### LG Chem, Ltd.

Separate Financial Statements and Internal Control over Financial Reporting December 31, 2021 and 2020

### LG Chem, Ltd. Index December 31, 2021 and 2020

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#### **Independent Auditor's Report**

(English Translation of a Report Originally Issued in Korean)

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

#### **Opinion**

We have audited the accompanying separate financial statements of LG Chem, Ltd. (the Company), which comprise the separate statements of financial position as at December 31, 2021 and 2020, and separate statements of profit or loss, separate statements of comprehensive income, separate statements of changes in equity and separate statements of cash flows for the years then ended, and notes to the separate financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the separate financial position of LG Chem, Ltd. as at December 31, 2021 and 2020, and its separate financial performance and its separate cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS).

We also have audited, in accordance with Korean Standards on Auditing, the Company's Internal Control over Financial Reporting as of December 31, 2021, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting*, and our report dated March 8, 2022 expressed an unqualified opinion.

#### **Basis for Opinion**

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

#### **Emphasis of Matter**

Without modifying our opinion, we draw attention to Note 4 to the separate financial statements. Note 4 to the separate financial statements describes management's plans and action taken to resolve uncertainty relating to the impact of Coronavirus disease 2019 (COVID-19) on the Company's productivity and ability to satisfy customer's orders, and to solve these events or circumstances.

#### **Key Audit Matters**

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

#### (1) Goodwill impairment assessment for Life Sciences Cash Generating Unit

Why this matter was determined to be a key audit matter

We focused on goodwill impairment assessment due to the significance of size of goodwill balance ( $\forall$  590,486 million as at December 31, 2021) and because the measurement of the 'recoverable amount' of the Company's Cash Generating Units (CGUs) involves management's judgements about the future results of the business, discount rate and adjustments arising from the perspective of market participants. Details are described in Note 12.

In particular, we focused our audit effort on the goodwill recognized in relation to the Life Sciences CGU ( $\forall$  391,311 million as at December 31, 2021) which is the most significant element among all relevant CGUs with goodwill. The Life Sciences business was acquired by the Company in 2017 and has recognized  $\forall$  294,918 million of impairment loss on goodwill for the year ended December 31, 2021. Considering the size of the balance and impairment loss recognized on this goodwill as well as the significant level of management's judgment involved for the estimation of value-in-use, we have included this matter as a key audit matter.

How this matter was addressed the in our audit

Audit procedures we performed to address this key audit matter include:

- Understanding, evaluation and testing of the design and operating effectiveness of relevant internal controls in place in connection with impairment assessment of goodwill including review and approval by management of future cash flow forecasts and assumptions applied in the assessment.
- · Evaluation of valuation model used by management to estimate value-in-use.
- Evaluation of the competence and objectivity of the expert utilized by the management.
- Comparison of future cash flow forecasts used to estimate value-in-use with the budgets approved by the management except for the cash flows relating to specific fixed assets adjusted from the perspective of market participants.
- · Comparison of the current year actual results with the prior year forecasts to assess whether management's forecasts include optimistic assumptions.
- · Evaluation of management's assumptions used to estimate value-in-use.
  - Comparison of estimated revenue growth rate, operating margin rate and capital expenditures applied to estimate value-in-use with historical performances of the CGU and the current market condition to evaluate whether applied assumptions are consistent.

- Evaluation of long-term growth rate by considering economic and industry forecasts
- Comparison of the discount rate used by the management with the discount rate independently calculated by us using observable information in the market.
- · Evaluation of CGUs identification and testing of book values allocated to CGUs
- · Evaluation of sensitivity analysis performed by management on the discount rate and terminal growth rate

#### (2) Purchase price allocation

Why this matter was determined to be a key audit matter

As disclosed in Note 37 to the separate financial statements, on November 1, 2021, the Company and its subsidiary, LG Chem Poland Sp. z o.o., acquired CEM(Chemical Electronics Material) business from LG Electronics Inc. for  $\forall$  524,700 million and accounted for the acquisitions in accordance with Korean IFRS 1103 *Business Combinations*. The Company acquired the domestic CEM business for  $\forall$  389,973 million and the 70% shares of LG Chem Hangzhou Advanced Materials Co., Ltd.(formerly, LG Electronics(Hangzhou) Co., Ltd.) for  $\forall$  67,027 million. LG Chem Poland Sp. z o.o., a subsidiary, acquired CEM business in Poland for  $\forall$  67,700 million.

The consideration transferred has been allocated to assets and liabilities acquired based on their fair values. The Company utilized an independent external expert for the valuation of the fair values of major tangible and intangible assets acquired.

Considering the size of the consideration transferred and the significant level of management's judgment involved for the allocation of consideration transferred, we have included this matter as a key audit matter.

How this matter was addressed the in our audit

Audit procedures we performed to address this key audit matter include:

- Understanding and evaluation of the design and operating effectiveness of relevant internal controls in place in connection with business combination including management's review of future cash flow forecasts and assumptions applied in the fair value determination, etc.
- · Review of the agreements for business combination
- Evaluation of the competence and objectivity of the external expert utilized by the management
- · Procedures performed by the auditor's expert included:
  - Evaluation of the valuation model used to determine the fair values of identifiable intangible assets and other assets/liabilities.
  - Evaluation of the key assumptions and variables used in the fair value determination.

- Testing of mathematical accuracy of the fair value calculation.
- · Assessment of the appropriateness of disclosures in the notes to the financial statements in relation to this business combination.

#### Other Matter

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

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

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

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

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

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

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

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

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

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

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Kibok Lee, Certified Public Accountant.

Seoul, Korea March 8, 2022

This report is effective as of March 8, 2022, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

LG Chem, Ltd.
Separate Statements of Financial Position
December 31, 2021 and 2020

(in millions of Korean won)	Notes	2021	2020
Assets			
Current assets			
Cash and cash equivalents	3, 5, 6	1,056,665	852,668
Trade receivables	3, 5, 7, 31	3,260,354	2,198,988
Other receivables	3, 5, 7, 31	214,700	145,612
Other current financial assets	3, 5, 8	1,789	-
Other current assets	13	145,308	119,288
Inventories	9	3,261,583	1,591,578
Assets held for sale	34 _	298,545	26,150
Total current assets	_	8,238,944	4,934,284
Non-current assets			
Other receivables	3, 5, 7	595,171	158,566
Other financial assets	3, 5, 8	262,876	51,699
Investments in subsidiaries	10	8,755,113	8,793,551
Investments in associates and joint ventures	10	203,170	157,642
Property, plant and equipment	11	11,204,154	10,096,185
Intangible assets	12	1,596,904	1,630,149
Investment properties	36	23,270	22,803
Other non-current assets	13, 16	49,550	5,271
Total non-current assets	_	22,690,208	20,915,866
Total assets	_	30,929,152	25,850,150
Liabilities			
Current liabilities			
Trade payables	3, 5, 31	1,502,925	877,035
Other payables	3, 5, 31	1,596,265	3,192,441
Borrowings	3, 5, 14	1,042,387	256,561
Other financial liabiliites	3, 5, 8	342	18,015
Provisions	15	13,077	13,448
Income tax payables		704,176	205,375
Other current liabilities	17, 35	574,432	345,330
Total current liabilities	· -	5,433,604	4,908,205
Non-current liabilities	<del>-</del>	<u> </u>	, ,
Other payables	3, 5, 31	4,958	4,226
Borrowings	3, 5, 14	6,112,797	3,277,409
Provisions	15	9,575	22,889
Net defined benefit liabilities	16	-	58,265
Deferred income tax liabilities	28	525,407	559,817
Other non-current liabilities	17, 35	57,934	55,834
Total non-current liabilities	-	6,710,671	3,978,440
Total liabilities	_	12,144,275	8,886,645
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# LG Chem, Ltd. Separate Statements of Financial Position December 31, 2021 and 2020

(in millions of Korean won)	Notes	2021	2020
Equity			
Share capital	1, 19	391,406	391,406
Capital surplus		2,733,331	2,701,242
Other components of equity	21	(18,011)	(35,699)
Accumulated other comprehensive income		19,893	15,495
Retained earnings	20	15,658,258	13,891,061
Total equity		18,784,877	16,963,505
Total liabilities and equity		30,929,152	25,850,150

LG Chem, Ltd.
Separate Statements of Profit or Loss
Years Ended December 31, 2021 and 2020

(in millions of Korean won, except per share amounts)	Notes	2021	2020
Revenue	31	20,471,044	20,830,009
Cost of sales	23, 31	(14,759,600)	(16,483,775)
Gross profit		5,711,444	4,346,234
Selling and administrative expenses	22, 23, 31	(2,692,284)	(3,231,797)
Operating profit		3,019,160	1,114,437
Finance income	25	662,840	421,562
Finance costs	25	(326,413)	(782,028)
Other non-operating income	26	404,307	834,210
Other non-operating expenses	27	(515,344)	(765,000)
Profit before income tax	32	3,244,550	823,181
Income tax expense	02	(799,967)	(840,780)
Profit (loss) from continuing operations	28	2,444,583	(17,599)
Profit (loss) from discontinued operations	34	69,680	(80,624)
Profit (loss) for the year		2,514,263	(98,223)
Earnings (losses) per share (in won)	29		
Basic earnings (losses) per ordinary share		32,274	(1,283)
Basic earnings (losses) per ordinary share from contiinuing operations		31,379	(234)
Basic earnings (losses) per preferred share		32,324	(1,233)
Basic earnings (losses) per preferred share from contiinuing operations		31,429	(184)

## LG Chem, Ltd. Separate Statements of Comprehensive Income Years Ended December 31, 2021 and 2020

(in millions of Korean won)	Notes	2021	2020
Profit (loss) for the year	_	2,514,263	(98,223)
Other comprehensive income			
Items that will not be reclassified to profit or loss		35,715	17,585
Remeasurements of net defined benefit liabilities	16	43,196	21,231
Gain on valuation of financial assets at fair value through other comprehensive income		6,066	3,025
Income tax relating to these items		(13,547)	(6,671)
Items that may be subsequently reclassified to profit or loss		-	411
Cash flow hedges		-	567
Income tax relating to these items		-	(156)
Other comprehensive income for the year, net of tax	_	35,715	17,996
Total comprehensive income (loss) for the year	_	2,549,978	(80,227)

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

LG Chem, Ltd. Separate Statements of Changes in Equity Years Ended December 31, 2021 and 2020

(in millions of Korean won)	Notes	Share capital	Capital surplus	Other components of equity	Accumulated other comprehensive income	Retained earnings	Total equity
Balance at January 1, 2020		391,406	2,283,378	(354,945)	28,797	14,111,594	16,460,230
Comprehensive income							
Loss for the year		-	-	-	-	(98,223)	(98,223)
Remeasurements of net defined benefit liabilities	16	-	-	-	-	15,393	15,393
Gain on valuation of financial assets at fair value							
through other comprehensive income		-	-	-	2,192	-	2,192
Cash flow hedges	_	<u>-</u>			(15,494)	15,905	411
Total comprehensive loss for the year	_				(13,302)	(66,925)	(80,227)
Transactions with owners Disposal of treasury shares Dividends	30	-	417,864	319,246	-	- (153.608)	737,110 (153,608)
Total transactions with owners	_		417.864	319.246		(153,608)	583.502
Balance at December 31, 2020	_	391,406	2,701,242	(35,699)	15,495	13,891,061	16,963,505
Balance at January 1, 2021	_	391,406	2,701,242	(35,699)	15,495	13,891,061	16,963,505
Comprehensive income	_	001,100	2,701,212	(66,666)	10,100	10,001,001	10,000,000
Profit for the year		_	_	_	-	2.514.263	2,514,263
Remeasurements of net defined benefit liabilities	16	_	_	_	_	31,317	31,317
Gain on valuation of financial assets at fair value					4 200	- /-	,
through other comprehensive income  Total comprehensive income for the year		<u>-</u>			4,398 4.398	2,545,580	4,398 2,549,978
rotal comprehensive income for the year	_	<u>-</u>		<u>-</u>	4,390	2,343,360	2,549,976
Transactions with owners							
Disposal of treasury shares		_	32,089	17,688	_	_	49,777
Dividends	30	_	-	-	-	(778,383)	(778,383)
Total transactions with owners		_	32,089	17,688		(778,383)	(728,606)
Balance at December 31, 2021	_	391,406	2,733,331	(18,011)	19,893	15,658,258	18,784,877
					·		

LG Chem, Ltd. Separate Statements of Cash Flows Years Ended December 31, 2021 and 2020

(in millions of Korean won)	Notes	2021	2020
Cash flows from operating activities			
Cash generated from operations	32	4,192,246	5,326,138
Interest received		6,360	28,000
Interest paid		(123,973)	(152,564)
Dividends received		352,501	108,240
Income taxes paid		(385,366)	(73,135)
Net cash inflow from operating activities		4,041,768	5,236,679
Cash flows from investing activities			
Decrease in other receivables		-	500
Decrease in other non-current receivables		22,921	26,850
Proceeds from disposal of investments in associates and joint ventures		6,836	382,974
Proceeds from disposal of investments in subsidiaries		1	-
Proceeds from disposal of financial instruments		5,131	91,159
Proceeds from disposal of property, plant and equipment		54,729	32,765
Proceeds from disposal of intangible assets		156	17,066
Government grants received		2,582	889
Proceeds from disposal of assets held for sale		68,659	52,114
Cash inflow due to business transfer		182,785	-
Increase in other non-current receivables		(63,180)	-
Increase in other long-term non-current receivables		(427,643)	(83,197)
Acquisition of investments in subsidiaries		(227,035)	(1,294,981)
Acquisition of investments in associates and joint ventures		(48,544)	(44,006)
Acquisition of financial instruments		(111,984)	(10,400)
Acquisition of property, plant and equipment		(1,990,446)	(2,187,196)
Acquisition of intangible assets		(73,420)	(124,583)
Cash outflow due to business combination		(457,000)	-
Split-off		<u> </u>	(1,251,298)
Net cash outflow from investing activities		(3,055,452)	(4,391,344)
Cash flows from financing activities			
Proceeds from borrowings		3,774,113	897,317
Disposal of treasurey shares		8,835	-
Repayments of borrowings		(3,794,894)	(1,732,731)
Dividends		(778,383)	(153,608)
Net cash outflow from financing activities		(790,329)	(989,022)
Net increase (decrease) in cash and cash equivalents		195,987	(143,687)
Cash and cash equivalents at the beginning of the year		852,668	1,002,263
Effects of exchange rate changes on cash and cash equivalents		8,010	(5,908)
Cash and cash equivalents at the end of year in	•		
the separate statement of financial position		1,056,665	852,668

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

#### 1. General Information

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

As at December 31, 2021, the Company has its manufacturing facilities in Yeosu, Daesan, Cheongju, Ulsan, Naju, Iksan, Paju, Osong, Onsan and Gimcheon and engages in petrochemical, advanced materials, and life sciences business.

As described in Note 38, on December 1, 2020, LG Energy Solution, Ltd. was newly established through the split-off of energy solution business division of the Company and related assets and liabilities of energy solution division have been transferred to LG Energy Solution, Ltd.

#### 2. Summary of Significant Accounting Policies

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

#### 2.1 Basis of Preparation

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

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

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

- Certain financial assets and liabilities (including derivative instruments) measured at fair value
- · Assets held for sale measured at fair value less costs to sell, and
- Defined benefit pension plans plan assets measured at fair value.

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

#### 2.2 Changes in Accounting Policy and Disclosures

(a) New and amended standards adopted by the Company

The Company has applied the following standards and amendments for the first time for their annual reporting period commencing January 1, 2021.

- Amendments to Korean IFRS 1116 Lease – Practical expedient for COVID-19 - Related Rent Concessions

As a 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. A lessee that makes this election shall account for any change in lease payments resulting from the rent concession the same way it would account for the change applying this Standard if the change were not a lease modification. The amendment does not have a significant impact on the financial statements.

- Amendments to Korean IFRS 1109 Financial Instruments, Korean IFRS 1039 Financial Instruments: Recognition and Measurement, Korean IFRS 1107 Financial Instruments: Disclosure, Korean IFRS 1104 Insurance Contracts and Korean IFRS 1116 Lease – Interest Rate Benchmark Reform (Phase 2 amendments)

In relation to interest rate benchmark reform, the amendments provide exceptions including adjusting effective interest rate instead of book amounts when interest rate benchmark of financial instruments at amortized costs is replaced, and applying hedge accounting without discontinuance although the interest rate benchmark is replaced in hedging relationship. The amendment does not have a significant impact on the financial statements.

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

The following new and amended accounting standards have been published that are not mandatory for December 31, 2021 reporting periods and have not been early adopted by the Company.

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

The application of the practical expedient, whereby 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. The amendment should be applied for annual periods beginning on or after April 1, 2021, and earlier application is permitted. The Company does not expect that these amendments have a significant impact on the 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 Company does not expect that these amendments have a significant impact on the 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 amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Company is in review for the impact of these amendments on the 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 amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Company does not expect that these amendments have a significant impact on the financial statements.

- 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 management's expectation. 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 meet 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 Company is in review for the impact of these amendments on the 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 Company is in review for the impact of these amendments on the 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 Company does not expect that these amendments have a significant impact on the financial statements.

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

The amendments introduce an exception to the initial recognition exemption. Applying this exception, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Company does not expect that these amendments have a significant impact on the financial statements.

- Annual improvements to Korean IFRS 2018-2020

Annual improvements of Korean IFRS 2018-2020 should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Company does not expect that these amendments have a significant impact on the 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 1116 Leases Lease incentives
- Korean IFRS 1041 Agriculture Measuring fair value

#### 2.3 Subsidiaries, Joint Ventures, and Associates

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

#### 2.4 Foreign Currency Translation

#### (a) Functional and presentation currency

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

#### (b) Transactions and balances

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

Foreign exchange gains and losses that relate to borrowings are presented in the statement of profit or loss, within 'finance income or costs. All other foreign exchange gains and losses are presented in the statement of profit or loss within 'other non-operating income or expenses.

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

#### 2.5 Cash and Cash Equivalents

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

#### 2.6 Financial Assets

#### (a) Classification

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

- those to be measured at fair value through profit or loss,
- · those to be measured at fair value through other comprehensive income, and
- those to be measured at amortized cost

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

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

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

#### (b) Measurement

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

#### A. Debt instruments

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

 Amortized cost: Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized

cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in 'finance income' using the effective interest rate method.

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

#### B. Equity instruments

The Company subsequently measures all equity investments at fair value. Where the Company's management has elected to present fair value gains and losses on equity investments, which held for long-term investment or strategic purpose, in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividend income from such investments continue to be recognized in profit or loss as 'finance income' when the right to receive payments is established. Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'Finance income or costs' in the statement of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

#### (c) Impairment

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

#### (d) Recognition and Derecognition

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

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

#### 2.7 Derivative Financial Instruments

Derivatives are initially recognized at fair value on the date a derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The accounting for subsequent changes in fair value depends on whether the derivative is designated as a hedging instrument, and if so, the nature of the item being hedged. The Company has hedge relationships and designates certain derivatives as either:

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

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

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

#### Cash flow hedge

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

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

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

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

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

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

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

#### 2.8 Trade Receivables

At initial recognition, trade receivables are measured at the amount of unconditional consideration, unless the trade receivables contain a significant financing component. Trade receivables are subsequently measured at amortized cost using the effective interest method, less loss allowance.

