

LX International Corp.

Separate financial statements
for the years ended December 31, 2021 and 2020
with the independent auditor's report

Table of contents

Independent auditor's report

	Page
Separate financial statements	
Separate statements of financial position	1
Separate statements of profit or loss	3
Separate statements of comprehensive income	4
Separate statements of changes in equity	5
Separate statements of cash flows	7
Notes to the separate financial statements	8
Independent auditor's report on internal control over financial reporting	87
Management's report on the operations of internal control over financial reporting	89

Independent auditor's report

The Shareholders and Board of Directors LX International Corp. (formerly, LG International Corp.)

Opinion

We have audited the separate financial statements of LX International Corp. (formerly, LG International Corp.) (the "Company"), which comprise the separate statements of financial position as of December 31, 2021 and 2020, and the 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 the Company as of December 31, 2021 and 2020, and its separate financial performance and its separate cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("KIFRS").

We also have audited, in accordance with Korean Auditing Standards ("KGAAS"), the Company's internal control over financial reporting ("ICFR") as of December 31, 2021, based on the criteria established in Conceptual Framework for designing and operating ICFR established by the Operating Committee of ICFR ("the ICFR Committee"), and our report dated March 16, 2022 expressed an unqualified opinion thereon.

Basis for opinion

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

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 separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For the matter below, our description of how our audit addressed the matter is provided in that context.

(1) Revenue recognition of overseas export sales

As described in Note 2 to the separate financial statements, the Company recognizes revenue when the performance obligation identified in contracts with customers is satisfied at the amount which it expects to receive in exchange for the goods or services. The Company's overseas export sales of goods are ₩3,129,786 million in total, accounting for approximately 75% of total sales. The Company recognizes revenue on overseas export sales when the control of goods, produced by the Company or purchased from suppliers, is transferred to the customers.

We identified the risk of overstatement in overseas export sales caused by errors in the judgment for the timing of identification and satisfaction of performance obligations in the contracts with customers as a significant risk.

The primary audit procedures we have conducted in relation to the above significant risk are as follows:

- Analysis on the accounting policies of revenue recognition for major types of sales contracts and changes therein, if any
- Assessment on the design and operating effectiveness of internal controls in relation to overseas export sales recognition
- Analysis for the contracts by type of overseas export sales (identification of performance obligation, measurement of transaction amount, allocation of transaction price, and review of the appropriateness in timing of revenue recognition)
- Testing of details on the transactions occurred during the current period by comparing the records and the related documents
- Assessment for the appropriateness of period to which the transactions occurred around the end of reporting period is attributable

Responsibilities of management and those charged with governance for the separate financial statements

Management is responsible for the preparation and fair presentation of the separate financial statements in accordance with KIFRS, 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, or has no realistic alternative but to do so.

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

Auditor's responsibilities for the audit of the separate financial statements

Our objectives are to obtain reasonable assurance about whether the separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KGAAS 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 separate financial statements.

As part of an audit in accordance with KGAAS, 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 Joon Yang Jeong.



March 16, 2022

This audit report is effective as of March 16, 2022, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the accompanying separate financial statements and may result in modifications to this report.

LX International Corp. (formerly, LG International Corp.)

Separate financial statements
for the years ended December 31, 2021 and 2020

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

Chun-sung Yoon
Chief Executive Officer
LX International Corp.

LX International Corp. (formerly, LG International Corp.)
Separate statements of financial position
as of December 31, 2021 and 2020
(Korean won in millions)

	Notes	2021	2020
Assets			
Current assets			
Cash and cash equivalents	4, 5, 26, 27	₩ 262,489	₩ 328,406
Short-term financial instruments	4, 5, 12, 26, 27	23,223	35,190
Trade accounts receivable	4, 12, 24, 26, 27	366,359	304,588
Other accounts receivable	4, 6, 12, 24, 26, 27	48,788	33,044
Accrued income	4, 12, 24, 26, 27	2,223	1,466
Advance payments	24	4,255	7,728
Prepaid expenses		2,683	1,644
Other current assets	4, 12, 24, 26, 27	12,714	4,867
Inventories, net	7	100,622	53,456
Assets held for sale	30	4,779	-
		<u>828,135</u>	<u>770,389</u>
Non-current assets			
Investment assets	4, 8, 12, 24, 26, 27	232,689	261,027
Investments in subsidiaries	9	1,726,301	1,288,382
Investments in associates	9	97,383	85,972
Property, plant and equipment, net	10, 29	8,955	16,305
Intangible assets, net	11	13,735	14,289
Deferred tax assets	23	81,584	126,106
Other non-current assets	4, 5, 12, 20, 24, 26, 27	30,262	48,291
		<u>2,190,909</u>	<u>1,840,372</u>
Total assets		<u>₩ 3,019,044</u>	<u>₩ 2,610,761</u>

(Continued)

LX International Corp. (formerly, LG International Corp.)
Separate statements of financial position
as of December 31, 2021 and 2020 (cont'd)
(Korean won in millions)

	Notes	2021	2020
Liabilities			
Current liabilities			
Short-term borrowings	4, 13, 26, 27	₩ 76,085	₩ 55,052
Trade accounts payable	4, 24, 26, 27	294,735	281,730
Other accounts payable	4, 6, 24, 26, 27	115,426	46,722
Advance received	17, 24	4,985	6,683
Withholdings	4, 26, 27	1,299	1,494
Income tax payable		12,344	6,095
Accrued expenses	4, 26, 27	18,078	30,546
Current portion of bonds and long-term borrowings	4, 13, 26, 27	212,287	154,802
Deposits received	4	-	644
Lease liabilities	4, 24, 26, 27, 29	5,442	4,985
Liabilities directly associated with assets held for sale	30	5,655	-
Current portion of provisions	14	5,987	-
		<u>752,323</u>	<u>588,753</u>
Non-current liabilities			
Bonds	4, 13, 26, 27	269,462	359,307
Long-term borrowings	4, 13, 26, 27	175,590	258,674
Defined benefit liabilities	20	-	532
Lease liabilities	4, 24, 26, 27, 29	1,315	1,773
Provisions	14, 22	13,913	25,348
Other non-current liabilities	4, 26, 27	1,070	7,150
		<u>461,350</u>	<u>652,784</u>
Total liabilities		<u>1,213,673</u>	<u>1,241,537</u>
Equity			
Capital stocks	15	193,800	193,800
Capital surplus	15	102,125	102,125
Other components of equity	15	(40,690)	(40,690)
Accumulated other comprehensive loss	15	(1,177)	(105,309)
Retained earnings		1,551,313	1,219,298
Total equity		<u>1,805,371</u>	<u>1,369,224</u>
Total liabilities and equity		<u>₩ 3,019,044</u>	<u>₩ 2,610,761</u>

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

LX International Corp. (formerly, LG International Corp.)
Separate statements of profit or loss
for the years ended December 31, 2021 and 2020
(Korean won in millions, except earnings per share)

	Notes	2021	2020
Sales	3, 17, 24	₩ 4,155,724	₩ 3,258,240
Cost of sales	19, 24	(3,967,383)	(3,151,014)
Gross profit		188,341	107,226
Selling and administrative expenses	18, 19	(176,011)	(131,620)
Operating Profit (loss)	3	12,330	(24,394)
Finance income	4, 6, 21	150,786	179,261
Finance costs	4, 6, 21	(147,426)	(212,033)
Share of profit of subsidiaries and associates	9, 21, 22	369,570	406,295
Other non-operating income, net	21	1,000	1,817
Profit before tax		386,260	350,946
Income tax expense	23	(38,241)	(55,683)
Profit for the year		₩ 348,019	₩ 295,263
Earnings per share:			
Basic and diluted, earnings per share	15	₩ 9,676	₩ 7,870

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

LX International Corp. (formerly, LG International Corp.)
Separate statements of comprehensive income
for the years ended December 31, 2021 and 2020
(Korean won in millions)

	Notes	2021	2020
Profit for the year		₩ 348,019	₩ 295,263
<i>Other comprehensive income (loss)</i> <i>that may be reclassified to profit or loss</i> <i>in subsequent periods:</i>			
Gain (loss) on valuation of derivatives designated as cash flow hedges	4, 6	123	(310)
Equity adjustments in equity method	9	85,429	(44,530)
Exchange differences on translation of foreign operations		8,244	(2,774)
		<u>93,796</u>	<u>(47,614)</u>
<i>Other comprehensive income (loss)</i> <i>that will not be reclassified to profit or loss</i> <i>in subsequent periods:</i>			
Gain (loss) on valuation of financial assets designated at fair value through OCI	4, 8	10,328	(40,680)
Remeasurement gain on defined benefit plans	20	529	4,919
Change in retained earnings in equity method	9	(2,146)	(21)
Equity adjustments in equity method	9	9	722
		<u>8,720</u>	<u>(35,060)</u>
Other comprehensive income (loss) for the year, net of tax		<u>102,516</u>	<u>(82,674)</u>
Total comprehensive income for the year, net of tax		<u>₩ 450,535</u>	<u>₩ 212,589</u>

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

LX International Corp. (formerly, LG International Corp.)

Separate statements of changes in equity
for the years ended December 31, 2021 and 2020

(Korean won in millions)

	Capital stocks	Capital surplus	Other components of equity	Accumulated other comprehensive loss	Retained earnings	Total equity
As of January 1, 2020	₩ 193,800	₩ 102,125	₩ (968)	₩ (17,738)	₩ 930,735	₩ 1,207,954
Profit for the year	-	-	-	-	295,263	295,263
Loss on valuation of derivatives designated as cash flow hedges	-	-	-	(310)	-	(310)
Equity adjustments in equity method	-	-	-	(43,808)	-	(43,808)
Exchange differences on translation of foreign operations	-	-	-	(2,774)	-	(2,774)
Loss on valuation of FVOCI	-	-	-	(40,679)	-	(40,679)
Remeasurement gain on defined benefit plans	-	-	-	-	4,919	4,919
Change in retained earnings in equity method	-	-	-	-	(21)	(21)
Total comprehensive income (loss)	-	-	-	(87,571)	300,161	212,590
Dividends (Note 16)	-	-	-	-	(11,598)	(11,598)
Acquisition of treasury stock	-	-	(39,722)	-	-	(39,722)
As of December 31, 2020	₩ 193,800	₩ 102,125	₩ (40,690)	₩ (105,309)	₩ 1,219,298	₩ 1,369,224

(Continued)

LX International Corp. (formerly, LG International Corp.)

**Separate statements of changes in equity
for the years ended December 31, 2021 and 2020 (cont'd)**

(Korean won in millions)

	Capital stocks	Capital surplus	Other components of equity	Accumulated other comprehensive loss	Retained earnings	Total equity
As of January 1, 2021	₩ 193,800	₩ 102,125	₩ (40,690)	₩ (105,309)	₩ 1,219,298	₩ 1,369,224
Profit for the year	-	-	-	-	348,019	348,019
Gain on valuation of derivatives designated as cash flow hedges	-	-	-	123	-	123
Equity adjustments in equity method	-	-	-	85,437	-	85,437
Exchange differences on translation of foreign operations	-	-	-	8,244	-	8,244
Gain on valuation of FVOCI	-	-	-	10,328	-	10,328
Remeasurement gain on defined benefit plans	-	-	-	-	529	529
Change in retained earnings in equity method	-	-	-	-	(2,146)	(2,146)
Total comprehensive income	-	-	-	104,132	346,402	450,534
Dividends (Note 16)	-	-	-	-	(14,387)	(14,387)
As of December 31, 2021	₩ 193,800	₩ 102,125	₩ (40,690)	₩ (1,177)	₩ 1,551,313	₩ 1,805,371

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

LX International Corp. (formerly, LG International Corp.)
Separate statements of cash flows
for the years ended December 31, 2021 and 2020
(Korean won in millions)

	Notes	2021	2020
Cash flows from operating activities:			
Profit for the year		₩ 348,019	₩ 295,263
Non-cash adjustments to reconcile profit for the year			
to net cash flows provided by (used in) operating activities	28	(314,692)	(338,963)
Working capital adjustments	28	(75,915)	39,111
Interest received		21,665	4,002
Interest paid		(18,105)	(22,577)
Dividends received		36,726	22,704
Income tax paid		(3,333)	20,841
Net cash flows provided by (used in) operating activities		(5,635)	20,381
Cash flows from investing activities:			
Decrease in financial instruments		-	1
Decrease in loans		60,085	923
Decrease in guarantee deposits		350	155
Proceeds from disposal and capital reduction			
of investments in associates	9	3,901	333,585
Proceeds from disposal of assets held for sale	30	7,330	22,920
Proceeds from disposal of property, plant and equipment	10	8,299	24
Proceeds from disposal of intangible assets	11	2,826	7,258
Increase in financial instruments		(5,086)	(20,000)
Increase in loans		(4,689)	(12,318)
Increase in guarantee deposits		(204)	(238)
Acquisition of equity instruments held for long-term	8	(5,399)	(3,000)
Acquisition of investments in subsidiaries	9, 24	(8,980)	(4,766)
Acquisition of investments in associates	9, 24	(2,720)	-
Acquisition of property, plant and equipment	10	(1,771)	(3,693)
Acquisition of intangible assets	11	(2,352)	(90)
Net cash flows provided by investing activities		51,590	320,761
Cash flows from financing activities:			
Acquisition of treasury stock	15	-	(39,722)
Proceeds from financial liabilities	28	333,674	395,302
Repayments of financial liabilities	28	(418,593)	(436,113)
Payment of principal portion of lease liabilities	28, 29	(6,662)	(6,736)
Dividends paid	16	(14,387)	(11,596)
Cash outflow from other financing activities		(5,930)	-
Net cash flows used in financing activities		(111,898)	(98,865)
Net increase (decrease) in cash and cash equivalents		(65,943)	242,277
Cash and cash equivalents as of January 1		328,406	88,140
Exchange differences on translation of cash and cash equivalents		26	(2,011)
Cash and cash equivalents as of December 31		₩ 262,489	₩ 328,406

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

1. Corporate information

LX International Corp. (the “Company”) was established on November 26, 1953 to engage in the import and export business. It changed its name to Bando Corporation in 1956, to Lucky Industries Co., Ltd. in 1984 and to LG International Corp. in 1995. Its current name was adopted on July 1, 2021.

The Company listed its common stock on the Korea Exchange in January 1976 and was designated as a general trading company by the Korean Government on November 12, 1976.

The Company is currently engaged in the import and export of goods, and other business activities. The Company is located in Seoul and operates 16 overseas branch offices, 5 liaison offices and 83 subsidiaries (including 58 sub-subsidiaries) as of December 31, 2021.

As LG Corp., the largest shareholder of the Company, newly established LX Holdings Corp. through the spin-off on May 1, 2021, and the Company was incorporated into LX Holdings Corp. LX Holdings Corp. holds 24.69% of the Company's common stock as of the end of the reporting period. The remaining equity shares are held by institutional investors, overseas investors, minority shareholders, and so on.

2. Basis of preparation and summary of significant accounting policies

2.1 Basis of preparation

The Company prepares statutory financial statements in the Korean language in accordance with Korean International Financial Reporting Standards (“KIFRS”) enacted by the *Act on External Audit of Stock Companies*. The accompanying financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

The separate financial statements have been prepared on a historical cost basis, except for debt and equity financial assets and derivative financial instruments that are valued at fair value. The carrying values of recognized assets and liabilities that are designated as hedged items in fair value hedges that would otherwise be carried at amortized cost are adjusted to record changes in the fair values attributable to the risks that are being hedged in effective hedge relationships. The separate financial statements are presented in Korean won and all values are rounded to the nearest won except when otherwise indicated.

LX International Corp. is the parent company of its subsidiaries (collectively referred to as the “Company”) and the consolidated financial statements of the Company prepared in accordance with KIFRS have been issued separately.

2.2 Summary of significant accounting policies

2.2.1 Current versus non-current classification

The Company presents assets and liabilities in the statement of financial position based on current/non-current classification.

An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in the normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realized within twelve months after the reporting period, or
- Cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

2.2.1 Current versus non-current classification (cont'd)

A liability is current when:

- It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Company classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

2.2.2 Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash at banks and on hand and cash equivalents with an original maturity of three months or less.

2.2.3 Inventories

Inventories are valued at the lower of cost and net realizable value, with cost being determined using the specific identification method and moving average method. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

2.2.4 Financial instruments – initial recognition and subsequent measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

2.2.4.1 Financial assets

2.2.4.1.1 Initial recognition and measurement

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient, the Company initially 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. Trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient are measured at the transaction price determined under KIFRS 1115.

In order for a financial asset to be classified and measured at amortized cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Company's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognized on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

2.2.4.1.2 Subsequent measurement

For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at amortized cost (debt instruments)
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortized cost (debt instruments)

The Company measures financial assets at amortized cost if both of the following conditions are met:

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

Financial assets at amortized cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

Financial assets at fair value through OCI (debt instruments)

The Company measures debt instruments at fair value through OCI if both of the following conditions are met:

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

For debt instruments at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognized in the statement of profit or loss and computed in the same manner as for financial assets measured at amortized cost. The remaining fair value changes are recognized in OCI. Upon derecognition, the cumulative fair value change recognized in OCI is recycled to profit or loss.

The Company's debt instruments at fair value through OCI includes investments in quoted debt instruments included under other non-current financial assets.

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Company can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under KIFRS 1032 Financial Instruments: Presentation and are not held for trading.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other non-operating income in the statement of profit or loss when the right of payment has been established, except when the Company benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

The Company may elect to classify irrevocably its non-listed equity investments under this category.

2.2.4.1.2 Subsequent measurement (cont'd)

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model.

Notwithstanding the criteria for debt instruments to be classified at amortized cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with net changes in fair value recognized in the statement of profit or loss.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

2.2.4.1.3 Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a Company of similar financial assets) is derecognized when:

- The rights to receive cash flows from the asset have expired, or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the asset is recognized to the extent of the Company's continuing involvement in the asset. In that case, the Company also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

2.2.4.2 Impairment of financial assets

Further disclosures relating to impairment of financial assets are also provided in Note 12.

The Company recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

2.2.4.2 Impairment of financial assets (cont'd)

ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Company applies a simplified approach in calculating ECLs. Therefore, the Company does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For debt instruments at fair value through OCI, the Company applies the low credit risk simplification. At every reporting date, the Company evaluates whether the debt instrument is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Company reassesses the internal credit rating of the debt instrument. In addition, the Company considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.

The Company's debt instruments at fair value through OCI comprise solely of quoted bonds that are graded in the top investment category and, therefore, are considered to be low credit risk investments. It is the Company's policy to measure ECLs on such instruments on a 12-month basis. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. The Company uses the ratings from the external independent credit rating agency both to determine whether the debt instrument has significantly increased in credit risk and to estimate ECLs.

The Company considers a financial asset in default when contractual payments are a year past due. However, in certain cases, the Company may also consider a financial asset to be in default when internal or external information indicates that the Company is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Company. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

2.2.4.3 Financial liabilities

2.2.4.3.1 Initial recognition and measurement

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, less directly attributable transaction costs.

The Company's financial liabilities include trade and other payables, borrowings including bonds and derivative financial liabilities.

2.2.4.3.2 Subsequent measurement

The subsequent measurement of financial liabilities depends on their classification as described below:

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss includes financial liabilities held for trading and financial liabilities designated upon initial recognition as at fair value through profit or loss.

Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by KIFRS 1109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in the statement of profit or loss.

2.2.4.3.2 Subsequent measurement (cont'd)

Borrowings

Interest-bearing borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR.

2.2.4.3.3 Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the statement of profit or loss.

2.2.4.4 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the statement of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

2.2.5 Derivative financial instruments and hedge accounting

2.2.5.1 Initial recognition and subsequent measurement

The Company uses derivative financial instruments such as forward currency contracts, swap currency and interest rate swaps to hedge its foreign currency risks and interest rate risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment
- Cash flow hedges when hedging exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognized firm commitment
- Hedges of a net investment in a foreign operation

At the inception of a hedge relationship, the Company formally designates and documents the hedge relationship to which the Company wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge.

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Company will assess whether the hedging relationship meets the hedge effectiveness requirements (including the analysis of sources of hedge ineffectiveness and how the hedge ratio is determined). A hedging relationship qualifies for hedge accounting if it meets all of the following effectiveness requirements:

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

2.2.5.1 Initial recognition and subsequent measurement (cont'd)

Hedges which meet the strict criteria for hedge accounting are accounted for as follows:

Fair value hedges

The change in the fair value of a hedging derivative is recognized in the statement of profit or loss in finance costs. The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognized in the statement of profit or loss as finance costs.

For fair value hedges relating to items carried at amortized cost, any adjustment to carrying value is amortized through the statement of profit or loss over the remaining term of the hedge using the EIR method. The EIR amortization may begin as soon as an adjustment exists and no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

If the hedge item is derecognized, the unamortized fair value is recognized immediately in the statement of profit or loss.

When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain (loss) recognized in the statement of profit or loss.

Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in other comprehensive income or loss in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the statement of profit or loss. The cash flow hedge reserve is adjusted to the lower of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The Company uses forward currency contracts as hedges of its exposure to foreign currency risk in forecast transactions and firm commitments, as well as forward commodity contracts for its exposure to volatility in the commodity prices. The ineffective portion relating to foreign currency contracts is recognized as other expense and the ineffective portion relating to commodity contracts is recognized in other operating income or expenses.

The Company designates only the spot element of forward contracts as a hedging instrument. The forward element is recognized in OCI and accumulated in a separate component of equity under cost of hedging reserve.

The amounts accumulated in OCI are accounted for, depending on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the amount accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and will not be recognized in OCI for the period. This also applies where the hedged forecast transaction of a non-financial asset or non-financial liability subsequently becomes a firm commitment for which fair value hedge accounting is applied.

For any other cash flow hedges, the amount accumulated in OCI is reclassified to profit or loss as a reclassification adjustment in the same period or periods during which the hedged cash flows affect profit or loss.

