outstanding: 690,518,970 / 90 = 7,672,433 shares

For the three-month period ended March 31, 2022, there were no dilutive potential outstanding ordinary shares at the reporting date. Accordingly, diluted earnings per share for profit attributable to owners of the Parent Company is identical to basic earnings per share. In addition, for the three-month period ended March 31, 2021, the Parent Company did not calculate diluted earnings per share due to antidilution effect.

Basic and diluted earnings (losses) per share attributable to ordinary and preferred shares from discounted operations for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in Korean won)	2022	2021
Basic earnings (losses) per ordinary share from discounted operations	(9)	4,199
Basic earnings (losses) per preferred share from discounted operations	(9)	4,199
Diluted earnings (losses) per ordinary share from discounted operations	(9)	4,199
Diluted earnings (losses) per preferred share from discounted operations	(9)	4,199

30. Dividends

The $\forall 935,275$ million (2021: $\forall 778,383$ million) of dividends for the year ended December 31, 2021, was paid to the shareholders of the Parent Company in April 2022.

31. Related Party Transactions

As at March 31, 2022 and December 31, 2021, LG Corp. is an entity exercising a significant influence over the Group, which owns 33.34% of the Parent Company's ordinary shares.

Details of associates and other related parties that have sales and other transactions with the Group or have receivables and payables balances as at March 31, 2022 and December 31, 2021, are as follows, and the details of investments in subsidiaries, associates and joint ventures are described in Note 1.3:

Related party	Related party's subsidiary (Domestic)	Related party's subsidiary (Overseas)	Details
D&O Corp. ¹	D&O CM Corp. Co.,Ltd.	D&O CM NANJING and others	Subsidiary of LG Corp.
LG CNS Co., Ltd.	Biz Tech Partners Co., Ltd. and others	LG CNS America Inc. and others	Subsidiary of LG Corp.
LG Management Development Institute	-	-	Subsidiary of LG Corp.
LG Sports Ltd.	-	-	Subsidiary of LG Corp.
LG Holdings Japan	-	-	Subsidiary of LG Corp.
LG Display Co., Ltd.	-	LG Display (China) Co., Ltd. and others	LG Enterprise group ²
LG Electronics Inc.	LG Innotek Co., Ltd. and others	Inspur LG Digital Mobile Communications Co., Ltd. and others	LG Enterprise group ²
LX International Corp.	LX Pantos Co., Ltd. and others	LX International (Japan) Ltd. and others	LG Enterprise group ²
LX Hausys, Ltd.	-	LX Hausys Tianjin Co., Ltd. and others	LG Enterprise group ²
LG Household & Health Care Ltd.	Coca-Cola Beverage Co. and others	-	LG Enterprise group ²

LX Semicon Co., Ltd.

- - LG Enterprise group²

LX MMA Corporation³

- - LG Enterprise group²

LG Uplus Corp.

LG HelloVision Corp.

- LG Enterprise group²

LG Enterprise group²

Beijing Yuanzhimeng
Advertising Co., Ltd.

LG Enterprise group²

Sales and purchases with related parties for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022							
			Purchas	se and others				
			Acquisition of					
			property, plant					
	Sales and	Purchase of	and equipment	Acquisition	Intonot			
	others	raw materials /merchandises	and intangible assets	of right-of- use assets	Interest expense	Others		
Entity with a significant influence over the Group LG Corp.			4 272		60	22 620		
·	-	-	1,273	-	60	23,620		
Associates and joint ventures								
SEETEC Co., Ltd.	25,596	53,716	_	_	101	19,754		
TECWIN Co., Ltd.	20,000	22	346	_	-	24		
HUAJIN NEW ENERGY MATERIALS(QUZHOU)			0.10					
CO., LTD.	-	28,183	-	-	-	-		
Others	12,560	2,760	-	-	-	1,093		
Other related parties								
D&O Corp. and its subsidiaries and								
associates	105	2,049	71,706	-	-	21,876		
LG CNS Co., Ltd. and its								
subsidiaries	4,409	340	66,347	-	6	37,469		
Others	-	-	-	-	-	10,566		
Others								
LG Display Co., Ltd. and								
its subsidiaries LG Electronics Inc. and its subsidiaries and joint	151,086	31	-	-	3	6		
ventures	202,752	106,311	101,364	-	98	6,772		

¹ During the three-month period ended March 31, 2022, the agenda for the change of the entity's name of S&I Corp. and its subsidiaries has been approved.