#### 2.9 Inventories

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

#### 2.10 Assets Held for sale

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

#### 2.11 Property, Plant and Equipment

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

**Useful lives** 

Buildings	25 - 50 years
Structures	15 - 50 years
Machinery	4 - 15 years
Others	1 - 15 years

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

#### 2.12 Investment Property

Investment property is property held to earn rentals or for capital appreciation or both. An investment property is measured initially at its cost. An investment property is measured after initial measurement at depreciated cost (less any accumulated impairment losses.) The Company depreciates investment properties, except for land, using the straight-line method over their useful lives of  $25 \sim 50$  years.

#### 2.13 Borrowing Costs

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

#### 2.14 Government Grants

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

#### 2.15 Intangible Assets

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

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

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

#### **Useful lives**

Development costs 3 - 15 years
Industrial property rights 5 - 15 years
Other intangible assets 6 - 20 years

#### 2.16 Research and Development

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

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

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

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

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

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

#### 2.17 Impairment of Non-financial Assets

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

#### 2.18 Trade and Other Payables

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

#### 2.19 Financial Liabilities

#### (a) Classification and measurement

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

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

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

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

#### (b) Derecognition

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

#### 2.20 Financial Guarantee Contracts

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

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

#### 2.21 Compound Financial Instruments

Compound financial instruments that the Company has issued are exchangeable bonds that can be exchanged with equity instruments at the option of the holder.

The liability component of this compound financial instrument is recognized initially at the fair value and subsequently recognized at amortized cost until exchange or maturity of the bonds. The exchange component is subsequently measured at fair value until exchange or maturity of the bonds. Any directly attributable transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

#### 2.22 Current and Deferred Tax

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

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

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

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

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

difference can be utilized.

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

#### 2.23 Provisions

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

#### 2.24 Greenhouse Gas Emissions Permits and Obligations

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

#### 2.25 Employee Benefits

#### (a) Post-employment benefits

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

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

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

#### (b) Other long-term employee benefits

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

#### 2.26 Revenue Recognition

#### (a) Identify performance obligation

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

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

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

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

#### (c) Sales return

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

#### (d) Significant financing component

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

#### 2.27 Lease

Lease activities and accounting policies of the Company

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

The Company leases various machinery, real estate and cars. Lease contracts are typically made for fixed periods, but may have extension options. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

At the commencement date, the Company recognizes a right-of-use asset and a lease liability. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

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

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

If the Company is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the useful life of the underlying asset.

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

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

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received

- any initial direct costs, and
- restoration costs

Payments associated with short-term leases or leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and small items of office furniture.

#### (a) Variable lease payments

Some property leases contain variable payment terms that are linked to sales generated from a warehouse. Variable lease payments that depend on usage are recognized in profit or loss in the period in which the condition that triggers those payments occurs.

#### (b) Extension and termination options

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

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

#### 3. Financial Risk Management

#### 3.1 Financial risk factors

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

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

#### (a) Market risk

#### 1) Foreign exchange risk

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

Management has set up a policy to require Company companies to manage their foreign exchange risk against their functional currency. The Company 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.

As at December 31, 2021 and 2020, the Company's monetary assets and liabilities denominated in currencies other than its functional currency, are as follows:

(in millions of Korean won)	202	<u> </u>	2020		
	Assets	Liabilities	Assets	Liabilities	
USD	2,762,672	2,356,731	1,815,013	527,283	
EUR	374,974	10,884	149,222	66,340	
JPY	1,809	40,585	1,966	60,225	
CNY and others	210,481	36,996	83,922	8,291	

As at December 31, 2021 and 2020, if the Company's functional currency had weakened / strengthened by 10% against the US dollar with all other variables held constant, profit before income tax would have been affected as follows:

(in millions of Korean won)	20	)21	20	)20
	10% Increase	10% Decrease	10% Increase	10% Decrease
USD	40,594	(40,594)	128,773	(128,773)

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

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

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

				2021			
	Contract Contract Contract exchange inception Contract —						mount
	Contractor	amount	exchange rate	date	maturity	Assets	Liabilities
Currency Forward	KDB	USD 35	1,135.60	2021.06.24	2022.06.24	1,789	-
Currency swap	SMBC	USD 200	1,118.00	2021.05.28	2024.05.28	13,556	-
·	KDB	USD 130	1,135.60	2021.06.24	2025.06.24	8,817	-
	KDB	USD 35	1,135.60	2021.06.24	2026.06.24	2,319	-
	Shinhan Bank	USD 300	1,131.80	2021.07.07	2026.07.07	12,196	-
	Woori Bank	USD 100	1,131.80	2021.07.07	2026.07.07	4,380	-
	Industrial and Commercial Bank of China	USD 100	1,131.80	2021.07.07	2026.07.07	4,653	-
	Shinhan Bank	USD 100	1,131.80	2021.07.07	2031.07.07	4,804	-
	Woori Bank	USD 200	1,131.80	2021.07.07	2031.07.07	10,032	-
	KDB	USD 200	1,131.80	2021.07.07	2031.07.07	10,429	-

#### 2) Price risk

The Company is exposed to equity securities price risk arises from investments held by the Company and classified in the separate statement of financial position either as available-for-sale or at fair value through profit or loss. The Company's equity investments are publicly traded and are related to the NASDAQ index.

The table below summarizes the impact of increases/decreases of the listed stock price index on the Company's equity before tax effects as at December 31, 2021 and 2020. The analysis is based on the assumption that the equity index has increased/decreased by 10% with all other variables held constant, and that all the Company's equity instruments moved in line with the index.

(in millions of Korean won)	202	21	2020			
	10% Increase	10% Decrease	10% Increase	10% Decrease		
NASDAQ	909	(909)	997	(997)		
	909	(909)	997	(997)		

#### 3) Interest rate risk

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

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

The table below summarizes the impact of increases/decreases of interest rate<sup>1</sup> on the Company's equity and post-tax profit for the years ended December 31, 2021 and 2020. 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	npact on post-tax profit		equity
	2021	2020	2021	2020
Increase <sup>1</sup>	(301)	-	(301)	-
Decrease <sup>1</sup>	301	-	301	-

¹ This analysis is for the short-term borrowings of USD 35 million (equivalent to ₩ 41,492 million) from Korea Development Bank (Note 14). Meanwhile, the Company has entered into a currency interest rate swap contract amounting to USD 165 million (equivalent to ₩ 195,608 million) to hedge interest rate risk of variable interest rate borrowings from Korea Development Bank and others.

#### (b) Credit risk

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

#### A. Trade receivables

The Company applies the simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The loss allowance provision as at December 31, 2021 and 2020, is as follows. Expected credit losses include forward-looking information.

(in millions of Korean won)  December 31, 2021	Receivables not past due <sup>1</sup>	Receivables past due but not impaired <sup>1</sup>	Impaired receivables <sup>2</sup>	Total
(Trade receivables) Gross carrying amount	3,182,702	78,658	1,162	3,262,522
Expected loss rate	0.0%	0.1%	76.7%	0.1%
Loss allowance provision	1,232	45	891	2,168
December 31, 2020 (Trade receivables)				
Gross carrying amount	2,161,591	37,163	2,733	2,201,487
Expected loss rate	0.1%	0.1%	48.7%	0.1%
Loss allowance provision	1,131	36	1,332	2,499

<sup>&</sup>lt;sup>1</sup> See Note 7.(3) for aging analysis.

Movements in the loss allowance provision for trade receivables for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	Trade receivables		
	2021	2020	
Beginning balance	2,499	4,046	
Increase in loss allowance recognized in profit or loss during the year (reversal of)	116	(748)	
Receivables written off during the year as uncollectible	(447)	(640)	
Decrease due to split-off	-	(159)	
Ending balance	2,168	2,499	

#### B. Other financial at assets amortized cost

Movements in loss allowance provision for other financial assets at amortized cost for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Beginning balance	2,111	2,109
Increase in loss allowance recognized as 'other non- operating expenses' in profit or loss during the year	-	2
Receivables written off during the year as uncollectible		
Ending balance	2,111	2,111

<sup>&</sup>lt;sup>2</sup> Impaired receivables are those for which impairment indicators have been confirmed, such as significant lack of collectability.

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

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

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

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

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

#### (c) Liquidity risk

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

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

(in millions of Korean won)	2021			
,	Less than	Between	Between	
	1 year	1-2 years	2-5 years	Over 5 years
Non-derivative financial instruments				
Borrowings (excluding lease liabilities)	1,138,177	705,873	3,089,606	2,829,728
Lease liabilities	42,467	24,615	25,836	61,019
Trade and other payables <sup>1</sup>	3,099,190	4,958		
	4,279,834	735,446	3,115,442	2,890,747
Derivative instruments Gross settlement currency forwards and swaps (Inflows) Outflows	(69,192) 66,646 (2,546) 4,277,288	(27,579) 26,825 (754) 734,692	(1,097,304) 1,045,463 (51,841) 3,063,601	(663,139) 629,746 (33,393) 2,857,354
(in millions of Korean won)		20	20	
,	Less than	Between 1-2	Between 2-5	
	1 year	years	years	Over 5 years
Borrowings (excluding lease liabilities)	298,407	627,415	1,753,211	1,074,696
Lease liabilities	36,666	21,024	28,547	63,706
Trade and other payables <sup>1</sup>	4,069,476	4,225	-	-
Total	4,404,549	652,664	1,781,758	1,138,402

 $<sup>^1</sup>$  Included  $\mbox{\em W}$  301,946 million (2020:  $\mbox{\em W}$  2,099,936 million) of financial liabilities due to a financial institution relating to reverse factoring arrangement. The Parent Company 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.

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

(in millions of Korean won)	2021			
,	Less than 1 year	Between 1-2 years	Between 2-5 years	Over 5 years
Financial guarantee contracts <sup>1</sup>	140,000	-	-	-
		20	)20	
	Less than 1 year	Between 1-2 years	Between 2-5 years	Over 5 years
Financial guarantee contracts <sup>1</sup>	190,000	-	_	-

<sup>&</sup>lt;sup>1</sup> The Company has provided financial guarantee for subsidiaries. The amount represents the maximum amount of the guarantee as at December 31, 2021 and 2020, in which the guarantee could be called (Note 18).

#### 3.2 Capital Risk Management

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

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

The gearing ratios and debt-to-equity ratios at December 31, 2021 and 2020, were as follows:

(in millions of Korean won, except for ratios)	2021	2020
Total borrowings (Note 14) (A)	7,155,184	3,533,970
Less: cash and cash equivalents (B)	(1,056,665)	(852,668)
Net debt (C=A+B)	6,098,519	2,681,302
Total liabilities (D)	12,144,275	8,886,645
Total equity (E)	18,784,877	16,963,505
Total capital (F=C+E)	24,883,396	19,644,807
Gearing ratio (C/F)	24.5%	13.6%
Debt-to-equity ratio (D/E)	64.6%	52.4%

#### 3.3 Fair Value

(a) Carrying amount and fair value of financial instruments by category as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	202	1	2020	
_	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets (current)				
Cash and cash equivalents	1,056,665	1	852,668	1
Trade receivables	3,260,354	1	2,198,988	1
Other receivables	214,700	1	145,612	1
Current derivative financial assets (currency forward)	1,789	1,789	-	-
Financial assets (non-current)				
Deposits held by financial institutions	206,121	1	106,121	1
Other receivables (excluding deposits held by financial institutions) Other non-current financial assets (carried at fair value)	389,050	1	52,445	1
Marketable financial assets (excluding derivative instruments)	7,565	7,565	7,679	7,679
Non-marketable financial assets <sup>3</sup>	184,125	184,125	44,020	44,020
Non-current derivative financial assets (currency swap)	71,186	71,186	-	-
Financial liabilities (current)				
Trade and other payables Current borrowings	3,099,190	1	4,069,476	1
(excluding exchangeable bonds and lease liabilities)	1,007,315	1	189,973	1
Current borrowings (exchangeable bonds)	-	-	32,500	32,763
Current lease liabilities	35,072	2	34,088	2
Current derivative financial liabilities (exchange rights)	-	-	16,797	16,797
Other current financial liabilities (excluding derivative liabilities)	342	1	1,218	1
Financial liabilities (non-current)				
Non-current borrowings (excluding lease liabilities)	6,029,409	5,836,698	3,183,528	3,213,522
Non-current lease liabilities	83,388	2	93,881	2
Other non-current payables	4,958	1	4,226	1

<sup>&</sup>lt;sup>1</sup> These financial assets and liabilities are not included in the disclosure above as their carrying amount is a reasonable approximation of the fair value.

<sup>&</sup>lt;sup>2</sup> Fair values for these financial assets and liabilities are not disclosed above in accordance with related Korean IFRS.

<sup>&</sup>lt;sup>3</sup> Acquisition costs of these financial assets approximate their fair values.

(b) 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 using Korean won currency note yield in the same credit grade with the Company (AA+), and the applied discount rates as at December 31, 2021 and 2020, are as follows:

(in percentage)	2021	2020
Discount rate	1.77%~2.99%	0.97%~2.27%

#### (c) Fair Value Hierarchy

Items that are measured at fair value are categorized by the fair value hierarchy levels, and the defined levels are as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities that an entity can access at the measurement date (Level 1).
- All inputs other than quoted prices included in level 1 that are observable (either directly 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).

Fair value hierarchy classifications of the financial instruments that are measured at fair value or its fair value is disclosed as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021					
	Level 1	Level 2	Level 3	Total		
Financial assets/liabilities measure	d at fair value					
Other non-current financial assets (Marketable financial assets)	7,565	-	-	7,565		
Other non-current financial assets (Non-marketable financial assets)	-	-	184,125	184,125		
Current derivative financial assets (currency forward)	-	1,789	-	1,789		
Non-current derivative financial assets (currency swap)	-	71,186	-	71,186		
Financial assets/liabilities not meas	sured at fair val	ue				
Non-current borrowings (excluding lease liabilities)	-	5,836,698	-	5,836,698		

(in millions of Korean won)		202	0	
	Level 1	Level 2	Level 3	Total
Financial assets/liabilities measured	d at fair value			
Other non-current financial assets (Marketable financial assets)	7,679	-	-	7,679
Other non-current financial assets (Non-marketable financial assets)	-	-	44,020	44,020
Current financial liabilities (exchange rights) 1	-	-	16,797	16,797
Financial assets/liabilities not meas	ured at fair va	lue		
Current borrowings (exchangeable bonds)	-	-	32,763	32,763
Non-current borrowings (excluding lease liabilities)	-	3,213,522	-	3,213,522

<sup>&</sup>lt;sup>1</sup> Movements in exchange rights are as follows.

### (in millions of Korean

won) USD		SD	EU	R	Total	
	2021	2020	2021	2020	2021	2020
Beginning Balance	-	42	16,797	888	16,797	930
Exchange	-	(89,961)	(24,835)	(188,303)	(24,835)	(278, 264)
Redemption	-	(70)	(2,440)	-	(2,440)	(70)
Evaluation	-	89,989	10,478	204,212	10,478	294,201
Ending Balance	-	-	-	16,797	-	16,797

#### (d) Valuation Technique and the Inputs

As at December 31, 2021, there are no fair value measurements categorized as level 3 of the fair value hierarchy, except for non-marketable financial assets. Valuation techniques and inputs used in level 3 fair value measurements as at December 31, 2020, are as follows:

(in millions of Korean won)			2020		
	Fair value	Level	Valuation Technique	Inputs	Coverage of Level 3 inputs
Financial liabilities  – Exchangeable Bond					
Exchangeable Bond	32,763	3	Binominal option pricing model	Annual rates of credit volatility	-0.5%p ~ +0.5%p
Exchange right	16,797	3	Binominal option	Annual rates of credit volatility	-0.5%p ~ +0.5%p
			pricing model	Underlying asset (equity) volatility	-5.0% ~ +5.0%

#### 4. Critical Accounting Estimates and Assumptions

The preparation of financial statements requires the Company to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Company's accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. The resulting accounting estimates may differ from the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

The spread of COVID-19 during 2021 has a significant impact on the domestic and international economies. This may affect the Company's financial position and business performance.

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

#### (a) Impairment test of goodwill

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

#### (b) Income taxes

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

#### (c) Provisions

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

#### (d) Fair value of financial instruments

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

#### (e) Impairment of financial assets

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

#### (f) Net defined benefit liabilities

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

#### (g) Lease

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

When both lessee and lessor have the right to terminate the lease without permission from the other party, the Company considers the contractual termination payments in determining the period for which the contract is enforceable.

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

#### 5. Financial Instruments by Category

(a) Categorizations of financial instruments as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021					
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 asset <sup>1</sup>	Total	
Cash and cash equivalents	1,056,665	-	-	-	1,056,665	
Trade receivables	3,156,808	-	103,546	-	3,260,354	
Other receivables	213,375	-	1,325	-	214,700	
Other non-current receivables	595,171	-	-	_	595,171	
Other current financial assets	-	-	-	1,789	1,789	
Other non-current financial assets	<u>-</u>	149,881	41,809	71,186	262,876	
Total	5,022,019	149,881	146,680	72,975	5,391,555	

(in millions of Korean won)	2021		
Financial liabilities	Financial liabilities at amortized cost	Other financial liabilities <sup>2</sup>	Total
Trade payables	1,502,925	-	1,502,925
Other payables	1,596,265	-	1,596,265
Borrowings (current)	1,007,315	35,072	1,042,387
Other current financial liabilities	-	342	342
Other non-current payables	4,958	-	4,958
Borrowings (non-current)	6,029,409	83,388	6,112,797
Total	10,140,872	118,802	10,259,674

(in millions of Korean won) 2020						
Financial assets	assets at amortized	Financial assets at fair value through profit or loss	Financial assets at fair value through other comprehensive income	Total		
Cash and cash equivalents	852,668	-	_	852,668		
Trade receivables	2,144,495	-	54,493	2,198,988		
Other receivables	125,949	-	19,663	145,612		
Other non-current receivables Other non-current financial	158,566	-	-	158,566		
assets	<u> </u>	26,196	25,503	51,699		
Total	3,281,678	26,196	99,659	3,407,533		
(in millions of Korean won)	2020					
Financial liabilities	Financial liabilities at amortized cost	Financial liabilities at fair value through profit or loss	Other financial liabilities <sup>2</sup>	Total		
Trade payables	877,035	_	_	877,035		
Other payables	3,192,441		_	3,192,441		
Borrowings (current)	222,473		34,088	256,561		
Other current financial liabilities	,+10	· 16,797	1,218	18,015		
Other non-current payables	4,226	ŕ	-,210	4,226		
Borrowings (non-current)	3,183,528		93,881	3,277,409		
Total	7,479,703	-	129,187	7,625,687		

<sup>&</sup>lt;sup>1</sup> Other financial assets include derivative assets that are not subject to the categorizations.

<sup>&</sup>lt;sup>2</sup> Other financial liabilities include lease liabilities that are not subject to the categorizations.