If cash flow hedge accounting is discontinued, the amount that has been accumulated in OCI must remain in accumulated OCI if the hedged future cash flows are still expected to occur. Otherwise, the amount will be immediately reclassified to profit or loss as a reclassification adjustment. After discontinuation, once the hedged cash flow occurs, any amount remaining in accumulated OCI must be accounted for depending on the nature of the underlying transaction as described above.

Hedges of a net investment in a foreign operation

Hedges of a net investment in a foreign operation, including a hedge of a monetary item that is accounted for as part of the net investment, are accounted for in a way similar to cash flow hedges. Gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized as OCI while any gains or losses relating to the ineffective portion are recognized in the statement of profit or loss. On disposal of the foreign operation, the cumulative value of any such gains or losses recorded in equity is transferred to the statement of profit or loss.

2.2.6 Investment in subsidiaries and associates and joint ventures

An associate is an entity over which the Company has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The Company's investments in its subsidiaries, associates and joint ventures are accounted for using the equity method.

Under the equity method, the investment in a subsidiary, an associate or a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Company's share of net assets of the subsidiary, associate or joint venture since the acquisition date. Goodwill relating to the subsidiary, associate or joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The statement of profit or loss and other comprehensive income reflects the Company's share of the results of operations of the subsidiary, associate or joint venture. Any change in other comprehensive income or loss of those investees is presented as part of the Company's other comprehensive income or loss. In addition, when there has been a change recognized directly in the equity of the subsidiary, associate or joint venture, the Company recognizes its share of any changes, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Company and the subsidiary, associate or joint venture are eliminated to the extent of the interest in the subsidiary, associate or joint venture.

The aggregate of the Company's share of profit or loss of a subsidiary, associate and a joint venture is shown on the face of the statement of profit or loss outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the subsidiary, associate or joint venture.

The financial statements of the subsidiary, associate or joint venture are prepared for the same reporting period as the Company. When necessary, adjustments are made to bring the accounting policies in line with those of the Company.

After application of the equity method, the Company determines whether it is necessary to recognize an impairment loss on its investment in its subsidiary, associate or joint venture. At each reporting date, the Company determines whether there is objective evidence that the investment in the subsidiary, associate or joint venture is impaired. If there is such evidence, the Company calculates the amount of impairment as the difference between the recoverable amount of the associate or joint venture and its carrying value, and then recognizes the loss as 'Share of profit of a subsidiary, associate and a joint venture' in the statement of profit or loss.

Upon loss of control, significant influence or joint control over the subsidiary, associate or joint control over the joint venture, the Company measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the subsidiary, associate or joint venture upon loss of control, significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognized in the statement of profit or loss.

2.2.7 Non-current assets held for sale (or distribution to equity holders) and discontinued operations

The Company classifies non-current assets and disposal groups as held for sale if their carrying amounts will be recovered principally through a sale or distribution rather than through continuing use. Such non-current assets and disposal groups classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset (disposal group), excluding the finance costs and income tax expense.

The criteria for held for sale classification is regarded as met only when the disposal is highly probable and the asset or disposal group is available for immediate disposal in its present condition. Actions required to complete the disposal should indicate that it is unlikely that significant changes to the disposal will be made or that the disposal will be withdrawn. Management must be committed to the disposal expected within one year from the date of the classification.

Property, plant and equipment and intangible assets are not depreciated or amortized once classified as held for sale or as held for distribution.

Assets and liabilities classified as held for sale or for distribution are presented separately as current items in the statement of financial position.

A disposal group qualifies as discontinued operation if it is:

- a component of the group that is a CGU or a group of CGUs,
- classified as held for sale or distribution or already disposed in such a way, or
- a major line of business or major geographical area.

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the statement of profit or loss and other comprehensive income.

2.2.8 Property, plant and equipment

Construction in progress is carried at acquisition cost less accumulated impairment loss, and property, plant and equipment is stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced in intervals, the Company recognizes such parts as individual assets with specific useful lives and depreciates them accordingly. Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in the statement of profit or loss as incurred. The present value of the expected cost for the decommissioning of an asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

Depreciation of property, plant and equipment is provided using the straight-line method over the estimated useful lives of the assets as follows:

	Useful lives	Depreciation method
Buildings	40	Straight-line method
Structures	40	"
Machinery	5	"
Vehicles	5 ~ 12	"
Others	5	"

An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain (loss) arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of profit or loss when the asset is derecognized.

2.2.8 Property, plant and equipment (cont'd)

The Company reviews the estimated residual values and expected useful lives of assets at least annually. In particular, the Company considers the impact of health, safety and environmental legislation in its assessment of expected useful lives and estimated residual values. The assets' residual values, useful lives and depreciation method are reviewed at each financial year end, and adjusted prospectively, if appropriate.

2.2.9 Leases

At inception of a contract, the Company assesses whether the contract is or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Company as a lessee

The Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Company recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

2.2.9.1 Right-of-use assets

The Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets as follows.

	Useful lives (years)
Buildings	1 ~ 10
Vehicles	1 ~ 5

If ownership of the leased asset transfers to the Company at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset. The right-of-use assets are also subject to impairment. Refer to the accounting policies in section 2.2.19 Impairment of non-financial assets.

2.2.9.2 Lease liabilities

At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Company and payments of penalties for terminating the lease, if the lease term reflects the Company exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

The Company's lease liabilities are included in Interest-bearing loans and borrowings (Refer to Note 26).

2.2.9.3 Short-term leases and leases of low-value assets

The Company applies the short-term lease recognition exemption to its short-term leases of buildings and vehicle (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

2.2.10 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the respective assets. All other borrowing costs are expensed in the period they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

2.2.11 Investment properties

Investment properties are measured initially at cost, including transaction costs and replacement costs which satisfied asset recognition requirements when they incurred. However, costs incurred during common maintenance activities are recognized as expenses when they occurred. Subsequent to initial recognition, investment properties are stated at cost, net of accumulated depreciation and/or accumulated impairment losses.

Investment properties are derecognized when either they have been disposed of or when the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in the statement of profit or loss in the period of derecognition.

Transfers are made to or from investment property only when there is a change in use. For a transfer from investment property to owner occupied property, the deemed cost for subsequent accounting is the carrying amount at the date of change in use. If owner occupied property becomes an investment property, the Company accounts for such property in accordance with the policy stated under property, plant and equipment up to the date of change in use.

2.2.12 Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as of the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditure is reflected in the statement of profit or loss in the year in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite. Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the statement of profit or loss in the expense category consistent with the function of the intangible asset.

Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually, either individually or at the cash generating unit level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the statement of profit or loss when the asset is derecognized.

2.2.12 Intangible assets (cont'd)

A summary of the policies applied to the Company's intangible assets is as follows:

	Useful lives	Amortization method
Goodwill	-	Test for impairment annually
Industrial property rights	5 ~ 15 years	Straight-line method
Overseas resources development (*)	Production period	Unit of production method
Others	5 years	Straight-line method

(*) Natural resources exploration and development expenditures are classified as overseas resource investments. When proved reserves of oil are determined and development is sanctioned, they are depreciated on a unit of production basis. Conversely, if there is any evidence or event that implies impairment of the asset, such as suspending the exploration or development before proposing its technical feasibility and possibility of commercialization, the Company commences test on the assets for impairment. When the book value of the asset is greater than estimated recoverable amounts for the residual period, the Company recognizes it as impairment.

2.2.13 Pension benefits and other post-employment benefits

The Company operates a defined benefit pension plan and defined contribution pension plan. The defined benefit pension plan in Korea requires contributions to be made to separately administered funds. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Re-measurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding net interest and the return on plan assets (excluding net interest), are recognized immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Re-measurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognized in profit or loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognizes restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Company recognizes the following changes in the net defined benefit obligation under selling and administrative expenses in the statement of profit or loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements
- Net interest expense or income

2.2.14 Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. Where the Company expects some or all of a provision to be reimbursed, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain. The expense relating to any provision is presented in the statement of profit or loss, net of any reimbursement.

2.2.15 Onerous contracts

If the Company has a contract that is onerous, the present obligation under the contract is recognized and measured as a provision. However, before a separate provision for an onerous contract is established, the Company recognizes any impairment loss that has occurred on assets dedicated to that contract. The unavoidable costs under a contract reflect the least net cost of exiting from the contract, which is the lower of the cost of fulfilling it and any compensation or penalties arising from failure to fulfil it.

2.2.16 Treasury shares

Own equity instruments which are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in the statement of profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

2.2.17 Revenue from contracts with customers

The Company is in the business of sales of goods in the resource and infrastructure sectors. The company provides the supply of goods and export-import transactions through contracts with customers. Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services.

2.2.17.1 Sales of goods

Revenue from sale of goods is recognized at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods. The normal credit term is 30 to 90 days upon delivery. The Company considers whether there are other promises in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated. The Company takes into consideration whether it is principal or agency relating to the performance obligations when determining the transaction price of sales of goods.

2.2.17.2 Principal versus agent consideration

When another party is involved in providing goods or services to its customer, the Company determines whether it is a principal or an agent in these transactions by evaluating the nature of its promise to the customer. The Company is a principal and records revenue on a gross basis if it controls the promised goods or services before transferring them to the customer. However, if the Company's role is only to arrange for another entity to provide the goods or services, then the Company is an agent and will need to record revenue at the net amount that it retains for its agency services.

2.2.17.3 Contract balance

Trade receivables

A receivable represents the Company's right to an amount of consideration that is unconditional. Refer to accounting policies of financial assets in the Note 2.2.4.1

Contract liabilities

A contract liability is the obligation to transfer goods or services to a customer for which the Company has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Company transfers goods or services to the customer, a contract liability is recognized when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Company performs under the contract.

2.2.18 Foreign currency translation

The Company's separate financial statements are presented in Korean won, which is also the Company's functional currency.

2.2.18.1 Transactions and balances

Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange at the reporting date. All differences are taken to the statement of profit or loss with the exception of all monetary items that are designated as part of the hedge of the Company's net investment of a foreign operation. These are recognized in other comprehensive income until the net investment is disposed, at which time, the cumulative amount is reclassified to the statement of profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in other comprehensive income.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction; and non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the dates when the fair value was determined.

2.2.18.2 Translations of foreign operation

Assets and liabilities of foreign operation are translated into Korea won at the closing rate at the reporting date and income and expenses are translated at exchange rates prevailing at the dates of the transactions, and these exchange differences are recognized in OCI. On the disposal of a foreign operation, the cumulative amount of the exchange differences in OCI relating to that foreign operation is reclassified from equity to profit or loss.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation are treated as assets and liabilities of the foreign operation, and translated at the spot rate of exchange at the reporting date.

2.2.19 Impairment of non-financial assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or Companies of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Company bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Company's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses of continuing operations, including impairment on inventories, are recognized in the statement of profit or loss and other comprehensive income in expense categories consistent with the function of the impaired asset, except for properties previously revalued with the revaluation taken to OCI. For such properties, the impairment is recognized in OCI up to the amount of any previous revaluation.

2.2.19 Impairment of non-financial assets (cont'd)

For assets excluding goodwill, an assessment is made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Company estimates the asset's or cash-generating unit's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the statement of profit or loss unless the asset is carried at a revalued amount, in which case the reversal is treated as a revaluation increase.

The following criteria are also applied in assessing impairment of specific assets:

Goodwill

Goodwill is tested for impairment annually (at certain time) and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each cash-generating unit (or company of cash-generating units) to which the goodwill relates. Where the recoverable amount of the cash generating unit is less than their carrying amount an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

Intangible assets with indefinite useful lives excluding goodwill

For intangible assets with indefinite useful lives, the Company performs the impairment test for an individual asset or a cash-generating unit to which the asset has been allocated, annually or at any indication of impairment.

2.2.20 Taxes

2.2.20.1 Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, by the reporting date, in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognized directly in equity is recognized in equity and not in the statement of profit or loss. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

2.2.20.2 Deferred tax

Deferred tax is provided using the liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- When the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

2.2.20.2 Deferred tax (cont'd)

Deferred tax assets are recognized for all deductible temporary differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized except:

- When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Tax benefits acquired as part of a business combination, but not satisfying the criteria for separate recognition at that date, are recognized subsequently if new information about facts and circumstances change. The adjustment is either treated as a reduction in goodwill (as long as it does not exceed goodwill) if it was incurred during the measurement period or recognized in profit or loss.

2.2.20.3 Sales tax

Expenses and assets are recognized net of the amount of sales tax, except:

- When the sales tax incurred on a purchase of assets or services is not recoverable from the taxation authority, in which case, the sales tax is recognized as part of the cost of acquisition of the asset or as part of the expense item, as applicable
- When receivables and payables are stated with the amount of sales tax included

The net amount of sales tax recoverable from, or payable to, the taxation authority is included as part of receivables or payables in the statement of financial position.

2.2.21 Crypto assets

As there is no standard applicable to KIFRS for Crypto assets (e. g. “Klay”), the Company developed an accounting policy by applying *mutatis mutandis* to KIFRS 38 in accordance with the interpretation announced by the IFRIC in June 2019.

2.2.21.1 Initial recognition of crypto assets

The Company recognizes crypto assets as an asset because it meets the definition of an asset in the *Conceptual Framework for Financial Reporting* (a resource controlled by an entity as a result of past events or transactions; and from which future economic benefits are expected to flow to the entity). The Company determines that crypto assets meet the definition of an intangible asset as an identifiable non-monetary asset without physical substance and records crypto assets as intangible assets.

2.2.21.2 Subsequent measurement of crypto assets

The Company applies the cost method to subsequent measurements of crypto assets by applying *mutatis mutandis* to KIFRS 1038.

2.2.21.3 Derecognition of crypto assets

As the Company is obligated to transfer rights to crypto assets or pays all cash flows received under pass-through contracts to third parties without significant delay, the Company derecognizes the crypto assets when it transfers most of the risks and rewards arising from ownership of the crypto assets to others, or otherwise, when it transfers control over the crypto assets to others, although it does not either transfer or retain such assets.

When disposing of crypto assets, the difference between the cash flow received or the cash flow to be received and the book value of the assets disposed is recognized as profit or loss upon disposal, but if any obligation arising from the ownership of the crypto assets has not been fulfilled, it is recognized as profit or loss when the obligation is satisfied.

2.3 New and amended standards and interpretations

The Company applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2021. The Company has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

2.3.1 Interest Rate Benchmark Reform – Phase 2: Amendments to KIFRS 1109, KIFRS 1039, KIFRS 1107, KIFRS 1104 and KIFRS 1116

The amendments provide temporary reliefs which address the financial reporting effects when an interbank offered rate (IBOR) is replaced with an alternative nearly risk-free interest rate (RFR). The amendments include the following practical expedients:

- Require contractual changes, or changes to cash flows due directly to the Reform, to be treated as changes to a floating interest rate, akin to a movement in a market rate of interest;
- Permit changes required by the IBOR Reform to be made to hedge designations and hedge documentation without discontinuing the hedging relationship; and
- Provide temporary relief to entities from having to meet the separately identifiable requirement when an RFR instrument is designated as a hedge of a risk component.

These amendments had no impact on the consolidated financial statements of the Company. The Company intends to use the practical expedients in future periods if they become applicable.

2.3.2 Amendments to KIFRS 1116 Covid-19 Related Rent Concessions beyond June 30, 2021

On May 28, 2020, the IASB issued *Covid-19-Related Rent Concessions* - amendment to KIFRS 1116 *Leases*. The amendments provide relief to lessees from applying KIFRS 1016 guidance on lease modification accounting for rent concessions arising as a direct consequence of the Covid-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a Covid-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the Covid-19 related rent concession the same way it would account for the change under KIFRS 1116 if the change were not a lease modification.

The amendment was intended to apply until June 30, 2021, but as the impact of the Covid-19 pandemic is continuing, on March 31, 2021, the IASB extended the period of application of the practical expedient to June 30, 2022. The amendment applies to annual reporting periods beginning on or after April 1, 2021. The Company has not received COVID-19-related rent concessions, but plans to apply the practical expedient if it becomes applicable within allowed period of application.

2.4 Significant accounting judgments, estimates and assumptions

The preparation of the Company's financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

Other disclosures relating to the Company's exposure to risks and uncertainties includes:

- Financial instruments risk management and policies Note 26
- Sensitivity analyses disclosures Note 20, 26

2.4.1 Judgments

In the process of applying the Company's accounting policies, management has made the following judgments, which have the most significant effect on the amounts recognized in the financial statements:

Determining the lease term of contracts with renewal and termination options – Company as lessee

The Company determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised.

The Company applies judgement in evaluating whether it is reasonably certain whether or not to exercise the option to renew and recognizes right-of-use assets and lease liabilities.

2.4.2 Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, 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 Company based its assumptions and estimates on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond control of the Company. Such changes are reflected in the assumptions when they occur.

2.4.2.1 Impairment of non-financial assets

The Company assesses at each reporting date, whether there is any objective evidence that a non-financial asset is impaired. Goodwill and intangible assets with indefinite useful lives are tested when there are indications. Other non-financial asset is tested when there are indications that carrying amount is not to be collected. In assessing value in use, management estimates future cash flows from certain assets or CGUs and selects the appropriate discount rate to calculate the present value of future cash flow. Refer to Note 22 for information on the specific details of main assumptions.

2.4.2.2 Defined benefit pension plan

The cost of the defined benefit pension plan and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexity of the valuation, the underlying assumptions and its long term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

In determining the appropriate discount rate, management considers the interest rates of corporate bonds in currencies consistent with the currencies of the post-employment benefit obligation with at least an 'AA' rating or above, as set by an internationally acknowledged rating agency. The mortality rate is based on publicly available mortality tables for the specific countries. Future salary increases and pension increases are based on expected future inflation rates for the respective countries.

2.4.2.3 Fair value measurement of financial instruments

When the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the discounted cash flow (DCF) model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the reported fair value of financial instruments.

2.4.2.4 Provision for expected credit losses of trade receivables

The Company uses a provision matrix to calculate ECLs for trade receivables. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns (i.e., by geography, product type, customer type and rating, and coverage by letters of credit and other forms of credit insurance).

The provision matrix is initially based on the Company's historical observed default rates. The Company will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic product) are expected to deteriorate over the next year which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed.

The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Company's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future.

2.4.2.5 Leases - Estimating the incremental borrowing rate

The Company cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Company would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Company 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease.

The Company estimates the IBR using observable inputs (such as market interest rates) when available and is required to make certain entity-specific estimates (such as the subsidiary's stand-alone credit rating).

2.4.2.6 Deferred tax assets

Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies. The Company has ₩68,890 million (2020: ₩71,625 million) of tax credits carried forward which can be used to offset future taxable income but with time constraint. Among the total tax credits carried forward, the Company has determined not to recognize deferred tax assets on ₩26,514 million of tax credits carried forward, due to lack of probability of occurrence. Refer to Note 23 for details.

2.4.2.7 Special tax provisions for promoting investment and collaborative cooperation

In accordance with the *special tax provision for promoting investment and collaborative cooperation*, The Company shall pay an additional income tax calculated under the applicable tax law, if the use of corporate earnings on qualifying investments, wage increase and collaborative cooperation falls below a certain portion of its taxable income. As the Company reflects the surtax imposed due to the special tax provisions for promoting investment and collaborative cooperation when computing its income tax, the Company's income tax may change arising from changes in investment, wage increase, or dividend payouts.

2.5 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Company's financial statements are disclosed below. The Company intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

2.5.1 KIFRS 1117 Insurance Contracts

In May 2017, the IASB issued IFRS 17 Insurance Contracts, a comprehensive new accounting standard for insurance contracts covering recognition and measurement. Once effective, KIFRS 1117 will replace KIFRS 1104 *Insurance Contracts* that was issued in 2005. KIFRS 1117 applies to all types of insurance contracts (i.e., life, non-life, direct insurance and re-insurance), regardless of the type of entities that issue them, as well as to certain guarantees and financial instruments with discretionary participation features. A few of exceptions will apply. The overall objective of KIFRS 1117 is to provide an accounting model for insurance contracts that is more useful and consistent for insurers. In contrast to the requirements in KIFRS 1104, which are largely based on grandfathering previous local accounting policies, KIFRS 1117 provides a comprehensive model for insurance contracts, covering all relevant accounting aspects. The core of KIFRS 1117 is the general model, supplemented by:

- A specific adaptation for contracts with direct participation features (the variable fee approach), and
- A simplified approach (the premium allocation approach) mainly for short-duration contracts.

KIFRS 1117 is effective for reporting periods beginning on or after January 1, 2023, with comparative figures required. Early application is permitted, provided the entity also applies KIFRS 1109 and KIFRS 1115 on or before the date it first applies KIFRS 1117. This standard is not applicable to the Company.

2.5.2 Amendments to KIFRS 1001: *Classification of Liabilities as Current or Non-current*

The amendments to paragraphs 69 to 76 of KIFRS 1001 to specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement
- That a right to defer must exist at the end of the reporting period
- That classification is unaffected by the likelihood that an entity will exercise its deferral right
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and must be applied retrospectively. The Company is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation.

2.5.3 Reference to the Conceptual Framework – Amendments to KIFRS 1103

The amendments are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements, issued in 1989, with a reference to the Conceptual Framework for Financial Reporting issued in March 2018 without significantly changing its requirements. The Board also added an exception to the recognition principle of KIFRS 1103 to avoid the issue of potential ‘day 2’ gains or losses arising for liabilities and contingent liabilities that would be within the scope of KIFRS 1037 or KIFRS 2121 *Levies*, if incurred separately. At the same time, the Board decided to clarify existing guidance in KIFRS 1103 for contingent assets that would not be affected by replacing the reference to the Framework for the Preparation and Presentation of Financial Statements. The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively.

2.5.4 Property, Plant and Equipment: Proceeds before Intended Use – Amendments to KIFRS 1016

The amendment prohibits entities deducting from the cost of an item of property, plant and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the costs of producing those items, in profit or loss.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 and must be applied retrospectively to items of property, plant and equipment made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment. The amendments are not expected to have a material impact on the Company.