² Although these entities are not the related parties of the Group in accordance with K-IFRS 1024, these entities belong to a large enterprise group in accordance with the Monopoly Regulation and Fair Trade Act.

³ During the year ended December 31, 2021, due to the spin-off of LG Corp., its shares were transferred to LX Holdings Corp., a new company, and then the classification criteria for related parties have been changed.

otal	550.790	363.037	260.676		286	565,922
Others	3,132	8,977	58	-	14	1,472
LX MMA Corporation ¹	51,754	51,438	-	-	-	1,305
subsidiaries	75,712	2,000	1,048	-	-	-
LX International Corp. and its subsidiaries LX Hausys, Ltd. and its	23,684	107,210	18,534	-	4	441,965

(in millions of Korean won) 2021

	Purchase and others								
			Acquisition of	o and others					
			property, plant						
		Purchase of	and equipment	Acquisition					
	Sales and	raw materials	and intangible	of right-of-	Interest				
	others	/merchandises	assets	use assets	expense	Others			
Entity with a significant									
influence over the Group									
LG Corp.	-	-	-	-	58	19,587			
Associates and joint									
ventures									
SEETEC Co., Ltd.	11,145	36,645	-	41	107	16,741			
TECWIN Co., Ltd.	1	2	367	-	-	8			
HL Greenpower Co., Ltd. ²	201,596	440	-	-	-	10			
HUAJIN NEW ENERGY									
MATERIALS(QUZHOU)									
CO., LTD.	-	457	-	-	-	241			
Others	-	2,567	-	-	-	394			
Other related parties									
D&O Corp. and its									
subsidiaries	20	2,928	135,667	-	-	28,519			
LG CNS Co., Ltd. and its									
subsidiaries	1,266	897	68,484	-	6	42,331			
Others	44	-	-	-	-	7,580			
Others									
LG Display Co., Ltd. and									
its subsidiaries	170,367	24	-	-	4	-			
LG Electronics Inc. and its									
subsidiaries and joint									
ventures	398,613	273,498	91,524	-	10	54,610			
LX International Corp. and	10 227	97,018	2,099		1	240,054			
its subsidiaries LX Hausys, Ltd. and its	19,327	97,010	2,099	-	1	240,034			
subsidiaries	58,216	_	10,956	_	_	660			
LX MMA Corporation ¹	21,307	42,881	-	_	_	832			
Others	1,957	6,247	766	9	17	1,111			
Total	883,859	463,604	309,863	50	203	412,678			
	000,009	400,004	308,003		203	712,010			

¹ Net sales and purchase amounts after offsetting for Raffinate transactions with LX MMA Corporation.

² This entity has been excluded from the related parties since the Company sold its shares in 2021. Transactions with this entity until the sale of shares have been included in the above information.