(b) Net gains or losses on each category of financial instruments for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Dividend income		
Financial assets at fair value through other comprehensive income	237	2,538
Interest income		
Financial assets at amortized cost	34,619	27,135
Interest expense		
Financial liabilities at amortized cost	(137,049)	(162,965)
Other financial liabilities	(4,680)	(2,331)
Financial assets at amortized cost <sup>1</sup>	(47)	(246)
Financial assets at fair value through other comprehensive income <sup>1</sup>	-	(631)
Gain (loss) on valuation		
Financial assets at fair value through profit or loss	25,388	3,898
Financial assets at fair value through other comprehensive income	6,066	3,025
Derivative instruments	64,896	(309,421)
Exchange differences		
Financial assets at amortized cost	229,632	(197,253)
Financial liabilities at amortized cost	(132,474)	98,336
Other financial liabilities	149	(10,522)

<sup>&</sup>lt;sup>1</sup> Fees paid to financial institutions for factoring

#### 6. Cash and Cash Equivalents

Details of cash and cash equivalents as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Bank deposits and cash on hand	178,643	127,821
Deposits held by financial institutions and others	878,022	724,847
Total	1,056,665	852,668

#### 7. Trade and Other Receivables

(a) Trade and other receivables and its provisions for impairment as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021				
	Gross amount	Provision for impairment	Carrying amount		
Trade receivables	3,262,522	(2,168)	3,260,354		
Other current receivables	216,811	(2,111)	214,700		
Other non-current receivables	595,171	-	595,171		
Total	4,074,504	(4,279)	4,070,225		
(in millions of Korean won)		2020			
	Gross amount	Provision for impairment	Carrying amount		
Trade receivables	2,201,487	(2,499)	2,198,988		
Other current receivables	147,723	(2,111)	145,612		
Other non-current receivables	158,566	<u> </u>	158,566		
Total	2,507,776	(4,610)	2,503,166		

(b) Details of other receivables as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Current		
Non-trade receivables	109,192	123,276
Accrued income	28,268	9
Loans	65,203	-
Guarantee deposits provided	12,037	22,327
	214,700	145,612
Non-current		
Non-trade receivables	27,599	25,251
Deposits held by financial institutions <sup>1</sup>	206,121	106,121
Loans	329,024	-
Guarantee deposits provided	32,427	27,194
	595,171	158,566
Total	809,871	304,178
•	-	

(c) The aging analysis of trade and other receivables as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	202	1	2020		
	Trade receivables	Other receivables	Trade receivables	Other receivables	
Receivables not past due	3,182,702	809,871	2,161,591	304,094	
Past due but not impaired					
Up to 3 months	74,560	-	34,433	76	
Between 3-6 months	205	-	1,452	8	
Over 6 months	3,893	<u> </u>	1,278		
	78,658	-	37,163	84	
Impaired receivables	1,162	2,111	2,733	2,111	
	3,262,522	811,982	2,201,487	306,289	

(d) Movements on the provision for impairment of trade and other receivables for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	llions of Korean won) 2021			
	Trade rece	ivables	Other rece	eivables
	Current	Non- current	Current	Non- current
Beginning balance	2,499	_	2,111	-
Provisions for impairment	116	-	-	-
Write-off	(447)	-	-	-
Decrease due to split-off	-	-	-	-
Ending balance	2,168	<u>-</u>	2,111	-

(in millions of Korean won)	2020				
	Trade rece	ivables	Other reco	eivables	
		Non-		Non-	
	Current	current	Current	current	
Beginning balance	4,046	-	2,109	-	
Provisions for impairment	(748)	-	2	-	
Write-off	(640)	-	-	-	
Decrease due to split-off	(159)	-	-	-	
Ending balance	2,499	-	2,111	_	
·		·			

- (e) As at December 31, 2021 and 2020, the carrying amounts of trade and other receivables are approximation of their fair values.
- (f) The Company transferred trade and other receivables to financial institutions for ₩ 97,642 million at December 31, 2020, 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

(a) Details of other financial assets and liabilities as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Other financial assets		
Financial assets at fair value through profit or loss (derivative instruments) (current)	1,789	-
Financial assets at fair value through other comprehensive income (excluding derivative instruments) (current)  Financial assets at fair value through profit or loss (excluding derivative instruments) (non-current)  Financial assets at fair value through profit or loss (derivative instruments) (non-current)	41,809	25,503
	149,881	26,196
	71,186	-
	264,665	51,699
Other financial liabilities		
Financial guarantee contracts (current)	342	1,218
Financial liabilities at fair value through profit or loss (exchange rights) (current)		16,797
	342	18,015

(b) Changes in equity and debt instruments included in other financial assets for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Beginning balance	51,699	125,430
Acquisitions / Transfer	111,984	10,505
Disposals	(3,447)	(91,159)
Gain on valuation (before income tax effects), through other comprehensive income	6,066	3,025
Gain on valuation, through profit or loss	25,388	3,898
Ending balance	191,690	51,699

(c) No impairment losses on other financial assets were recognized for the years ended December 31, 2021 and 2020.

#### 9. Inventories

(a) Details of inventories as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021				
-	Gross amount	Valuation allowance	Carrying amount		
Merchandise	19,985	(519)	19,466		
Finished / Semi-finished products	1,661,097	(63,842)	1,597,255		
Work-in-process	24,998	-	24,998		
Raw materials	826,647	(14,876)	811,771		
Supplies	127,918	-	127,918		
Materials-in-transit	680,175	-	680,175		
Total	3,340,820	(79,237)	3,261,583		

(in millions of Korean won)	2020				
	Gross amount	Valuation allowance	Carrying amount		
Merchandise	20,502	(65)	20,437		
Finished / Semi-finished products	861,257	(55,332)	805,925		
Work-in-process	22,668	-	22,668		
Raw materials	457,193	(10,132)	447,061		
Supplies	113,919	-	113,919		
Materials-in-transit	181,568	-	181,568		
Total	1,657,107	(65,529)	1,591,578		

<sup>(</sup>b) During the year, the cost of inventories recognized as expense and included in 'cost of sales' amounted to ₩ 10,944,338 million (2020: ₩ 12,980,183 million).

#### 10. Investments in Subsidiaries, Associates and Joint ventures

(a) Changes in investments in subsidiaries, associates and joint ventures for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Beginning balance	8,951,193	5,350,083	
Additions / Transfer	342,805	8,254,097	
Impairment <sup>1,2</sup>	-	(144,919)	
Reclassified as held-for-sale <sup>3</sup>	(293,762)	(13,444)	
Transfer due to split-off <sup>4</sup>	-	(4,452,376)	
Others <sup>5</sup>	(41,953)	(42,248)	
Ending balance	8,958,283	8,951,193	

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

<sup>&</sup>lt;sup>2</sup> Impairment loss recognized as other non-operating expenses and key assumptions used to determine value in use are as follows:

(in millions of Korean won and in percentage)	2020		
	FarmHannong Co., Ltd.		
Impaired amount	144,919		
Pre-tax discount rate	11.6%		
Terminal growth rate	1%		

<sup>&</sup>lt;sup>3</sup> Based on the approval of management, the Company decided to dispose of LCD polarizer business (June 2020). The related assets were reclassified as assets held for sale in the statement of financial position as at December 31, 2020. The disposal of LCD polarizer business has been completed in February 2021. In addition, based on the approval of management, the Company decided to dispose of 8,500,000 shares of LG Energy Solution, Ltd., a subsidiary, and reclassified it as non-current assets held for sale in the statement of financial position as at December 31, 2021. The disposal has been completed in January 2022.

<sup>&</sup>lt;sup>4</sup> During 2020, LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd., LG Chem Michigan Inc., Nanjing LG Chem New Energy Battery Co., Ltd., LG Chem Wroclaw Energy sp. z o.o., LG Chem Austrailia Pty Ltd., LG Chem Nanjing Energy Solution Co.,Ltd., VINFAST LITHIUM BATTERY PACK LLC., WUXI CL New Energy Technology Ltd., Jiangxi VL Battery Co.,Ltd, HL Greenpower Co., Ltd. have been transferred to LG Energy Solution, Ltd. due to the split-off.

<sup>&</sup>lt;sup>5</sup> The Company sold Ugimag Korea Co., Ltd. and FJ Composite Material Co., Ltd. during 2021 and LG Holdings (HK) Ltd. during 2020.

(b) Details of investments in subsidiaries, associates and joint ventures as at December 31, 2021 and 2020, are as follows:

		Percentage of			
(in millions of Korean won and in percentage)	Location ownersh		hip (%)	Carrying	amount
		2021	2020	2021	2020
Subsidiaries					
Ningbo LG Yongxing Chemical Co.,Ltd.	China	75	75	135,908	135,908
LG Energy Solution, Ltd. <sup>1</sup>	Korea	100	100	6,618,295	6,915,141
LG Chemical India Pvt. Ltd.	India	100	100	54,929	54,929
LG Chemical (Guangzhou) Engineering Plastics					
Co.,Ltd.	China	100	100	21,911	21,911
LG Chem (Taiwan), Ltd.	Taiwan	100	100	18	18
Tianjin LG Bohai Chemical Co.,Ltd.	China	68	68	77,871	77,871
Tianjin LG BOTIAN Chemical Co.,Ltd.	China	58	58	10,423	10,423
LG Chem (China) Investment Co.,Ltd.	China	100	100	264,233	264,233
LG Chem (Tianjin) Engineering Plastics Co.,Ltd.	China	90	90	14,733	14,733
LG Chem Europe GmbH <sup>2</sup>	Germany	100	100	20,619	3,085
LG Chem Poland Sp. z o.o. <sup>3</sup>	Poland	100	100	49,142	26,948
LGC Petrochemical India Private Ltd.	India	100	100	299	299
HAENGBOKNURI CO.,LTD.	Korea	100	100	600	600
LG CHEM TK Kimya SANAYI VE TIC. Ltd. STI.	Turkey	100	100	174	174
LG Chem Japan Co.,Ltd.	Japan	100	100	1,406	1,406
LG Chem (Chongqing) Engineering Plastics Co.,					
Ltd.	China	100	100	37,410	37,410
LG Chem(HUIZHOU) Petrochemical Co., Ltd.	China	70	70	99,001	99,001
LG Chem Hai Phong Veitnam Co.,Ltd.	Vietnam	100	100	3,079	3,079
LG Chem Mexico S.A. de C.V.	Mexico	100	100	394	394
LG Chem Hai Phong Engineering Plastics Co.,Ltd.	Vietnam	100	100	15,344	15,344
LG Chem (Guangzhou) Information & Electronics	01:	400	400	101 101	101 101
Materials Co.,Ltd.	China	100	100	184,491	184,491
FarmHannong Co.,Ltd.	Korea	100	100	579,581	579,581
LG Chem Life Sciences India Pvt. Ltd.	India	100	100	2,170	2,170
LG Jiansheng Life Sciences (Beijing) Co., Ltd. <sup>4</sup>	China	60	100	3,490	1,233
LG Chem Life Sciences (Thailand) Ltd.	Thailand	100	100	431	431
LG Chem Life Science Innovation Center, Inc.	USA	100	100	1,702	1,702
LG CHEM FUND I LLC <sup>5</sup>	USA	100	100	51,431	40,178
LEYOU NEW ENERGY MATERIALS(WUXI)CO.,LTD.	China	51	51	169,113	169,113
LG Chem America, Inc.	USA	100	100	32,283	32,283
LG NanoH2O, Inc.	USA	100	100	38,414	38,414
Uniseal, Inc.	USA	100	100	30,186	
LG Chem Asia Pte. Ltd. <sup>6</sup>				-	30,186
	Singapore	100	-	821	-
Shanjin Optoelectronics (Taiwan) Co., Ltd. <sup>7</sup>	Taiwan	100	-	55,297 36,967	-
LG PETRONAS Chemicals Malaysia <sup>8</sup>	Malaysia	51 70	-	36,867	-
LG Cham Chia Datasahamiad Ina 10	China	70	-	67,027	-
LG Chem Ohio Petrochemical, Inc. <sup>10</sup>	USA	100	-	22,516	-

LG BCM <sup>11</sup>	Korea	100	-	53,504	-
Ugimag Korea Co., Ltd. 12	Korea	-	100	-	30,862
				8,755,113	8,793,551
Associates					
TECWIN Co.,Ltd.	Korea	21	21	2,861	2,861
LG Chem BRASIL INTERMEDICAO DE					
NEGOCIOS DO SETOR QUIMICO LTDA. 15	Brazil	100	100	579	579
LG Chem Malaysia SDN.BHD. 15	Malaysia	100	100	150	150
FJ Composite Material Co., Ltd. <sup>13</sup>	Japan	-	30	-	3,016
LG Chem Life Sciences Poland Ltd. <sup>15</sup>	Poland	100	100	17	17
HUAJIN NEW ENERGY					
MATERIALS(QUZHOU)CO.,LTD.	China	49	49	89,523	89,523
TL Chemical CO., Ltd. <sup>14</sup>	Korea	40	-	48,544	
				141,674	96,146
Joint ventures					
VINA Plasticizers Chemical Co.,Ltd.	Vietnam	50	50	3,080	3,080
SEETEC Co.,Ltd.	Korea	50	50	58,416	58,416
				61,496	61,496
Total				203,170	157,642

- <sup>1</sup> During 2021, the Company decided to dispose of part of its shares of LG Energy Solution, Ltd. and reclassified it as non-current assets held for sale amounting to ₩ 293,762 million.
- $^2$  During 2021, the Company acquired additional shares of LG Chem Europe GmbH for ↔ 17,534 million.
- $^3$  During 2021, the Company acquired additional shares of LG Chem Poland Sp. z o.o. for  $\mbox{$\psi$}$  22,194 million.
- <sup>4</sup> During 2021, the Company acquired additional shares of LG Jiansheng Life Sciences (Beijing) Co.,Ltd. for ₩ 2,257 million. The entity name of LG Jiansheng Life Sciences (Beijing) Co., Ltd. has been changed from LG Chem Life Sciences (Beijing) Co., Ltd. and the percentage of ownership of the Parent Company has decreased to 60%.
- <sup>5</sup> During 2021, the Company additionally acquired shares of LG CHEM FUND I LLC for ₩ 11,253 million.
- <sup>6</sup> LG Chem Asia Pte. Ltd. was newly established for the year ended December 31, 2021, and the Company acquired 100% shares of LG Chem Asia Pte. Ltd. for ₩821 million.
- <sup>7</sup> During 2021, the Company acquired shares of Shanjin Optoelectronics (Taiwan) Co., Ltd. for  $\forall$  55,297 million.
- <sup>8</sup> During 2021, the Company acquired shares of LG PETRONAS Chemicals Malaysia for ₩ 36,867 million.
- <sup>9</sup> During 2021, the Company acquired shares of LG Chem Hangzhou Advanced Materials Co., Ltd. for  $\forall$  67,027 million.
- <sup>11</sup> During 2021, the Company acquired shares of LG BCM for ₩ 53,504 million.
- <sup>13</sup> During 2021, the Company has disposed of FJ Composite Material Co., Ltd.
- <sup>14</sup> During 2021, the Company acquired shares of TL Chemical CO., Ltd. for ₩ 48,544 million.
- <sup>15</sup> Classified as an investment in associate due to its small size.

#### 11. Property, Plant and Equipment

(a) Changes in property, plant and equipment for the years ended December 31, 2021 and 2020, are as follows:

(in millions of						:	2021					
Korean won)									Right-of-	Construction	Machinery	
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	use assets	-in-progress	-in-transit	Total
Beginning balance	1,024,616	1,957,015	777,195	3,315,441	2,860	220,742	96,681	112,295	125,905	2,140,794	322,641	10,096,185
Cost	1,060,900	2,395,008	1,329,896	10,575,612	22,433	696,284	298,035	413,151	187,255	2,217,048	322,641	19,518,263
Accumulated												
depreciation	-	(415,241)	(538,185)	(7,124,438)	(19,488)	(464,216)	(199,410)	(294,938)	(61,337)	-	-	(9,117,253)
Accumulated												
impairment	(36,284)	(22,752)	(14,516)	(135,733)	(85)	(11,326)	(1,944)	(5,918)	(13)	(76,254)	-	(304,825)
Business												
combination												
(Note 37)	69,872	61,251	2,754	52,983	69	3,200	772	-	-	29	-	190,930
Acquisitions/												
Transfer	15,889	261,028	305,332	2,745,144	758	93,417	52,608	181,305	31,231	2,053,714	96,890	5,837,316
Disposals/ Transfer	(7,791)	(5,207)	(901)	(7,186)	(13)	(4,462)	(1,030)	-	(5,216)	(3,431,247)	(338,218)	(3,801,271)
Depreciation	-	(54,956)	(54,222)	(737,161)	(959)	(71,537)	(30,865)	(107,642)	(36,149)	-	-	(1,093,491)
Impairment		(2,008)	(6,420)	(13,150)		(366)	(59)			(376)	(3,136)	(25,515)
Ending balance	1,102,586	2,217,123	1,023,738	5,356,071	2,715	240,994	118,107	185,958	115,771	762,914	78,177	11,204,154
Cost	1,138,870	2,708,304	1,630,529	13,065,640	22,186	723,343	308,724	490,049	205,524	839,544	78,177	21,210,890
Accumulated												
depreciation	-	(468,062)	(587,531)	(7,612,307)	(19,400)	(477,714)	(189,131)	(298,173)	(89,753)	-	-	(9,742,071)
Accumulated												
impairment	(36,284)	(23,119)	(19,260)	(97,262)	(71)	(4,635)	(1,486)	(5,918)	-	(76,630)	-	(264,665)

(in millions of						2	2020					
Korean won)									Right-of-	Construction	Machinery	
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	use assets	-in-progress	-in-transit	Total
Beginning balance	1,247,766	2,515,249	802,725	3,530,647	3,434	398,009	114.682	175,123	92,717	1,581,035	160,028	10,621,415
Cost	1,284,718	3,120,778	1,331,742	11,860,563	26,424	1,124,510	357,401	378,824	126,123	1,666,659	160,028	21,437,770
Accumulated	1,201,710	0,120,770	1,001,712	11,000,000	20, 12 1	1,121,010	007,101	070,021	120,120	1,000,000	100,020	21,101,110
depreciation		(580,822)	(521,145)	(8,151,131)	(22,893)	(714,723)	(240,363)	(197,978)	(33,331)	_		(10,462,386)
Accumulated		(000,022)	(021,110)	(0,101,101)	(22,000)	(111,120)	(210,000)	(101,010)	(00,001)			(10,102,000)
impairment	(36,952)	(24,707)	(7,872)	(178,785)	(97)	(11,778)	(2,356)	(5,723)	(75)	(85,624)	_	(353,969)
Acquisitions/	(==,===)	(= :,: = : )	(-,)	(112,122)	()	( , )	(=,===)	(=,: ==)	()	(,)		(===,===)
Transfer	177	379,952	68,353	762,969	1,441	120,564	51,824	38,837	72,595	2,317,554	258,442	4,072,708
Disposals/ Transfer	(157)	(3,984)	(199)	(45,876)	(3)	(5,922)	(485)	(1,979)	(2,191)	(1,612,730)	(72,345)	(1,745,871)
Depreciation	-	(69,439)	(47,286)	(706,256)	(1,359)	(116,998)	(34,714)	(99,491)	(34,737)	-	-	(1,110,280)
Impairment	_	(1,662)	(8,639)	(39,509)	-	(10,148)	(60)	(195)	(86)	(1,704)	(260)	(62,263)
Reversal of		,	, ,	, ,		, , ,	, ,	, ,	, ,	,	, ,	,
impairment	-	_	_	-	_	-	-	-	-	220	-	220
Transfer to assets												
held for sale (Note												
34)	-	-	-	(7,733)	(12)	(2,805)	(40)	-	-	-	-	(10,590)
Split-off	(223,170)	(863,101)	(37,759)	(178,801)	(641)	(161,958)	(34,526)	-	(2,393)	(143,581)	(23,224)	(1,669,154)
Ending balance	1,024,616	1,957,015	777,195	3,315,441	2,860	220,742	96,681	112,295	125,905	2,140,794	322,641	10,096,185
Cost	1,060,900	2,395,008	1,329,896	10,575,612	22,433	696,284	298,035	413,151	187,255	2,217,048	322,641	19,518,263
Accumulated												
depreciation	-	(415,241)	(538,185)	(7,124,438)	(19,488)	(464,216)	(199,410)	(294,938)	(61,337)	-	-	(9,117,253)
Accumulated												
impairment	(36,284)	(22,752)	(14,516)	(135,733)	(85)	(11,326)	(1,944)	(5,918)	(13)	(76,254)	-	(304,825)

- (b) During the year, the Company capitalized ₩ 28,158 million of borrowing costs (2020: ₩ 34,550 million) in relation to acquisition of property, plant and equipment, on property, plant and equipment. The capitalization rate of borrowings used to determine the amount of borrowing costs eligible for capitalization is 2.30% (2020: 2.37%).
- (c) Line items including depreciation in the separate statements of profit or loss for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Cost of sales	969,359	957,622
Selling and administrative expenses	121,331	146,754
Others	68	795
Discontinued operations	2,733	5,109
Total	1,093,491	1,110,280

#### (d) Lease

(i) Amounts recognized in the statement of financial position

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

(in millions of Korean won)	2021.12.31	2020.12.31
Right-of-use assets <sup>1</sup>		
Real-estate	102,004	109,010
Machinery	6,156	9,004
Vehicles	7,611	7,891
	115,771	125,905

<sup>&</sup>lt;sup>1</sup> Included in the line item 'Property, plant and equipment' in the statements of financial position.