2.5.5 Onerous Contracts – Costs of Fulfilling a Contract – Amendments to KIFRS 1037

The amendments to KIFRS 1037 specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making.

The amendments apply a “directly related cost approach”. The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract.

The amendments are effective for annual reporting periods beginning on or after January 1, 2022. The Company will apply these amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments.

2.5.6 KIFRS 1101 *First-time Adoption of International Financial Reporting Standards* – Subsidiary as a first-time adopter

The amendment permits a subsidiary that elects to apply paragraph D16(1) of KIFRS 1101 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to KIFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted.

2.5.7 KIFRS 1109 *Financial Instruments* – Fees in the '10 per cent' test for derecognition of financial liabilities

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The Company will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendments are not expected to have a material impact on the Company.

2.5.8 KIFRS 1041 *Agriculture* – Taxation in fair value measurements

The amendment removes the requirement in paragraph 22 of KIFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of KIFRS 1041. An entity applies the amendment prospectively to fair value measurements on or after the beginning of the first annual reporting period beginning on or after January 1, 2022 with earlier adoption permitted. The amendments are not expected to have a material impact on the Company.

2.5.9 Definition of Accounting Estimates - Amendments to KIFRS 1008

The amendments clarify the distinction between changes in accounting estimates and accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted. The amendments are not expected to have a material impact on the Company.

2.5.10 Disclosure of Accounting Policies - Amendments to KIFRS 1001

The amendments provide guidance and examples to help entities apply materiality judgements to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures. The amendments to KIFRS 1001 are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted. The amendments are not expected to have a material impact on the Company.

2.5.11 Amendments to KIFRS 1012 *Income Taxes* – Narrowing the scope of the initial recognition exception of deferred taxes

The amendments narrowed the scope of the initial recognition exemption so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary difference, thus to resolve accounting diversity in the recognizing of deferred tax assets and liabilities. Paragraphs 15 and 24 (initial recognition exemption of deferred taxes) of KIFRS 1012 were amended to include an additional condition (3) where a deferred tax asset and liability shall be recognized for a temporary difference that arises on initial recognition of an asset or liability in a single transaction if that transaction give rise to equal amounts of taxable and deductible temporary differences. The amendments are effective for annual reporting periods beginning on or after January 1, 2023 with earlier adoption permitted. The amendments are not expected to have a material impact on the Company.

3. Segment information

For management purposes, the Company is organized into business units based on its products and services and has three reportable segments as follows:

Segment	Principal activity
Energy/Palm	Development and sales of coal, Development of metals, Project, Indonesia palm
Industrial material/Solution	Chemicals, Metal material, Agro&Food TFT, IT, Platform and Others
Collectively grouped	Common group management

3.1 Segment sales and operating income

Details of segment results for the years ended December 31, 2021 and 2020, are as follows (Korean won in millions):

	2021		2020	
	Sales	Operating income	Sales	Operating income (loss)
Energy/Palm	₩ 1,525,167	₩ 5,881	₩ 841,817	₩ (25,831)
Industrial material/Solution	2,630,557	6,450	2,416,423	1,438
	₩ 4,155,724	₩ 12,331	₩ 3,258,240	₩ (24,393)

3.2 Segment assets and liabilities

Details of assets and liabilities of operating segments as of December 31, 2021 and 2020, are as follows (Korean won in millions):

	2021		2020	
	Assets	Liabilities	Assets	Liabilities
Energy/Palm	₩ 1,418,827	₩ 224,481	₩ 1,107,151	₩ 232,974
Industrial material/Solution	420,981	344,176	354,199	350,185
Collectively grouped (*1)	1,179,236	645,016	1,149,411	658,378
	₩ 3,019,044	₩ 1,213,673	₩ 2,610,761	₩ 1,241,537

(*1) Assets and liabilities that individually do not have a material effect to a particular operating segment have been collectively grouped. These include cash and cash equivalents, investment assets, property, plant and equipment, and intangible assets.

3.3 Sales by geographic region

Details of external revenue for the years ended December 31, 2021 and 2020, by geographic locations are as follows (Korean won in millions):

	2021	2020
Korea	₩ 1,025,808	₩ 779,551
America	623,011	502,169
Europe	87,133	312,349
Asia	2,381,867	1,643,522
Others	37,905	20,649
	<u>₩ 4,155,724</u>	<u>₩ 3,258,240</u>

4. Classification of financial instruments

4.1 Financial instruments by category

4.1.1 Financial assets

Financial assets by category as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021				
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial assets at amortized cost	Hedge accounting-related assets	Total
Cash and cash equivalents	₩ 117,708	₩ -	₩ 144,781	₩ -	₩ 262,489
Short-term financial instruments	-	-	23,223	-	23,223
Equity instruments held for long-term	8,402	121,082	-	-	129,484
Trade accounts receivable	-	-	366,359	-	366,359
Other accounts receivable	198	-	46,847	1,743	48,788
Long-term loans	-	-	103,205	-	103,205
Other financial assets	-	-	40,151	-	40,151
	<u>₩ 126,308</u>	<u>₩ 121,082</u>	<u>₩ 724,566</u>	<u>₩ 1,743</u>	<u>₩ 973,699</u>

	2020				
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial assets at amortized cost	Hedge accounting-related assets	Total
Cash and cash equivalents	₩ 233,273	₩ -	₩ 95,133	₩ -	₩ 328,406
Short-term financial instruments	-	-	35,190	-	35,190
Equity instruments held for long-term	7,781	107,458	-	-	115,239
Trade accounts receivable	-	-	304,588	-	304,588
Other accounts receivable	6,096	-	26,948	-	33,044
Long-term loans	-	-	145,787	-	145,787
Other financial assets	-	-	52,549	-	52,549
	<u>₩ 247,150</u>	<u>₩ 107,458</u>	<u>₩ 660,195</u>	<u>₩ -</u>	<u>₩ 1,014,803</u>

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

4.1.2 Financial liabilities

Financial liabilities by category as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting-related liabilities	Total
Trade accounts payable	₩ -	₩ 294,735	₩ -	₩ 294,735
Other accounts payable	1,240	114,186	-	115,426
Borrowings	-	251,675	-	251,675
Bonds payable	-	269,462	-	269,462
Current portion of bonds payable and long-term borrowings	-	212,287	-	212,287
Other financial liabilities	-	26,134	-	26,134
	₩ 1,240	₩ 1,168,479	₩ -	₩ 1,169,719

	2020			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting-related liabilities	Total
Trade accounts payable	₩ -	₩ 281,730	₩ -	₩ 281,730
Other accounts payable	575	39,609	6,538	46,722
Borrowings	-	313,726	-	313,726
Bonds payable	-	359,307	-	359,307
Current portion of bonds payable and long-term borrowings	-	154,802	-	154,802
Other financial liabilities	-	45,097	1,495	46,592
	₩ 575	₩ 1,194,271	₩ 8,033	₩ 1,202,879

4.2 Gains and losses on financial instruments

4.2.1 Gains and losses on financial assets

Gains and losses on financial assets by category for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021				
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial assets at amortized cost	Hedge accounting-related assets	Total
Profit or loss:					
Interest income	₩ 705	₩ -	₩ 11,258	₩ -	₩ 11,963
Dividend income	-	6,573	-	-	6,573
Gain on foreign currency transactions	-	-	48,219	-	48,219
Gain on foreign currency translation	-	-	12,660	-	12,660
Gain on currency forwards	7,464	-	-	-	7,464
Gain on currency swaps	-	-	-	3,684	3,684
Bad debt expenses	-	-	(811)	-	(811)
Other bad debt expenses	-	-	(10,285)	-	(10,285)
Loss on disposal of receivables	-	-	(760)	-	(760)
Other comprehensive income (*1):					
Gain on valuation of FVOCI	-	13,624	-	-	13,624
Gain on valuation of derivatives designated as cash flow hedges	-	-	-	17	17
	<u>8,169</u>	<u>20,197</u>	<u>60,281</u>	<u>3,701</u>	<u>92,348</u>
	2020				
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial assets at amortized cost	Hedge accounting-related assets	Total
Profit or loss:					
Interest income	₩ -	₩ -	₩ 7,977	₩ -	₩ 7,977
Dividend income	-	4,151	-	-	4,151
Gain on foreign currency transactions	-	-	(46,496)	-	(46,496)
Gain on foreign currency translation	-	-	(15,376)	-	(15,376)
Gain on currency forwards	13,676	-	-	-	13,676
Gain on currency swaps	-	-	-	1,688	1,688
Reversal of bad debt expenses	-	-	311	-	311
Reversal of other bad debt expenses	-	-	4,260	-	4,260
Loss on disposal of receivables	-	-	(1,162)	-	(1,162)
Other comprehensive income (*1):					
Loss on valuation of FVOCI	-	(53,666)	-	-	(53,666)
	<u>₩ 13,676</u>	<u>₩ (49,515)</u>	<u>₩ (50,486)</u>	<u>₩ 1,688</u>	<u>₩ (84,637)</u>

(*1) Other comprehensive income is the amount before income tax effect.

4.2.2 Gains and losses on financial liabilities

Gains and losses on financial liabilities by category for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting-related liabilities	Total
Profit or loss:				
Interest expenses	₩ -	₩ (17,903)	₩ -	₩ (17,903)
Loss on foreign currency transactions	-	(43,074)	-	(43,074)
Loss on foreign currency translation	-	(7,681)	-	(7,681)
Loss on currency forwards	(19,113)	-	-	(19,113)
Gain on exemption from debt	-	13,352	-	13,352
Other comprehensive income (*1):				
Gain on valuation of derivatives designated as cash flow hedges	-	-	145	145
	₩ (19,113)	₩ (55,306)	₩ 145	₩ (74,274)
	2020			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting- related liabilities	Total
Profit or loss:				
Interest expenses	₩ -	₩ (23,047)	₩ -	₩ (23,047)
Loss on foreign currency transactions	-	25,191	-	25,191
Loss on foreign currency translation	-	18,445	-	18,445
Loss on currency forwards	(9,842)	-	-	(9,842)
Loss on currency swaps	-	-	(8,553)	(8,553)
Other comprehensive income (*1):				
Loss on valuation of derivatives designated as cash flow hedges	-	-	(409)	(409)
	₩ (9,842)	₩ 20,589	₩ (8,962)	₩ 1,785

(*1) Other comprehensive income is the amount before income tax effect.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

5. Cash and cash equivalents

Details of cash and cash equivalents as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Cash on hand	₩ 608	₩ 321
Short-term deposits	261,881	328,085
	<u>₩ 262,489</u>	<u>₩ 328,406</u>

Outstanding balances of restricted deposits as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Restricted deposits	₩ 20,719	₩ 20,010

6. Derivative financial instruments

6.1 Valuation of derivative financial instruments

Valuation gains and losses arising from derivative financial instruments included in other accounts receivable and payable as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			2020		
	Gain on valuation	Loss on valuation	Other comprehensive income (*1)	Gain on valuation	Loss on valuation	Other comprehensive income (*)
Currency forwards	₩ 198	₩ 1,240	₩ -	₩ 6,096	₩ 575	₩ -
Currency swaps	1,726	-	17	-	8,220	(409)
	<u>₩ 1,924</u>	<u>₩ 1,240</u>	<u>₩ 17</u>	<u>₩ 6,096</u>	<u>₩ 8,795</u>	<u>₩ (409)</u>

(*1) Other comprehensive income is the amount before income tax effect.

6.2 Currency forwards

As of December 31, 2021 and 2020, gains and losses on valuation of unsettled currency forward contracts are as follows (Korean won in millions and other currencies in thousands):

2021						
Position-buy	Buying amount	Position-sell	Selling amount	Contracted exchange rate	Gain on valuation	Loss on valuation
AED	1,602	KRW	522	325.68	₩ -	₩ 3
CNY	3,130	KRW	582	186.00	1	-
EUR	674	KRW	903	1,340.20	4	-
KRW	35,379	AUD	41,629	849.50~852.50	-	501
KRW	12,878	EUR	9,573	1,336.76~1,350.20	3	47
KRW	209,744	USD	176,916	1,160.50~1,192.00	190	399
USD	50,114	KRW	59,868	1,187.50~1,197.10	-	290
					<u>₩ 198</u>	<u>₩ 1,240</u>
2020						
Position-buy	Buying amount	Position-sell	Selling amount	Contracted exchange rate	Gain on valuation	Loss on valuation
KRW	149,116	USD	131,493	1,087.00 ~ 1,192.30	₩ 6,095	₩ 1
USD	27,143	KRW	30,096	1,087.00 ~ 1,180.80	1	565
AED	1,602	KRW	483	301.55	-	9
					<u>₩ 6,096</u>	<u>₩ 575</u>

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

6.3 Currency swaps

As of December 31, 2021 and 2020, gains and losses on valuation of unsettled currency swap contracts are as follows (Korean won in millions and other currencies in thousands):

2021								
Contracted party	Buying amount	Selling amount	Contracted exchange rate	Receivable interest rate	Payment interest rate	Contracted term	Gain on valuation	Other comprehensive gain
Shinhan Bank	USD 20,000	₩ 21,984	1,099.20	3ML + 0.90%	1.075%	2021.1.21 ~ 2022.1.18	₩ 1,726	₩ 17
2020								
Contracted party	Buying amount	Selling amount	Contracted exchange rate	Receivable interest rate	Payment interest rate	Contracted term	Loss on valuation	Other comprehensive loss
The Export Import Bank of Korea	USD 25,000	₩ 28,613	1,144.50	3ML + 2.30%	3.20%	2016.4.1 ~ 2021.4.1	₩ (1,745)	₩ (346)
Hana Bank	USD 50,000	₩ 60,875	1,217.50	3ML + 1.50%	1.80%	2020.4.29 ~ 2021.2.15	(6,475)	(63)
							₩ (8,220)	₩ (409)

7. Inventories

Details of inventories as of December 31, 2021 and 2020 are as follows (Korean won in millions):

2021			
	Acquisition cost	Valuation allowance	Book value
Merchandise	₩ 66,386	₩ (508)	₩ 65,878
Materials in transit	34,744	-	34,744
	₩ 101,130	₩ (508)	₩ 100,622
2020			
	Acquisition cost	Valuation allowance	Book value
Merchandise	₩ 31,362	-	₩ 31,362
Materials in transit	22,094	-	22,094
	₩ 53,456	-	₩ 53,456

For the year ended December 31, 2021, the Company recognized ₩508 million as a loss on valuation of inventories carried at net realizable value. For the year ended December 31, 2020, the Company recognized ₩23 million as a reversal of loss on valuation of inventories carried at net realizable value. This is recognized in cost of sales.

8. Investment assets

Details of investment assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Equity instruments held for long-term		
Financial assets at fair value through profit or loss	₩ 8,402	₩ 7,782
Financial assets at fair value through OCI	121,082	107,458
Long-term loans receivable	103,205	145,787
	₩ 232,689	₩ 261,027

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

8.1 Equity instruments held for long-term

As of December 31, 2021, details of equity instruments held for long-term are as follows (Korean won in millions):

	Number of shares	Equity ownership (%)	Acquisition cost	Book value
Financial assets at fair value through profit or loss				
VL Future				
Environment Industry Fund	-	14.16	₩ 2,900	₩ 2,900
Pablo Air Co.,Ltd	2,408	5.84	2,499	2,499
Futureplay Co.	15,730	2.98	3,000	3,003
Global Dynasty Natural Resources Private Equity Fund (*1)	-	7.46	2,242	-
			10,641	8,402
Financial assets at fair value through OCI (*2)				
Korea Ras Laffan LNG Co., Ltd. (Qatar LNG project)	1,558,666	5.60	2,410	18,637
Vietnam Korea Exchange Ltd.	-	10.00	322	322
LG Int'l (Saudi) LLC (*3)	-	90.00	118	118
Oilhub Korea Yeosu Co., Ltd.	131,000	5.00	7,205	7,317
GS E&R Co., Ltd.	1,654,445	9.52	95,585	54,043
Tianjin LG Bohai Chemical Co., Ltd.	-	10.00	11,737	37,629
Cobalt blue holdings Ltd.	7,093,959	2.35	6,467	3,016
			123,844	121,082
			₩ 134,485	₩ 129,484

(*1) For the year ended December 31, 2021, the Company lost significant influence over the investee and classified it as financial assets at fair value through profit or loss.

(*2) Financial assets measured at fair value through OCI include investments in shares of non-listed companies held as non-controlling interests. As the Company holds these investments for the purpose of business strategy, fair value changes are presented as OCI and the Company irrevocably elected to classify as financial asset at fair value through OCI.

(*3) The Company's equity interest in the entity has been excluded from investments in subsidiaries and associates as the entity is undergoing liquidation procedures and therefore, has no substantial business operations.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

8.1 Equity instruments held for long-term (cont'd)

Changes in the net book value of equity instruments held for long-term for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021					
	Equity ownership (%)	Jan. 1	Acquisition (disposal)	Valuation	Others	Dec. 31
Financial assets at fair value through profit or loss						
VL Future						
Environment Industry Fund	14.16 ₩	- ₩	2,900 ₩	- ₩	- ₩	2,900
Pablo Airline (*1)	5.84	-	2,499	-	-	2,499
QQ Aromatics LLC						
(formerly, Aromatics Oman LLC) (*2)	1.00	4,779	-	-	(4,779)	-
Futureplay Co. (*1))	2.98	3,003	-	-	-	3,003
		<u>7,782</u>	<u>5,399</u>	<u>-</u>	<u>(4,779)</u>	<u>8,402</u>
Financial assets at fair value through OCI						
Korea Ras Laffan LNG Limited (Qatar LNG project)	5.60	21,500	-	(2,863)	-	18,637
Vietnam Korea Exchange Ltd.	10.00	322	-	-	-	322
LX Int'l (Saudi) LLC	90.00	118	-	-	-	118
Oilhub Korea Yeosu Co., Ltd.	5.00	7,530	-	(213)	-	7,317
GS E&R Co, Ltd.	9.52	55,100	-	(1,057)	-	54,043
Tianjin LX Bohai Chemical	10.00	21,819	-	15,810	-	37,629
Cobalt blue holdings Ltd.	2.35	1,069	-	1,947	-	3,016
		<u>107,458</u>	<u>-</u>	<u>13,624</u>	<u>-</u>	<u>121,082</u>
	₩	115,240 ₩	5,399 ₩	13,624 ₩	(4,779) ₩	129,484 ₩

		2020				
	Equity ownership (%)	Jan. 1	Acquisition (disposal)	Valuation	Dec. 31	
Financial assets at fair value through profit or loss						
Aromatics Oman LLC	1.00	₩ 4,779	₩ -	₩ -	₩ 4,779	
Futureplay Co. (*3)	3.05	-	3,000	3	3,003	
		4,779	3,000	3	7,782	
Financial assets at fair value through OCI						
Korea Ras Laffan LNG Co., Ltd. (Qatar LNG project)	5.60	33,853	-	(12,353)	21,500	
Vietnam Korea Exchange Ltd	10.00	322	-	-	322	
LG Int'l (Saudi) LLC	90.00	118	-	-	118	
Oilhub Korea Yeosu Co., Ltd	5.00	9,707	-	(2,177)	7,530	
GS E&R Co., Ltd.	9.52	96,961	-	(41,861)	55,100	
Tianjin LG Bohai Chemical Co., Ltd.	10.00	19,358	-	2,461	21,819	
Cobalt blue holdings Ltd.	2.92	805	-	264	1,069	
		161,124	-	(53,666)	107,458	
	₩	165,903	₩ 3,000	₩ (53,663)	₩ 115,240	

(*1) For the year ended December 31, 2021, the Company acquired 14.16% of equity interests of VL Environmental Future Private Equity Fund and 5.84% of equity interests of Pablo Air Co., Ltd. and classified them as financial assets at fair value through profit or loss.

(*2) During the year ended December 31, 2021, the Company classified it as non-current assets held for sale. (Refer to Note 30).

(*3) During the year ended December 31, 2020, the Company acquired 3.23% of equity interests of Futureplay Co., Ltd. and classified it as financial assets at fair value through profit or loss.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

9. Investments in subsidiaries and associates

9.1 Investments in subsidiaries

As of December 31, 2021 and 2020, investments in subsidiaries are as follows.

	Country of domicile	Equity ownership (%)		Reporting date	Principal operation
		2021	2020		
LX International (America) Inc.(formerly, LG International (America) Inc.) (*1)	USA	100.00	100.00	Dec. 31	Export and import
LX International (Japan) Ltd.(formerly, LG International (Japan) Ltd.) (*1)	Japan	100.00	100.00	Dec. 31	"
LX International (HK) Ltd.(formerly, LG International (Hong Kong) Ltd.) (*1)	Hong Kong	100.00	100.00	Dec. 31	"
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.) (*1)	Singapore	100.00	100.00	Dec. 31	"
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH) (*1)	Deutschland	100.00	100.00	Dec. 31	"
LX International (Shanghai) Corp.(formerly, LG International (China) Ltd.) (*1)	China	100.00	100.00	Dec. 31	"
Yantai LX International VMI Co., LTD (formerly, Yantai VMI Hub LG International Co., Ltd.) (*1)	China	100.00	100.00	Dec. 31	Hub
Bowen Investment (Australia) Pty. Ltd.	Australia	100.00	100.00	Dec. 31	Coal mining
PT. Batubara Global Energy (BGE)	Indonesia	100.00	100.00	Dec. 31	"
PT. Ganda Alam Makmur (GAM)	Indonesia	60.00	60.00	Dec. 31	"
LX International India Private Limited (formerly, LG International (India) Ltd.) (*1)	India	100.00	100.00	Mar. 31	Export and import
PT. Green Global Lestari (GGL)	Indonesia	100.00	100.00	Dec. 31	Palm oil
PT. LX International Indonesia (LXII) (formerly, PT. LG International Indonesia (LGII)) (*1)	Indonesia	100.00	100.00	Dec. 31	Industrial planting
PT. Binsar Natorang Energi (BNE)	Indonesia	95.00	95.00	Dec. 31	Hydroelectric power
PT. Global Investment Institusi (GII) (*2)	Indonesia	99.94	-	Dec. 31	Health Care
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	China	100.00	100.00	Dec. 31	Steel frames
Philco Resources Ltd. (Rapu-Rapu)	Malaysia	60.00	60.00	Dec. 31	Copper mining
Resource Investment (Hong Kong) Ltd. (Xinzheng)	Hong Kong	100.00	100.00	Dec. 31	Coal mining
LX International Yakutsk, LLC (formerly, LG International Yakutsk Ltd.) (*1)	Russia	100.00	100.00	Dec. 31	Real estate
Korea Carbon International Co., Ltd. (Shaanxi BBM)	Hong Kong	60.00	60.00	Dec. 31	Renewable plant
Colmineral, S.A. de C.V.	Mexico	100.00	100.00	Dec. 31	Iron ore
Fertilizer Resources Investment Ltd.	Hong Kong	100.00	100.00	Dec. 31	Fertilizer
Dangjin Tank Terminal Co., Ltd.	Korea	100.00	100.00	Dec. 31	Storage
Haiphong Steel Flower Electrical & Machinery Company Limited	Vietnam	100.00	100.00	Dec. 31	Steel frames
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.) (*1)	Korea	51.00	51.00	Dec. 31	Logistics

(*1) For the year ended December 31, 2021, the names of subsidiaries were changed.