Balances of receivables and payables arising from sales and purchases of goods and services as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022						
	Trade receival		Loa		Other	T-4-1	
	and others	3	receiva	ables re	eceivables	Total	
Entity with a significant influence over the Group							
LG Corp.		-		-	10,083	10,083	
Associates and joint ventures							
SEETEC Co., Ltd.	8	,911		-	703	9,614	
TECWIN Co., Ltd. HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.		-		-	-	-	
Others		397		-	39	436	
Other related parties							
D&O Corp. and its subsidiaries and associates		1		_	_	1	
LG CNS Co., Ltd. and its subsidiaries	1	,843				4,843	
·	4	,043		-	-	4,043	
Others		-		-	-	-	
Others							
LG Display Co., Ltd. and its subsidiaries LG Electronics Inc. and its subsidiaries and joint ventures ²		,466 ,637		-	657 3,258	152,123 259,895	
LX International Corp. and its subsidiaries		,330		_	-	1,330	
LX Hausys, Ltd. and its subsidiaries		,147		_	24	76,171	
LX MMA Corporation		,489		_	734	20,223	
Others	10	324		_	1,673	1,997	
				-			
Total	519	,545			17,171	536,716	
(in millions of Korean won)	March 31, 2022 Payables						
	Trade payables	Borro	wings	Lease liabilities	Other payables	Total	
Entity with a significant influence over the Group							
LG Corp.	_		_	9,026	313,759	322,785	
•				3,020	010,700	322,703	
Associates and joint ventures	00.470			00.000	0.000	50.000	
SEETEC Co., Ltd.	20,472		-	23,880	9,630	53,982	
TECWIN Co., Ltd.	-		-	-	6	6	
HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	3,649		_	_	_	3,649	
					122,872		
Others	227		-	-	122,072	123,099	
Other related parties							
D&O Corp. and its subsidiaries and associates	-		-	-	140,926	140,926	
LG CNS Co., Ltd. and its subsidiaries	500		-	904	94,842	96,246	
Others	-		-	-	1,289	1,289	
Others							
LG Display Co., Ltd. and its subsidiaries LG Electronics Inc. and its subsidiaries and joint	38		-	567	3,187	3,792	
ventures ²	68,511		-	18,299	213,996	300,806	
LX International Corp. and its subsidiaries	25,213		-	2,585	226,395	254,193	
LX Hausys, Ltd. and its subsidiaries	-		_	-	3,472	3,472	
LX MMA Corporation	18,338		_	-	, -	18,338	
Others	2,856		_	3,308	4,196	10,360	
			 -				
Total	139,804			58,569	1,134,570	1,332,943	

(in millions of Korean won)	December 31, 2021					
				Receivables		
	Trade receival and others		Loa receiv		Other eceivables	Total
Entity with a significant influence over the Group						
LG Corp.		-		-	9,983	9,983
Associates and joint ventures						
SEETEC Co., Ltd.	7	,426		-	462	7,888
TECWIN Co., Ltd. HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.		-		-	-	-
Others		463		-	4,586	5,049
Other related parties		403		-	4,560	5,049
•		200			0.700	0.450
D&O Corp. and its subsidiaries ¹	-	388		-	8,762	9,150
LG CNS Co., Ltd. and its subsidiaries	5	,632		-	326	5,958
Others		-		-	6,739	6,739
Others						
LG Display Co., Ltd. and its subsidiaries LG Electronics Inc. and its subsidiaries and joint ventures ²		,826			935 25,438	111,761 295,554
LX International Corp. and its subsidiaries		.676		_	20,400	2,676
LX Hausys, Ltd. and its subsidiaries		,934		_	- 55	58,989
LX MMA Corporation		,754		_	625	21,379
Others	20	23		-	1,773	1,796
	477			-		
Total	477	,238			59,684	536,922
(in millions of Korean won)			De	ecember 31, 2 Payables	021	
	Trade payables	Borro	wings	Lease liabilities	Other payables	Total
Entity with a significant influence over the Group						
LG Corp.	_		_	11,866	23,609	35,475
Associates and joint ventures				11,000	25,005	55,475
-	17 161			24.652	10 210	EQ 407
SEETEC Co., Ltd.	17,164		-	24,653	•	52,127
TECWIN Co., Ltd. HUAJIN NEW ENERGY MATERIALS(QUZHOU) CO., LTD.	317 48,054		-	-	16,116	16,433 48,054
Others	-		_	_	410	410
Other related parties					410	410
					202 004	202 004
D&O Corp. and its subsidiaries ¹	-		-	-	282,691	282,691
LG CNS Co., Ltd. and its subsidiaries	233		-	1,192		317,585
Others	-		-	-	715	715
Others						
LG Display Co., Ltd. and its subsidiaries LG Electronics Inc. and its subsidiaries and joint ventures ²	32 59,289		-	595 18,694	•	3,569 226,168
			-	10,034	•	
LX International Corp. and its subsidiaries	18,467		-	-	182,716	201,183
LX Hausys, Ltd. and its subsidiaries	- -		-	-	5,501	5,501
LX MMA Corporation	15,960		-	-	-	15,960
Others	3,226			3,479	8,583	15,288
Total	162,742			60,479	997,938	1,221,159