(in millions of Korean won)	2021.12.31	2020.12.31
Lease liabilities <sup>1</sup>		
Current	35,072	34,088
Non-current	83,388	93,881
	118,460	127,969

<sup>&</sup>lt;sup>1</sup> Included in the line item 'borrowings' in the statements of financial position.

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

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

(in millions of Korean won)	2021	2020
Depreciation of right-of-use assets		
Real-estate	28,555	26,620
Machinery	2,836	2,895
Vehicles and others	4,758	5,222
	36,149	34,737
Interest expense relating to lease liabilities (included in finance cost)	2,695	2,331
Expense relating to short-term leases (included in cost of goods sold and administrative expenses)	10,731	14,167
Expense relating to leases of low-value assets that are not short-term leases (included in cost of goods sold		
and administrative expenses)	7,227	13,024

#### 12. Intangible Assets

**Ending balance** 

55,677

294,825

(a) Changes in intangible assets for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)				2021			
	Development costs	Software	Industrial property rights	Goodwill	Memberships	Others	Total
Basinning balance	EE 677	204.825	267 504	700 756	24 969	166 422	1 620 140
Beginning balance Business combination	55,677	294,825	367,591	723,756	21,868	166,432	1,630,149
(Note 37)	-	349	642	165,760	-	39,120	205,871
Separate acquisitions/ Transfer Additions – internal	-	139,424	52,924	-	1,506	21,862	215,716
development	198	-	_	_	_	-	198
Disposals/ Transfer	-	(2,272)	(3,871)	(4,112)	(110)	(2,037)	(12,402)
Amortization	(5,923)	(86,800)	(32,529)	-	-	(18,167)	(143,419)
Impairment Transfer to assets held	-	(60)	(404)	(294,918)	-	(3,467)	(298,849)
for sale (Note 34)			(360)				(360)
Ending balance	49,952	345,466	383,993	590,486	23,264	203,743	1,596,904
(in millions of Korean won)				2020			
			Industrial				
	Development		property				
	costs	Software	rights	Goodwill	Memberships	Others	Total
Beginning balance Separate acquisitions/	56,375	231,063	442,187	723,756	46,842	180,592	1,680,815
Transfer Additions – internal	-	267,285	123,359	-	867	10,320	401,831
development	4,116	-	-	-	-	-	4,116
Disposals/ Transfer	-	(1,591)	(4,023)	-	(16,623)	(7,901)	(30,138)
Amortization	(4,814)	(85,001)	(41,866)	-	-	(16,140)	(147,821)
Impairment Transfer to assets held	-	(26)	(1,447)	-	-	-	(1,473)
for sale (Note 34)	-	-	(5,124)	-	-	-	(5,124)
Split-off		(116,905)	(145,495)		(9,218)	(439)	(272,057)

367,591

723,756

21,868

166,432

1,630,149

(b) Line items including amortization of intangible assets for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Cost of sales	23,583	33,459
Selling and administrative expenses	119,697	114,099
Discontinued operations	139	263
Total	143,419	147,821

- (d) Goodwill is allocated to the Company's CGUs identified for each operating segment. The carrying amounts of goodwill allocation by CGUs as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)			2021					
	Acquisition of							
	Merger of LG Petrochemical	Acquisition of SAP	LG Life Sciences,	Acquisition of CEM				
CGUs	Co., Ltd	business	Ltd,	business	Total			
Petrochemicals								
NCC	2,639	_	-	-	2,639			
ABS	1,472	_	-	-	1,472			
PO	1,054	-	-	-	1,054			
PVC	808	-	-	-	808			
Acrylic	350	25,222	-	-	25,572			
Plasticizer	53	-	-	-	53			
BPA	467	-	-	-	467			
Others	1,350	-	-	-	1,350			
Advanced Materials								
PSAA <sup>1</sup>	_	-	-	-	-			
Separator <sup>2</sup>	_	-	-	165,760	165,760			
Life Sciences								
Life sciences <sup>3</sup>	-	-	391,311	-	391,311			
Total	8,193	25,222	391,311	165,760	590,486			

<sup>&</sup>lt;sup>1</sup> During 2021, the Company has sold PSAA business.

<sup>&</sup>lt;sup>2</sup> During 2021, the Company recognized goodwill in relation to the acquisition of CEM business.

<sup>&</sup>lt;sup>3</sup> During 2021, the Company recognized ₩ 294,918 million of impairment against goodwill recognized in relation to the acquisition of LG Life Sciences, Ltd.

(in millions of Korean won)	2020						
CGUs	Merger of LG Petrochemical Co., Ltd	Acquisition of SAP business	Acquisition of PSAA business	Acquisition of LG Life Sciences, Ltd,	Total		
Basic Materials							
NCC	2,639	-	-	-	2,639		
ABS	1,472	-	-	-	1,472		
PO	1,054	-	-	-	1,054		
PVC	808	-	-	-	808		
Acrylic	350	25,222	-	-	25,572		
Plasticizer	53	-	-	-	53		
BPA	467	-	-	-	467		
Others	1,350	-	-	-	1,350		
Intelligence and Electronic Materials							
PSAA	-	-	4,112	-	4,112		
Life Sciences							
Life sciences	-	-	-	686,229	686,229		
Total	8,193	25,222	4,112	686,229	723,756		

The recoverable amounts of CGUs have been determined based on value-in-use or fair value less cost of disposal calculations. Value-in-use calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. Fair value less cost of disposal reflects expectation of future business and usage pattern of assets from the perspective of market participants. Management determined the estimated pre-tax cash flow based on past performance and its expectations of market development. Discount rates applied by the management are the pre-tax discount rates reflecting specific risks relating to the relevant operating segments. Taking into account the uncertainties relating to COVID-19, discount rates have been determined based on average values of input parameters (e.g., market risk premium) for longer observable period than before.

During 2021, key assumptions used for calculation of value in use and fair value less cost of disposal are as follows:

(in millions of Korean won)	2021				
	Pre-tax discount rate	Growth rate for subsequent years after five years			
Acquisition of					
LG Petrochemical Co., Ltd.	9.0%	0.0%			
Acquisition of SAP business	9.0%	0.0%			
Acquisition of LG Life Sciences	12.8%	3.0%			

The results of the sensitivity analysis for the fair value less cost of disposal calculation of Life Sciences CGU are as follows:

(in millions of Korean won)	0.5% Increase	0.5% Decrease	
Discount rate			
Increase (decrease) in fair value	(95,850)	109,362	
Growth rate			
Increase (decrease) in fair value	69,525	(61,005)	

If the pre-tax discount rate applied to the cash flow projections of this CGU had been 0.5% higher than management's estimates, the Company would have had to recognize an impairment against goodwill of  $\mbox{$W$}$  95,850 million. In addition, if the growth rate applied to the cash flow projections of this CGU had been 0.5% lower than management's estimates, the Company would have had to recognize an impairment against goodwill of  $\mbox{$W$}$  61,005 million.

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

Greenhouse gas emission permits held for the purpose of fulfilling obligations

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

(in thousands of tons)	2021	2022	2023	2024	2025	Total
Allocation with nil consideration	8,800	8,800	8,800	8,718	8,718	43,836

Changes in greenhouse gas emission permits during the years ended December 31, 2021 and 2020, are as follows:

(in thousands of				202	21			
tons and millions	202	0	202	1	202	2	202	3
of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance /Allocation with nil								
consideration	8,140	-	8,800	-	8,800	-	8,800	-
Purchase/Sale	(144)	-	-	-	-	-	-	-
Exchange Borrowings/Carry	100	-	(100)	-	-	-	-	-
forwards between								
years	(24)	-	24	-	-	-	-	-
Surrendered to the								
government	(8,072)						<u> </u>	
Ending balance <sup>1</sup>		<u>-</u>	8,724	_	8,800		8,800	-

LG Chem, Ltd. Notes to the Separate Financial Statements December 31, 2021 and 2020

(in thousands of

(in thousands of			202	1		
tons and millions	2024	4	202	5	Tota	al
of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance /Allocation with nil						
consideration	8,718	-	8,718	-	51,976	-
Purchase/Sale	-	-	-	-	(144)	-
Exchange Borrowings/Carry forwards between years	-	-	-	-	-	-
Surrendered to the						
government	<u> </u>	<u>-</u>	<u> </u>		(8,072)	-
Ending balance <sup>1</sup>	8,718	<u>-</u>	8,718		43,760	-

<sup>1</sup> The amount of emission permits as at December 31, 2021 will be submitted to the government after certification in the next year.

2020

of Korean won)         Quantity         Amount         Quantity         Quantity         Amount         Quantity	tons and millions	201	9	202	0	202	1	202	2
Allocation with nil consideration   8,233   4,375   7,482   9,040   9,040   0   0   0   0   0   0   0   0   0	of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Borrowings/Carry forwards between years	/Allocation with nil	8,233	4,375	7,482	_	9,040	_	9,040	-
Surrendered to the government         (8,412)         (7,900)         -	Borrowings/Carry	138	3,525	-	-	-	-	-	-
Ending balance         -         -         7,441         -         9,040         -         9,040         -           (in thousands of tons and millions of Korean won)         2023         2024         2025         Total           Beginning balance /Allocation with nil consideration         9,040         -         8,955         -         8,955         -         60,745         4,375           Purchase/Sale         -         -         -         -         138         3,525           Borrowings/Carry forwards between years         - </td <td>,</td> <td>41</td> <td>-</td> <td>(41)</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	,	41	-	(41)	-	-	-	-	-
Continuity   Con	government	(8,412)	(7,900)				<u>-</u> .		
tons and millions of Korean won)         2023         2024         2025         Total           Beginning balance /Allocation with nil consideration         9,040         - 8,955         - 8,955         - 60,745         4,375           Purchase/Sale Borrowings/Carry forwards between years         - 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Ending balance		<u> </u>	7,441		9,040	<u>-</u> _	9,040	-
of Korean won)         Quantity         Amount         Quantity         Amount         Quantity         Amount         Quantity         Amount           Beginning balance //Allocation with nil consideration         9,040         - 8,955         - 8,955         - 60,745         4,375           Purchase/Sale         - 2 - 2 - 2 - 3         - 138         3,525           Borrowings/Carry forwards between years         - 2 - 2 - 2 - 3         - 2 - 3         - 3         - 3           Surrendered to the government         - 3 - 3 - 3         - 3 - 3         - 3 - 3         - 3	(in thousands of								
Beginning balance /Allocation with nil consideration 9,040 - 8,955 - 8,955 - 60,745 4,375 Purchase/Sale 138 3,525 Borrowings/Carry forwards between years Surrendered to the government (8,412) (7,900)	tons and millions	202	3	202	4	202	5	Tota	al
/Allocation with nil consideration 9,040 - 8,955 - 8,955 - 60,745 4,375  Purchase/Sale 138 3,525  Borrowings/Carry forwards between years	of Korean won)	Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
Purchase/Sale       -       -       -       -       -       -       138       3,525         Borrowings/Carry forwards between years       -<	/Allocation with nil	9,040	_	8,955	-	8,955	_	60,745	4,375
Borrowings/Carry         forwards between         years       - </td <td>Purchase/Sale</td> <td>-</td> <td>-</td> <td>-</td> <td>_</td> <td>-</td> <td>_</td> <td></td> <td></td>	Purchase/Sale	-	-	-	_	-	_		
Surrendered to the government	Borrowings/Carry								5,525
government	•	-	-	-	-	-	-	-	-
Ending balance 9,040 - 8,955 - 8,955 - 52,471 -		<u>-</u> _		<u>-</u> _		<u>-</u> _		(8,412)	(7,900)
	Ending balance	9,040	<u>-</u>	8,955	<u>-</u>	8,955		52,471	-

During the years ended December 31, 2021 and 2020, 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 December 31, 2021 and 2020, consist of:

(in millions of Korean won)	2021	2020
Current		
Prepayments to suppliers and prepaid		
expense	30,188	36,106
Prepaid value added tax	107,093	75,933
Others	8,027_	7,249
Total	145,308	119,288
Non-current		
Net defined benefit assets (Note 16)	44,717	-
Long-term prepayments and prepaid		
expenses	4,833	5,241
Others	<u> </u>	30
Total	49,550	5,271

#### 14. Borrowings

(a) Borrowings as at December 31, 2021 and 2020, are as follows:

Current           Short-term borrowings         447,445         -           Current-portion of debentures         559,870         222,473           Current-portion of lease liabilities         35,072         34,088           1,042,387         256,561           Non-current         Long-term borrowings         882,134         -           Debentures         5,147,275         3,183,528           Lease liabilities         83,388         93,881	(in millions of Korean won)	2021	2020
Current-portion of debentures       559,870       222,473         Current-portion of lease liabilities       35,072       34,088         1,042,387       256,561         Non-current       882,134       -         Long-term borrowings       882,134       -         Debentures       5,147,275       3,183,528         Lease liabilities       83,388       93,881	Current		
Current-portion of lease liabilities         35,072         34,088           1,042,387         256,561           Non-current         882,134         -           Long-term borrowings         882,134         -           Debentures         5,147,275         3,183,528           Lease liabilities         83,388         93,881	Short-term borrowings	447,445	-
Non-current     1,042,387     256,561       Long-term borrowings     882,134     -       Debentures     5,147,275     3,183,528       Lease liabilities     83,388     93,881	Current-portion of debentures	559,870	222,473
Non-current         882,134         -           Long-term borrowings         5,147,275         3,183,528           Lease liabilities         83,388         93,881	Current-portion of lease liabilities	35,072	34,088
Long-term borrowings       882,134       -         Debentures       5,147,275       3,183,528         Lease liabilities       83,388       93,881		1,042,387	256,561
Debentures       5,147,275       3,183,528         Lease liabilities       83,388       93,881	Non-current		
Lease liabilities 83,388 93,881	Long-term borrowings	882,134	-
	Debentures	5,147,275	3,183,528
	Lease liabilities	83,388	93,881
6,112,797 3,277,409 _		6,112,797	3,277,409
<b>Total</b> 7,155,184 3,533,970	Total	7,155,184	3,533,970

(b) Details of borrowings as at December 31, 2021, are as follows:

General borrowings (in millions of Korean won)	Bank	Interest rate (%)	Latest maturity date	Amount in Korean won	Current	Non-current
Negotiated borrowings in foreign curreny <sup>1</sup>	Kookmin Bank and others	Libor + 0.30 and others	2022.3.27	405,953	405,953	-
Borrowings in foreign currency	SMBC	1.30	2024.5.28	237,100	-	237,100
Borrowings in foreign currency	KDB	0.99~1.17	2026.6.24	237,100	41,492	195,608
Borrowings in Korean won	BOA	1.95	2024.11.01	150,000	-	150,000
Borrowings in Korean won	KDB	3.05	2028.11.01	300,000	-	300,000
Less: discount on long-term borrowings				(574)	-	(574)
Total				1,329,579	447,445	882,134

<sup>&</sup>lt;sup>1</sup> Accounted for as collateralized borrowings for trade receivables.

There were no general borrowings held by the Company as at December 31, 2020.