(*2) For the year ended December 31, 2021, the Company acquired PT. Global Investment Institusi (GII), which was included in the consolidation scope.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

9.1 Investments in subsidiaries (cont'd)

Details of the investments in subsidiaries as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
	Acquisition cost	Net asset value	Net book value	Net book value
LX International (America) Inc. (formerly, LG International (America) Inc.)	₩ 21,156	₩ 43,181	₩ 40,814	₩ 36,266
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	401	4,169	3,418	3,711
LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.)	17,663	10,082	10,073	8,426
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)	3,288	19,228	18,953	12,173
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH)	12,314	10,203	10,203	9,624
LX International (Shanghai) Corp. (formerly, LG International (China) Ltd.)	6,129	8,337	8,337	7,126
Yantai LX International VMI Co., LTD (formerly, Yantai VMI Hub LG International Co., Ltd.)	1,070	5,268	5,268	4,013
Bowen Investment (Australia) Pty. Ltd.	26,707	16,839	16,839	8,545
PT. Batubara Global Energy (BGE)	11,753	47,661	47,575	33,533
PT. Ganda Alam Makmur (GAM)	241,090	401,623	268,018	161,120
LX International India Private Limited (formerly, LG International (India) Ltd.)	943	1,838	1,838	1,737
PT. Green Global Lestari (GGL)	175,502	183,514	180,572	149,813
PT. LX International Indonesia (LXII) (formerly, PT. LG International Indonesia (LGII))	98,231	(5,030)	-	755
PT. Binsar Natorang Energi (BNE)	59,071	95,919	92,889	73,933
PT. Global Investment Institusi (GII)	8,531	7,000	7,235	-
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	7,419	35,657	35,889	28,653
Philco Resources Ltd. (Rapu-Rapu)	4,310	246	-	-
Resource Investment (Hong Kong) Ltd. (Xinzhen)	53,176	131,908	131,908	59,554
LX International Yakutsk, LLC (formerly, LG International Yakutsk Ltd.)	5,325	(7,223)	-	-
Korea Carbon International Co., Ltd. (Shaanxi BBM)	839	-	-	-
Colmineral, S.A. de C.V.	5	3	4	4
Fertilizer Resources Investment Ltd.	97,580	160,660	160,660	131,109
Dangjin Tank Terminal Co., Ltd.	107,920	90,866	91,620	92,390
Haiphong Steel Flower Electrical & Machinery Company Limited	7,773	7,088	7,088	4,471
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)	314,721	893,956	587,100	461,426
	₩ 1,282,917	₩ 2,162,993	₩ 1,726,301	₩ 1,288,382

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

9.1 Investments in subsidiaries (cont'd)

The summarized financial information of major subsidiaries as of December 31, 2021 and 2020 and operation results for the years ended by December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021													
	Current assets		Non-current assets		Current liabilities		Non-current liabilities		Revenue	Profit (loss) for the year	Dividends paid by subsidiaries			
LX International (America) Inc.(formerly, LG International (America) Inc.)	₩	399,237	₩	3,161	₩	358,454	₩	763	₩	1,711,415	₩	3,478	₩	-
LX International (Japan) Ltd.(formerly, LG International (Japan) Ltd.)		92,087		7,961		90,629		5,250		482,779		63		-
LX International (HK) Ltd.(formerly, LG International (Hong Kong) Ltd.)		108,338		2,976		101,232		-		572,449		866		-
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)		619,178		20,058		601,115		18,893		3,786,013		5,724		-
PT. Batubara Global Energy (BGE)		244,261		11,719		208,231		88		676,701		10,927		-
PT. Ganda Alam Makmur (GAM)		224,781		445,852		176,993		92,017		501,210		153,200		-
PT. Green Global Lestari (GGL)		6,917		209,872		3,458		29,817		-		22,418		-
Resource Investment (Hong Kong) Ltd. (Xinzheng)		75,910		56,005		8		-		-		65,684		1,563
Fertilizer Resources Investment Ltd.		176		160,484		-		-		-		18,684		4,957
Dangjin Tank Terminal Co., Ltd.		263		91,315		693		19		-		(2,470)		-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)		1,806,999		603,388		1,348,224		168,207		7,817,729		266,597		18,105
	2020													
	Current assets		Non-current assets		Current liabilities		Non-current liabilities		Revenue	Profit (loss) for the year	Dividends paid by subsidiaries			
LX International (America) Inc.(formerly, LG International (America) Inc.)	₩	372,124	₩	3,030	₩	337,917	₩	914	₩	1,376,181	₩	4,440	₩	-
LX International (Japan) Ltd.(formerly, LG International (Japan) Ltd.)		71,373		4,286		70,374		1,083		362,349		(245)		782
LX International (HK) Ltd.(formerly, LG International (Hong Kong) Ltd.)		107,255		3,932		101,957		801		308,790		2,924		-
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)		582,751		18,816		571,963		17,338		2,348,661		2,318		-
PT. Batubara Global Energy (BGE)		70,976		(983)		36,211		191		323,439		(477)		-
PT. Ganda Alam Makmur (GAM)		55,254		422,043		62,778		191,668		194,484		7,236		-
PT. Green Global Lestari (GGL)		6,660		171,720		2,570		24,320		-		3,774		-
Resource Investment (Hong Kong) Ltd. (Xinzheng)		5,025		54,529		-		-		-		(6,551)		-
Fertilizer Resources Investment Ltd.		69		131,040		-		-		-		10,643		-
Dangjin Tank Terminal Co., Ltd.		283		91,977		610		15		-		(2,325)		-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)		1,142,531		546,350		904,234		136,549		4,763,367		117,751		11,985

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

9.1 Investments in subsidiaries (cont'd)

Changes in the net book value of investments in subsidiaries by equity method for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021						
	Jan. 1	Acquisition (disposal) and transfer	Dividends	Equity adjustments in equity method	Share of profit or loss	Others	Dec. 31
LX International (America) Inc. (formerly, LG International (America) Inc.)	₩ 36,266	₩ -	₩ -	₩ 3,380	₩ 1,168	₩ -	₩ 40,814
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	3,711	-	-	(96)	(197)	-	3,418
LX International (HK) Ltd.(formerly, LG International (Hong Kong) Ltd.)	8,426	-	-	786	861	-	10,073
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)	12,173	-	-	1,238	5,542	-	18,953
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH)	9,624	-	-	25	554	-	10,203
LX International (Shanghai) Corp.(formerly, LG International (China) Ltd.)	7,126	-	-	842	369	-	8,337
Yantai LX International VMI Co., LTD (formerly, Yantai VMI Hub LG International Co., Ltd.)	4,013	-	-	502	753	-	5,268
Bowen Investment (Australia) Pty. Ltd.	8,545	-	-	212	8,082	-	16,839
PT. Batubara Global Energy (BGE)	33,533	-	-	3,143	10,899	-	47,575
PT. Ganda Alam Makmur (GAM)	161,120	-	-	16,901	89,997	-	268,018
LX International India Private Limited (formerly, LG International (India) Ltd.)	1,737	-	-	125	(24)	-	1,838
PT. Green Global Lestari (GGL)	149,813	-	-	9,606	21,153	-	180,572
PT. LX International Indonesia (LXII) (formerly, PT. LG International Indonesia (LGII))	755	-	-	(122)	(5,644)	5,011	-
PT. Binsar Natorang Energi (BNE)	73,933	-	-	12,400	6,556	-	92,889
PT. Global Investment Institusi (GII)	-	7,280	-	786	(831)	-	7,235
Steel Flower Electric & Machinery (Tianjin) Co., Ltd. Resource Investment (Hong Kong) Ltd. (Xinzheng)	28,653	-	-	3,474	3,762	-	35,889
LX International Yakutsk, LLC (formerly, LG International Yakutsk Ltd.)	59,554	-	(1,563)	8,233	65,684	-	131,908
Colmineral, S.A. de.C.V.	-	-	-	(595)	(382)	977	-
Fertilizer Resources Investment Ltd.	4	-	-	-	-	-	4
Dangjin Tank Terminal Co., Ltd.	131,109	-	(4,957)	15,824	18,684	-	160,660
Haiphong Steel Flower Electrical & Machinery Company Limited	92,390	1,700	-	-	(2,470)	-	91,620
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)	4,471	-	-	566	2,051	-	7,088
	461,426	-	(18,105)	9,673	136,251	(2,145)	587,100
	₩ 1,288,382	₩ 8,980	₩ (24,625)	₩ 86,903	₩ 362,818	₩ 3,843	₩ 1,726,301

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

9.1 Investments in subsidiaries (cont'd)

	2020						
	Jan. 1	Acquisition (disposal) and transfer	Dividends	Equity adjustments in equity method	Share of profit or loss	Others (*1)	Dec. 31
LX International (America) Inc. (formerly, LG International (America) Inc.)	₩ 34,222	₩ -	₩ -	₩ (2,414)	₩ 4,458	₩ -	₩ 36,266
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	4,735	-	(782)	11	(253)	-	3,711
LX International (HK) Ltd.(formerly, LG International (Hong Kong) Ltd.)	6,097	-	-	(595)	2,924	-	8,426
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)	9,834	-	-	(298)	2,637	-	12,173
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH)	8,428	-	-	260	936	-	9,624
LX International (Shanghai) Corp.(formerly, LG International (China) Ltd.)	7,016	-	-	49	61	-	7,126
Yantai LX International VMI Co., LTD (formerly, Yantai VMI Hub LG International Co., Ltd.)	3,210	-	-	5	798	-	4,013
Guangzhou Seel Flower Electrical & Machinery Co., Ltd	-	-	-	-	-	-	-
Bowen Investment (Australia) Pty. Ltd.	27,973	-	-	629	(6,629)	(13,428)	8,545
PT. Batubara Global Energy (BGE)	37,484	-	-	(3,416)	(535)	-	33,533
PT. Ganda Alam Makmur (GAM)	168,563	-	-	(11,442)	3,999	-	161,120
LX International India Private Limited (formerly, LG International (India) Ltd.)	1,681	-	-	(156)	212	-	1,737
PT. Green Global Lestari (GGL)	153,085	4,766	-	(10,117)	2,079	-	149,813
PT. LX International Indonesia (LXII) (formerly, PT. LG International Indonesia (LGII))	470	-	-	(85)	370	-	755
PT. Binsar Natorang Energi (BNE)	78,030	-	-	(10,645)	6,548	-	73,933
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	-	-	-	-	-	-	-
Resource Investment (Hong Kong) Ltd. (Xinzhen)	67,602	-	-	(1,497)	(6,551)	-	59,554
LX International Yakutsk, LLC (formerly, LG International Yakutsk Ltd.)	-	-	-	(416)	(166)	582	-
Colmineral, S.A. de.C.V.	4	-	-	-	-	-	4
Fertilizer Resources Investment Ltd.	120,465	-	-	2	10,642	-	131,109
Dangjin Tank Terminal Co., Ltd.	94,715	-	-	-	(2,325)	-	92,390
Haiphong Steel Flower Electrical & Machinery Company Limited	4,376	-	-	(281)	376	-	4,471
Highland Cement International Co., Ltd	-	-	-	-	-	-	-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)	420,217	-	(11,985)	(6,867)	60,061	-	461,426
	₩ 1,273,969	₩ 4,766	₩ (12,767)	₩ (47,149)	₩ 82,409	₩ (12,846)	₩ 1,288,382

(*1) Others include the effects of reduction due to recognition of impairment loss on the assets (see Note 22).

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

9.2 Investments in associates

As of December 31, 2021 and 2020, investments in associates are as follows.

	Domicile	Equity ownership (%)		Reporting date	Principal business activity
		2021	2020		
Heungkuk highclass Private Special Asset PEF E1	Korea	50.00	50.00	12.31	Overseas resources development
Biofriends INC. (*1, 2)	Korea	11.36	-	12.31	Manufacturing and selling clean energy
POSCO-IPPC (India Pune Processing Center)	India	35.00	35.00	3.31	Processing and selling steel
POSCO-PWPC (Poland Wroclaw Processing Center)	Poland	40.00	40.00	12.31	"
Kernhem B.V.	Netherland	30.00	30.00	12.31	Oil and gas
ADA Oil LLP (*1)	Kazakhstan	12.50	12.50	12.31	"
GS HP Sunflower Village Int'l Corp.	Vietnam	30.00	30.00	12.31	Leasing real estate
Oman International Petrochemical Industry Company LLC	Oman	30.00	30.00	12.31	Manufacturing and selling PTA, PET
Musandam Power Company SAOC (*1)	Oman	18.00	18.00	12.31	Thermal power plant
Gansu Wuwei Cogeneration Power Plant	China	30.00	30.00	12.31	Generating Cogeneration

(*1) The entities were classified as associates even though the Company holds less than 20% equity ownership. As the Company has rights to elect the directors of the entities and its executives participate in their management as directors, the Company considered that it has significant influence over these entities.

(*2) For the year ended December 31, 2021, the Company acquired and classified it as investments in associates.

Details of the investments in associates as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			2020
	Acquisition cost	Net asset value	Net book value	Net book value
Heungkuk highclass Private Special Asset PEF E1	₩ 4,566	₩ (8,998)	₩ -	₩ -
Biofriends INC.	2,720	17,881	2,550	-
POSCO-IPPC (India Pune Processing Center)	9,184	41,290	14,451	9,769
POSCO-PWPC (Poland Wroclaw Processing Center)	5,244	22,227	8,915	6,752
Kernhem B.V.	2,005	(65,980)	-	-
ADA Oil LLP	22,011	(60,619)	-	-
GS HP Sunflower Village Int'l Corp.	2,911	17,732	5,320	4,395
Oman International Petrochemical Industry Company LLC (*1)	19,766	64,587	-	-
Musandam Power Company SAOC	6,535	34,790	6,662	5,409
Gansu Wuwei Cogeneration Power Plant	55,932	196,788	59,485	59,647
	₩ 130,874	₩ 259,698	₩ 97,383	₩ 85,972

(*1) The entity has discontinued its operations, and the Company has not received recent financial statements of the entity.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

9.2 Investments in associates (cont'd)

The condensed financial information of major associates as of December 31, 2021 and 2020 is as follows (Korean won in millions):

	2021							
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Revenue	Profit (loss) for the year	Dividends paid by associates	
POSCO-IPPC (India Pune Processing Center)	₩ 161,741	₩ 29,017	₩ 137,571	₩ 11,897	₩ 403,314	₩ 11,044	₩	-
POSCO-PWPC (Poland Wroclaw Processing Center)	73,142	7,791	58,701	5	125,524	5,481		-
Musandam Power Company SAOC	84,929	215,252	65,909	199,482	77,836	10,021		1,041
Gansu Wuwei Cogeneration Power Plant	98,877	429,488	57,824	273,753	191,269	(7,496)		4,381
	2020							
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Revenue	Profit (loss) for the year	Dividends paid by associates	
POSCO-IPPC (India Pune Processing Center)	₩ 96,289	₩ 38,821	₩ 85,426	₩ 21,772	₩ 267,760	₩ 5,060	₩	-
POSCO-PWPC (Poland Wroclaw Processing Center)	50,541	10,778	41,873	2,626	108,292	2,325		-
Gansu Wuwei Cogeneration Power Plant	95,422	404,354	39,820	262,628	176,972	18,771		2,490

Changes in the net book value of investments in associates for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021						
	Jan. 1	Acquisition (disposal)	Dividends	Change in equity adjustment in equity method	Share of profit or loss	Impairment and others	Dec. 31
Biofriends INC.	₩ -	₩ 2,720	₩ -	₩ -	₩ (206)	₩ 36	₩ 2,550
POSCO-IPPC (India Pune Processing Center)	9,769	-	-	817	3,865	-	14,451
POSCO-PWPC (Poland Wroclaw Processing Center)	6,752	-	-	(29)	2,192	-	8,915
Kernhem B.V. (*1)	-	-	-	(251)	153	98	-
ADA Oil LLP (*1)	-	-	-	(124)	660	(536)	-
GS HP Sunflower Village Int'l Corp.	4,395	-	(50)	480	495	-	5,320
Musandam Power Company SAOC	5,409	-	(1,041)	490	1,804	-	6,662
Gansu Wuwei Cogeneration Power Plant	59,647	-	(4,381)	6,467	(2,248)	-	59,485
	₩ 85,972	₩ 2,720	₩ (5,472)	₩ 7,850	₩ 6,715	₩ (402)	₩ 97,383
	2020						
	Jan. 1	Acquisition (disposal)	Dividends	Change in equity adjustment in equity method	Share of profit or loss	Impairment and others	Dec. 31
POSCO-IPPC (India Pune Processing Center)	₩ 8,864	₩ -	₩ -	₩ (866)	₩ 1,771	₩ -	₩ 9,769
POSCO-PWPC (Poland Wroclaw Processing Center)	6,113	-	-	(291)	930	-	6,752
LG Holdings (HK) Ltd. (LG Building Ltd.)	44,660	(32,690)	-	(12,367)	397	-	-
Kernhem B.V.	-	-	-	2,437	(1,310)	(1,127)	-
ADA Oil LLP	-	-	-	1,419	(545)	(874)	-
GS HP Sunflower Village Int'l Corp.	4,350	-	(183)	(268)	517	(21)	4,395
Sal de Vida Korea Corp.	30	(30)	-	-	-	-	-
Musandam Power Company SAOC	4,939	-	(1,079)	(324)	1,873	-	5,409
Gansu Wuwei Cogeneration Power Plant	56,190	-	(2,490)	316	5,631	-	59,647
	₩ 125,146	₩ (32,720)	₩ (3,752)	₩ (9,944)	₩ 9,264	₩ (2,022)	₩ 85,972

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

10. Property, plant and equipment

Details of property, plant and equipment as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		
	Acquisition cost	Accumulated depreciation	Net book value
Land	₩ 12	₩ -	₩ 12
Buildings	560	(125)	435
Structures	1,275	(866)	409
Machinery and equipment	236	(176)	60
Vehicles	259	(212)	47
Others	7,695	(6,891)	804
Construction-in-progress	614	-	614
Right-of-use assets	10,182	(3,608)	6,574
	₩ 20,833	₩ (11,878)	₩ 8,955

	2020			
	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Net book value
Land	₩ 12	₩ -	₩ -	₩ 12
Buildings	560	(111)	-	449
Structures	1,275	(812)	-	463
Machinery and equipment	19,899	(10,500)	(9,349)	90
Vehicles	11,464	(4,100)	-	7,364
Others	9,328	(8,029)	-	1,299
Construction-in-progress	9	-	-	9
Right-of-use assets	9,389	(2,770)	-	6,619
	₩ 51,976	₩ (26,322)	₩ (9,349)	₩ 16,305

Changes in the net book value of property, plant and equipment for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021				
	Jan. 1	Additions	Disposals	Depreciation	Dec. 31
Land	₩ 12	₩ -	₩ -	₩ -	₩ 12
Buildings	449	-	-	(14)	435
Structures	463	-	-	(54)	409
Machinery and equipment	90	-	-	(30)	60
Vehicles	7,364	-	(6,916)	(401)	47
Others	1,299	1,166	(241)	(1,420)	804
Construction-in-progress	9	605	-	-	614
Right-of-use assets	6,619	9,478	(2,795)	(6,728)	6,574
	₩ 16,305	₩ 11,249	₩ (9,952)	₩ (8,647)	₩ 8,955

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

10. Property, plant and equipment (cont'd)

	2020					
	Jan. 1	Additions	Transfer (*1)	Disposals	Depreciation	Dec. 31
Land	₩ 12	₩ -	₩ -	₩ -	₩ -	₩ 12
Buildings	463	-	-	-	(14)	449
Structures	518	-	-	-	(55)	463
Machinery and equipment	78	40	-	-	(28)	90
Vehicles	8,237	61	-	-	(934)	7,364
Others	1,483	419	-	(107)	(496)	1,299
Construction-in-progress	55	3,173	(3,219)	-	-	9
Right-of-use assets	8,042	7,732	-	(2,457)	(6,698)	6,619
	₩ 18,888	₩ 11,425	₩ (3,219)	₩ (2,564)	₩ (8,225)	₩ 16,305

(*1) For the year ended December 31, 2020, ₩3,219 million was transferred to the intangible assets.