Fund transactions with related parties for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)				2022			
			Equity	Loa	ans	Borrov	vings ¹
	Dividends received	Dividends paid	contributions in cash (capital reduction)	Loans	Repayment	Borrowings	Repayment
Entity with a significant influence over the Group LG Corp.	_	_	_	_	<u>-</u>	-	2,923
Associates and joint							•
ventures							
SEETEC Co., Ltd.	5,000	-	-	-	-	-	238
Other related parties							
LG CNS Co., Ltd.	-	-	-	-	-	-	295
Others							
LG Display America, Inc.	_	-	-	_	-	-	40
LX Pantos Poland							
sp.z.o.o	-	-	-	-	-	62	2
PANTOS LOGISTICS							
MEXICO S.A. de C.V	-	-	-	-	-	2,384	161
LX PANTOS TURKEY						207	04
LOJISTIK LG Electronics	-	-	-	-	-	337	21
Deutschland GmbH	_	_	_	_	_	_	72
LG ELECTRONICS							
WROCLAW SP. Z O.O.	_	-	-	-	-	-	348
LG HOUSEHOLD &							
HEALTH CARE LTD		-	<u> </u>	-			156
Total	5,000	-	<u> </u>	-		2,783	4,256

¹ Other receivables to D&O Corp. (formerly, S&I Corp.) include the amount of deposits which are classified as memberships in the financial statements of the Group.

² The warranty provision related to the recall of GM Bolt is not included in the above receivables and payables.

(in millions of Korean won)	2021								
			Equity contributions in cash	Loa	ans	Borrov	vings ¹		
	Dividends received	Dividends paid	(capital reduction)	Loans	Repayment	Borrowings	Repayment		
Entity with a significant influence over the Group LG Corp.	_	_	_	_	_	_	2,972		
Associates and joint							,-		
ventures SEETEC Co., Ltd.	10,000	-	_	_	-	41	1,981		
Other related parties									
LG CNS Co., Ltd.	-	-	-	-	_	-	1,914		
LG Holdings Japan									
Co.,Ltd.	-	-	-	-	-	-	92		
Others									
LG Display America, Inc.	-	-	-	-	-	-	35		
Pantos Logistics France	-	-	-	-	-	-	178		
Pantos Logistics Spain S.L.	-	-	-	-	-	-	68		
LG Electronics Deutschland GmbH						_	70		
LX Hausys, Ltd.	-	-	-	-	-	-			
LG HOUSEHOLD &	-	-	-	-	-	-	652		
HEALTH CARE LTD	_	_	_	_	_	9	478		
Total	10,000		-			50	8,440		

¹ The amounts represent lease liabilities that were recognized or repaid for the three-month periods ended March 31, 2022 and 2021.

Compensation for key management of the Group for the three-month periods ended March 31, 2022 and 2021, consists of:

(in millions of Korean won)	2022	2021
Short-term employee benefits	21,610	13,777
Post-employment benefits	2,966	3,765
Total	24,576	17,542

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

There are no provisions recognized against receivables from related parties as at March 31, 2022 and December 31, 2021; therefore, there are no impairment losses recognized against the receivables from related parties for the three-month period ended March 31, 2022 and for the year ended December 31, 2021.

As at March 31, 2022, there are no payment guarantees provided by the Group for related parties.

32. Cash Flows

Cash generated from operations for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Profit before income tax		
Profit before income tax from continuing operations	1,023,562	1,427,972
Profit (loss) before income tax from discontinued operations	(793)	420,165
	1,022,769	1,848,137
Adjustments for:		
Depreciation	727,532	577,521
Amortization	65,755	50,167
Post-employment benefits	52,505	48,225
Finance income	(217,361)	(193,165)
Finance costs	223,784	235,853
Foreign exchange differences	4,078	(1,419)
Loss (gain) on valuation of inventories	9,223	(5,347)
Gain on disposal of property, plant and equipment	(10,894)	(30,732)
Gain on disposal of intangible assets	(8)	(15)
Loss on disposal of property, plant and equipment	14,677	8,686
Loss on disposal of intangible assets	19,543	103
Impairment loss on property, plant and equipment	918	3,493
Impairment loss on intangible assets	40	14
Gain on disposal of business	-	(385,704)
Additions to provisions	71,478	69,294
Other income/expenses	32,815	(37,030)
Increase in inventories	(1,009,645)	(440,955)
Increase in trade receivables	(543,809)	(613,795)
Decrease (increase) in other receivables	71,668	(99,859)
Increase in other current assets	(69,769)	(99,544)
Increase in trade payables	876,849	479,698
Increase (decrease) in other payables	(87,839)	313,644
Decrease in other current liabilities	(255,540)	(321,871)
Decrease in provisions	(296,555)	(93,739)
Increase (decrease) in net defined benefit liabilities	(2,102)	129
Other cash flows from operations	(34,785)	1,470
Cash generated from operations	665,327	1,313,259