(c) Details of debentures as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)			2021			
,		Annual	Latest	Amount in		
	Financial institution	interest rate (%)	maturity	Korean	Current	Non-
	rmanciai institution	(%)	date	won	Current	current
50-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)2	Co., Ltd. and others	2.28	2022.5.19	400,000	400,000	-
50-3 <sup>rd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.53	2024.5.19	280,000	-	280,000
51-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.88	2023.2.20	240,000	-	240,000
51-3 <sup>rd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	3.07	2025.2.20	270,000	-	270,000
51-4 <sup>th</sup> 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) <sup>2</sup>	Co., Ltd. and others	2.02	2022.3.13	160,000	160,000	-
52-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.11	2024.3.13	240,000	-	240,000
52-4th 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					
guaranteed/public)	Co., Ltd. and others	1.57	2023.2.19	350,000	-	350,000
53-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	1.65	2025.2.19	250,000	-	250,000
53-3 <sup>rd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	1.72	2027.2.19	50,000	-	50,000
53-4th 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 <sup>nd</sup> Debenture (non-	KB SECURITIES CO.,LTD and					
guaranteed/public)	others	1.51	2026.2.19	270,000	-	270,000
54-3 <sup>rd</sup> Debenture (non-	KB SECURITIES CO.,LTD and					
guaranteed/public)	others	1.76	2028.2.19	200,000	-	200,000
54-4 <sup>th</sup> Debenture (non-	KB SECURITIES CO.,LTD and					
guaranteed/public)	others	2.14	2031.2.19	260,000	-	260,000
54-5 <sup>th</sup> Debenture (non-	KB SECURITIES CO.,LTD and					
guaranteed/public)	others	2.22	2036.2.19	120,000	-	120,000
55-1st Debenture (non-	KB SECURITIES CO.,LTD and					
guaranteed/private)	others	2.39	2031.5.7	90,000	-	90,000
55-2 <sup>nd</sup> Debenture (non-	KB SECURITIES CO.,LTD and					
guaranteed/private)	others	2.52	2036.5.7	60,000	-	60,000
5Y USD Green bond (non-	OITI and athere					
guaranteed/private)	CITI and others	1.38	2026.7.7	592,750	-	592,750
10Y USD Green bond (non-	OIT.					
guaranteed/private)	CITI and others	2.38	2031.7.7	592,750	-	592,750
Less: discount on debentures	8			(18,355)	(130)	(18,225)
Total					559,870	
				5,707,145	339,070	5,147,275

(in millions of Korean won)			2020			
,	Financial institution	Annual interest rate (%)	Latest maturity date	Amount in Korean won	Current	Non-
		` '				
50-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.28	2022.5.19	400,000	-	400,000
50-3 <sup>rd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.53	2024.5.19	280,000	-	280,000
51-1st Debenture (non-	NH Investment & Securities					
guaranteed/public)1	Co., Ltd. and others	2.56	2021.2.20	190,000	190,000	-
51-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.88	2023.2.20	240,000	-	240,000
51-3 <sup>rd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	3.07	2025.2.20	270,000	-	270,000
51-4th 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)	Co., Ltd. and others	2.02	2022.3.13	160,000	-	160,000
52-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)	Co., Ltd. and others	2.11	2024.3.13	240,000	-	240,000
52-3 <sup>rd</sup> Debenture (non-	NH Investment & Securities					
guaranteed/public)3	Co., Ltd. and others	2.21	2026.3.13	-	_	_
52-4th 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					
guaranteed/public)	Co., Ltd. and others	1.57	2023.2.19	350,000	_	350,000
53-2 <sup>nd</sup> Debenture (non-	NH Investment & Securities			•		•
guaranteed/public)	Co., Ltd. and others	1.65	2025.2.19	250,000	_	250,000
53-3 <sup>rd</sup> Debenture (non-	NH Investment & Securities			•		•
guaranteed/public)	Co., Ltd. and others	1.72	2027.2.19	50,000	_	50,000
53-4 <sup>th</sup> Debenture (non-	NH Investment & Securities			•		,
guaranteed/public)	Co., Ltd. and others	1.91	2030.2.19	250,000	_	250,000
USD foreign currency	- ,			,		,
debenture with maturity	CITI and others					
in 2024 <sup>3</sup>		3.25	2024.10.15	_	_	_
USD foreign currency						
debenture with maturity	CITI and others					
in 2029 <sup>3</sup>		3.63	2029.4.15	_	_	_
EUR foreign currency						
debenture with maturity	CITI and others					
in 2023 <sup>3</sup>		0.50	2023.4.15	_	_	_
1-1st USD Overseas		5.55				
Exchangeable bonds <sup>4,6</sup>	Credit Suisse	_	2020.10.7	_	_	_
1-2 <sup>nd</sup> EUR Overseas						
Exchangeable bonds <sup>56</sup>	Credit Suisse	_	2021.1.14	32,787	32,787	_
Less: discount on debentur	res			(6,786)	(314)	(6,472)
Total						, ,
101				3,406,001	222,473	3,183,528

<sup>&</sup>lt;sup>1</sup> During 2021, the 51-1st Debenture (non-guaranteed/public) has been repaid.

<sup>&</sup>lt;sup>2</sup> During 2021, the 50-2nd Debenture (non-guaranteed/public) has been reclassified into the current portion.

billion were transferred to LG Energy Solution, Ltd. according to the split-off of energy solution division of the Company.

<sup>4</sup> Details of 1-1<sup>st</sup> USD overseas exchangeable bonds are as follows:

#### **Details**

USD 220,000,000 Aggregate principal amount USD 220,000,000 Issue price

Coupon rate (%) 0.00

Issue date April 16, 2018 **Maturity date** April 16, 2021

Redemption - Redemption at maturity: Outstanding bond principal, which is not

repaid early or which call option is not exercised on, is repaid at

maturity as a lump sum.

- Prepayment: The issuer has a call option.

**Underlying shares** 509,606 registered ordinary shares (treasury shares)

**Exchange price** 

460,000 (Korean won/shares)

**Exchange period** From May 27, 2018 to April 06, 2021

Call option by the issuer - Share price (based on closing price) is higher than 130% of

> exchange price for more than 20 trading days during 30 consecutive trading days in a row, after 1 year from the closing

date.

- The amount of outstanding bonds is less than 10% in aggregate principal amount of the bonds originally issued (clean up call). - As a result of changes relating to tax laws in Korea, the issuer

becomes obliged to pay any additional amounts.

Call option by bondholders - The shares cease to be listed or admitted to trading or are

suspended for a period equal to or exceeding 30 consecutive

trading days.

- The occurrence of a change of control

#### **Details**

Aggregate principal amount EUR 315,200,000 Issue price EUR 315,200,000

Coupon rate (%) 0.00

Issue date April 16, 2018 **Maturity date** April 16, 2021

Redemption - Redemption at maturity: Outstanding bond principal, which is not

repaid early or which call option is not exercised on, is repaid at

maturity as a lump sum.

- Prepayment: The issuer has a call option.

**Underlying shares** 775,128 registered ordinary shares (treasury shares)

**Exchange price** 533,600 (Korean won/shares)

**Exchange period** From May 27, 2018 to April 06, 2021

Call option by the issuer - Share price (based on closing price) is higher than 130% of

exchange price for more than 20 trading days during 30 consecutive trading days in a row, after 1 year from the closing

- The amount of outstanding bonds is less than 10% in aggregate

<sup>&</sup>lt;sup>5</sup> Details of 1-2<sup>nd</sup> EUR overseas exchangeable bonds are as follows:

principal amount of the bonds originally issued (clean up call).

- As a result of changes relating to tax laws in Korea, the issuer becomes obliged to pay any additional amounts.

#### Call option by bondholders

- The shares cease to be listed or admitted to trading or are suspended for a period equal to or exceeding 30 consecutive trading days.
- The occurrence of a change of control

Details of finance lease liabilities as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)			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	118,460	35,072	83,388
(in millions of Korean won)			2020		
	Annual	Latest			
Leaser	interest rate (%)	maturity date	Total amount	Current	Non-current
Hyundai Oil Bank and others	1.98 ~ 3.01	2068.3.31	127,969	34,088	93,881

<sup>&</sup>lt;sup>6</sup> As the conditions for the execution of call options have been satisfied for the year ended December 31, 2020, exchangeable bonds of USD 219,800,000 were exchanged with 509,113 treasury shares and the remaining exchangeable bonds of USD 200,000 have been early repaid on October 7, 2020. Exchangeable bonds of EUR 290,700,000 were exchanged with 714,856 treasury shares and EUR 22,300,000 were additionally exchanged with 54,834 treasury shares and the remaining exchangeable bonds of EUR 2,200,000 have been repaid for the year ended December 31, 2021.

#### 15. Provisions

Total

Changes in the carrying amount of provisions for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)			2021		
		Greenhouse			
		gas	Legal		
	Warranty <sup>1</sup>	emission <sup>2</sup>	claims <sup>3</sup>	Restoration <sup>4</sup>	Total
Beginning balance	6,901	4,033	-	25,403	36,337
Business combination	1,386	-	-	-	1,386
Additions (reversal)	14,994	(4,033)	990	4,537	16,488
Used	(15,184)	-	(990)	(15,385)	(31,559)
Ending balance	8,097	_	-	14,555	22,652
Less: current portion	(6,352)	-	-	(6,725)	(13,077)
Total	1,745		-	7,830	9,575
(in millions of Korean won)			2020		
		Greenhouse			
		Greeningase			
		gas	Legal		
	Warranty <sup>1</sup>		Legal claims³	Restoration⁴	Total
Beginning balance	•	gas emission²	-		
Beginning balance Effect of split-off	534,351	gas emission <sup>2</sup> 25,157	claims <sup>3</sup>	Restoration <sup>4</sup> 3,377	563,255
Effect of split-off	534,351 (546,647)	gas emission <sup>2</sup> 25,157 (746)	claims <sup>3</sup> 370 (336)	3,377	563,255 (547,729)
	534,351 (546,647) 304,616	gas emission <sup>2</sup> 25,157 (746) (12,478)	claims <sup>3</sup>		563,255 (547,729) 314,498
Effect of split-off Additions (reversal) Used	534,351 (546,647)	gas emission <sup>2</sup> 25,157 (746)	claims <sup>3</sup> 370 (336)	3,377 - 22,394	563,255 (547,729) 314,498 (293,687)
Effect of split-off Additions (reversal)	534,351 (546,647) 304,616 (285,419)	gas emission <sup>2</sup> 25,157 (746) (12,478) (7,900)	claims <sup>3</sup> 370 (336)	3,377 - 22,394 (368)	563,255 (547,729) 314,498

<sup>&</sup>lt;sup>1</sup> 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.

20,939

22,889

1,950

<sup>&</sup>lt;sup>2</sup> Greenhouse gas emission provisions have been accrued for estimated expenditures to be obligated for any excess emission. The estimated emission for the year ended December 31, 2021, amounts to 7,813 thousand tons (2020: 7,886 thousand tons).

<sup>&</sup>lt;sup>3</sup> Lawsuit provisions have been accrued for certain pending cases.

<sup>&</sup>lt;sup>4</sup> Restoration provisions have been accrued based on the estimated expenses to restore land pollutions.

#### 16. Net Defined Benefit Liabilities

(a) Details of net defined benefit liabilities recognized in the statements of financial position as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Present value of defined benefit obligations <sup>1</sup>	1,005,986	936,965
Fair value of plan assets	(1,050,703)	(878,700)
Liability (asset) in the separate statement of		
financial position	(44,717)	58,265

<sup>&</sup>lt;sup>1</sup> The present value of retirement benefit obligations is net of existing contributions to the National Pension Plan of ₩ 629 million as at December 31, 2021 (2020: ₩ 649 million).

(b) The amounts recognized in the separate statements of profit or loss for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Current service cost <sup>1</sup>	113,770	170,964	
Net interest cost	1,474	3,557	
Total, included in employee benefit expenses	115,244	174,521	

<sup>&</sup>lt;sup>1</sup> The above amounts excluded ₩ 2,456 million (2020: ₩ 5,138 million) of expenses capitalized to construction in progress and development costs.

- (c) Post-employment benefits recognized for defined contribution plan for the year ended December 31, 2021, amounted to ₩ 7,730 million (2020: ₩ 7,298 million).
- (d) Post-employment benefits recognized in the separate statements of profit or loss for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Cost of sales	79,047	111,904	
Selling and administrative expenses	43,665	67,693	
Discontinued operations	262	2,222	
Total	122,974	181,819	

(e) Movements in the present value of defined benefit obligations for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Beginning balance	936,965	1,285,980
Transfer in	4,808	6,106
Transfer out	(5,898)	(1,436)
Increase (decrease) in defined benefit obligations due to business combination	, ,	, ,
(split-off)	54,897	(455,133)
Current service cost	116,226	176,102
Interest expense	23,190	29,221
Remeasurements:		
Actuarial loss from change in		
demographic assumptions	2,820	7,943
Actuarial gain from change in financial		
assumptions	(41,433)	(24,874)
Actuarial gain from experience		
adjustments	(11,614)	(10,239)
Others	(275)	1,201
Payments from plans	(73,700)	(77,906)
Ending balance	1,005,986	936,965

(f) Movements in the fair value of plan assets for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Beginning balance	878,700	1,126,798
Transfer out	(233)	(725)
Increase (decrease) in assets due to		
business combination (split-off)	45,275	(415,772)
Interest income	21,716	25,664
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(7,306)	(4,738)
Contributions:		
Employers	184,725	220,000
Payments from plans	(70,079)	(72,228)
Administrative costs	(2,095)	(299)
Ending balance	1,050,703	878,700

(g) The actual return on plan assets for the year ended December 31, 2021, was  $\mbox{$\forall$}$  14,410 million (2020:  $\mbox{$\forall$}$  20,926 million).

(h) The significant actuarial assumptions as at December 31, 2021 and 2020, are as follows:

	2021	2020	
Discount rate	2.9%	2.5%	
Salary growth rate	5.0%	5.0%	

(i) The sensitivity analysis for changes in key actuarial assumptions as at December 31, 2021, is as follows:

(in millions of Korean won)	Increase by 0.5%	Decrease by 0.5%
Discount rate: Increase (decrease) in defined benefit obligations	(55,417)	58,077
Salary growth rate: Increase (decrease) in defined benefit		
obligations	56,545	(54,621)

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.

(j) Plan assets as at December 31, 2021 and 2020, consist of:

(in millions of Korean won)	2021		2020	0
	Amount	Composition	Amount	Composition
Insurance contracts with				
guaranteed yield	1,050,703	100%	878,700	100%

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

(k) As at December 31, 2021, the weighted average duration of defined benefit obligation is 11.97 years.

The Company reviews the funding level on an annual basis and has a policy of eliminating deficit from the fund. Expected contributions to post-employment benefit plans for the year ending December 31, 2022 are ₩ 82,834 million.

#### 17. Other Current and Non-current Liabilities

Details of other current and non-current liabilities as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Current			
Advances from customers	49,959	31,453	
Withholding	68,844	74,579	
Unearned revenues	34,089	22,060	
Accrued expenses	421,540	217,238	
Total	574,432	345,330	
Non-current			
Long-term accrued expenses	46,857	40,562	
Long-term unearned revenues	11,077	15,272	
Total	57,934	55,834	

#### 18. Commitments and Contingencies

- (a) The company is jointly liable for liabilities of LG Energy Solution, Ltd. as at December 1, 2020, a newly established company through the split-off from the Parent Company.
- (b) As at December 31, 2021, the Company has been guaranteed from the Seoul Guarantee Insurance Company for the execution of contracts and others.
- (c) As at December 31, 2021, the Company has bank overdraft agreements with several banks for up to ₩ 20,400 million, and has entered into contracts with several financial institutions, and for letters of credit for up to ₩ 22,000 million and US\$ 336 million, foreign currency purchase agreement for up to US\$ 452 million, and for the guaranteed payments in foreign currency for up to US\$ 181 million. The Company also has comprehensive credit line of credit agreements with several financial institutions for up to ₩ 20,000 million (including bank overdraft of ₩ 5,000 million), US\$ 300 million (relating to trade finance and import/export).
- (d) As at December 31, 2021, the Company has B2B purchase arrangements with several financial institutions amounting to ₩ 227,000 million, as well as enterprise general fund arrangement with limit of ₩ 800,000 million and US\$ 760 million.
- (e) As at December 31, 2021, the Company has reverse factoring agreements, and utilized the facility for ₩ 171,760 million provided by Shinhan Card and utilized the facility for ₩ 130,186 million provided by Woori Card.
- (f) As at December 31, 2021, in relation to General Motors (GM) Bolt EV, the class action against General Motors (GM) Bolt EV including the Company is still pending. However, the ultimate outcome of the case cannot be determined at the reporting date.
- (g) In addition, as at December 31, 2021, the Company has been named as a plaintiff in 9 legal actions, involving ₩ 29,979 million in claims. The Company has been named as a defendant in 13 legal actions, with ₩ 43,095 million in claims. The ultimate outcome of these cases cannot be determined at the reporting date.
- (h) As at December 31, 2021, the 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 December 31, 2021, the Company shut down the relevant production facilities.

- (i) The Company has entered into manufacture and production technical contracts with ExxonMobil and others.
- (j) The Company has entered into a license agreement with LG Corp. to use trademarks on the products that the Company manufactures and sells, and on the services the Company provides in relation to its business.
- (k) As at December 31, 2021, the Company has contracts of US\$ 150 million in guarantees with financial institutions in regard to warranty for certain products.
- (I) As at December 31, 2021, the Company has guaranteed the repayment of various obligations of its subsidiaries. The outstanding balance of such guarantees as at December 31, 2021, amounts to ₩ 140,000 million (2020: ₩ 190,000 million). Details of guarantees provided as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)		_	Amount of guarantee		Outstanding loan amount		
Guarantee beneficiary	Financial institution	Guarantee period	2021	2020	2021	2020	
FarmHannong Co.,Ltd.	Creditors	2017.2.16 ~ 2022.2.16	100,000	100,000	100,000	100,000	
FarmHannong Co.,Ltd.	Creditors	2018.3.2 ~ 2021.3.2	-	50,000	-	50,000	
FarmHannong Co.,Ltd.	Creditors	2018.3.2 ~ 2023.3.2	40,000	40,000	40,000	40,000	
Total			140,000	190,000	140,000	190,000	

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

Further, as at December 31, 2021, the Company provided no financial guarantee to its associates in relation to their borrowings.

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

(in millions of Korean won)	2021	2020
Property, plant and equipment	657,292	403,201

#### 19. Share Capital

(a) Changes in share capital and share premium for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won and in shares)	hares	Preferred :			
	Number of shares	Share capital	Number of shares	Share capital	Share premium
January 1, 2020	70,592,343	352,962	7,688,800	38,444	2,014,454
December 31, 2020	70,592,343	352,962	7,688,800	38,444	2,014,454
December 31, 2021	70,592,343	352,962	7,688,800	38,444	2,014,454

(b) Changes in treasury shares for the years ended December 31, 2021 and 2020, are as follows:

	Number o	f shares		Gain on	
(in millions of Korean won and in shares)	Ordinary shares	Preferred shares	Carrying amount	disposal of treasury shares	
January 1, 2020 Decrease in treasury shares due to exercise of	1,652,417	16,367	354,945	13,855	
exchange rights	(1,187,575)	-	(319,246)	417,864	
Others		1			
December 31, 2020	464,842	16,368	35,699	431,719	
Decrease in treasury shares due to exercise of					
exchange rights	(91,228)	-	(14,302)	28,344	
Disposal of treasury shares1	(6,085)	(10,327)	(3,386)	3,744	
December 31, 2021	367,529	6,041	18,011	463,807	

<sup>&</sup>lt;sup>1</sup> 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.

#### 20. Retained Earnings

Retained earnings as at December 31, 2021 and 2020, consist of:

(in millions of Korean won)	2021	2020
Legal reserve <sup>1</sup>	195,703	195,703
Discretionary reserve <sup>2</sup>	12,916,975	13,762,283
Retained earnings before appropriation	2,545,580	(66,925)
Total	15,658,258	13,891,061

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

#### 21. Other Components of Equity

Details of other components of equity as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Treasury shares (Note 19)	(18,011)	(35,699)

<sup>&</sup>lt;sup>2</sup> The Company separately accumulates a discretionary reserve for research and human resource development through appropriation of retained earnings, which has been included as deductible expense for the corporate income tax return according to the Special Tax Treatment Law. The reserve could be paid as a dividend in accordance with the terms of related tax laws.