Details of insurance for properties are as follows (Korean won in millions):

	Insured assets	Insurance institution	Insured amount	
			2021	2020
Property insurance	Plant & equipment, etc.	KB insurance Co. Ltd. and others	₩ 42,078	₩ 67,078

11. Intangible assets

Details of intangible assets as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
License	₩ 11,255	₩ 11,287
Others	2,480	3,002
	₩ 13,735	₩ 14,289

Changes in the net book value of intangible assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

		2021					
		Jan. 1	Additions	Disposals	Amortization	Gain on impairment	Dec. 31
License	₩	11,287	₩ 2,043	₩ (2,615)	₩ -	₩ 540	₩ 11,255
Others		3,002	309	-	(831)	-	2,480
	₩	14,289	₩ 2,352	₩ (2,615)	₩ (831)	₩ 540	₩ 13,735

		2020						
		Jan. 1	Additions	Disposals	Transfer	Amortization	Impairment (*1)	Dec. 31
License	₩	17,340	₩ -	₩ (7,212)	₩ 1,259	₩ -	₩ (100)	₩ 11,287
Others		1,520	90	-	1,960	(568)	-	3,002
	₩	18,860	₩ 90	₩ (7,212)	₩ 3,219	₩ (568)	₩ (100)	₩ 14,289

(*1) See Note 22.

The Company participates as the Klaytn Blockchain Platform Operator (General Council Officer) and is acquiring the cryptocurrency, Klay. Acquisition of the asset does not require significant acquisition costs; therefore, it is treated as a non-retained asset. As of December 31, 2021, the Company has 6,615,173 Klay (2020: 5,681,108 Klay).

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

12. Trade and other receivables

Details of trade and other receivables as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			2020		
	Total amount	Allowance for doubtful accounts	Net value	Total amount	Allowance for doubtful accounts	Net value
Current:						
Trade receivables	₩ 405,592	₩ (39,233)	₩ 366,359	₩ 343,113	₩ (38,525)	₩ 304,588
Short-term loans	8,234	(5,011)	3,223	15,190	-	15,190
Other receivables (*1)	57,013	(10,166)	46,847	36,016	(9,068)	26,948
Current portion of Long-term other accounts receivable	5,928	-	5,928	-	-	-
Present value discount	(210)	-	(210)	-	-	-
Accrued income	5,092	(2,869)	2,223	4,054	(2,588)	1,466
Short-term deposits	2,658	-	2,658	2,791	-	2,791
	<u>484,307</u>	<u>(57,279)</u>	<u>427,028</u>	<u>401,164</u>	<u>(50,181)</u>	<u>350,983</u>
Non-current:						
Long-term loans	217,166	(113,961)	103,205	249,248	(103,461)	145,787
Long-term other receivables (*1)	11,855	(119)	11,736	19,366	(194)	19,172
Present value discount	(1,585)	-	(1,585)	(2,644)	-	(2,644)
Long-term uncollected income	26,957	(8,218)	18,739	38,495	(7,407)	31,088
Long-term bank Deposits (*2)	10	-	10	10	-	10
Long-term deposits	4,943	(4,290)	653	4,955	(4,289)	666
	<u>259,346</u>	<u>(126,588)</u>	<u>132,758</u>	<u>309,430</u>	<u>(115,351)</u>	<u>194,079</u>
	<u>₩ 743,653</u>	<u>₩ (183,867)</u>	<u>₩ 559,786</u>	<u>₩ 710,594</u>	<u>₩ (165,532)</u>	<u>₩ 545,062</u>

(*1) As of December 31, 2021, other receivables related to derivatives of ₩1,942 million (₩6,096 million in 2020) were excluded.

(*2) As of December 31, 2021, it presents the amount after excluding ₩709 million of excessive amount of plan assets (see Note 20).

12. Trade and other receivables (cont'd)

Changes in the net book value of allowance for doubtful accounts for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
	Trade receivables	Other receivables	Trade receivables	Other receivables
Jan. 1	₩ 38,525	₩ 127,007	₩ 40,798	₩ 118,028
Bad debt expenses	811	10,285	-	-
Reversal of allowance for bad debts	-	-	(311)	(4,260)
Others (*1)	(103)	7,342	(1,962)	13,239
Dec. 31	₩ 39,233	₩ 144,634	₩ 38,525	₩ 127,007

(*1) Reversal of allowance for doubtful accounts in relation to Kernhem B.V. and ADA Oil LLP., which amounts to ₩9,072 million (Impairment loss in 2020: ₩9,611 million), is included.

Aging analysis of trade receivables as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Less than 3 months	3 to 6 months	6 to 12 months	1 to 3 years	More than 3 years	Total
Dec. 31, 2021	₩ 347,509	₩ 9,056	₩ 2,921	₩ 7	₩ 46,099	₩ 405,592
Dec. 31, 2020	285,083	12,455	4	563	45,008	343,113

As of the December 31, 2021, there are no trade accounts receivable that were transferred or factored but not derecognized because the requirements for financial instrument derecognition are not met.

13. Borrowings and bonds

13.1 Short-term borrowings

Details of short-term borrowings as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Description	Financial institution	Annual interest rate as of Dec. 31, 2021	2021	2020
General borrowings	BOC and others	1.49% and others	₩ 73,710	₩ 54,400
Banker's usance	Hana Bank and others	0.41% ~ 0.52%	2,375	652
			₩ 76,085	₩ 55,052

The Company has contracts of commercial paper discount with Woori, Shinhan, Hana and KDB bank. Amounts that have not reached maturity after discounts and do not meet the requirements of financial asset derecognition are accounted as short-term borrowings.

The Company has signed individual and comprehensive loan agreements (credit limit of ₩18,000 million) with Shinhan Bank and two other banks in relation to bank overdraft facilities as of December 31, 2021. In relation to the bank overdraft facilities above, long-term financial instruments are provided as collateral.

13.2 Long-term borrowings

Details of long-term borrowings as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Financial institution	Annual interest rate as of Dec. 31, 2021	2021	2020
Local currency	Korea Energy Agency	Special energy fund rate - 2.25%	₩ 1,977	₩ 2,635
	Forestry Cooperative in Korea	1.50%	6,284	8,488
	Woori International the 1 st Co., Ltd.	2.89% ~ 2.91%	130,000	130,000
	The Export-Import Bank of Korea	Export-Import Financial Debentures 3 month + (1.36% ~ 1.39%)	87,120	96,200
			225,381	237,323
		Less: current portion	(71,823)	(11,943)
			₩ 153,558	₩ 225,380
Foreign currency	Korea Energy Agency	Special energy fund rate - 2.25%	₩ 22,516	₩ 33,739
	The Export-import Bank of Korea	6ML + 2.32%, 3ML + 2.3%	-	36,992
	Nonghyup Bank	3ML + 2.3%	-	4,080
	NH Investment & Securities (H.K.)	3ML + 2.3%	-	1,360
			22,516	76,171
		Less: current portion	(484)	(42,877)
			22,032	33,294
			₩ 175,590	₩ 258,674

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

13.3 Bonds

Details of bonds as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Series	Issue date	Maturity date	Annual interest rate	2021	2020	Warranty
115th	Mar. 03, 2015	Mar. 03, 2022	2.74%	50,000	50,000	Non-warranty
116-3rd	May. 28, 2015	May. 28, 2022	2.86%	90,000	90,000	"
117-2nd	Sep. 05, 2016	Sep. 05, 2021	2.02%	-	30,000	"
118-1st	Jan. 23, 2018	Jan. 22, 2021	2.57%	-	70,000	"
118-2nd	Jan. 23, 2018	Jan. 20, 2023	2.95%	30,000	30,000	"
119th	May. 13, 2020	May. 13, 2030	3.10%	50,000	50,000	"
120-1st	May. 27, 2020	May. 27, 2023	1.80%	90,000	90,000	"
120-2nd	May. 27, 2020	May. 27, 2025	2.07%	50,000	50,000	"
121-1st	Aug. 06, 2021	Aug. 06, 2026	2.29%	20,000	-	"
121-2nd	Aug. 06, 2021	Aug. 06, 2031	3.10%	30,000	-	"
Less: discount on bonds				(557)	(710)	
Less: current portion of bonds				(140,000)	(100,000)	
Less: current portion of discount on bonds				19	17	
				<u>₩ 269,462</u>	<u>₩ 359,307</u>	

The Company issued the 115th, 116-3rd, 118-2nd, 119-1st, 120-1st and 120-2nd, 121-1st and 121-2nd unsecured bonds at discounts with the condition of full redemption on maturity date, and those interests are payable every 3 months. Bond discounts were amortized using the effective interest rate method during redemption period and recognized as finance costs.

As of the January 28, 2022, the Company additionally issued a total of ₩300 billion in the 122-1st, 122-2nd and 122-3rd bonds.

14. Provisions

Details of provisions as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
	Current	Non-Current	Current	Non-Current
Onerous contracts	5,987	13,396	-	24,873
Provisions for litigation	-	517	-	475
	<u>₩ 5,987</u>	<u>₩ 13,913</u>	<u>₩ -</u>	<u>₩ 25,348</u>

Changes in provisions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021				
	Jan. 1	Reversal	Used	Others	Dec. 31
Onerous contracts	₩ 24,873	₩ (1,785)	₩ (5,864)	₩ 2,159	₩ 19,383
Provisions for litigation	475	-	-	42	517
	<u>₩ 25,348</u>	<u>₩ (1,785)</u>	<u>₩ (5,864)</u>	<u>₩ 2,201</u>	<u>₩ 19,900</u>

	2020				
	Jan. 1	Recognition	Used	Others	Dec. 31
Onerous contracts	₩ 39,354	₩ (7,663)	₩ (4,889)	₩ (1,929)	₩ 24,873
Provisions for litigation	505	-	-	(30)	475
Financial guarantee Liabilities	5,767	-	-	(5,767)	-
	<u>₩ 45,626</u>	<u>₩ (7,663)</u>	<u>₩ (4,889)</u>	<u>₩ (7,726)</u>	<u>₩ 25,348</u>

15. Capital stocks and others

15.1 Capital stocks

Details of capital stocks as of December 31, 2021 and 2020 are as follows (Korean won in millions, except per share amounts):

	2021	2020
Number of ordinary shares issued	38,760,000	38,760,000
Par value per share	₩ 5,000	₩ 5,000
	<u>₩ 193,800</u>	<u>₩ 193,800</u>

15.2 Capital surplus

Details of capital surplus as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Paid-in capital in excess of par value	₩ 47,106	₩ 47,106
Asset revaluation surplus (*1)	37,286	37,286
Other capital surplus	17,732	17,732
	<u>₩ 102,124</u>	<u>₩ 102,124</u>

(*1) The Company revalued its property, plant and equipment on July 1, 1998 in accordance with the Assets Revaluation Act, and the revaluation difference amounted to ₩87,151 million. The revaluation reserve was calculated by deducting the revaluation tax and the exchange rate adjustment difference from the revaluation difference.

15.3 Other components of equity

Details of other components of equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Treasury stock (*1)	₩ (40,690)	₩ (40,690)

(*1) The Company signed the contract of acquisition of treasury stocks with KB Securities (for up to: ₩100 billion), and during the year ended December 31, 2020, acquired 2,691,323 shares of treasury stocks. As of December 31, 2021, the Company has 2,792,098 shares of treasury stocks.

15.4 Accumulated other comprehensive loss

Details of accumulated other comprehensive loss as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Loss on valuation of FVOCI	₩ (2,119)	₩ (12,447)
Gain(loss) on valuation of derivatives designated as cash flow hedges	13	(110)
Positive (Negative) adjustments of equity in equity method	(2,622)	(88,059)
Exchange differences on translation of foreign operations	3,551	(4,693)
	<u>₩ (1,177)</u>	<u>₩ (105,309)</u>

15.5 Retained earnings

Details of retained earnings as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Legal reserve	₩ 38,705	₩ 37,266
Business rationalization reserve	1,511	1,511
Improvement of financial structure reserve	13,693	13,693
Voluntary reserves and retained earnings before appropriations	1,497,405	1,166,829
	<u>₩ 1,551,314</u>	<u>₩ 1,219,299</u>

15.6 Earnings per share

The Company's per share for the years ended December 31, 2021 and 2020 are computed as follows (number of shares, Korean won):

	2021	2020
Profit for the year	₩ 348,019,242,657	₩ 295,262,540,235
Weighted-average number of ordinary shares outstanding (*1)	35,967,920	37,517,383
Basic earnings per share	<u>₩ 9,676</u>	<u>₩ 7,870</u>

(*1) The Company's weighted-average number of ordinary shares for the years ended December 31, 2021 and 2020 are computed as follows:

	2021		2020	
	Number of shares	Number of shares*days of holding	Number of shares	Number of shares*days of holding
Number of common shares issued	38,760,000	14,147,400,000	38,760,000	14,186,160,000
Treasury shares	(2,792,074)	(1,019,109,218)	(2,792,074)	(454,797,807)
Number of ordinary shares outstanding	<u>35,967,902</u>	<u>13,128,290,782</u>	<u>35,967,926</u>	<u>13,731,362,193</u>
Days of holding		365 days		366 days
Weighted-average number of ordinary shares outstanding		35,967,920		37,517,383

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

15.7 Statements of appropriation of retained earnings

The statements of appropriation of retained earnings for the years ended December 31, 2021 and 2020 are as follows (Korean won):

	2021	2020
Retained earnings before appropriations :		
Unappropriated retained earnings carried forward from the prior year	₩ -	₩ -
Re-measurement loss on defined benefit plans	528,504,099	4,919,485,387
Change in retained earnings in equity method	(2,145,403,496)	(20,844,042)
Profit for the year	348,019,242,657	295,262,540,235
	346,402,343,260	300,161,181,580
Reversal of voluntary reserves:	-	-
	-	-
Appropriation:		
Legal reserve	(8,272,617,460)	(1,438,717,040)
Cash dividends (Note 16)	(82,726,174,600)	(14,387,170,400)
Voluntary reserve	(255,403,551,200)	(284,335,294,140)
	(346,402,343,260)	(300,161,181,580)
Unappropriated retained earnings to be carried forward to the next year	₩ -	₩ -

The statement of retained earnings (accumulated deficit) before appropriations (disposition) for the year ended December 31, 2021 is scheduled to be approved at the annual stockholder's meeting to be held on March 24, 2022. The statement of retained earnings (accumulated deficit) before appropriations (disposition) for the year ended December 31, 2020 was approved at the annual stockholder's meeting on March 24, 2021.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

16. Dividends

For the years ended December 31, 2021 and 2020, dividends paid are as follows (Korean won in millions, except per share amounts):

	2021	2020
Dividend per share	₩ 400	₩ 300
Dividends paid	14,387	11,598

As of December 31, 2021 and 2020, proposed dividends to be approved at the general meeting of shareholders consist of the following (Korean won in millions, except per share amounts):

	2021	2020
Dividend per share	₩ 2,300	₩ 400
Dividends	82,726	14,387

17. Sales

Revenue from contracts with customers for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			2020		
	Energy/Palm	Industrial material/Solution	Total	Energy/Palm	Industrial material/Solution	Total
Revenue recognized at a point of time						
Sales of goods	₩ 1,524,941	₩ 2,599,939	₩ 4,124,880	₩ 838,229	₩ 2,398,242	₩ 3,236,471
Sales of services	130	30,014	30,144	3,567	17,279	20,846
	1,525,071	2,629,953	4,155,024	841,796	2,415,521	3,257,317
Revenue recognized over period						
Sales of services	96	604	700	21	902	923
	₩ 1,525,167	₩ 2,630,557	₩ 4,155,724	₩ 841,817	₩ 2,416,423	₩ 3,258,240

Details of changes in contract liabilities arising from contracts with customers during December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			
	Jan. 1	Increase	Decrease	Dec. 31
Energy/Palm	₩ 5,208	₩ 56,228	₩ (59,177)	₩ 2,259
Industrial material/Solution	1,475	27,713	(26,462)	2,726
	₩ 6,683	₩ 83,941	₩ (85,639)	₩ 4,985
	2020			
	Jan. 1	Increase	Decrease	Dec. 31
Energy/Palm	₩ 239	₩ 22,335	₩ (17,366)	₩ 5,208
Industrial material/Solution	1,522	30,359	(30,406)	1,475
	₩ 1,761	₩ 52,694	₩ (47,772)	₩ 6,683

18. Selling and administrative expenses

Details of selling and administrative expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Salaries	₩ 52,315	₩ 32,807
Retirement benefits	4,842	5,243
Employee welfare benefits	8,484	7,540
Travel	1,194	1,421
Rents	1,116	1,476
Depreciation	7,012	6,625
Insurance	771	714
Freight	58,367	36,152
Service	26,578	23,700
Loading and unloading	214	365
Amortization	831	567
Bad debt expenses (Reversal of allowance for bad debts)	811	(311)
Sales commissions	323	1,400
Expenses for overseas branch office	7,029	6,495
Others	6,123	7,425
	₩ 176,010	₩ 131,619

19. Expenses classified by nature

Expenses classified by nature for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Cost of goods sales	₩ 3,965,748	₩ 3,149,416
Employee benefits (salaries, retirement benefits)	57,157	38,050
Distribution costs (custody charges, packaging costs, transportation expenses)	58,809	37,213
Depreciation and amortization	9,478	8,793
Others	52,201	49,161
	₩ 4,143,393	₩ 3,282,633

20. Pension benefits

The Company operates both defined contribution and defined benefit pension plans.

Details of employee benefit liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Present value of defined benefit obligation	₩ 34,412	₩ 34,613
Fair value of plan assets (*1)	(35,121)	(34,081)
	₩ (709)	₩ 532

(*1) The Company classified fair value of plan assets exceeding present value of defined benefit obligation as other non-current assets.

20. Pension benefits (cont'd)

Expenses recognized in respect of the defined benefit plans for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Current service costs	₩ 4,331	₩ 4,812
Net interest costs	10	175
Management costs of plan assets	75	63
	₩ 4,416	₩ 5,050

Changes in the present value of defined benefit obligation for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
As of January 1	₩ 34,613	₩ 41,658
Current service costs	4,331	4,812
Interest costs	565	793
Benefits paid	(3,912)	(5,595)
Transfer in (out)	(513)	(597)
Re-measurement loss (gain) on defined benefit plans	(672)	(6,458)
As of December 31	₩ 34,412	₩ 34,613

Changes in the fair value of plan assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
As of January 1	₩ 34,081	₩ 32,857
Return on plan assets	555	618
Contribution payable	4,117	6,207
Benefits paid	(3,582)	(5,559)
Re-measurement loss on defined benefit plans	25	21
Management costs of plan assets	(75)	(63)
As of December 31	₩ 35,121	₩ 34,081

The key components of plan assets account for total fair value of plan assets as of December 31, 2021 and 2020 as follows:

	2021	2020
Debt securities	95.50%	95.52%
Deposits	2.73%	4.44%
Others	1.77%	0.04%
	100.00%	100.00%

The principal assumptions used in actuarial calculation as of December 31, 2021 and 2020 are as follows:

	2021	2020
Salary increase rate	5.00%	5.00%
Discount rate	2.53%	1.75%

20. Pension benefits (cont'd)

Sensitivity analyses on the principal assumptions used in actuarial calculation as of December 31, 2021 are as follows (Korean won in millions):

	Defined benefit obligation		
	Dec. 31	Increase by 1%	Decrease by 1%
Salary increase rate	₩ 34,412	₩ 36,426	₩ 32,560
Discount rate	34,412	32,540	36,491

Expenses by operating a defined contribution plan for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Retirement benefits	₩ 158	₩ 128

21. Finance income and costs

21.1 Finance income

Details of finance income for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Interest income	₩ 11,963	₩ 7,977
Gain on foreign currency transactions	104,116	129,304
Gain on foreign currency translation	15,657	21,891
Gain on currency forwards	7,464	13,676
Gain on currency swaps	3,684	1,688
Dividend income	6,573	4,151
Commission revenue from guarantees	1,329	574
	₩ 150,786	₩ 179,261

21.2 Finance costs

Details of finance costs for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Interest expenses	₩ 17,903	₩ 23,047
Loss on foreign currency transactions	98,972	150,609
Loss on foreign currency translation	10,678	18,822
Loss on currency forwards	19,113	9,841
Loss on currency swaps	-	8,552
Loss on disposal of receivables	760	1,162
	₩ 147,426	₩ 212,033

21.3 Share of profit (loss) of subsidiaries and associates, and related gain and loss

Share of profit (loss) of subsidiaries and associates, and related gain and loss for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Share of profit of subsidiaries and associates	₩ 381,536	₩ 109,988
Share of loss of subsidiaries and associates	(12,002)	(18,314)
Gain on disposal of investments in subsidiaries and Associates (*1)	36	337,660
Impairment loss on investments in subsidiaries and associates (*2)	-	(23,039)
	₩ 369,570	₩ 406,295

(*1) Gains on disposal of investment in LG Holdings(HK) Ltd.(LG Building Ltd.), Guangzhou Steel Flower Electrical & Machinery Co., Ltd. and Highland Cement International Co., Ltd. during the year ended December 31, 2020, are included.

(*2) Refer to note 22

21.4 Other non-operating income and expenses

Other non-operating income and expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions): Gain on disposal of Property, plant and equipment Gain on disposal of intangible assets

	2021	2020
Other reversal of allowance for bad debts (Other bad debt expenses)	₩ (10,285)	₩ 4,260
Gain on disposal of Property, plant and equipment	1,175	46
Gain on disposal of intangible assets	801	305
Gain on impairment of intangible assets	540	-
Impairment loss of intangible assets (*1)	-	(100)
Gain on exemption from debt	13,352	-
Others	(4,583)	(2,693)
	₩ 1,000	₩ 1,818

(*1) Refer to note 22

22. Impairment loss on assets

Details of impairment loss recognized for the year ended December 31, 2020 are as follows (Korean won in millions):

	2020		
Segment	Investments in subsidiaries	Investments in associates	Intangible assets
	Energy/Palm	Industrial material/Solution	Collectively Companyed
Cause of impairment	Decline in business performances	Decline in business performances	Decline in market value
Nature of asset	Coal mining	Palm oil	License
Related region	Oceania	Asia	Asia
Impairment loss	₩ 13,428	₩ 9,611	₩ 100
Measuring of recoverable amount	Value in use	Value in use	Fair value less costs to sell
Basis of estimates	Zero-Growth / DCF	Zero-Growth / DCF	-
Discount rate	5.04%	9.96%	-

23. Income tax

The major components of income tax expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Current income tax (*1)	₩ 9,172	₩ 25,057
Changes in deferred tax	44,523	14,979
Deferred tax related to items recognized in other comprehensive income (loss)	(15,454)	15,648
Income tax expenses (benefit) reported in the statement of profit or loss	₩ 38,241	₩ 55,684

(*1) The refund of ₩1,394 million related to claim for corporate tax correction with regards to an increase in foreign tax payment credit due to gain on exemption of debt are included for the year ended December 31, 2021. The refunds with regards to the local income tax correction claims and adjustment due to administrative litigation, ₩ 15,969 million were included for the year ended Dec 31, 2020.