Changes in liabilities arising from financial activities for the three-month period ended March 31, 2022, are as follows:

(in millions of				2022			
Korean won)	As at January 1, 2022	Cash flows from financing activities	Reclassifi- cation of current portion	Amortization	Lease liabilities	Others	As at March 31, 2022
Short-term borrowings	2,817,211	(117,467)	534,439	-	-	26,566	3,260,749
Long-term borrowings	3,875,943	159,357	(534,439)	-	25,186	38,212	3,564,259
Debentures	8,072,580	(260,000)	-	2,195	-	54,369	7,869,144
Other payables for the reverse factoring							
arrangement	299,645	(299,645)			<u>-</u>	-	
Total	15,065,379	(517,755)		2,195	25,186	119,147	14,694,152

Significant non-cash transactions for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)	2022	2021
Reclassification of construction-in-progress	894,202	1,192,523
Reclassification of machinery-in-transit	35,984	12,589
Reclassification of long-term borrowings into current portion	1,243,965	401,747
Other payables related to acquisitions of property, plant and		
equipment and intangible assets	561,360	1,697,363
Reclassification of other payables under the reverse		
factoring arrangement	-	641,839
Exchange of treasury stocks such as exchangeable bonds	-	54,383

33. Segment Information

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

Segment	Products or services	Major customers
Petrochemicals	ABS, PC, PE, PP, Acrylic, Alcohol, SAP, PVC, Synthetic rubber, Special resin, BPA, Ethylene, Propylene and others	LG Electronics Inc., OCI Group Co. Ltd., Mitsubishi Corp. and others
LG Energy solution	Mobile batteries, Automotive batteries, Electricity storage batteries and others	Hewlett-Packard Co., General Motors Corp., and others
Advanced materials ¹	Automotive components, LCD Photoresist, OLED materials, Battery materials and others	LG Display Co., Ltd., Samsung Display Co., Ltd., BOE, AUO and others
Life sciences	Growth hormone, Vaccine, Antidiabetic, agricultural chemicals and others	UNICEF, Intervet, SOUSAM IMPORTACAO E EXPORTACAO LTDA and others

Segment	Products or services	Major customers
Common and others	Crop protection products, Seeds, Fertilizers, General management, sales and R&D and others	National Agriculture Cooperative Federation and others

¹ During the year ended December 31, 2021, the Group disposed of all of its shares of Ugimag Korea Co., Ltd. and related profit and loss are presented as discontinued operations. The information for the comparative period has been restated to reflect these changes.

Segment information on revenue, profit and loss for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of			2022			
Korean won)	Petro- chemicals	LG Energy solution	Advanced materials	Life sciences	Common and others ³	Total
Total segment revenue	5,963,473	4,342,326	1,568,017	217,438	300,193	12,391,447
Inter-segment revenue Revenue from external	146,950	3,490	609,922	14,658	8,356	783,376
customers ¹	5,816,523	4,338,836	958,095	202,780	291,837	11,608,071
Operating profit (loss) ² Depreciation and	634,600	259,153	153,761	32,197	(55,451)	1,024,260
amortization	244,174	417,674	53,279	21,355	56,693	793,175
	2021					
(in millions of			2021			
(in millions of Korean won)	Petro- chemicals	LG Energy solution	2021 Advanced materials	Life sciences	Common and others ³	Total
•			Advanced			Total 10,261,023
Korean won)	chemicals	solution	Advanced materials	sciences	and others ³	
Korean won) Total segment revenue Inter-segment revenue	chemicals 4,435,187	solution 4,215,247	Advanced materials	sciences 161,901	and others ³ 282,113	10,261,023
Total segment revenue Inter-segment revenue Revenue from external	chemicals 4,435,187 135,980	4,215,247 2,054	Advanced materials 1,166,575 420,321	161,901 2,019	and others ³ 282,113 55,956	10,261,023 616,330