#### 22. Selling and Administrative Expenses

Selling and administrative expenses for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Wages and salaries	574,511	721,035
Post-employment benefits (Note 16)	43,665	67,693
Employee benefits	92,020	142,341
Travel expense	11,289	25,734
Water & utilities	37,157	52,647
Packaging expenses	5,613	5,739
Rental expenses	88,611	89,154
Commission expenses	632,439	742,363
Depreciation	121,966	148,101
Advertising expense	21,401	22,337
Freight expenses	652,497	430,305
Training expense	15,810	13,469
Amortization (Note 12)	119,697	114,099
Sample expense	6,585	11,835
Development costs	137,512	224,996
Others	131,511	419,949
Total	2,692,284	3,231,797

#### 23. Breakdown of Expenses by Nature

Cost of sales, and selling and administrative expenses by nature for the years ended December 31, 2021 and 2020, consist of:

(in millions of Korean won)	2021	2020
Changes in inventories of merchandise, finished goods, semi-finished goods and	(227.224)	254 255
work in process	(805,224)	654,877
Raw materials and consumables used	11,379,018	11,335,921
Purchase of merchandise	370,544	989,385
Employee benefit expenses (Note 24)	1,702,633	2,114,975
Advertising expenses	22,436	23,379
Freight expenses	676,795	458,069
Commission expenses	845,423	949,705
Depreciation and amortization	1,234,605	1,253,281
Rentals and fees	28,899	30,163
Other expenses	1,996,755	1,905,817
Total _	17,451,884	19,715,572

#### 24. Employee Benefit Expenses

Details of employee benefit expenses for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Salaries	1,463,583	1,761,211
Post-employment benefits – Defined benefit plan (Note 16)	114,982	172,420
Post-employment benefits – Defined contribution plan (Note 16)	7.730	7.177
Others	116,338	174,167
Total	1,702,633	2,114,975

#### 25. Finance Income and Costs

Details of finance income and costs for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Finance income		
Interest income <sup>1</sup>	34,619	27,135
Dividend income	356,433	92,595
Exchange differences	171,629	297,934
Gain on derivative instruments	72,975	-
Gain on financial assets	27,184	3,898
Total	662,840	421,562
Finance costs		
Interest expense <sup>2</sup>	113,617	131,623
Exchange differences	204,604	340,417
Loss on derivative instruments	8,079	309,988
Loss on financial assets	113	<u> </u>
Total	326,413	782,028

<sup>&</sup>lt;sup>1</sup> Details of interest income for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Deposits held by financial institutions	6,292	12,339
Other loans and receivables	28,327	14,796
Total	34,619	27,135

<sup>&</sup>lt;sup>2</sup> Details of interest expense for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Interest on financial institutions	5,807	877
Interest on finance lease liabilities	2,695	2,331
Interest on debentures	107,857	138,937
Other interest expenses	25,416	24,028
Capitalized interest for qualifying assets	(28,158)	(34,550)
Total	113,617	131,623

#### 26. Other Non-Operating Income

Details of other non-operating income for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Exchange differences Gain on disposal of property, plant and	254,985	419,069
equipment	27,270	2,245
Gain on disposal of intangible assets	5,266	149
Gain on disposal of investment in associates and		
joint ventures (Note 10)	3,820	341,015
Others	112,966	71,732
Total	404,307	834,210

#### 27. Other Non-Operating Expenses

Details of other non-operating expenses for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Exchange differences Loss on disposal of property, plant and equipment Loss on disposal of intangible assets Impairment loss on property, plant and equipment (Note 11) Impairment loss on intangible assets (Note 12) Impairment loss on investments in subsidiaries	124,703 20,354 2,255 25,158 298,849	486,025 25,541 1,451 60,190 1,410 144,919
Others Total	14,074 29,951 515,344	12,168 33,296 765,000

## 28. Tax Expense and Deferred Tax

(a) Income tax expense for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Current tax on profit for the year	871,673	399,670
Adjustments in respect of prior years	12,495	(10,634)
Deferred tax movement in temporary differences	(6,239)	619,341
Deferred tax - credit carryforwards	(28,170)	(329)
	849,759	1,008,048
Deferred tax charged directly to equity	(13,686)	(1,565)
Current tax charged directly to equity	(13,304)	(185,744)
Effect of discontinued operations	(22,802)	20,041
Income tax expense	799,967	840,780

(b) The aggregate current and deferred tax charged directly to equity (other comprehensive income) for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Current tax		
Gain (loss) on disposal of financial assets at fair value		
through other comprehensive income	138	(5,262)
Loss on disposal of treasury shares	(13,442)	(180,482)
Deferred tax		
Remeasurements of net defined benefits liabilities	(11,878)	(5,839)
Gain (loss) on valuation of financial assets at fair		
value through other comprehensive income	(1,807)	4,430
Loss on valuation of derivative instruments		(156)
Total	(26,989)	(187,309)

(c) Movements in deferred tax assets (liabilities) for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)				20	021		
	Increase (decrease)						
					_	ther	
	Beginnir balance	-	Profit for the	. ,	•	ehensive oss	Ending balance
Defined benefit liabilities	257,	160		1,955		2,009	261,124
Plan assets	(242,7	796)	(3	32,259)		(13,888)	(288,943)
Provision for impairment on receivables		235		(225)			
Property, plant and equipment		275	(/	(235) 10,522)		-	29,753
Investments in subsidiaries.	70,	,213	(-	10,322)		_	29,733
associates and joint ventures	(1,0	046)		49,922		_	48,876
Accrued income	•	(3)		2		_	(1)
Others	(650,4			41,062		(1,807)	(611,193)
	(566,6	523)		19,925		(13,686)	(560,384)
Tax credit carryforwards	6,	807		28,170			34,977
Deferred income tax assets							
(Liabilities)	(559,8	316)		48,095		(13,686)	(525,407)
(in millions of Korean won)				202	20		
			li	ncrease (d	decrease)		
				Oth	er		
	Beginning		t (loss)	compreh			Ending
	balance	for th	ne year	income	(loss)	Split-off	balance
Defined benefit liabilities	347,371		27,958		1,303	(119,472)	257,160
Plan assets	(309,869)	(	(38,971)	(	(7,142)	113,186	(242,796)
Provision for impairment on							
receivables	235		-		-	-	235
Property, plant and equipment	47,223		23,052		-	-	70,275
Investments in subsidiaries,	(6,250)		5,204				(1,046)
associates and joint ventures  Accrued income	(0,230)		3,204 17		_	-	(3)
Others	196,660	(6	35,037)		4,274	(216,345)	(650,448)
-	275,350		17,777)		(1,565)	(222,631)	(566,623)
Tax credit carryforwards	6,478	(0	329	,	-	-	6,807
Deferred income tax assets							
(Liabilities)	281,828	(6	17,448)		(1,565)	(222,631)	(559,816)

(d) The reconciliations between income tax expense and accounting profit for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Profit before income tax expense <sup>1</sup>	3,337,032	722,517
Tax at domestic tax rates applicable	907,322	188,330
Tax effects of:		
Income not subject to tax	(1,797)	(36,482)
Expenses not deductible for tax purposes	35,978	9,521
Unrecognized deferred income tax for temporary		
differences in the current year	27,392	758,122
Tax credit	(159,801)	(149,047)
Others	13,675	50,296
Effect of discontinued operations	(22,802)	20,041
Income tax expense	799,967	840,780
Effective tax rate (income tax expense/ profit before		
income tax)	23.97%	116.37%

<sup>&</sup>lt;sup>1</sup> The amount before taking into account the discontinued operating income.

- (e) Realization of deferred tax assets is dependent on the Company's ability to generate future taxable profits in excess of the profits arising from the reversal of taxable temporary differences, and economic and industry outlooks. Management periodically reviews on these factors.
- (f) Details of deductible (taxable) temporary differences unrecognized as deferred tax assets (liabilities) as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Investment in subsidiaries, associates and joint ventures	3,441,291	3,610,119
Land	373	488
Goodwill	(424,726)	(694,422)
Total	3,016,938	2,916,185

#### 29. Earnings per Share

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

(a) Basic earnings per share for profit from continuing operations and earnings per share for the years ended December 31, 2021 and 2020, are computed as follows:

#### Basic earnings per ordinary share from continuing operations

(in millions of Korean won and in number of shares)	2021	2020
Profit (loss) from continuing operations attributable to ordinary shares <sup>1</sup> Weighted average number of ordinary shares	2,203,389	(16,187)
outstanding <sup>2</sup>	70,218,611	69,177,128
Basic earnings (losses) per ordinary share from continuing operations (in won)	31,379	(234)
Basic earnings per ordinary share		
(in millions of Korean won and in number of shares)	2021	2020
Profit (loss) attributable to ordinary shares <sup>1</sup> Weighted average number of ordinary shares	2,266,202	(88,762)
outstanding <sup>2</sup>	70,218,611	69,177,128
Basic earnings (losses) per ordinary shares (in won)	32,274	(1,283)
Basic earnings per preferred share from contin	uing operations	
(in millions of Korean won and in number of shares)	2021	2020
Profit (loss) from continuing operations attributable to preferred share <sup>1</sup>	241,195	(1,412)
Weighted average number of preferred shares outstanding <sup>2</sup>	7,674,271	7,672,433
Basic earnings (losses) per preferred share from continuing operations (in won)	31,429	(184)

Basic earnings per preferred share		
(in millions of Korean won and in number of shares)	2021	2020
Profit (loss) attributable to preferred shares <sup>1</sup> Weighted average number of preferred shares	248,061	(9,461)
outstanding <sup>2</sup>	7,674,271	7,672,433
Basic earnings (losses) per preferred shares (in won)	32,324	(1,233)
<sup>1</sup> Profit attributable to ordinary and preferred shares	are as follows:	
(in millions of Korean won)	2021	2020
Profit (loss) from continuing operations attributable to the equity holders of the		
Parent Company	2,444,584	(17,599)
Ordinary shares dividends (A)	842,623	691,771
Preferred shares dividends (B)	92,475	77,108
Undistributed earnings (losses) from		
continuing operation for the year	1,509,486	(786,478)
Undistributed earnings (losses) available for ordinary shares (C)	1,360,766	(707,958)
Undistributed earnings (losses) available for	1,000,700	(101,330)
preferred shares (D)	148,720	(78,520)
Profit (loss) from continuing operations for		
the year attributable to ordinary shares	0.000.000	(40.407)
(A+C) Profit (loss) from continuing operations for	2,203,389	(16,187)
the year attributable to preferred shares		
(B+D)	241,195	(1,412)
(in millions of Korean won)	2021	2020
Profit (loss) attributable to the equity holders		
of the Parent Company	2,514,263	(98,223)
Ordinary shares dividends (A)	842,623	691,771
Preferred shares dividends (B)	92,475	77,108
Undistributed earnings (losses) for the year	1,579,165	(867,102)
Undistributed earnings (losses) available for	4 400 500	(700 500)
ordinary shares (C) Undistributed earnings (losses) available for	1,423,580	(780,533)
preferred shares (D)	155,585	(86,569)
Profit (loss) for the year attributable to	. 23,000	(33,333)
ordinary shares (A+C)	2,266,202	(88,762)
Profit (loss) for the year attributable to	040 004	(0.404)
preferred shares (B+D)	248,061	(9,461)

<sup>&</sup>lt;sup>2</sup> Weighted average numbers of shares are calculated as follows:

		2021		
Ordinary shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance	2021. 1. 1 - 2021. 12. 31	70,163,895	365	25,609,821,675
	2021. 10. 28 - 2021. 12. 31	6,085	65	395,525
Exchange of treasury shares	2021. 1. 9 - 2021. 12. 31	54,834	357	19,575,738
Total				25,629,792,938

Weighted average number of ordinary shares outstanding: 25,629,792,938 / 365 = 70,218,611 shares

	2021			
Preferred shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance	2021. 1. 1 - 2021. 12. 31	7,672,432	365	2,800,437,680
	2021. 10. 28 - 2021. 12. 31	10,327	65	671,255
Total				2,801,108,935

Weighted average number of preferred shares outstanding: 2,801,108,935 / 365 = 7,674,271 shares

	2020			
Ordinary shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance	2020. 1. 1 - 2020. 12. 31	68,939,926	366	25,232,012,916
Exchange of treasury shares	2020. 8. 1 - 2020. 12. 31	47,277	153	7,233,381
	2020. 9. 1 - 2020. 12. 31	446,115	122	54,426,030
	2020. 10. 1 - 2020. 12. 31	16,212	92	1,491,504
	2020. 11. 1 - 2020. 12. 31	50,658	61	3,090,138
	2020. 12. 1 - 2020. 12. 31	663,707	31	20,574,917
Total				25,318,828,886

Weighted average number of ordinary shares outstanding: 25,318,828,886 / 366 = 69,177,128 shares

	2020			
Preferred shares outstanding	Period	Number of shares	Number of days	Number of shares x days
Beginning balance	2020. 1. 1 - 2020. 12. 31	7,672,433	366	2,808,110,478
Total				2,808,110,478

Weighted average number of preferred shares outstanding: 2,808,110,478 / 366 = 7,672,433 shares

As at December 31, 2021 and 2020, the Company did not calculate diluted earnings per share due to antidilution.

Basic and diluted earnings (losses) per share attributable to ordinary and preferred shares from discounted operations for the years ended December 31, 2021 and 2020, are as follows:

(in Korean won)	2021	2020
Basic (losses) per ordinary share from		
discounted operations	895	(1,049)
Basic (losses) per preferred share from discounted operations	895	(1,049)
Diluted (losses) per ordinary share from		(, , , , , , )
discounted operations	895	(1,049)
Diluted (losses) per preferred share from discounted operations	895	(1,049)

#### 30. Dividends

(a) Details of dividends for the years ended December 31, 2021 and 2020, are as follows:

	2021	2020
Number of shares entitled to dividends: shares issued and outstanding (par value per share: ₩ 5,000)		
Ordinary shares	70,224,814	70,127,501
Preferred shares	7,682,759	7,672,432
Dividend per share (in Korean won, %)		
Ordinary shares: cash	12,000 (240%)	10,000 (200%)
Preferred shares: cash	12,050 (241%)	10,050 (201%)
Cash dividends to distribute (in millions of Korean won)		
Ordinary shares	842,698	701,275
Preferred shares	92,577	77,108
	935,275	778,383

(b) Dividend payout ratios for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Dividends (A) Profit (loss) attributable to the ordinary equity holders	935,275	778,383
of the Parent Company (B) Dividend payout ratio (A/B)	<u>2,514,263</u> 37.2%	(98,223)

(c) Dividend yield ratios for the years ended December 31, 2021 and 2020, are as follows:

	202	:1	2020		
(in Korean won)	Ordinary shares	Preferred Shares	Ordinary shares	Preferred Shares	
Dividend per share (A)	12,000	12,050	10,000	10,050	
Market value at the end of year (B) <sup>1</sup>	628,500	298,875	808,750	377,375	
Dividend yield ratio (A/B)	1.91%	4.03%	1.24%	2.66%	

<sup>&</sup>lt;sup>1</sup> Average price in the stock market for one week preceding two business days before shareholder list closing date for the general shareholders' meeting.

#### 31. Related Party Transactions

- (a) As at December 31, 2021 and 2020, LG Corp. is an entity exercising a significant influence over the Company as it owns 33.34% of the Company's ordinary shares.
- (b) Details of other related parties that have sales and other transactions with the Company or have receivables and payables balances, other than consolidated subsidiaries, associates and joint ventures (Note 10), as at December 31, 2021 and 2020, are as follows:

Related party	Related party's subsidiary (Domestic)	Related party's subsidiary (Overseas)	Details
S&I Corp.	S&I CM	S&I CM NANJING Co., Ltd. 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. LG Holdings Japan	<u>-</u> -	- -	Subsidiary of LG Corp. Subsidiary of LG Corp.
LG Display Co., Ltd.	-	LG Display (China) Co., Ltd. and others	LG Enterprise group <sup>1</sup>
LG Electronics Inc.	LG Innotek Co., Ltd. and others	Inspur LG Digital Mobile Communications Co., Ltd. and others	LG Enterprise group <sup>1</sup>
LX International Corp.	LX Pantos Co., Ltd. and others	LX International (Japan) Ltd. and others	LG Enterprise group <sup>1</sup>
LX Hausys, Ltd.	-	LG Hausys Tianjin Co., Ltd. and others	LG Enterprise group <sup>1</sup>
LG Household & Health Care Ltd.	Coca-Cola Beverage Co. and others	-	LG Enterprise group <sup>1</sup>
LX Semicon Co., Ltd. LX MMA Corporation LG Uplus Corp. G II R Inc.	- - LG HelloVision Corp. HS AD Inc.	- - -	LG Enterprise group <sup>1</sup> LG Enterprise group <sup>1</sup> LG Enterprise group <sup>1</sup> LG Enterprise group <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Although these entities are not the related parties of the Company in accordance with Korean IFRS 1024, the entities belong to a large enterprise group in accordance with the Monopoly Regulation and Fair Trade Act.