Reconciliations between income tax expenses at the effective income tax rate and profit before tax at the Korea statutory tax rate for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Profit before income tax	₩ 386,261	₩ 350,946
Statutory income tax (24.1% in 2021)	93,013	84,467
Adjustments:		
Effect of recognized deferred tax for temporary differences	(50,409)	(4,510)
Current year adjustment related to the income tax on previous years	(1,733)	(18,781)
Effect of non-deductible expenses for tax purposes	(917)	1,672
Tax credit	(5,335)	(7,346)
Foreign income tax directly charged	1,852	2,953
Income tax on non-recirculation	1,834	3,737
Others	(64)	(6,508)
Income tax expenses	₩ 38,241	₩ 55,684
Effective tax rate (income tax expenses/ profit before income tax)	9.90%	15.87%

The major components of deferred income tax charged directly to equity for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Loss (gain) on valuation of FVOCI	₩ (3,297)	₩ 12,987
Equity adjustments in equity method	(9,317)	3,257
Exchange differences on translation of foreign operations	(2,632)	886
Loss (gain) on valuation of derivatives	(39)	99
Re-measurement gain on defined benefit plans	(169)	(1,581)
	₩ (15,454)	₩ 15,648

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

23. Income tax (cont'd)

Temporary differences and deferred taxes for the years ended December 31, 2021 and 2020 consist of the following (Korean won in millions):

	Accumulated temporary differences			Deferred tax assets (liabilities)	
	Jan. 1, 2020	Net changes	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021
Deferred income tax due to temporary differences					
Impairment of available-for-sale financial assets	₩ 147,608	₩ -	₩ 147,608	₩ 34,510	₩ 34,510
Stock dividend	12,999	-	12,999	3,146	3,146
Allowance for doubtful accounts	157,039	17,962	175,001	36,570	39,468
Bad debt expenses	3,492	-	3,492	845	845
Accrued income	(5)	3	(2)	(1)	-
Interest income	3,038	175	3,213	735	778
Allowance for inventories	-	508	508	-	123
Gain on commodity futures	-	(17)	(17)	-	(4)
Loss on product futures	145	(145)	-	35	-
Accrued expenses	1,581	(5)	1,576	383	381
Admission and denial on depreciation cost	4,863	(3,848)	1,015	1,177	246
Bonus	2,113	15,481	17,594	511	4,258
Interest related to loans or construction	(483)	-	(483)	(117)	(117)
Brand loyalty	62	(62)	-	15	-
Present value of defined benefit obligation	34,304	128	34,432	8,302	8,332
Fair value of plan assets	(32,619)	(1,387)	(34,006)	(7,894)	(8,229)
Gain (loss) on foreign currency translation	(16,938)	7,283	(9,655)	(4,099)	(2,337)
Interest and translation of debt related on success	3,997	1,129	5,126	967	1,241
Rewards for long term employee	1,144	(74)	1,070	277	259
Impairment right of membership	2,022	(540)	1,482	489	359
Investments in subsidiaries and associates	(100,765)	(437,631)	(538,396)	(29,392)	(75,153)
Financial assets at fair value through OCI	16,362	(13,625)	2,737	3,960	662
Impairment loss	79,155	(25,517)	53,638	19,155	12,980
Provisions	31,648	(5,448)	26,200	7,659	6,340
Taxes and dues	4,016	3,589	7,605	498	1,366
Guarantee commission	21,569	-	21,569	375	373
Deemed dividend	40,126	2,065	42,191	9,710	10,210
Gains from assets contributed	1,529	-	1,529	370	370
Transfer price	7,423	-	7,423	-	-
Finance lease	138	45	183	34	44
Commission fees	7,414	68	7,482	573	590
	432,977	(439,863)	(6,886)	88,793	41,041

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

23. Income tax (cont'd)

	Accumulated temporary differences			Deferred tax assets (liabilities)	
	Jan. 1, 2020	Net changes	Dec. 31, 2021	Dec. 31, 2020	Dec. 31, 2021
Tax credits	-	-	-	37,313	42,376
Charged income tax due to non-recirculation	-	-	-	-	(1,833)
				<u>₩ 126,106</u>	<u>₩ 81,584</u>

Temporary differences for which the deferred tax assets (liabilities) have not been recognized for the years ended December 31, 2021 and 2020 consist of the following (Korean won in millions):

	2021	2020
Investments in subsidiaries, associates or joint ventures (*1)	₩ 151,480	₩ 207,487
Guarantee commission and others	29,411	29,403
	<u>₩ 180,891</u>	<u>₩ 236,890</u>

(*1) The Company did not recognize deferred tax assets (liabilities) related to temporary differences due to accumulated other comprehensive loss and accumulated losses from investments in subsidiaries or associates in which the Company has no plan for disposal in the foreseeable future.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

24. Related party disclosures

As of December 31, 2021, LX Holdings Corp., the largest shareholder of the Company, holds 24.69% of the Company's common shares and has significant influence over the Company.

Consolidated subsidiaries as of December 31, 2021 are as follows:

	Country of Domicile	Equity ownership (%)		Reporting date	Principal activity
		2021	2020		
LX International (America) Inc. (formerly, LG International (America) Inc.) (*1)	USA	100.00	100.00	Dec. 31	Export and import
LHC Solar LLC	USA	100.00	100.00	Dec. 31	Solar energy
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.) (*1)	Japan	100.00	100.00	Dec. 31	Export and import
LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.) (*1)	Hong Kong	100.00	100.00	Dec. 31	"
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.) (*1)	Singapore	100.00	100.00	Dec. 31	"
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH) (*1)	Deutschland	100.00	100.00	Dec. 31	"
LX International (Shanghai) Corp. (formerly, LG International (China) Ltd.) (*1)	China	100.00	100.00	Dec. 31	"
Yantai VMI Hub LX International Co., Ltd. (formerly, Yantai VMI Hub LG International Co., Ltd.) (*1)	China	100.00	100.00	Dec. 31	Hub
Bowen Investment (Australia) Pty. Ltd.	Australia	100.00	100.00	Dec. 31	Coal mining
PT. Batubara Global Energy (BGE)	Indonesia	100.00	100.00	Dec. 31	"
PT. Megaprima Persada (MPP)	Indonesia	75.00	75.00	Dec. 31	"
PT. Mega Global Energy (MGE)	Indonesia	100.00	100.00	Dec. 31	"
PT. Ganda Alam Makmur (GAM)	Indonesia	60.00	60.00	Dec. 31	"
LX International (India) Ltd. (formerly, LG International (India) Ltd.) (*1)	India	100.00	100.00	Mar. 31	Export and import
PT. Green Global Lestari (GGL) (*3)	Indonesia	100.00	100.00	Dec. 31	Palm oil
PT. Parna Agromas (PAM)	Indonesia	95.00	95.00	Dec. 31	"
PT. Grand Utama Mandiri (GUM) (*3)	Indonesia	100.00	95.00	Dec. 31	"
PT. Tintin Boyok Sawit Makmur (TBSM) (*3)	Indonesia	100.00	95.00	Dec. 31	"
PT. Tintin Boyok Sawit Makmur Dua (TBSMD) (*3)	Indonesia	100.00	95.00	Dec. 31	"
PT. Green Global Utama (GGU)	Indonesia	100.00	100.00	Dec. 31	"
PT. LX International Indonesia (LXII) (formerly, LG International Indonesia (LGII))	Indonesia	100.00	100.00	Dec. 31	Service
PT. Binsar Natorang Energi (BNE)	Indonesia	95.00	95.00	Dec. 31	Hydroelectric energy
PT. Energy Metal Indonesia (EMI) (*2)	Indonesia	100.00	-	Dec. 31	Nickel
PT. Global Investment Institusi (GII) (*2)	Indonesia	100.00	-	Dec. 31	Health care
PT. Satu Gen Indonesia (SGI) (*2)	Indonesia	51.00	-	Dec. 31	"
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	China	100.00	100.00	Dec. 31	Steel frames
Philco Resources Ltd. (Rapu-Rapu)	Malaysia	60.00	60.00	Dec. 31	Copper mining
Resource Investment (Hong Kong) Ltd. (Xinzhen)	Hong Kong	100.00	100.00	Dec. 31	Coal mining
LX International Yakutsk Ltd. (formerly, LG International Yakutsk Ltd.) (*1)	Russia	100.00	100.00	Dec. 31	Real estate
Korea Carbon International Co., Ltd. (Shaanxi BBM)	Hong Kong	60.00	60.00	Dec. 31	Renewable energy
Colmineral, S.A. de C.V.	Mexico	100.00	100.00	Dec. 31	Iron ore
Fertilizer Resources Investment Ltd.	Hong Kong	100.00	100.00	Dec. 31	Fertilizer
Dangjin Tank Terminal Co., Ltd.	Korea	100.00	100.00	Dec. 31	Storage
Haiphong Steel Flower Electrical & Machinery Company Limited	Vietnam	100.00	100.00	Dec. 31	Steel frames
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.) (*1, 4)	Korea	51.00	51.00	Dec. 31	Logistics
Pantos Busan Newport Logistics Center Co., Ltd. (*4)	Korea	100.00	100.00	Dec. 31	Warehouse
Helistar air Co., Ltd. (*4)	Korea	100.00	100.00	Dec. 31	Logistics
Hanultari Co., LTD., (*4)	Korea	100.00	100.00	Dec. 31	Other food retail
Pantos Logistics (China) Co., Ltd. (*4)	China	100.00	100.00	Dec. 31	Logistics
Pantos Logistics (Shanghai) Co., Ltd. (*4)	China	100.00	100.00	Dec. 31	Warehouse
Pantos Logistics (Ningbo) Co., Ltd. (*4)	China	100.00	100.00	Dec. 31	Logistics
LX Pantos Logistics (Shenzhen) Co., Ltd. (*1, 4) (formerly, Pantos Logistics (Shenzhen) Co., Ltd.)	China	100.00	100.00	Dec. 31	"
Pantos Logistics (H.K) Co., Ltd. (*4)	Hong Kong	100.00	100.00	Dec. 31	"
Pantos Logistics (Taiwan) Co., Ltd. (*4)	Taiwan	100.00	100.00	Dec. 31	"
PT. LX Pantos Logistics Indonesia (formerly, PT. Pantos Logistics Indonesia) (*1, 4)	Indonesia	99.00	99.00	Dec. 31	"
PT. LX Pantos Logistics Jakarta (formerly, PT. Pantos Logistics Jakarta) (*1, 4)	Indonesia	100.00	100.00	Dec. 31	"
LX Pantos Logistics Singapore Pte. Ltd. (formerly, Pantos Logistics Singapore Pte. Ltd.) (*1, 4)	Singapore	100.00	100.00	Dec. 31	"
LX Pantos Logistics (Thailand) Co., Ltd. (formerly, Pantos Logistics (Thailand) Co., Ltd.) (*1, 4)	Thailand	100.00	100.00	Dec. 31	"
LX Pantos Logistics Malaysia Sdn. Bhd. (formerly, Pantos Logistics Malaysia Sdn. Bhd.) (*1, 4)	Malaysia	100.00	100.00	Dec. 31	"

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

24. Related party disclosures (cont'd)

	Country of domicile	Equity ownership (%)		Reporting date	Principal activity
		2021	2020		
LX Pantos Logistics (India) Pvt. Ltd. (formerly, Pantos Logistics (India) Pvt. Ltd.) (*1, 4)	India	100.00	100.00	Mar. 31	"
LX Pantos (Cambodia) Co., Ltd. (formerly, Pantos Logistics (Cambodia) Co., Ltd.) (*1, 4)	Cambodia	100.00	100.00	Dec. 31	"
LX Pantos Vietnam Co., Ltd. (formerly, Pantos Logistics Vietnam Co., Ltd.) (*1, 4)	Vietnam	100.00	100.00	Dec. 31	"
LX Pantos Australia Pty Ltd. (formerly, Pantos Logistics Australia Pty Ltd.) (*1, 4)	Australia	100.00	100.00	Dec. 31	"
LX Pantos Holdings (Thailand) Co., Ltd. (formerly, Pantos Holdings (Thailand) Co., Ltd.) (*1, 4)	Thailand	48.50	48.50	Dec. 31	"
Pantos Logistics Myanmar Co., Ltd. (*4)	Myanmar	87.96	87.96	Mar. 31	"
LX Pantos U.K. Ltd (formerly, Pantos Logistics U.K. Ltd.) (*1, 4)	UK	100.00	100.00	Dec. 31	"
LX Pantos Netherlands B. V (formerly, Pantos Logistics Benelux B.V) (*1, 4)	Netherlands	100.00	100.00	Dec. 31	"
Pantos Logistics France (*4)	France	100.00	100.00	Dec. 31	"
LX Pantos Poland SP.Z.O.O. (formerly, Pantos Logistics Poland) (*1, 4)	Poland	100.00	100.00	Dec. 31	"
LX Pantos Germany GmbH (formerly, Pantos Logistics Germany GmbH) (*1, 4)	Deutschland	100.00	100.00	Dec. 31	"
LX Pantos Spain Slu. (formerly, Pantos Logistics Spain S.L.) (*1, 4)	Spain	100.00	100.00	Dec. 31	"
LX Pantos Turkey Lojistik Ve Ticaret Ltd. Sti. (formerly, Pantos Logistics Ve Tic.Lgd.Sti) (*1, 4)	Turkey	100.00	100.00	Dec. 31	"
Pantos Logistics Sweden AB (*4)	Sweden	100.00	100.00	Dec. 31	"
LX Pantos Mexico, S.A. DE C.V. (formerly, Pantos Logistics Mexico) (*1, 4)	Mexico	100.00	100.00	Dec. 31	"
LX Pantos Logistica Do Brasil Ltda (formerly, Pantos Do Brasil Logistica) (*1, 4)	Brazil	100.00	100.00	Dec. 31	"
LX Pantos Colombia SAS (formerly, Pantos Logistics Colombia SAS) (*1, 4)	Colombia	100.00	100.00	Dec. 31	"
Pantos Logistics Chile SpA (*4)	Chile	100.00	100.00	Dec. 31	"
LX Pantos Panama, S.A (formerly, Pantos Logistics Panama S.A.) (*1, 4)	Panama	100.00	100.00	Dec. 31	"
Pantos Logistics AR S.A. (*4)	Argentina	100.00	100.00	Dec. 31	"
LX Pantos Solucoes Logisticas Do Brasil Ltda. (formerly, Hi Logistics Brasil Servicos De Logistica LTDA) (*1, 4)	Brasil	100.00	100.00	Dec. 31	Warehouse
FNS CIS LLC (*4)	Russia	100.00	100.00	Dec. 31	"
Pantos Logistics Kazakhstan (*4)	Kazakhstan	100.00	100.00	Dec. 31	"
Pantos Logistics Ukraine Ltd (*4)	Ukraine	100.00	100.00	Dec. 31	"
Pantos Customs Services LLC (*4, 5)	Russia	-	100.00	Dec. 31	Customs
Pantos Logistics L.L.C (Dubai) (*4)	Dubai	49.00	49.00	Dec. 31	"
Pantos Logistics L.L.C (Oman) (*4, 5)	Oman	-	70.00	Dec. 31	"
Pantos Logistics Co., LTD. Saudi Arabia (*4)	Saudi Arabia	100.00	100.00	Dec. 31	"
Pantos Logistics Nigeria Limited (*4, 5)	Nigeria	-	99.93	Dec. 31	"
LX Pantos Japan Inc. (formerly, Pantos Logistics Japan Inc.) (*1, 4)	Japan	100.00	100.00	Dec. 31	"
Hi Logistics (China) Co., Ltd. (*4)	China	100.00	100.00	Dec. 31	"
Hi Logistics RUS, LLC. (*4, 5)	Russia	-	100.00	Dec. 31	"
LX Pantos Solutions India Private Limited (formerly, Pantos Logistic Solutions India Private Limited) (*1, 4)	India	100.00	100.00	Mar. 31	"
Hi Logistics Egypt S.A.E (*4)	Egypt	99.26	99.26	Dec. 31	"
LX Pantos America, INC. (formerly, Pantos North America, INC.) (*1, 4)	USA	100.00	100.00	Dec. 31	"
LX Pantos Hungary KFT. (formerly, Pantos Logistics Hungary KTF.) (*1, 4)	Hungary	100.00	100.00	Dec. 31	"
Onecube International Logistics Co., Ltd. (*4)	China	100.00	100.00	Dec. 31	"
PT. Pantos Express Indonesia (*4)	Indonesia	49.00	49.00	Dec. 31	"

(*1) For the year ended December 31, 2021, the name of consolidated subsidiaries were changed.

(*2) For the year ended December 31, 2021, the Company included several subsidiaries in the consolidation scope by acquiring interests of PT. Global Investment Institusi (GII) directly, interests of PT. Satu Gen Indonesia (SGI) through its subsidiary, PT. Global Investment Institusi (GII), and interest of PT. Energy Metal Indonesia (EMI) through its subsidiary, PT. Batu bara Global Energy (BGE).

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

24. Related party disclosures (cont'd)

(*3) For the year ended December 31, 2021, PT.Green Global Lestari (GGL) acquired 5% of remaining shares in PT. Grand Utama Mandiri (GUM) and PT. Tintin Boyok Sawit Markur (TBSM), respectively. Also, PT. Tintin Boyok Sawit Markur (TBSM) acquired 5% of remaining shares in PT. Tintin Boyok Sawit MakmurDua (TBSMD).

(*4) As of December 31, 2021, the entities are subsidiaries of LX Pantos Logistics Co., Ltd., and the equity ownerships presented above are simple sums of equity interests held by LX Pantos Logistics Co., Ltd. and its subsidiaries.

(*5) For the year ended December 31, 2021, the Company excluded several subsidiaries from the consolidation scope by liquidating Pantos Logistics L.L.C (Oman), Pantos Logistics Nigeria Limited, and Hi Logistics RUS LLC., and selling Pantos Customs Services LLC.

Transactions with the related parties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			2020		
	Sales	Purchase	Service	Sales	Purchase	Service
Subsidiaries:						
LX International (America) Inc. (formerly, LG International (America) Inc.)	₩ 623,204	₩ -	₩ 4	₩ 502,134	₩ 543	-
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	226	2,765	34	247	48,896	193
LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.)	305	-	-	7,057	-	-
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)	1,408,448	36,161	430	782,104	17,849	-
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH)	570	65	27	2	55	1,264
LX International (Shanghai) Ltd. (formerly, LG International (China) Ltd.)	10	-	972	11	-	864
Bowen Investment (Australia) Pty Ltd	1,502	-	-	1,548	-	-
PT. Batubara Global Energy (BGE)	2,315	475,674	28	2,600	259,287	70
PT. Ganda Alam Makmur (GAM)	3,734	-	6	1,013	-	-
LX International India Private Limited (formerly, LG International (India) Ltd.)	-	-	947	-	-	1,132
PT. Green Global Lestari (GGL)	866	-	-	643	-	-
PT. Parna Agromas (PAM)	-	-	-	2	-	3
PT. Tintin Boyok Sawit Makmur (TBSM)	3	-	-	7	-	-
PT. Green Global Utama (GGU)	24	-	1	19	-	-
PT. LX International Indonesia (LXII) (formerly, PT. LG International Indonesia (LGII))	382	-	17	180	-	-
PT. Energy Metal Indonesia (EMI)	1	-	-	-	-	-
PT. Global Investment Institusi (GII)	72	-	-	-	-	-
PT. Satu Gen Indonesia (SGI)	-	-	563	-	-	-
PT. Binsar Natorang Energi (BNE)	118	-	-	3,489	-	-
Steel Flower Electric & Machinery (Tianjin) Co., Ltd	116	517	3	348	546	-
LX International Yakutsk Ltd. (formerly, LG International Yakutsk Ltd.)	512	-	-	398	-	-
Dangjin Tank Terminal Co., Ltd.	147	-	-	142	-	-
Haiphong Steel Flower Electrical & Machinery Company Limited	5,307	27	116	6,740	-	109
Highland Cement International Co., Ltd	-	-	-	14	-	-
Philco Resources Ltd. (Rapu-Rapu)	133	-	-	109	-	-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)	564	50,400	20,400	1	22,768	11,300

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

24. Related party disclosures (cont'd)

	2021			2020		
	Sales	Purchase	Service	Sales	Purchase	Service
LX Pantos Logistics Japan Inc. (formerly, Pantos Logistics Japan Inc.)	₩ -	₩ -	₩ -	₩ -	₩ 174	₩ 309
PT. Mega Global Energy (MGE)	-	-	4	-	-	-
LX Pantos Logistics (Shenzhen) Co., Ltd. (formerly, Pantos Logistics (Shenzhen) Co., Ltd.)	-	-	10,117	-	-	9,532
LX Pantos Poland SP.Z.O.O. (formerly, Pantos Logistics Poland)	-	-	-	2	-	-
Yantai LX International VMI Co., LTD (formerly, Yantai VMI Hub LG International Co., Ltd.)	5	-	1	-	-	282
	<u>2,048,564</u>	<u>565,609</u>	<u>33,670</u>	<u>1,308,810</u>	<u>350,118</u>	<u>25,058</u>
Associates:						
POSCO-PWPC (Poland Wroclaw Processing Center)	908	-	-	209	-	-
Kernhem B.V.	1,972	-	-	1,088	-	-
ADA Oil LLP	327	-	-	319	-	-
Biofriends INC.	1,392	-	-	-	-	-
Musandam Power Company SAOC	31	-	3	72	-	-
	<u>4,630</u>	<u>-</u>	<u>3</u>	<u>1,688</u>	<u>-</u>	<u>-</u>
Other related parties: (*1)						
LG Corp.	567	-	2,832	-	-	3,543
LG Electronics Inc.	121,507	-	1,318	301,980	2,641	208
LG Chem Ltd.	79,791	95,890	5	54,798	57,800	7
LG Display Co., Ltd.	-	14,266	2,809	-	46,295	14,345
Others	124,850	621	13,732	61,720	750	14,345
	<u>326,715</u>	<u>110,777</u>	<u>20,696</u>	<u>418,498</u>	<u>107,486</u>	<u>18,103</u>
	<u>₩ 2,379,909</u>	<u>₩ 676,386</u>	<u>₩ 54,369</u>	<u>₩ 1,728,996</u>	<u>₩ 457,604</u>	<u>₩ 43,161</u>

(*1) It is not included in the scope of related parties per KIFRS 1024, *Disclosure of Related Parties*, but it belongs to the same conglomerate under the *Act on Monopoly Regulation and Fair Trade*.