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

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

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

Segment information on assets and liabilities as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of			March 31,	2022		
Korean won	Petro- chemicals	LG Energy solution	Advanced materials	Life sciences	Common and others	Total
Reportable segment asset ¹ Investments in associates and joint	15,549,839	34,936,490	4,864,226	1,575,983	7,490,917	64,417,455
ventures	64,598	222,407	94,925	17	148,973	530,920
Reportable segment liability ¹	4,555,927	15,499,855	1,330,973	177,582	7,362,018	28,926,355
(in millions of			December 31	1, 2021		
Korean won	Petro- chemicals	LG Energy solution	Advanced materials	Life sciences	Common and others	Total
Reportable segment asset ¹ Investments in associates and joint	15,297,794	23,728,448	4,972,040	1,576,987	5,560,033	51,135,302
ventures	62,024	225,567	93,835	17	153,867	535,310
Reportable segment liability ¹	5,016,619	14,980,391	1,406,698	220,954	6,300,652	27,925,314

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

External sales and non-current assets by geographical segments from continuing operations for the three-month periods ended March 31, 2022 and 2021, and as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of	Sales		Non-curre	nt assets¹
Korean won)	2022	2021	March 31, 2022	December 31, 2021
Korea ²	2,816,169	2,159,900	16,152,864	16,157,398
China	3,609,504	2,647,491	4,854,833	4,688,935
Asia	1,467,368	1,222,047	171,283	147,809
America	1,062,284	991,623	2,269,448	1,692,631
Europe	2,514,438	2,530,902	4,332,074	4,192,086
Others	138,308	92,730	_	
Total	11,608,071	9,644,693	27,780,502	26,878,859

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

There is no single external customer who contributes over 10% of the Group's revenue for the three-month periods ended March 31, 2022 and 2021.

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

34. Assets Held for Sale and Discontinued Operations

34.1 Assets Held for Sale

Upon the approval of management, the Group decided to dispose of acrylic film business (December 2020). As a result, the related assets and liabilities were reclassified as assets and liabilities held for sale. The disposal of acrylic film business and land acquired as part of acquisition of Farm Hannong Co., Ltd. is expected to be completed in the first half of FY2022.

Details of assets of disposal group classified as held for sale as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Assets of disposal group		
Property, plant and equipment	5,367	5,364
Total	5,367	5,364

Assets of the disposal group were measured at net fair value immediately before the initial classification as assets as held for sale and there are no other non-operating expenses (income) recognized from the measurement for the three-month periods ended March 31, 2022 and 2021.

34.2 Discontinued Operations

The Group decided to discontinue Glass substrate business with the resolution of the Board of Directors in January 2020 and substantially discontinued the related business as at March 2020. In addition, the Group decided to dispose of LCD polarizer business with the resolution of the Board of Directors in June 2020, and the disposal has been completed in February 2021. The Group disposed of all of its shares of Ugimag Korea Co., Ltd., in July 2021. Accordingly, the profit and loss from the related operations are presented as discontinued operations and the comparative consolidated statements of profit or loss have been restated.

Comprehensive income information from discontinued operation for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022	
	LCD polarizer	Glass substrate	Total
Revenue	16	184	200
Expense	(414)	(579)	(993)
Loss before income tax of discontinued			
operation	(398)	(395)	(793)
Income tax benefits (expense)	(4)	109	105
Loss after income tax of discontinued operations	(402)	(286)	(688)
Expense Loss before income tax of discontinued operation Income tax benefits (expense) Loss after income tax of discontinued	(414) (398) (4)	(579) (395) 109	(9