<sup>&</sup>lt;sup>2</sup> 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

(c) Sales and purchases with related parties for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won) 2021 Purchase and others Acquisition of property, plant Purchase of and equipment Acquisition Sales and raw materials and intangible of right-of-Interest others /merchandises assets use assets expense Others Entity with a significant influence over the Company LG Corp. 12 11,866 139 53,462 **Subsidiaries** LG Energy Solution, Ltd. 104,238 1,188 261 385 2,756 Ningbo LG Yongxing Chemical Co.,Ltd. 303,743 6,899 LG Chem America, Inc. 2,938 1,046,723 LG Energy Solution (Nanjing) Co., Ltd. 54,237 31,264 LG Chemical (Guangzhou) **Engineering Plastics** Co.,Ltd. 67,566 3,991 LG Chem (Taiwan), Ltd. 2,179 47,346 LG Chem Display Materials (Beijing) Co.,Ltd.1 1,910 Tianjin LG Bohai Chemical Co.,Ltd. 207,529 757 LG Chem (China) Investment Co.,Ltd. 854 49,610 LG Chem (Tianjin) **Engineering Plastics** Co.,Ltd. 21,098 12 LG Chem Europe GmbH 710,563 13,947 LG Chem Poland Sp. z o. o. 37,938 166 LG NanoH2O, LLC. 43,222 13,117 LG Energy Solution Michigan Inc. 71,713 LG Energy Solution Battery (Nanjing) Co., Ltd. 15,786 LG Energy Solution 769,245 Wroclaw sp. z o.o. LG Chem (Guangzhou) I&E Materials Co., Ltd. 187,037 8,408 LG Energy Solution Technology (Nanjing) Co., Ltd. 24,789

LG Chem, Ltd. Notes to the Separate Financial Statements December 31, 2021 and 2020

Others	245,050	19,666	7	-	-	24,487
Associates and joint						
ventures						
SEETEC Co., Ltd.	76,149	180,001	654	94	419	69,220
TECWIN Co., Ltd.	10	182	1,069	-	-	81
HUAJIN NEW ENERGY						
MATERIALS(QUZHOU)						
CO., LTD	804	161,775	-	-	-	33
Others	902	10,949	-	-	-	2,697
Other related parties						
S&I Corp. and its						
subsidiaries	2	4,965	227,658	-	-	69,637
LG CNS Co., Ltd. and its						
subsidiaries	170	4,487	296,527	1,192	14	81,893
Others	156	-	-	-	-	18,701
Others						
LG Display Co., Ltd. and						
its subsidiaries	416,125	151	-	-	-	21
LG Electronics Inc. and its						
subsidiaries <sup>2</sup>	427,507	923	12,047	-	-	467,614
LX International Corp. and						
its subsidiaries	95,840	289,186	876	-	-	677,545
LX Hausys, Ltd. and its						
subsidiaries	277,568	5,166	31,951	-	-	683
LX MMA Corporation <sup>2</sup>	159,641	186,970	-	-	-	3,696
Others	10,905	31,655	1,792	9	63	3,085
Total	5,426,378	948,761	572,842	13,161	1,020	1,557,402

(in millions of Korean won) 2020

			Purchase and others						
Entity with a significant	Sales and others	Purchase of raw materials /merchandises	Acquisition of property, plant and equipment and intangible assets	Acquisition of right-of- use assets	Interest expense	Others			
influence over the Company									
LG Corp.	14	-	-	-	167	60,718			
Subsidiaries									
LG Energy Solution, Ltd. Ningbo LG Yongxing	23,674	-	-	21,887	1,120	891			
Chemical Co.,Ltd.	102,860	3,681	-	-	-	444			
LG Chem America, Inc. LG Energy Solution	638,310	-	-	-	-	1,028			
(Nanjing) Co., Ltd. LG Chemical (Guangzhou) Engineering Plastics	683,526	1,662,368	-	-	-	5,391			
Co.,Ltd.	44,386	2,633	-	-	-	-			
LG Chem (Taiwan), Ltd.	58,953	-	-	-	-	6,988			

LG Chem Display						
Materials (Beijing)						
Co.,Ltd.	4,297	-	-	-	-	14
Tianjin LG Bohai Chemical	440.500					
Co.,Ltd.	116,529	-	-	-	-	-
LG Chem (China)						44.004
Investment Co.,Ltd.	-	-	-	-	-	44,204
LG Chem (Tianjin)						
Engineering Plastics	12.257	615				E2
Co.,Ltd.	13,357	015	-	-	-	53
LG Chem Europe GmbH	484,954	-	-	-	-	59,587
LG Chem Poland						
Sp. z o. o.	22,107	-	-	-	-	34
LG NanoH2O, LLC.	25,372	-	-	-	-	12,998
LG Energy Solution						
Michigan Inc.	267,522	1,596	-	-	-	33,287
LG Energy Solution						
Battery (Nanjing) Co.,						
Ltd.	123,161	859,981	-	-	-	41
LG Energy Solution						
Wroclaw sp. z o.o.	1,680,540	1,955	-	-	-	9,150
LG Chem (Guangzhou)	440.000	4.0				
I&E Materials Co., Ltd.	148,352	18	-	-	-	1,116
LG Energy Solution						
Technology (Nanjing)	00.044	054.000				500
Co., Ltd.	69,241	351,938	-	-	-	509
Others	173,091	19,535	2	-	-	29,432
Associates and joint						
ventures						
SEETEC Co., Ltd.	66,396	135,799	10	618	86	78,908
TECWIN Co., Ltd.	339	318	4,662	-	-	211
HL Greenpower Co., Ltd.	853,423	-	-	-	-	3,530
HUAJIN NEW ENERGY						
MATERIALS(QUZHOU)						
CO., LTD	-	857	-	-	-	-
Others	53	3,821	-	-	_	2,482
Other related parties						
LX MMA Corporation <sup>3</sup>	84,388	135,179	_	_	_	3,320
S&I Corp. and its	04,300	155,179	_	_	_	3,320
subsidiaries	267	27,015	328,981	_	_	76,005
LG CNS Co., Ltd. and its	207	27,010	020,001			70,000
subsidiaries	12,132	4,479	234,921	_	16	76,516
Others	14	., •		_		15,433
	14	_	_	_	_	10,400
Others						
LG Display Co., Ltd. and	460 40E	00				05
its subsidiaries	468,405	98	-	-	-	95
LG Electronics Inc. and its subsidiaries	775,401	168,409	28,698			27,827
	773,401	100,409	20,090	-	-	21,021
LX International Corp. and its subsidiaries	57,832	263,481	1,272	_	_	337,158
LX Hausys, Ltd. and its	01,002	200,401	1,212	-	-	001,100
subsidiaries	167,253	1,861	5,665	-	1	6,227
				1 605		
Others	7,844	22,499	2,060	1,605	29	5,846

Total	7,173,993	3,668,136	606,271	24,110	1,419	899,443

<sup>&</sup>lt;sup>1</sup> 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.

(d) Balances of receivables and payables arising from sales and purchases of goods and services as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021							
	Receivables							
	Trade receivables and others	Loan receivables	Other receivables	Total				
Entity with a significant influence over the								
Company								
LG Corp.	-	-	9,941	9,941				
Subsidiaries								
LG Energy Solution, Ltd.	20,343	-	4,483	24,826				
Ningbo LG Yongxing Chemical Co.,Ltd.	4,072	-	1,969	6,041				
LG Chem America, Inc.	313,378	-	-	313,378				
LG Energy Solution (Nanjing) Co., Ltd.	8,331	-	-	8,331				
LG Chemical (Guangzhou) Engineering Plastics								
Co.,Ltd.	5,429	-	7,076	12,505				
LG Chem (Taiwan), Ltd.	14,055	-	40	14,095				
Tianjin LG Bohai Chemical Co.,Ltd.	32,964	-	612	33,576				
LG Chem (China) Investment Co.,Ltd.	685	-	-	685				
LG Chem (Tianjin) Engineering Plastics	2,299	-	2,096	4,395				
LG Chem Europe Gmbh	249,089	-	5,807	254,896				
LG Chem Poland Sp. z o. o.	19,351	-	3,893	23,244				
LG NanoH2O, Inc.	11,497	-	-	11,497				
LG Energy Solution Michigan Inc.	17,419	-	-	17,419				
LG Energy Solution Battery (Nanjing) Co., Ltd.	4,123	-	-	4,123				
LG Energy Solution Wroclaw sp. z o.o.	123,867	-	-	123,867				
LG Chem (Guangzhou) I&E Materials Co., Ltd.	53,948	-	165	54,113				
LG Energy Solution Technology (Nanjing) Co.,								
Ltd.	11,022	-	-	11,022				
Others	84,013	-	24,891	108,904				
Associates and joint ventures								
SEETEC Co., Ltd.	7,426	-	462	7,888				
TECWIN Co., Ltd.	-	-	-	-				
HUAJIN NEW ENERGY MATERIALS(QUZHOU)								
CO ., LTD.	-	-	-	-				
Others	-	-	477	477				
Other related parties								
S&I Corp. and its subsidiaries	-	-	5,395	5,395				
LG CNS Co., Ltd. and its subsidiaries1	-	-	98	98				
Others	-	-	3,956	3,956				
Others								
LG Display Co., Ltd. and its subsidiaries	75,342	-	935	76,277				
LG Electronics Inc. and its subsidiaries	150,573	-	1,295	151,868				
	•		•	•				

<sup>&</sup>lt;sup>2</sup> The consideration transferred for the acquisition of CEM business has been included in other purchase from LG Electronics Inc. and its subsidiaries (Note 37).

<sup>&</sup>lt;sup>3</sup> Net sales and purchase amounts after offsetting for Raffinate transactions with LX MMA.

LG Chem, Ltd. Notes to the Separate Financial Statements December 31, 2021 and 2020

LX International Corp. and its subsidiaries LX Hausys, Ltd. and its subsidiaries

LX MMA Corporation

LX MIMA Corporation	20	,754	-	202	21,339				
Others		23	<u> </u>	1,772	1,795				
Total	1,291	,399	<del></del>	76,003	1,367,402				
(in millions of Korean won)	2021								
	Trade payables	Borrowings	Lease liabilities	Other payables	Total				
Entity with a significant influence over the									
Company									
LG Corp.	_	_	11,866	12,703	24,569				
Subsidiaries			,	•	,				
LG Energy Solution, Ltd.	43,784	_	12,396	5,857	62,037				
Ningbo LG Yongxing Chemical Co.,Ltd.	144	-	, -	. 1	145				
LG Chem America, Inc.	_	_	_	5,317	5,317				
LG Energy Solution (Nanjing) Co., Ltd.	_	_	_	-	,				
LG Chemical (Guangzhou) Engineering Plastics									
Co.,Ltd.	896	-	-	1	897				
LG Chem (Taiwan), Ltd.	-	-	-	369	369				
Tianjin LG Bohai Chemical Co.,Ltd.	-	-	_	-					
LG Chem (China) Investment Co.,Ltd.	-	-	-	7,416	7,416				
LG Chem (Tianjin) Engineering Plastics	-	-	-	1	1				
LG Chem Europe Gmbh	-	-	-	5,549	5,549				
LG Chem Poland Sp. z o. o.	26,049	-	-	5	26,054				
LG NanoH2O, Inc.	-	-	-	5,572	5,572				
LG Energy Solution Michigan Inc.	-	-	_	-					
LG Energy Solution Battery (Nanjing) Co., Ltd.	-	-	-	-	-				
LG Energy Solution Wroclaw sp. z o.o.	-	-	_	-					
LG Chem (Guangzhou) I&E Materials Co., Ltd.	342	-	_	151	493				
LG Energy Solution Technology (Nanjing) Co.,									
Ltd.	-	-	-	-	-				
Others	1,876	-	-	6,227	8,103				
Associates and joint ventures									
SEETEC Co., Ltd.	17,164	-	24,653	10,310	52,127				
TECWIN Co., Ltd.	-	-	-	21	21				
HUAJIN NEW ENERGY MATERIALS(QUZHOU)									
CO ., LTD.	48,054	-	-	-	48,054				
Others	-	-	-	410	410				
Other related parties									
S&I Corp. and its subsidiaries	-	-	-	69,202	69,202				
LG CNS Co., Ltd. and its subsidiaries1	-	-	1,192	133,150	134,342				
Others	-	-	-	224	224				
Others									
LG Display Co., Ltd. and its subsidiaries	49	-	-	2,891	2,940				
LG Electronics Inc. and its subsidiaries	-	-	-	31,924	31,924				
LX International Corp. and its subsidiaries	9,116	-	-	120,392	129,508				
LX Hausys, Ltd. and its subsidiaries	-	-	-	5,415	5,415				
LX MMA Corporation	14,861	-	-	-	14,861				
Others	2,486		3,478	4,658	10,622				

2,462

58,934

20,754

2,462

58,989

21,339

55

585

Total	164,821	- 53	3,585 427,766	646,172					
(in millions of Korean won)	2020								
(III IIIIII GI T KGI GUIT WGII)	Receivables								
	Trade receivables and others	Loan receivables	Other receivables	Total					
Entity with a significant influence over the									
Company									
LG Corp.	-	-	12,395	12,395					
Subsidiaries									
LG Energy Solution, Ltd.	20,351	-	6,972	27,323					
Ningbo LG Yongxing Chemical Co.,Ltd.	3,612	-	2,196	5,808					
LG Chem America, Inc.	163,936	-	-	163,936					
LG Energy Solution (Nanjing) Co., Ltd.	75,438	-	27,154	102,592					
LG Chemical (Guangzhou) Engineering Plastics									
Co.,Ltd.	9,355	-	4,966	14,321					
LG Chem (Taiwan), Ltd.	15,190	-	3,137	18,327					
LG Chem Display Materials (Beijing) Co.,Ltd.	-	-	16	16					
Tianjin LG Bohai Chemical Co.,Ltd.	4,665	-	325	4,990					
LG Chem (China) Investment Co.,Ltd.	-	-	-	-					
LG Chem (Tianjin) Engineering Plastics	2,068	-	1,441	3,509					
LG Chem Europe Gmbh	103,411	-	163	103,574					
LG Chem Poland Sp. z o. o.	6,256	-	3,018	9,274					
LG NanoH2O, LLC.	9,959	-	-	9,959					
LG Energy Solution Michigan Inc.	4,173	-	602	4,775					
LG Energy Solution Battery (Nanjing) Co., Ltd.	4,047	-	11	4,058					
LG Energy Solution Wroclaw sp. z o.o.	232,308	-	3,900	236,208					
LG Chem (Guangzhou) I&E Materials Co., Ltd.	51,790	-	4,351	56,141					
LG Energy Solution Technology (Nanjing) Co.,	,		•	,					
Ltd.	1,538	-	-	1,538					
Others	49,276	-	6,903	56,179					
Associates and joint ventures	,		•	,					
SEETEC Co., Ltd.	3,820	_	201	4,021					
TECWIN Co., Ltd.	-	_	<u>-</u>	-					
HUAJIN NEW ENERGY MATERIALS(QUZHOU)									
CO ., LTD.	-	_	_	_					
Others	_	_	22	22					
Other related parties									
LX MMA Corporation	3,186	_	504	3,690					
S&I Corp. and its subsidiaries	-	_	8,462	8,462					
LG CNS Co., Ltd. and its subsidiaries1	_	_	-	-					
Others	_	_	2,562	2,562					
Others			2,002	2,002					
LG Display Co., Ltd. and its subsidiaries	66,258	_	25,528	91,786					
LG Electronics Inc. and its subsidiaries	73,447	_	131	73,578					
LX International Corp. and its subsidiaries		_	-						
LX Hausys, Ltd. and its subsidiaries	34,272	_	31	34,303					
Others	128	_	1,160	1,288					
	938,484	<u>-</u>	116,151	1,054,635					
Total	950,404	<del>-</del>	110,131	1,004,000					
(in millions of Korean won)	-	202							
		Payab	oles						

LG Chem, Ltd. Notes to the Separate Financial Statements December 31, 2021 and 2020

	Trade payables	Borrowings	Lease liabilities	Other payables	Total
Entity with a significant influence over the					
Company					
LG Corp.	-	-	11,934	3,349	15,283
Subsidiaries					
LG Energy Solution, Ltd.	-	-	21,253	2,765	24,018
Ningbo LG Yongxing Chemical Co.,Ltd.	813	-	-	3	816
LG Chem America, Inc.	-	-	-	254	254
LG Energy Solution (Nanjing) Co., Ltd.	14,299	-	-	-	14,299
LG Chemical (Guangzhou) Engineering Plastics					
Co.,Ltd.	389	-	-	4	393
LG Chem (Taiwan), Ltd.	-	-	-	2,767	2,767
LG Chem Display Materials (Beijing) Co.,Ltd.	-	-	-	670	670
Tianjin LG Bohai Chemical Co.,Ltd.	-	-	-	-	
LG Chem (China) Investment Co.,Ltd.	-	-	-	5,068	5,068
LG Chem (Tianjin) Engineering Plastics	34	-	-	2	36
LG Chem Europe Gmbh	-	-	-	2,847	2,847
LG Chem Poland Sp. z o. o.	-	-	-	3	3
LG NanoH2O, LLC.	-	-	-	5,263	5,263
LG Energy Solution Michigan Inc.	-	-	-	1	1
LG Energy Solution Battery (Nanjing) Co., Ltd.	-	-	-	4	4
LG Energy Solution Wroclaw sp. z o.o.	-	-	-	168	168
LG Chem (Guangzhou) I&E Materials Co., Ltd.	635	-	-	161	796
LG Energy Solution Technology (Nanjing) Co.,					
Ltd.	-	-	-	1	1
Others	3,196	-	-	2,530	5,726
Associates and joint ventures					
SEETEC Co., Ltd.	14,977	-	26,014	9,884	50,875
TECWIN Co., Ltd.	-	-	-	574	574
HUAJIN NEW ENERGY MATERIALS(QUZHOU)					
CO ., LTD.	70	-	-	-	70
Others	124	-	-	272	396
Other related parties					
LX MMA Corporation	13,088	-	-	-	13,088
S&I Corp. and its subsidiaries	-	-	-	106,712	106,712
LG CNS Co., Ltd. and its subsidiaries1	-	-	1,206	61,940	63,146
Others	-	-	-	187	187
Others					
LG Display Co., Ltd. and its subsidiaries	-	-	-	-	
LG Electronics Inc. and its subsidiaries	16,152	-	-	16,793	32,945
LX International Corp. and its subsidiaries	6,591	-	-	35,478	42,069
LX Hausys, Ltd. and its subsidiaries	-	-	-	3,955	3,955
Others	1,820		1,101	5,563	8,484
Total	72,188	-	61,508	267,218	400,914

<sup>&</sup>lt;sup>1</sup> Other receivables to S&I Corp. include the amount of deposits which are classified as memberships in the financial statements of the Company.