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

24. Related party disclosures (cont'd)

Receivables and payables from transactions with the related parties as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021				
	Accounts receivable	Loans	Other receivables	Accounts payable	Other payables
Subsidiaries:					
LX International (America) Inc. (formerly, LG International (America) Inc.)	₩ 59,559	₩ -	₩ 12,750	₩ -	₩ 6,934
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	54	-	287	1	1
LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.)	-	-	36	-	-
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)	98,572	-	372	8,035	10,997
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH)	321	-	17	-	-
LX International (Shanghai) Ltd. (formerly, LG International (China) Ltd.)	-	-	12	-	-
Yantai LX International VMI Co., LTD (formerly, Yantai VMI Hub LG International Co., Ltd.)	-	-	13	-	2
Haiphong Steel Flower Electrical & Machinery Company Limited	2,632	-	66	-	18
Bowen Investment (Australia) Pty Ltd	-	35,754	720	-	-
PT. Batubara Global Energy (BGE)	-	-	765	30,153	263
PT. Mega Global Energy (MGE)	-	-	10	-	1
PT. Mega PRIMA PERSADA (MPP)	-	-	17	-	-
PT. Ganda Alam Makmur (GAM)	-	17,071	8,791	-	1
LX International India Private Limited Ltd. (formerly, LG International (India) Ltd.)	-	-	18	-	-
PT. Global Investment Institusi (GII)	-	-	79	-	621
PT. Green Global Lestari (GGL)	-	27,113	3,280	-	-
PT. Parna Agromas (PAM)	-	-	69	-	1
PT. Grand Utama Mandiri (GUM)	-	-	38	-	2
PT. Tintin Boyok Sawit Makmur (TBSM)	-	-	21	-	-
PT. Green Global Utama (GGU)	-	-	32	-	1
PT. LX International Indonesia (LXII) (formerly, PT. LG International Indonesia (LGII))	-	8,234	1,883	-	11
PT. Energy Metal Indonesia (EMI)	-	-	1	-	-
PT. Binsar Natorang Energi (BNE)	-	-	33	-	12
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	-	-	75	-	-
LX International Yakutsk Ltd. (formerly, LG International Yakutsk Ltd.)	-	11,250	2,468	-	3
Dangjin Tank Terminal Co., Ltd.	-	-	29	-	-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)	621	-	10	-	2,923
LX Pantos Logistics (Shenzhen) Co., Ltd. (formerly, Pantos Logistics (Shenzhen) Co., Ltd.)	-	-	-	-	249
Philco Resources Ltd. (Rapu-Rapu)	-	3,897	249	-	-
	161,759	103,319	32,141	38,189	22,040
Associates:					
POSCO-IPPC (India Pune Steel Processing Center)	-	-	-	-	1
POSCO-PWPC (Poland Wroclaw Processing Center)	904	-	-	-	-
Gansu Wuwei Cogeneration Power Plant	-	-	1	-	-
KM Resources Ltd. (Rapu-Rapu)	-	2,784	-	-	-
Kernhem B.V.	-	47,210	4,847	-	-

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

24. Related party disclosures (cont'd)

	2021				
	Accounts receivable	Loans	Other receivables	Accounts payable	Other payables
Biofriends INC.	₩ 221	₩ -	₩ -	₩ -	₩ -
ADA Oil LLP	-	11,246	26	-	-
	1,125	61,240	4,874	-	1
Other related parties:					
LG Corp.	-	-	2,658	-	3,165
LG Electronics Inc.	11,935	-	-	-	451
LG Chem Ltd.	8,771	-	-	2,383	33,216
LG Display Co., Ltd.	-	-	-	-	2,940
Others	8,485	-	8,663	277	1,472
	29,191	-	11,321	2,660	41,244
	₩ 192,075	₩ 164,559	₩ 48,336	₩ 40,849	₩ 63,285
	2020				
	Accounts receivable	Loans	Other receivables	Accounts payable	Other payables
Corporations that have significant influence on the Company at the end of the previous year:					
LG Corp.	₩ -	₩ -	₩ 2,763	₩ -	₩ 3,346
Subsidiaries:					
LX International (America) Inc. (formerly, LG International (America) Inc.)	24,413	-	6	363	1,619
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	18	-	281	6,114	2
LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.)	616	-	9	-	1
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)	124,318	-	30	21	1,321
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH)	-	-	18	-	114
LX International (Shanghai) Ltd. (formerly, LG International (China) Ltd.)	-	-	4	-	-
Yantai LX International VMI Co., LTD (formerly, Yantai VMI Hub LG International Co., Ltd.)	-	-	10	-	6
Haiphong Steel Flower Electrical & Machinery Company Limited	3,664	-	43	-	42
Bowen Investment (Australia) Pty Ltd	-	59,922	443	-	-
PT. Batubara Global Energy (BGE)	-	-	135	23,803	370
PT. Mega Global Energy (MGE)	-	-	13	-	-
PT. Ganda Alam Makmur (GAM)	-	39,168	18,149	-	-
LX International India Private Limited Ltd. (formerly, LG International (India) Ltd.)	-	-	3	-	-
PT. Green Global Lestari (GGL)	-	21,619	2,462	-	-
PT. Parna Agromas (PAM)	-	-	18	-	1
PT. Grand Utama Mandiri (GUM)	-	-	7	-	-
PT. Tintin Boyok Sawit Makmur (TBMSM)	-	-	12	-	-
PT. Green Global Utama (GGU)	-	-	16	-	-
PT. LX International Indonesia (LXII) (formerly, PT. LG International Indonesia (LGII))	-	7,557	1,348	-	-
PT. Binsar Natorang Energi (BNE)	-	5,091	281	-	11
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	-	-	7	-	-

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

24. Related party disclosures (cont'd)

	2020				
	Accounts receivable	Loans	Other receivables	Accounts payable	Other payables
LX International Yakutsk Ltd. (formerly, LG International Yakutsk Ltd.)	₩ -	₩ 10,325	₩ 1,860	₩ -	₩ 2
Dangjin Tank Terminal Co., Ltd.	-	-	24	-	-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)	-	-	2	-	934
LX Pantos Logistics (Shenzhen) Co., Ltd. (formerly, Pantos Logistics (Shenzhen) Co., Ltd.)	-	-	-	-	381
Philco Resources Ltd. (Rapu-Rapu)	-	3,576	116	-	-
	153,029	147,258	25,297	30,301	4,804
Associates:					
POSCO-IPPC (India Pune Steel Processing Center)	-	-	-	-	1
POSCO-PWPC (Poland Wroclaw Processing Center)	197	-	-	-	-
Kernhem B.V.	-	43,328	7,984	-	-
ADA Oil LLP	-	10,754	650	-	-
Musandam Power Company SAOC	-	-	2	-	-
KM Resources Ltd.(Rapu-Rapu)	-	1,306	-	-	-
GS HP Sunflower Village Int'l Corp.	-	-	49	-	-
	197	55,388	8,685	-	1
Other related parties:					
LG Electronics Inc.	10,953	-	-	234	232
LG Chem Ltd.	6,593	-	-	90	4,575
LG Display Co., Ltd.	-	-	-	2,129	359
Others	9,651	-	4,523	337	851
	27,197	-	4,523	2,790	6,267
	₩ 180,423	₩ 202,646	₩ 41,268	₩ 33,091	₩ 14,418

The Company recognized allowance for doubtful accounts of ₩53,120 million as of December 31, 2021 (2020: ₩59,854 million) for the trade and other accounts receivable from the related parties.

Transfers under finance arrangements with the related parties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021			
	Dividends	Investments in cash (capital reduction)	Loans	Collection
Subsidiaries:				
Bowen Investment (Australia) Pty Ltd	₩ -	₩ -	₩ -	₩ 25,097
PT. Binsar Natorang Energi (BNE)	-	-	-	5,091
PT. Green Global Lestari (GGL)	-	-	3,398	-
PT. Ganda Alam Makmur (GAM)	-	-	-	23,501
Dangjin Tank Terminal Co., Ltd.	-	1,700	-	-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)	18,105	-	-	-
Resource Investment (Hong Kong) Ltd. (Xinzheng)	1,563	-	-	-
Fertilizer Resources Investment Ltd.	4,957	-	-	-
PT. Global Investment Institusi (GII)	-	7,280	-	-
	24,625	8,980	3,398	53,689
Associates:				
Biofriends INC.	-	2,720	-	-
GS HP Sunflower Int'l Village Corp.	50	-	-	-
Musandam Power Company SAOC	1,041	-	-	-
Gansu Wuwei Cogeneration Power Plant	4,381	-	-	-

24. Related party disclosures (cont'd)

		2021			
		Dividends	Investments in cash (capital reduction)	Loans	Collection
ADA Oil LLP	₩	-	₩ -	₩ -	₩ 466
KM Resources Ltd.(Rapu-Rapu)		-	-	1,291	-
		5,472	2,720	1,291	466
Other related parties:					
Tianjin LG Bohai Chemical Co.,Ltd.		453	-	-	-
	₩	30,550	₩ 11,700	₩ 4,689	₩ 54,155
		2020			
		Dividends	Investments in cash (capital reduction)	Loans	Collection
Subsidiaries:					
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	₩	782	₩ -	₩ -	₩ -
PT. Green Global Lestari (GGL)		-	4,766	3,494	-
LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.)		11,985	-	-	-
		12,767	4,766	3,494	-
Associates:					
GS HP Sunflower Int'l Village Corp.		183	-	-	-
Musandam Power Company SAOC		1,079	-	-	-
Gansu Wuwei Cogeneration Power Plant		2,490	-	-	-
KM Resources Ltd.(Rapu-Rapu)		-	-	1,436	-
		3,752	-	1,436	-
	₩	16,519	₩ 4,766	₩ 4,930	₩ -

Details of compensation for key management personnel are as follows (Korean won in millions):

	2021	2020
Short-term employee benefits	₩ 9,050	₩ 5,993
Retirement benefits	2,555	4,235
	₩ 11,605	₩ 10,228

LX International Corp. (formerly, LG International Corp.)
Notes to the separate financial statements
December 31, 2021 and 2020

25. Commitments and contingencies

25.1 Guarantees provided

Guarantees provided by the Company as of December 31, 2021 as follows (foreign currencies in thousands):

	Financial institution	Object	Limit		Outstanding
Subsidiaries:					
LX International (America) Inc. (formerly, LG International (America) Inc.)	Mizuho and others	Local finance	USD	134,500	109,000
LX International (Japan) Ltd. (formerly, LG International (Japan) Ltd.)	MUFG and others	"	JPY	12,038,000	38,000
LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.)	SMBC and others	"	USD	280,000	10,472
LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) Pte. Ltd.)	SMBC and others	"	HKD	1,500	98
LX International (Deutschland) GmbH (formerly, LG International (Deutschland) GmbH)	SMBC and others	"	USD	352,000	121,652
Bowen Investment (Australia) Pty Ltd	Mizuho and others	"	SGD	200	17
LX International (Shanghai) Corp. (formerly, LG International (China) Corp.)	ANZ and others	"	USD	13,000	-
LX International India Private Limited (formerly, LG International (India) Ltd.)	Hana Bank and others	"	EUR	5,000	-
		"	AUD	77,992	17,008
		"	USD	10,000	-
	Citi	"	CNY	80,000	-
PT. Batubara Global Energy (BGE)		"	INR	1,900	-
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	BTPN and others	"	USD	62,400	16,180
	HSBC and others	"	IDR	1,300,000	581,280
PT. Parna Agromas (PAM)		"	CNY	345,000	-
	BTPN and others	"	USD	5,000	-
PT. Ganda Alam Makmur (GAM) (*1)		"	IDR	21,300,000	58,719
PT. Binsar Natorang Energi (BNE)	KEXIM and others	"	USD	40,500	40,500
Haipong Steel Flower Electrical & Machinery Co., Ltd.	SG	"	IDR	2,200,000	561,365
		"	USD	4,679	4,679
	HSBC and others	"	USD	9,600	4,897
PT. Grand Utama Mandiri (GUM)	Hana Bank and others	"	VND	301,104,000	210,063,890
PT. Tintin Boyok Sawit Makmur (TBSM)	Shinhan Bank and others	"	IDR	40,700,000	47,805
PT. Mega Global Energy (MGE)		"	IDR	115,700,000	44,096
PT. Energy Metal Indonesia (EMI)	Woori Bank		IDR	120,000,000	-
	Woori Bank		IDR	86,910,000	65,612,587
PT. Global Investment Institusi (GII)	Hana Bank and others		USD	2,100	-
PT. LX International Indonesia (LXII)) (formerly, PT. LG International Indonesia (LGII))			IDR	2,500,000	145,912
	Hana Bank and others	"	USD	2,100	1,220
		"	IDR	2,400,000	431,901
		"	USD	21,500	-
PT. Green Global Utama (GGU)	BTPN and others	"	IDR	336,000,000	200,998
Associates:					
Musandam Power Company S.A.O.C	Bank Muscat	"	OMR	941	941

(*1) The amount represents 60% of total contracted guarantees, which is the same percentage as the company's equity ownership in the subsidiary. Furthermore, the Company is jointly and severally liable for outstanding balances.

25.2 Major agreements such as opening letters of credit

As of December 31, 2021, the agreements concluded for the establishment of Letter of credits and other financial arrangement with financial institutions are as follows (Korean won in millions and foreign currencies in thousands):

Description	Financial institution	Contract amount	
Bills bought	KDB Bank and others	USD	60,500
Letter of credits	Shinhan Bank and others	USD	93,530
Payment guarantee	ANZ and others	USD	5,000
		KRW	709
Bank overdrafts	Hana Bank and others	KRW	13,000
Line of credit	KDB Bank and others	USD	15,000
		KRW	80,000
Trade financing	Woori Bank and others	USD	534,000
		KRW	108,000
Total		USD	708,030
		KRW	201,709

25.3 Guarantees received

Details of guarantees received as of December 31, 2021 and 2020 are as follows (Korean won in millions and foreign currencies in thousands):

2021	Financial institution	Details	Guarantee amount	Description
	Hana Bank and others	Bonds and others	₩ 16,573	KRW 8,128, USD 4,679, OMR 941
2020	Financial institution	Details	Guarantee amount	Description
	Hana Bank and others	Bonds and others	₩ 17,659	KRW 9,465, USD 5,084, OMR 942

25.4 Pledged notes and checks

The Company pledged 17 notes and 4 checks as collateral to its customers, creditors and guarantors related to various guarantees and borrowings as of December 31, 2021.

25.5 License agreement

The Company terminated a license agreement with LG Corp. for the use of "LG" brand on June 30, 2021.

25.6 Joint liability on guarantee

The Company and newly incorporated entity, LF Corp. (formerly, LG Fashion Corporation), are jointly and severally liable for the obligations of LGI existing before the spin-off.

25.7 Pending lawsuits

The Company is a defendant in various lawsuits with claims aggregating to ₩4,582 million, and as of December 31, 2021, the outcomes of litigation are not reliably determinable. However, in some litigation cases, it was determined that there is a possibility of an outflow of resources and that the effect can be measured reliably. In this regard, the effect is already reflected in the financial statements (see Note 14).

In the case of arbitration with Oman's government in relation to the termination of the oil business operated in Oman, which was disclosed as contingent liabilities for the year ended December 31, 2020, the Company has excluded the case from the litigation amount due to the conclusion of the arbitration agreement and the fulfillment of agreement for the year ended December 31, 2021.

25.8 Other commitments

As of December 31, 2021, the commitments the Company has entered into with customers other than financial institutions are as follows:

Type of commitment	Counterparty	Description
Put option	Gansu Wuwei Cogeneration Power Plant	As of the October 10, 2015, the Company signed a put option contract with Gansu Province Electricity Investment Group Co., Ltd. to acquire 30% of equity interests of Gansu Wuwei Cogeneration Power Plant for a capital increase.
Put option	Bio Friends Co., Ltd.	As of the May 20, 2021, the Company signed a put option contract with Bio Friends Co., Ltd. and its stakeholder, Won-Jun Jo, to acquire equity shares of Bio Friends Co., Ltd.
Put option	Pablo Air Co., Ltd.	As of the December 1, 2021, the Company signed two contracts for the acquisition of convertible preferred stocks of Pablo Air Co., Ltd. with Pablo Air Co., Ltd. and its stakeholder, Young-Jun Kim, and signed a put option contract for the new stocks to be acquired.

25.9 Uncertainty regarding the influence of COVID-19

The spread of the pandemic Covid-19 is exerting major impact on not only the national economy, but also the global economy. Also, various forms of governmental support policies are being announced in order to cope with Covid-19.

The accounts that are influenced by Covid-19 are mostly the recoverability of accounts receivable (see Note 12), impairment of the investments in associates (see Note 9, 22) and so on. The Company has prepared financial statements by reasonably estimating the impact of Covid-19. However, the spread or termination of Covid-19 may affect the Company's estimation and assumptions, but the ultimate therefrom is not reasonably estimable as of December 31, 2021.

25.10 Uncertainty regarding Russia-Ukraine war

Armed conflicts in Ukraine, which began in February 2022, and related sanctions against Russia by the international community thereafter could affect companies subject to sanctions, as well as companies directly or indirectly operating with Ukraine or Russia, and those directly or indirectly exposed to industry or the economy of Ukraine or Russia. This event is a non-adjusting event after the reporting period. The Company cannot reasonably estimate the future financial impact of the Russia-Ukraine war.

26. Financial risk management objectives and policies

The Company's principal financial liabilities, other than derivatives, comprise loans and borrowings, trade and other payables. The main purpose of these financial liabilities is to finance the Company's operations. The Company has trade receivables, loans and other receivables, and cash and short-term deposits that derive directly from its operations. The Company also holds financial assets at fair value through profit or loss and financial assets at fair value through OCI and enters into derivative transactions.

The Company is exposed to market risk, credit risk and liquidity risk.

The Board of Directors reviews and agrees policies for managing each of these risks which are summarized below. It is the Company's policy that no trading in derivatives for speculative purposes is to be undertaken.

26.1 Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market prices comprise three types of risk: interest rate risk, currency risk, commodity price risk and other price risk, such as equity risk. Financial instruments affected by market risk include loans and borrowings, deposits, loans, and derivative financial instruments.

The sensitivity analysis is in the following sections relate to the financial position as of December 31, 2021 and 2020.

The sensitivity analysis has been prepared on the basis that the amount of net debt, the ratio of fixed to floating interest rates of the debt and derivatives and the proportion of financial instruments in foreign currencies are all held constant and on the basis of the hedge designations in place at December 31, 2021.

The analysis excludes the impact of movements in market variables on the carrying value of pension and other post-retirement obligations, provisions and on the non-financial assets and liabilities of foreign operations.

The following assumptions have been made in calculating the sensitivity analyses:

- The statement of financial position sensitivity relates to derivatives, financial assets at fair value through profit or loss and financial assets at fair value through OCI.
- The sensitivity of the relevant statement of profit or loss item is the effect of the assumed changes in respective market risks. This is based on the financial assets and financial liabilities held at December 31, 2021 and 2020 including the effect of hedge accounting.
- The sensitivity of equity is calculated by taking into account the effect of any associated cash flow hedges and hedges of a net investment in a foreign subsidiary at December 31, 2020 associate with changes in underlying assets.

26.1.1 Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's long-term debt obligations with floating interest rates.

The Company is exposed to interest rate risk due to its long-term debt. The Company is exposed to cash flow interest rate risk due to its borrowings with floating interest rates and fair value interest rate risk due to its borrowings with fixed interest rates.

The Company's position with regard to interest rate risk exposure is mainly related to debt obligations such as bonds, loans and interest-bearing deposits and investments. The Company has a risk management program in place to monitor and actively manage such risks.

The Company manages its interest rate risk by establishing regional and global working capital sharing systems, regularly monitoring market interest rates, and preparing action plans.

26.1.1 Interest rate risk (cont'd)

Interest rate sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in interest rates on that portion of loans and borrowings, after the impact of hedge accounting. With all other variables held constant, the Company's profit before tax is affected through the impact on floating rate borrowings as follows. There is only an immaterial impact on the Company's equity (Korean won in millions):

	2021		2020	
	Increase by 1%	Decrease by 1%	Increase by 1%	Decrease by 1%
Interest income	₩ 3,200	₩ (3,200)	₩ 4,364	₩ (4,364)
Interest expenses	(1,314)	1,314	(2,506)	2,506
Net effect	₩ 1,886	₩ (1,886)	₩ 1,858	₩ (1,858)

The assumed movement in basis points for interest rate sensitivity analysis is based on the currently observable market environment.