(in millions of Korean won)		2021		
		Glass		
	LCD polarizer	substrate	Ugimag	Total
Revenue	587,655	7,499	5,394	600,548
Expense	(168,357)	(5,288)	(6,738)	(180,383)
Profit (loss) before income			_	
tax of discontinued				
operation	419,298	2,211	(1,344)	420,165
Income tax expense	(92,656)	(475)	<u> </u>	(93,131)
Profit (loss) after income tax				
of discontinued operations	326,642	1,736	(1,344)	327,034

Net cash flows from discontinued operations for the three-month periods ended March 31, 2022 and 2021, are as follows:

(in millions of Korean won)		2022		
	LCI) polarizer	Glass substrate	Total
Net cash inflow (outflow) from	operating			
activities		11,869	(561)	11,308
Net cash inflow from investing	activities	426	282	708
Net cash inflow (outflow) from	financing			
activities		(12,295)	279	(12,016)
(in millions of Korean won)			2021	
		Glass		
	LCD polarizer	substrate	ugimag	Total
Net cash inflow (outflow)				
from operating activities	203,352	2,0	19 (1,511)	203,860
Net cash inflow (outflow)			, ,	
from investing activities	581,085	5,8	74 (220)	586,739
Net cash inflow (outflow)			, ,	
from financing activities	(796,937)	(7,89	93) 1,731	(803,099)

35. Assets and Liabilities related to Contracts with Customers

Assets and liabilities related to contracts with customers as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Contract assets		
Total contract assets	-	-
Contract liabilities		
Advances in relation to revenue from the Group's		
main business activities	423,805	376,487
Expected customer incentives	55,159	5,636
Unearned revenue	152,501	167,151
Total contract liabilities	631,465	549,274

Revenue recognized in relation to contract liabilities

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

(in millions of Korean won)	2022	2021
Revenue recognized in the current period from the		
contract liabilities balance at the beginning of the period	125,175	94,393
Advances in relation to revenue from the Group's main		
business activities	108,213	91,034
Unearned revenue	16,962	3,359
Revenue recognized from performance obligations satisfied in previous periods	-	_

36. Investment Properties

Details of investment properties as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of	March 31, 2022				December 31, 2021			
Korean won)	Cost	Accumulated depreciation	Accumulated impairment	Book amount	Cost	Accumulated depreciation	Accumulated impairment	Book amount
Land	4,211	-	-	4,211	4,211	-	-	4,211
Buildings	66,421	(14,070)	(51)	52,300	65,542	(13,409)	(47)	52,086
Total	70,632	(14,070)	(51)	56,511	69,753	(13,409)	(47)	56,297

Changes in investment properties for the three-month period ended March 31, 2022 and for the year ended December 31, 2021, are as follows:

(in millions of	2022			2021		
Korean won)	Land	Building	Total	Land	Building	Total
Beginning balance	4,211	52,086	56,297	4,211	45,222	49,433
Acquisitions/transfers	-	623	623	-	8,233	8,233
Disposals/transfers	-	(51)	(51)	-	(73)	(73)
Depreciation		(358)	(358)	<u>-</u>	(1,296)	(1,296)
Ending balance	4,211	52,300	56,511	4,211	52,086	56,297

The fair value of investment properties is measured either by independent professional appraisers with certified qualification or measured based on official appraised value of land and available information from recent transactions of similar properties, and it is classified as 'level 3' of the fair value hierarchy. The fair value of investment properties as at March 31, 2022, is \pm 66,849 million (December 31, 2021: \pm 66,861 million).

During the three-month period ended March 31, 2022, rental income from investment properties under operating lease is $\mbox{$\mbox{$$\mu$}$1,671 million (2021: $\mbox{$\mbox{$$\mu$}$1,613 million), and operating expenses incurred for investment properties that generated rental income (including maintenance and repair expenses) are $\mbox{$\mbox{μ}$355 million (2021: $\mbox{$\mu$}$304 million). During the three-month period ended March 31, 2022, operating expenses incurred for investment properties that do not generate rental income (including maintenance and repair expenses) are $\mbox{$\mu$}$3 million (2021: μ3 million).$

Operating lease

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

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

The future minimum lease payments expected to be received in relation to the above operating lease agreement for investment properties as at March 31, 2022 and December 31, 2021, are as follows:

(in millions of Korean won)	March 31, 2022	December 31, 2021
Within one year	6,488	6,874
Within two years	4,299	6,016
Total	10,787	12,890

37. Business Combination

On February 28, 2022, the Group acquired 100% shares of LG Energy Solution Vertech Inc., an electricity storage batteries installation service provider in USA. The acquisition is expected to increase sales through expanded vertical integration by strengthening contact points with customers of electricity storage batteries.