<sup>(</sup>e) Fund transactions with related parties for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)				2021			
			Equity	Loa	ins	Borro	wings <sup>2</sup>
	Dividends received	Dividends paid	contributions in cash (capital reduction) <sup>1</sup>	Loans	Repayment	Borrowings	Repayment
Entity with a significant influence over the Company							
LG Corp.	-	235,342	-	-	-	11,866	11,956
Subsidiaries							
LG Energy Solution, Ltd.	-	-	-	-	-	-	10,121
LG Chem (Taiwan), Ltd. Ningbo LG Yongxing	2,995	-	-	-	-	-	-
Chemical Co.,Ltd.	269,226	-	-	-	-	-	-
LG Chem Europe GmbH Tianjin LG Bohai	16,772	-	17,534	-	-	-	-
Chemical Co.,Ltd. Tianjin LG BOTIAN	3,063	-	-	-	-	-	-
Chemical Co.,Ltd. LG Chem (Guangzhou) Information & Electronics Materials	630	-	-	-	-	-	-
Co. ,Ltd. LG Chemical (Guangzhou) Engineering Plastics	33,811	-	-	-	-	-	-
Co.,Ltd.  LG Chem (Tianjin)  Engineering Plastics	12,388	-	-	-	-	-	-
Co.,Ltd.	3,048	_	_	_	_	_	_
LG Chem Fund I LLC	-	_	11,253	_	_	_	_
Ugimag Korea Co., Ltd. <sup>3</sup>	_	_		_	_	_	_
LG Chem Asia Pte. Ltd. LG PETRONAS	-	-	4,990 821	-	-	-	-
Chemicals Malaysia Shanjin Optoelectronics	-	-	36,867	-	-	-	-
(Taiwan) Co., Ltd. LG Jiansheng Life Sciences (Beijing) Co.,	-	-	55,297	-	-	-	-
Ltd. LG Chem Poland Sp. z	-	-	2,257	-	-	-	-
o.o. LG Chem Hangzhou Advanced Materials Co.,	-	-	22,194	-	-	-	-
Ltd. LG Chem Ohio	-	-	67,027	-	-	-	-
Petrochemical, Inc.	-	-	22,516	-	-	-	-
LG BCM Associates and joint	-	-	53,504	-	-	-	-
ventures							

SEETEC Co., Ltd.	10,000	-	-	-	-	94	8,017
LG Vina Chemical	334	-	-	-	-	-	-
TL Chemical CO., Ltd	-	-	48,544	-	-	-	-
Other related parties							
LG CNS Co., Ltd.	-	-	-	-	-	1,192	3,471
Others							
LX Hausys, Ltd.	-	-	-	-	-	-	571
LG HOUSEHOLD &							
HEALTH CARE LTD	<u> </u>					9	1,579
Total	352,267	235,342	342,804			13,161	35,715

(in millions of Korean won)	2020						
			Equity	Loa	ins	Borro	wings <sup>2</sup>
	Dividends received	Dividends paid	contributions in cash (capital reduction)	Loans	Repayment	Borrowings	Repayment
Entity with a significant influence over the Company							
LG Corp.	-	47,068	-	-	-	167	14,699
Subsidiaries							
LG Energy Solution, Ltd.4	-	-	6,915,141	-	-	21,887	1,038
LG Chem (Taiwan), Ltd. Ningbo LG Yongxing	3,253	-	-	-	-	-	-
Chemical Co.,Ltd. LG Chemical (Guangzhou) Engineering Plastics	72,121	-	-	-	-	-	-
Co.,Ltd. LG Chem Display Materials (Beijing)	2,401	-	-	-	-	-	-
Co.,Ltd.	4,241	-	-	-	-	-	-
LG Chem America Inc.	-	-	32,283	-	-	-	-
LG NanoH2O, LLC.	-	-	38,414	-	-	-	-
Uniseal, Inc. LG Chem Life Science	-	-	30,186	-	-	-	-
Innovation Center, Inc LG Energy Solution	-	-	1,702	-	-	-	-
Michigan Inc.	-	-	206,240	-	-	-	-
LG Chem Fund I LLC LEYOU NEW ENERGY MATERIALS(WUXI)	-	-	16,111	-	-	-	-
Co.,LTD	-	-	17,639	-	-	-	-
Ugimag Korea Co., Ltd. LG Energy Solution Technology (Nanjing)	-	-	24,500	-	-	-	-
Co., Ltd. LG Energy Solution	-	-	514,137	-	-	-	-
Wroclaw	-	-	413,739	-	-	-	-

Associates and joint ventures							
SEETEC Co., Ltd.	10,000	-	-	-	-	86	3,506
TECWIN Co., Ltd. HUAJIN NEW ENERGY MATERIALS(QUZHOU)	314	-	-	-	-	-	-
CO.,LTD	-	-	22,191	-	-	-	-
Jiangxi VL Battery Co.,Ltd	-	-	21,814	-	-	-	-
Other related parties							
LG CNS Co., Ltd.	-	-	-	-	-	16	1,190
Others							
LX Hausys, Ltd. LG HOUSEHOLD &	-	-	-	-	-	56	8
HEALTH CARE LTD		<u>-</u>				29	697
Total	92,330	47,068	8,254,097	<u> </u>	<u>-</u>	22,241	21,138

<sup>&</sup>lt;sup>1</sup> The Company disposed of all of its shares of FJ Composite Materials Co., LTD. to LX Semicon Co., Ltd. in 2021. This transaction has not been included in the above table.

(f) Compensation for key management of the Company for the years ended December 31, 2021 and 2020, consists of:

(in millions of Korean won)	2021	2020
Short-term employee benefits	63,218	88,895
Post-employment benefits	6,771	6,308
Total	69,989	95,203

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

There is no provision recognized for receivables of related parties as at December 31, 2021 and no impairment loss on receivables for related parties are recognized for the years ended December 31, 2021 and 2020.

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

<sup>&</sup>lt;sup>2</sup> The amounts represent lease liabilities that were recognized or repaid for the year ended December 31, 2021.

<sup>&</sup>lt;sup>3</sup> The entity has been excluded from the related parties since the Company sold its shares in 2021. Transactions with the entity until the sale of shares have been included in the above information.

<sup>&</sup>lt;sup>4</sup> Included transactions related to the split-off of energy solution division of the Company into LG Energy Solution, Ltd. for the year ended December 31, 2020.

#### 32. Cash Flows

(a) Reconciliation between profit before income tax and cash generated from operations for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Profit before income tax	3,337,032	722,517
Profit before income tax from continuing operations Profit (loss) before income tax from discontinued	3,244,550	823,181
operations	92,482	(100,664)
Adjustments for: Depreciation	1 004 059	1,110,832
Amortization	1,094,058	, ,
	143,416	147,821
Post-employment benefits Finance income	115,244	174,521
	(437,990)	(224,359)
Finance costs	116,697	585,228
Foreign exchange differences	306	14,170
Loss on valuation of inventories (reversal)	13,708	(3,884)
Gain on disposal of property, plant and equipment	(35,538)	(16,298)
Gain on disposal of intangible assets	(5,265)	(149)
Loss on disposal of property, plant and equipment	20,404	26,180
Loss on disposal of intangible assets	2,298	1,451
Impairment loss on property, plant and equipment Impairment loss on property, plant and equipment (reversal)	25,720	62,264 (220)
Impairment loss on intangible assets	298,849	1,473
Impairment loss on investments in associates	230,043	144,919
Gain on disposal of investments in associates	(3,820)	(341,015)
Loss on disposal of investments in subsidiaries	36,605	(341,013)
Gain on disposal of business	(201,882)	(32,085)
Additions to provisions	16,489	314,498
Other expenses	160	11,896
Decrease (increase) in inventories	(1,658,476)	317,376
Decrease (increase) in trade receivables	(947,557)	106,854
Decrease (increase) in other receivables	(947,337) 17,741	(291,959)
Decrease (increase) in other current assets	(25,041)	69,651
Settlement of derivative assets	(23,041)	
	4 220 200	(733)
Increase in trade payables	1,328,388	1,497,917
Increase in other payables	954,134	1,298,622
Increase in other current liabilities	209,118	128,306
Decrease in net defined benefit liabilities	(185,585)	(217,071)
Decrease in provisions	(31,559)	(285,787)
Other cash flows from operations	(5,408)	3,202
Cash generated from operations	4,192,246	5,326,138

(b) Changes in liabilities arising from financial activities for the year ended December 31, 2021, are as follows:

(in millions of Korean won)				2021			
	At January 1, 2021	Cash flows from financing activities	Reclassification of current portion	Amortization	Lease liabilities	Others	At December 31, 2021
Short-term borrowings	34,087	410,339	36,492	-	-	1,599	482,517
Long-term borrowings	93,881	860,303	(36,492)	130	25,999	21,700	965,521
Debentures	3,406,000	2,273,941	-	3,165	-	24,039	5,707,145
Exchange rights	16,797	-	-	-	-	(16,797)	-
Other payables for the reverse							
factoring arrangement	2,081,307	(3,565,364)			<u> </u>	1,783,702	299,645
	5,632,072	(20,781)		3,295	25,999	1,814,243	7,454,828

(c) The significant non-cash transactions for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Reclassification of construction-in-progress	3,431,247	1,612,730
Reclassification of machinery-in-transit	338,218	72,345
Reclassification of long-term borrowings into current		
portion	596,362	903,097
Other payables related to acquisitions of property, plant		
and equipment and intangible assets	533,042	602,608
Reclassification of other payables under the reverse		
factoring arrangement	1,783,702	2,802,825
Reclassification into assets held for sale	294,122	29,158
Conversion of exchangeable bonds into treasury shares	54,383	917,592
Transfer of related assets due to split-off	-	10,016,932
Transfer of related liabilities and equities due to split-off	-	4,353,089

#### 33. Appropriation of Retained Earnings

The appropriation of retained earnings for the year ended December 31, 2021, is expected to be appropriated at the shareholders' meeting on March 23, 2022. The appropriation date for the year ended December 31, 2020, was March 25, 2021.

The appropriation of retained earnings for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Unappropriated retained earnings carried over from prior year	-	-
Profit (loss) for the year	2,514,263	(98,223)
Remeasurements of net defined benefit liabilities	31,317	15,393
Cash flow hedge	<u>-</u>	15,905
Retained earnings available for appropriation	2,545,580	(66,925)
Transfer from other reserves		
Reserve for technology development		845,308
Appropriation of retained earnings		
Legal reserve	-	-
Dividends	935,275	778,383
Reserve for technology development	1,610,305	
	2,545,580	778,383
Unappropriated retained earnings to be carried forward	_	_

#### 34. Assets Held for Sale and Discontinued Operations

#### 34.1 Assets Held for Sale

Upon the approval of management, the Company decided to dispose of acrylic film business (December 2021), LCD polarizer business (June 2021) and 8,500,000 shares of LG Energy Solution, Ltd., a subsidiary (December 2021). The related assets were reclassified as assets held for sale. The disposal of acrylic film business is expected to be completed in the first half of 2022 and the disposal of 8,500,000 shares of LG Energy Solution, Ltd. has been completed in January 2022. In addition, the disposal of LCD polarizer business has been completed in February 2021.

(a) Details of assets of disposal group classified as assets held for sale as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Assets of disposal group		
Property, plant and equipment	4,783	7,668
Intangible assets	-	5,038
Investment in subsidiaries	293,762	13,444
Total	298,545	26,150

(b) 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 years ended December 31, 2021 and 2020.

#### 34.2 Discontinued Operations

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

Comprehensive income information from discontinued operation for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021 Glass substrate				
	LCD polarizer	and others	Total		
Revenue	190,289	10,026	200,315		
Expense	(62,809)	(45,024)	(107,833)		
Profit (loss) before income tax of					
discontinued operation	127,480	(34,998)	92,482		
Income tax benefits (expense)	(31,431)	8,629	(22,802)		
Profit (loss) after income tax of					
discontinued operations	96,049	(26,369)	69,680		

(in millions of Korean won)	2020			
		_		
	LCD polarizer	and others	Total	
Revenue	177,226	43,901	221,127	
Expense	(238,145)	(83,646)	(321,791)	
Loss before income tax of discontinued		<u> </u>		
operation	(60,919)	(39,745)	(100,664)	
Income tax benefits	12,128	7,912	20,040	
Loss after income tax of discontinued				
operations	(48,791)	(31,833)	(80,624)	

Net cash flows from discontinued operations for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)		2021			
	Glass substrate				
	LCD polarizer	and others	Total		
Net cash inflow (outflow) from operating					
activities	(26,994)	591	(26,403)		
Net cash inflow from investing activities	182,785	5,934	188,719		
Net cash outflow from financing activities	(155,791)	(6,525)	(162,316)		
// /// /// / / / / / / / / / / / / / /		0000			
(in millions of Korean won)		2020			
(in millions of Korean won)		Glass substrate			
(In millions of Korean won)	LCD polarizer		Total		
(In millions of Korean won)  Net cash inflow (outflow) from operating		Glass substrate	Total		
, ,		Glass substrate	<b>Total</b> 53,368		
Net cash inflow (outflow) from operating	LCD polarizer	Glass substrate and others			
Net cash inflow (outflow) from operating activities	LCD polarizer	Glass substrate and others			

#### 35. Assets and Liabilities related to Contracts with Customers

(a) Assets and liabilities related to contracts with customers as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Contract assets		
Total contract assets	-	-
Contract liabilities		
Advances in relation to revenue from the Company's main business activities	36,839	26,145
Expected services to be transferred	-	-
Expected customer incentives	1,824	1,536
Unearned revenue	30,510	25,696
Expected refunds		<u>-</u>
Total contract liabilities	69,173	53,377

#### Revenue recognized in relation to contract liabilities

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

(in millions of Korean won)	2021	2020
Revenue recognized in the current year from the contract liability balance at the beginning		
of the year	29,902	132,408
Advances in relation to revenue from the Company's main business activities	25,891	116,305
Unearned revenue	4,011	12,603
Expected services to be transferred	-	3,500
Revenue recognized from performance obligations satisfied in previous years	-	-

#### 36. Investment Properties

(a) Details of investment properties as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)		2	021			20	020	
	Cost	Accumulated depreciation	Accumulated impairment	Book amount	Cost	Accumulated depreciation	Accumulated impairment	Book amount
Land	4,216	-	-	4,216	4,216	-	-	4,216
Buildings	29,591	(10,365)	(172)	19,054	30,140	(11,361)	(192)	18,587
	33,807	(10,365)	(172)	23,270	34,356	(11,361)	(192)	22,803

(b) Changes in investment properties for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021				2020	
	Land	Building	Total	Land	Building	Total
Beginning balance	4,216	18,587	22,803	4,368	48.960	53,328
Acquisitions/transfers	-,210	6,145	6,145	-,000	17,338	17,338
Disposals/transfers	-	(5,043)	(5,043)	(152)	(5,221)	(5,373)
Depreciation	-	(635)	(635)	-	(1,347)	(1,347)
Transfer	_	<u> </u>	<u> </u>		(41,143)	(41,143)
Ending balance	4,216	19,054	23,270	4,216	18,587	22,803

(c) The fair value of investment properties is measured either by independent professional appraisers with certified qualification or measured based on official appraised value of land and available information from recent transactions of similar properties, and it is classified as 'level 3' of the fair value hierarchy. The fair value of investment properties as at December 31, 2021, is ₩ 34,379 million (2020: ₩ 30,298 million).

Rental income from investment properties under operating lease is  $\mbox{$\mbox{$$\mu$}$}$  1,680 million (2020:  $\mbox{$\mbox{$$\mu$}$}$  6,439 million), and operating expenses incurred for investment properties that generated rental income (including maintenance and repair expenses) are  $\mbox{$\mbox{$$\mu$}$}$  623 million (2020:  $\mbox{$\mbox{$$\mu$}$}$  1,335 million). Operating expenses incurred for investment properties that do not generate rental income (including maintenance and repair expenses) are  $\mbox{$\mbox{$$\mbox{$$$$}$}$}$  12 million).

#### (d) Operating lease

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

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

residual values are reflected in the fair value of investment properties.

The future minimum lease payments expected to be received in relation to the above operating lease agreement for investment properties as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Within one year	1,524	1,304
Within two years	551	173
Within five years	1,100	215
	3,175	1,692

#### 37. Business Combination

On November 1, 2021 the 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 Company acquired the domestic CEM business for  $\forall$  389,973 million and the 70% shares of LG Chem Hangzhou Advanced Materials Co., Ltd.(formerly, LG Electronics(Hangzhou) Co., Ltd) for  $\forall$  67,027 million. LG Chem Poland Sp. z o.o., a subsidiary, acquired CEM business in Poland for  $\forall$  67,700 million.

The goodwill of  $\forall$  165,760 million arising from the business combination is attributable to sales increase from combining the operations of the Company 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	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		
Trade and other receivables <sup>1</sup>	113,639	26,228
Inventories	28,518	36,627
Property, plant and equipment	190,930	38,755
Intangible assets	40,111	447
Other assets	4,050	-
Investment in subsidiary <sup>2</sup>	67,027	-
Trade payables	(136,158)	(24,602)
Provisions	(1,386)	(597)
Net defined benefit liabilities	(9,622)	-
Other liabilities	(5,869)	(522)
Fair value of net identifiable assets acquired	291,240	76,336

Goodwill	165,760	-
Gains from buying at a bargain price	-	(8,636)
	457,000	67,700

<sup>&</sup>lt;sup>1</sup> The fair value of trade and other receivables of LG Chem, Co., Ltd. is identical with the gross contractual amount.

The revenue and net loss in 2021 contributed by CEM business since the acquisition were  $\forall$  50,339 million and  $\forall$  8,819 million, respectively.

Revenue and profit or loss of the Company for the year ended December 31, 2021 would have been  $\mbox{$\forall$}$  20,951,138 million and  $\mbox{$\forall$}$  2,562,925 million, respectively as though the acquisition of CEM business had occurred as of the beginning of the year ended December 31, 2021.

#### 38. Split-off

date

Upon the resolution of Board of Directors on September 17, 2020, the Company decided to split off its energy solution division into LG Energy Solution, Ltd. Assets and liabilities related to the energy solution division of the Company were transferred to LG Energy Solution, Ltd., a newly established entity and 100% of shares of LG Energy Solution, Ltd. were issued to the Company as a consideration according to the split-off plan. The split-off was approved by shareholders' meeting on October 30, 2020. Details of the split-off are as follows.

#### **Details**

Method	Split-off
Related Entities	LG Chem Co., Ltd. (surviving company after the split-off) LG Energy Solution, Ltd. (newly established entity for the split-off)
Approval of shareholders' meeting	October 30, 2020
Effective split-off	December 1, 2020

Acquisition cost of investment in subsidiary resulting from the split-off was measured based on the net book value of assets and liabilities transferred. Details of assets and liabilities transferred are as follows.

(in millions of Korean won)	Amount
Assets	
Cash and cash equivalents	1,251,298
Trade receivables	1,552,070
Inventories	756,250
Investments in subsidiaries, associates and joint ventures	4,452,376
Property, plant and equipment	1,669,154
Intangible assets	272,057
Other assets	1,315,025
Total assets	11,268,230

<sup>&</sup>lt;sup>2</sup> The Company acquired 70% of shares of LG Chem Hangzhou Advanced Materials Co., Ltd. (formerly LG Electronics (Hangzhou) Co., Ltd) for ₩ 67,027 million.

Liabilities	
Trade payables	1,224,818
Borrowings	1,953,835
Other liabilities	1,174,436
Total liabilities	4,353,089
Net assets transferred (Investment in	
subsidiary)	6,915,141

#### 39. Events After the Reporting Period

In January 2022, the Company disposed of 8,500,000 shares of LG Energy Solution, Ltd. (4.25% of the ownership), which was classified as assets held for sale in accordance with the approval of the Board of Directors in December 2021. The percentage of ownership held by the Company over LG Energy Solution, Ltd. has decreased from 100% to 81.8% after this transaction.

#### 40. Approval of Issuance of the Financial Statements

The separate financial statements 2021 were approved for issue by the Board of Directors on February 22, 2022 and are subject to change with approval of shareholders at their Annual General Meeting.

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

(English Translation of a Report Originally Issued in Korean)

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

#### **Opinion on Internal Control over Financial Reporting**

We have audited LG Chem, Ltd. (the Company) Internal Control over Financial Reporting as of December 31, 2021, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.* 

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.* 

We also have audited, in accordance with Korean Standards on Auditing, the separate financial statements of the Company, which comprise the separate statement of financial position as at December 31, 2021 and the separate statement of profit or loss, separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flow for the year then ended, and notes to the separate financial statements including a summary of significant accounting policies, and our report dated on March 8, 2022, expressed unqualified opinion.

#### Basis for Opinion on Internal Control over Financial Reporting

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

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

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

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

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

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

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

#### Definition and Inherent Limitations of Internal Control over Financial Reporting

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

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

The engagement partner on the audit resulting in this independent auditor's report is Kibok Lee, Certified Public Accountant.

Seoul, Korea March 8, 2022

This report is effective as of March 8, 2022, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the Company's internal control over financial reporting thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

## Report on the Effectiveness of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

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

We, as the Chief Executive Officer ("CEO") and the Internal Control over Financial Reporting ("ICFR") Officer of LG Chem, Ltd. ("the Company"), assessed the effectiveness of the design and operation of the Company's Internal Control over Financial Reporting for the year ended December 31, 2021.

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

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

Based on the assessment results, we believe that the Company's ICFR, as at December 31, 2021, is designed and operating effectively, in all material respects, in accordance with *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.* 

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

February 8, 2022

Hak -Cheol Shin, Chief Executive Officer

Dong-Seok Cha, Internal Control over Financial Reporting Officer