Interest rate benchmark reform

The following table demonstrates the nominal amount and weighted average maturity of derivatives as of Dec 31, 2021 and 2020 with hedging relationships that will be affected by interest rate reform as financial instruments are converted to risk-free interest rates (RFR), which are analyzed by interest rate criteria. Derivatives as a hedging instrument provide a close approximation of the level of risk exposure that banks manage through a hedging relationship.

(Korean won in millions, years)

Description	Interest	2021		2020	
		Valuation amount	Average maturity (Year)	Valuation amount	Average maturity (Year)
Currency Swap	LIBOR USD (3M)	₩ 1,743	0.1	₩ (8,629)	0.2

26.1.2 Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company's exposure to the risk of changes in foreign exchange rates relates primarily to the Company's operating activities (when revenue or expense are denominated in a different currency from the Company's functional currency) and the Company's net investments in foreign operations.

The Company is exposed to foreign exchange risk arising from international operations and transactions with different foreign currencies. Most widely used foreign currencies are the USD, EUR, JPY, and others.

The Company manages its foreign currency risk by entering into currency forward contracts. Exposure to currency translation risk is largely dependent on the accounting standards of the local jurisdiction and the translation methods required by such jurisdiction.

26.1.3 Foreign currency risk (cont'd)

Foreign currency sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in the exchange rate. With all other variables held constant, the Company's profit before tax is affected, as follows (due to changes in the fair value of monetary assets and liabilities including undesignated foreign currency derivatives) (Korean won in millions):

	2021		2020	
	Increase by 10%	Decrease by 10%	Increase by 10%	Decrease by 10%
Gain (loss) on foreign currency translation	₩ 27,777	₩ (27,777)	₩ 4,393	₩ (4,393)
Gain (loss) on valuation of derivative financial instruments	(20,702)	20,702	(3,139)	3,139
Net effect (*1)	₩ 7,075	₩ (7,075)	₩ 1,254	₩ (1,254)

(*1) The Company manages its exchange rate risk arising from assets and liabilities denominated in foreign currencies through derivative contracts.

26.2 Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily for trade receivables and loan notes) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

The book value of financial assets represents maximum exposure to credit risk. The maximum exposures to credit risk as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Cash equivalents (*1)	₩ 261,881	₩ 328,085
Short-term financial instruments	23,223	35,190
Equity instruments held for long-term:		
Financial assets at fair value through profit or loss	8,402	7,782
Financial assets at fair value through OCI.	121,082	107,458
Trade accounts receivable	366,359	304,588
Other accounts receivable (*2)	46,847	26,948
Long-term loans	103,205	145,787
Other financial assets (*2)	40,151	52,549
	₩ 971,150	₩ 1,008,387

(*1) Excludes cash on hand.

(*2) Excludes other receivables in relation to derivatives.

26.3 Maturity profile of financial assets

The table below summarizes the maturity profile of the Company's financial assets based on contractual undiscounted payments (Korean won in millions):

	2021				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Cash and cash equivalents	₩ 262,489	₩ -	₩ -	₩ -	₩ 262,489
Short-term financial instruments	23,223	-	-	-	23,223
Trade accounts receivable	365,944	415	-	-	366,359
Other accounts receivable	48,788	-	-	-	48,788
Long-term loans	-	19,397	59,816	23,992	103,205
Other financial assets	10,599	5,859	8,213	15,480	40,151
	<u>₩ 711,043</u>	<u>₩ 25,671</u>	<u>₩ 68,029</u>	<u>₩ 39,472</u>	<u>₩ 844,215</u>

	2020				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Cash and cash equivalents	₩ 328,406	₩ -	₩ -	₩ -	₩ 328,406
Short-term financial instruments	35,190	-	-	-	35,190
Trade accounts receivable	303,794	413	381	-	304,588
Other accounts receivable	32,543	501	-	-	33,044
Long-term loans	-	20,677	21,618	103,492	145,787
Other financial assets	4,258	21,597	6,701	19,993	52,549
	<u>₩ 704,191</u>	<u>₩ 43,188</u>	<u>₩ 28,700</u>	<u>₩ 123,485</u>	<u>₩ 899,564</u>

26.4 Liquidity risk

Liquidity risk refers to the risk that the Company may default on the contractual obligations that become due.

The table below summarizes the maturity profile of the Company's financial liabilities based on contractual undiscounted payments (Korean won in millions):

	2021				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Trade accounts payable	₩ 294,735	₩ -	₩ -	₩ -	₩ 294,735
Other accounts payable	115,426	-	-	-	115,426
Borrowings	148,392	116,638	37,564	21,388	323,982
Bonds payable	139,980	119,832	69,819	79,812	409,443
Lease liabilities	5,442	1,059	103	153	6,757
Other financial liabilities	19,377	-	-	-	19,377
	<u>₩ 723,352</u>	<u>₩ 237,529</u>	<u>₩ 107,486</u>	<u>₩ 101,353</u>	<u>₩ 1,169,720</u>

	2020				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Trade accounts payable	₩ 281,730	₩ -	₩ -	₩ -	₩ 281,730
Other accounts payable	46,722	-	-	-	46,722
Borrowings	109,871	150,175	76,240	32,259	368,545
Bonds payable	99,983	259,609	49,826	49,872	459,290
Lease liabilities	4,985	1,463	97	212	6,757
Other financial liabilities	32,685	7,150	-	-	39,835
	<u>₩ 575,976</u>	<u>₩ 418,397</u>	<u>₩ 126,163</u>	<u>₩ 82,343</u>	<u>₩ 1,202,879</u>

The table above represents the maturities of the financial liabilities as of each reporting date.

26.5 Capital management

The primary objective of the Company's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximize its shareholders' value.

The Company manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Company may adjust the dividend distributions, return capital or issue new shares.

The Company monitors capital using various gearing ratios including debt and net debt ratios. The Company includes within total borrowings, interest-bearing loans and borrowings, trade and other payables. Details of gearing ratios as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Total liabilities (A)	₩ 1,213,673	₩ 1,241,537
Total equity (B)	1,805,371	1,369,224
Cash and cash equivalents (C)	262,489	328,406
Total borrowings (D)	740,181	834,592
Debt ratio (A / B)	67.23%	90.67%
Net borrowing ratio ((D-C) / B)	26.46%	36.97%

27. Fair value

27.1 Fair value of financial instruments

The book value and fair value of financial instruments as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021		2020	
	Book value	Fair value	Book value	Fair value
Financial assets:				
Financial assets measured at amortized cost (*1):				
Cash and cash equivalents	₩ 144,781	₩ 144,781	₩ 95,133	₩ 95,133
Short-term financial instruments	23,223	23,223	35,190	35,190
Trade accounts receivable	366,359	366,359	304,588	304,588
Long-term loans	103,205	103,205	145,787	145,787
Other accounts receivable	46,847	46,847	26,948	26,948
Other financial assets	40,151	40,151	52,549	45,998
	<u>724,566</u>	<u>724,566</u>	<u>660,195</u>	<u>660,195</u>
Financial assets recognized at fair value:				
Cash and cash equivalents	117,708	117,708	233,273	233,273
Other accounts receivable related derivatives	1,941	1,941	6,096	6,096
Equity instruments held for long-term	129,484	129,484	115,239	115,239
	<u>249,133</u>	<u>249,133</u>	<u>354,608</u>	<u>354,608</u>
	<u>₩ 973,699</u>	<u>₩ 973,699</u>	<u>₩ 1,014,803</u>	<u>₩ 1,014,803</u>
	2021		2020	
	Book value	Fair value	Book value	Fair value
Financial liabilities:				
Financial liabilities measured at amortized cost (*1):				
Borrowings	₩ 251,675	₩ 251,675	₩ 313,726	₩ 313,726
Bonds payable	269,462	269,462	359,307	359,307
Current portion of bonds and long-term borrowings	212,287	212,287	154,802	154,802
Other financial liabilities	435,055	435,055	366,436	366,436
	<u>1,168,479</u>	<u>1,168,479</u>	<u>1,194,271</u>	<u>1,194,271</u>
Financial liabilities recognized at fair value:				
Other accounts payable related derivatives	1,240	1,240	7,113	7,113
Other financial liabilities	-	-	1,495	1,495
	<u>1,240</u>	<u>1,240</u>	<u>8,608</u>	<u>8,608</u>
	<u>₩ 1,169,719</u>	<u>₩ 1,169,719</u>	<u>₩ 1,202,879</u>	<u>₩ 1,202,879</u>

(*1) As the carrying amounts are considered to be a reasonable approximation of the fair values, the carrying amounts have been stated as the fair values.

27.2 Fair value measurement of assets and liabilities recorded in the statements of financial position

The Company uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

- Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities
- Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly
- Level 3: techniques which use inputs that have a significant effect on the recorded fair value that are not based on observable market data.

As of December 31, 2020, the Company holds the assets and liabilities measured at fair value in the statements of financial position, and assets and liabilities for which the fair values were disclosed as follows (Korean won in millions):

	2021		
	Level 1	Level 2	Level 3
Assets and liabilities measured at fair value:			
Financial assets at fair value through profit or loss:			
Cash and cash equivalents	₩ -	₩ 117,708	₩ -
Other accounts receivable related to derivatives	-	198	-
Equity instruments held for long-term (*1)	-	-	8,402
Financial assets at fair value through OCI:			
Equity instruments held for long-term (*1)	3,016	-	117,626
Financial liabilities at fair value through profit or loss:			
Other accounts payable related to derivatives	-	1,240	-
Derivatives related to hedge accounting:			
Other accounts receivable related to derivatives	-	1,743	-
Assets and liabilities for which fair values are disclosed:			
Cash and cash equivalents	₩ 608	₩ 144,173	₩ -
Short-term financial instruments	-	20,000	3,223
Trade accounts receivable	-	-	366,359
Long-term loans	-	-	103,205
Other accounts receivable	-	-	46,847
Other financial assets	-	10	40,141
Borrowings	-	251,675	-
Bonds payable	-	269,462	-
Current portion of bonds payable and long-term borrowings	-	212,287	-
Other financial debts	-	-	435,055

(*1) Equity instruments held for long-term whose fair value cannot be measured reliably was measured at cost after recognizing the impairment loss.

There was no movement between the levels of the fair value hierarchy for the year ended December 31, 2021.

27.2 Fair value measurement of assets and liabilities recorded in the statements of financial position (cont'd)

	2020		
	Level 1	Level 2	Level 3
Assets and liabilities measured at fair value:			
Financial assets at fair value through profit or loss:			
Cash and cash equivalents	₩ -	₩ 233,273	₩ -
Other accounts receivable related to derivatives	-	6,096	-
Equity instruments held for long-term (*1)	-	-	3,002
Financial assets at fair value through OCI:			
Equity instruments held for long-term (*1)	1,068	-	105,949
Financial liabilities at fair value through profit or loss:			
Other accounts payable related to derivatives	-	575	-
Derivatives related to hedge accounting:			
Other accounts payable related to derivatives	-	6,538	-
Other financial debts	-	1,495	-
Assets and liabilities for which fair values are disclosed:			
Cash and cash equivalents	₩ 321	₩ 94,812	₩ -
Short-term financial instruments	-	20,000	15,190
Trade accounts receivable	-	-	304,588
Long-term loans	-	-	145,787
Other accounts receivable	-	-	26,948
Other financial assets	-	10	52,539
Borrowings	-	313,726	-
Bonds payable	-	359,307	-
Current portion of bonds payable and long-term borrowings	-	154,802	-
Other financial debts	-	-	366,436

(*1) Equity securities whose fair value cannot be measured reliably was measured at cost after recognizing the impairment loss. Accordingly, it has been excluded from the above fair value hierarchy.

Valuation method and interest rate used to determine fair value

Equity securities within level 1 are traded in active markets (such as the Korea Exchange) for marketable equity securities, which were evaluated based on the closing price as of the end of the reporting period.

Derivative instruments within level 2, after calculating the expected cash flow by using the current exchange rate at the end of the reporting period, were measured at present value, and the discount rate applied was 1.29% during the period (2020: 0.66%).

Equity securities within level 3 were evaluated using the DCF as an active market does not exist for non-marketable equity securities. The discount rate applied was 6.93%~12.99% during the period (2020: 7.34~14.62%).

28. Statements of cash flows

Non-cash adjustments to reconcile profit for the year to net cash flows for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Depreciation	₩ 8,647	₩ 8,225
Amortization	831	568
Impairment loss (reversal) on intangible assets	(540)	100
Retirement benefits	4,416	5,050
Bad debt expenses (Reversal of allowance for bad debts)	11,096	(4,571)
Interest income	(11,963)	(7,977)
Gain on foreign currency translation	(15,657)	(21,891)
Interest expenses	17,903	23,047
Loss on foreign currency translation	10,678	18,821
Gain on disposal of investments in subsidiaries and associates	(36)	(337,660)
Impairment loss on investments in subsidiaries and associates	-	23,039
Share of profit of subsidiaries and associates	(381,536)	(109,988)
Share of loss of subsidiaries and associates	12,002	18,314
Income tax expenses	38,241	55,684
Gain on exemption from debt	(13,352)	-
Dividend income	(6,573)	(4,151)
Provision reversal	(1,785)	(7,663)
Others	12,936	2,090
	₩ (314,692)	₩ (338,963)

Working capital adjustments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Increase in trade accounts receivable	₩ (61,731)	₩ (48,767)
Decrease (increase) in other accounts receivable	(27,966)	21,281
Decrease in advance payments	1,344	98
Decrease (increase) in inventories	(47,674)	78,948
Decrease (increase) in other operating assets	(3,056)	1,181
Increase in trade payables	12,377	10,962
Increase (decrease) in other accounts payable	75,121	(19,039)
Increase (decrease) in advance received	(1,698)	4,922
Severance and retirement benefits paid	(4,425)	(6,192)
Decrease in plan assets	(535)	(648)
Decrease in provisions	(5,864)	(4,889)
Increase (decrease) in other operating liabilities	(11,808)	1,254
	₩ (75,915)	₩ 39,111

Significant non-cash transactions for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021	2020
Other accounts receivable related to disposal of investment assets	₩ -	₩ 9,325
Acquisition of right-of-use assets	9,478	7,732

28. Statements of cash flows (cont'd)

The adjustment of liabilities arising from financing activities for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	2021				
	Jan. 1	Cash flows in financing activities	Non-cash changes		Dec. 31
			Foreign currency translation	Others (*1)	
Short-term borrowings	₩ 55,052	₩ 19,304	₩ 1,729	₩ -	₩ 76,085
Long-term borrowings	313,494	(54,098)	1,852	(13,352)	247,896
Bonds	459,290	(50,126)	-	279	409,443
Lease liabilities	6,757	(6,661)	-	6,661	6,757
	<u>₩ 834,593</u>	<u>₩ (91,581)</u>	<u>₩ 3,581</u>	<u>₩ (6,412)</u>	<u>₩ 740,181</u>

	2020				
	Jan. 1	Cash flows in financing activities	Non-cash changes		Dec. 31
			Foreign currency translation	Others	
Short-term borrowings	₩ 73,684	₩ (11,758)	₩ (6,874)	₩ -	₩ 55,052
Long-term borrowings	466,792	(148,411)	(4,887)	-	313,494
Bonds	339,601	119,359	-	330	459,290
Lease liabilities	8,164	(6,736)	(14)	5,343	6,757
	<u>₩ 888,241</u>	<u>₩ (47,546)</u>	<u>₩ (11,775)</u>	<u>₩ 5,673</u>	<u>₩ 834,593</u>

(*1) The amount of reduction due to exemption of debt is included.

29. Leases

Details of and changes in right-of-use asset for the years ended December 31, 2021 and 2020 are as follows (Korean won in thousands):

	2021		
	Buildings	Vehicles	Total
Jan. 1	₩ 5,426	₩ 1,193	₩ 6,619
Additions	9,012	466	9,478
Depreciation	(6,024)	(704)	(6,728)
Disposals	(2,569)	(226)	(2,795)
Dec. 31	<u>₩ 5,845</u>	<u>₩ 729</u>	<u>₩ 6,574</u>
Acquisition cost	8,506	1,676	10,182
Accumulated depreciation	(2,661)	(947)	(3,608)
Net book value	5,845	729	6,574

29. Leases (cont'd)

Details of and changes in right-of-use asset for the years ended December 31, 2020 are as follows (Korean won in thousands):

	2020		
	Buildings	Vehicles	Total
Jan. 1	₩ 6,905	₩ 1,137	₩ 8,042
Additions	6,819	913	7,732
Depreciation	(5,975)	(723)	(6,698)
Disposals	(2,323)	(134)	(2,457)
Dec. 31	₩ 5,426	₩ 1,193	₩ 6,619
Acquisition cost	7,250	2,139	9,389
Accumulated depreciation	(1,824)	(946)	(2,770)
Net book value	5,426	1,193	6,619

The details of changes in lease liabilities for the years ended December 31, 2021 are as follows (Korean won in millions):

	2021
Jan. 1	₩ 6,757
Additions	9,478
Interest expense	111
Payment	(6,773)
Termination	(2,816)
Dec. 31	₩ 6,757

The details of changes in lease liabilities for the years ended December 31, 2020 are as follows (Korean won in millions):

	2020
Jan. 1	₩ 8,164
Additions	7,687
Interest expense	136
Payment	(6,736)
Termination	(2,480)
Others	(14)
Dec. 31	₩ 6,757

Details of expenses came from short-term leases and leases of low-value assets are as follows (Korean won in millions):

	2021	2020
Short-term leases	₩ 11,079	₩ 10,174
Leases of low-value assets	154	44
	11,233	10,218

30. Non-current Assets as held for sale

As of December 31, 2021, the capital directly related to non-current assets held for sale and non-current assets held for sale are as follows (Korean won in millions):

	Assets	Liabilities
Equity instruments held for long-term		
Aromatics Oman LLC	₩ 4,779	₩ 5,655

(*1) For the year ended December 31, 2021, the Company decided to dispose 1% of its stake in Aromatics Oman LLC, which had been classified as equity instruments held for long-term, and reclassified the related assets and liabilities with non-current assets held for sale and non-current liabilities held for sale respectively.

31. Approval of separate financial statements

The separate financial statements of the Company for the year ended December 31, 2021 were approved and authorized for issue by the Company's Board of Directors on January 28, 2022.

Audit or review on internal control over financial reporting

LX International Corp. (formerly, LG International Corp.)

The accompanying independent auditor's report on internal control over financial reporting is attached as a result of auditing the separate financial statements of LX International Corp. (formerly, LG International Corp.) for the year ended December 31, 2021 and the internal control over financial reporting in accordance with the Article 8 of the *Act on External Audit of Stock Companies*.

1. Independent auditor's report on internal control over financial reporting
2. ICFR Operating Status Report

Independent auditor's report on internal control over financial reporting

The Shareholders and Board of Directors
LX International Corp. (formerly, LG International Corp.)

Opinion on internal control over financial reporting

We have audited LX International Corp. (formerly, LG International Corp.)'s (the "Company") internal control over financial reporting ("ICFR") based on the Conceptual Framework for designing and operating ICFR established by the operating committee of ICFR (the "ICFR Committee") as of December 31, 2021.

In our opinion, the Company's ICFR has been effectively designed and operated, in all material respects, as of December 31, 2021, in accordance with the Conceptual Framework for designing and operating ICFR.

We also have audited, in accordance with Korean Auditing Standards ("KGAAS"), the separate statement of financial position as of 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 flows for the year then ended, and notes to the separate financial statements, including a summary of significant accounting policies, and our report dated March 16, 2022 expressed an unqualified opinion thereon.

Basis for opinion on ICFR

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

Responsibilities of management and those charged with governance for ICFR

Management is responsible for designing, implementing, and maintaining an effective ICFR, and for assessing the effectiveness of the ICFR included in the accompanying report on the effectiveness of the ICFR.

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

Auditor's responsibilities for the audit of ICFR

Our responsibility is to express an opinion of the Company's ICFR based on our audit. We conducted our audit in accordance with KGAAS. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective ICFR was maintained in all material respects.

An audit of ICFR involves performing procedures to obtain audit evidence as to 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 also includes testing and evaluating the design and operating effectiveness of ICFR based on obtaining an understanding of ICFR and the assessed risk.

ICFR definition and inherent limitations

A company's ICFR is implemented by those charged with governance, management, and other employees and is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of separate financial statements for external purposes in accordance with Korean International Financial Reporting Standards ("KIFRS"). A company's ICFR 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 company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of separate financial statements in accordance with KIFRS, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the separate financial statements.

Because of its inherent limitations, ICFR may not prevent or detect misstatements of the separate financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that ICFR 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 Joon Yang Jeong.

A handwritten signature in black ink that reads "Ernst & Young Han Young". The signature is written in a cursive, flowing style.

March 16, 2022

This audit report is effective as of March 16, 2022, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the Company's internal control over financial reporting and may result in modifications to this report.

ICFR Operating Status Report

To the Shareholders, Board of Directors, and Audit Committee of LX International Corp.

We, as the Chief Executive Officer and the Internal Accounting Manager of LX International Corp. ("the Company"), assessed operating status of the Company's Internal Control over Financial Reporting ("ICFR") for the year ending December 31, 2021.

Design and operation of ICFR is the responsibility of the Company's management, including the Chief Executive Officer and the Internal Accounting Manager (collectively, "We", "Our" or "Us").

We evaluated whether the Company effectively designed and operated its ICFR to prevent and detect errors or frauds which may cause a misstatement in financial statements to ensure preparation and disclosure of reliable financial information.


We used the 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting' established by the Operating Committee of Internal Control over Financial Reporting in Korea (the "ICFR Committee") as the criteria for design and operation of the Company's ICFR. And we conducted an evaluation of ICFR based on the 'Management Guideline for Evaluating and Reporting Effectiveness of Internal Control over Financial Reporting' established by the ICFR Committee.

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

We certify that this report does not contain any untrue statement of a fact, or omit to state a fact necessary to be presented herein.

We also certify that this report does not contain or present any statements which might cause material misunderstandings of the readers, and we have reviewed and verified this report with sufficient care.

January 28, 2022



Chun-sung Yoon
Chief Executive Officer

Byeong-il Min
Internal Accounting Manager