Details of consideration transferred, assets and liabilities recognized as a result of the business combination, are as follows:

Gain from a bargain purchase amounting to ₩33,302 million occurred from the acquisition is recognized as other non-operating income in the consolidated statement of profit or loss.

(in millions of Korean won)	Amount
Consideration transferred	
Cash and cash equivalents	16,153
Total consideration	16,153
Identifiable assets acquired and liabilities assumed	
Cash and cash equivalents	7,749
Trade and other receivables ¹	56,333
Inventories	5,477
Property, plant and equipment	7,251
Intangible assets	1,503
Other assets	12,295
Trade and non-trade payables	(25,578)
Other payables	(13,213)
Deferred tax liabilities	(2,362)
Fair value of net identifiable assets acquired	49,455
Goodwill (gain from a bargain purchase)	(33,302)
	16,153

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

The revenue and net loss for the three-month period ended March 31, 2022 contributed by LG Energy Solution Vertech Inc. since the acquisition were ₩3,473 million and ₩1,497 million, respectively.

Revenue and profit or loss of the Group for the three-month period ended March 31, 2022 would have been \(\psi 11,607,389\) million and \(\psi 748,458\) million, respectively as though the acquisition of LG

Energy Solution Vertech Inc. had occurred as at the beginning of the three-month period ended March 31, 2022.

The Group accounts for the business combination with provisional amounts as at March 31, 2022 and the amounts may be adjusted if there is new information obtained about facts and circumstances related to business combination within the measurement period of one year from the acquisition date.

On November 1, 2021, the Parent Company and its subsidiary, LG Chem Poland Sp. z o.o., acquired CEM(Chemical Electronics Material) business from LG Electronics Inc. to drive competitive separator business. The Parent Company acquired the domestic CEM business for \times 389,973 million and the 70% shares of LG Chem Hangzhou Advanced Materials Co., Ltd.(formerly, LG Electronics(Hangzhou) Co., Ltd) for \times 67,027 million. LG Chem Poland Sp. z o.o., a subsidiary, acquired CEM business in Poland for \times 67,700 million.

The goodwill of ₩202,568 million arising from the business combination is attributable to sales increase from combining the operations of the Group and CEM business.

Details of consideration transferred, assets and liabilities recognized as a result of the business combination, are as follows:

(in millions of Korean won)	LG Chem Ltd.	LG Chem Poland Sp. Z.o.o
Consideration transferred		
Cash and cash equivalents	457,000	67,700
Total consideration	457,000	67,700
Identifiable assets acquired and liabilities assumed		
Cash and cash equivalents	4,376	-
Trade and other receivables ¹	190,386	26,228
Inventories	43,084	36,627
Property, plant and equipment	211,373	38,755
Intangible assets	48,841	447
Other assets	4,204	-
Trade and other payables	(213,669)	(24,602)
Provisions	(1,809)	(597)
Net defined benefit liabilities	(9,622)	-
Other liabilities	(5,930)	(522)
Deferred tax liabilities	(3,851)	-
Fair value of net identifiable assets acquired	267,383	76,336
Less: non-controlling interest	(12,951)	-
Acquired amount attributable to the Parent Company	254,432	76,336
Goodwill	202,568	-
Gain from a bargain purchase		(8,636)
	457,000	67,700

¹ The fair value of trade and other receivables as of the acquisition date and the total contractual amount are ₩217,624 million, of which the amount that is not expected to be recovered is ₩1,010 million.

38. Events after the Reporting Period

- (a) In April 2022, the Group established a subsidiary in Arizona, USA to respond to securing orders for cylindrical batteries and paid the capital.
- (b) In April 2022, the Group entered into a contract to acquire 15% shares of Capchem Poland SP. Z o.o. to localize battery raw material procurement.
- (c) In May 2022, the Group acquired 3.04% shares of Li-Cycle, a battery recycling company in North America.