

LG International Corp.

Separate financial statements
for the years ended December 31, 2018 and 2017
with the independent auditors' report

Table of contents

Independent auditor's report	
Separate financial statements	Page
Separate statements of financial position	1
Separate statements of profit or loss	3
Separate statements of other comprehensive income or loss	4
Separate statements of changes in equity	5
Separate statements of cash flows	7
Notes to the separate financial statements	8
Independent auditor's review report on internal control over financial reporting	83
Management's assessment on internal control over financial reporting	

Independent auditor's report

The Stockholders and Board of Directors LG International Corp.

Opinion

We have audited the accompanying separate financial statements of LG International Corp. (the "Company"), which comprise the separate statements of financial position as at December 31, 2018 and 2017, and the separate statements of profit or loss, separate statements of other comprehensive income or loss, separate statements of changes in equity and separate statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

In our opinion, the separate financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2018 and 2017, and its financial performance and cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.

Basis for opinion

We conducted our audit in accordance with Korean Auditing Standards. 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 audit 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

The Key Audit Matters are based on our professional judgment and are the most significant in the Company's separate financial statements. These matters have been addressed in the context of an audit of our entire separate financial statements and in the formation of our opinion and we do not provide any separate opinion on these matters.

A. Revenue recognition

As discussed in Note 2 to the separate financial statements, the Company recognizes revenue when the performance obligation identified in the contracts with the customers is fulfilled, as the amount of which is expected to be received in exchange for the goods or services. Revenues from resource business and infrastructure business are ₩701,114 million and ₩2,153,036 million, respectively, and revenues were recognized when controls were transferred to customers for the goods produced or purchased from suppliers.

As discussed in Note 2, the Company has concluded that in some of contracts with customers, it does not have control on the goods before the goods are transferred to customers, and therefore the Company net off cost of sales amounting ₩157,053 million with their revenues.

We identified the risk of overstatement in revenues caused by possibilities of the Company's errors in identification of performance obligations and the timing of performing obligations identified in the contracts with customers related to the Company's goods sales as the most significant risk.

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

- Review of accounting policies and its changes in revenue recognition for major types of sales contracts
- Review of contracts by type of sales (identification of performance obligation, measurement of transaction amount, allocation of transaction price, review of appropriateness in timing of revenue recognition)

- Testing sales transactions selected on sampling base by comparing the records with related evidences
- Testing appropriateness in timing of revenue recognition for the transactions occurred around reporting period end

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

Management is responsible for the preparation and fair presentation of the separate financial statements in accordance with Korean International Financial Reporting Standards, 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 consolidated financial statements

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

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

- Identify and assess the risks of material misstatement of the 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, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- 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 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 financial statements, including the disclosures, and whether the 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 partner in charge of the audit resulting in this independent auditor's report is Jung Ho Chae.

Ernst & Young Han Young

March 7, 2019

This audit report is effective as of March 7, 2019, 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.

LG International Corp.

Separate financial statements
for the years ended December 31, 2018 and 2017

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

Chi-Ho Song
Chief Executive Officer
LG International Corp.

LG International Corp.
Separate statements of financial position
as of December 31, 2018 and 2017

(Korean won in millions)

	Notes	2018	2017
Assets			
Current assets			
Cash and cash equivalents	4, 5, 27, 28	₩ 80,089	₩ 114,777
Short-term financial assets	4, 12, 27, 28	2,663	5,459
Trade accounts receivable	4, 12, 25, 27, 28	302,456	340,293
Other accounts receivable	4, 6, 12, 27, 28	83,147	8,362
Accrued income	4, 12, 25, 27, 28	24,927	35,145
Advance payments		14,334	8,985
Prepaid expenses		1,702	2,117
Other current assets	4	4,827	6,223
Inventories, net	7	126,651	135,355
		<u>640,796</u>	<u>656,716</u>
Non-current assets			
Investment assets	4, 8, 12, 25, 27, 28	325,774	330,917
Investment in subsidiaries	9	1,344,007	1,191,179
Investment in associates	9	179,746	224,759
Property, plant and equipment, net	10	27,706	29,790
Investment properties, net	10	24,800	25,506
Intangible assets, net	11	18,300	54,651
Deferred tax assets	24	128,140	205,666
Other non-current assets	4, 5	7,954	9,620
		<u>2,056,427</u>	<u>2,072,088</u>
Total assets		<u>₩ 2,697,223</u>	<u>₩ 2,728,804</u>

(Continued)

LG International Corp.
Separate statements of financial position
as of December 31, 2018 and 2017 (cont'd)

(Korean won in millions)

	Notes	2018	2017
Liabilities			
Current liabilities			
Short-term borrowings	4, 13, 27, 28, 29	₩ 466	₩ 63,122
Trade accounts payable	4, 25, 27, 28	325,630	304,154
Other accounts payable	4, 6, 25, 27, 28	112,402	60,563
Advance received		896	2,448
Withholdings	4	2,192	555
Current tax liabilities		-	2,160
Accrued expenses	4	33,650	38,863
Current portion of bonds and long-term borrowings	4, 13, 27, 28, 29	225,875	157,378
Deposits received	4	4,879	4,490
		<u>705,990</u>	<u>633,733</u>
Non-current liabilities			
Bonds	4, 13, 27, 28, 29	339,345	329,310
Long-term borrowings	4, 13, 27, 28, 29	462,845	552,133
Defined benefit liabilities	20	8,639	2,517
Provision	23	38,099	-
Other non-current liabilities	4	7,652	11,923
		<u>856,580</u>	<u>895,883</u>
Total liabilities		<u>1,562,570</u>	<u>1,529,616</u>
Equity			
Issued capital	14	193,800	193,800
Share premium	14	102,125	102,125
Other components of equity	14	(968)	(968)
Accumulated other comprehensive income (loss)	14	(43,567)	(59,619)
Retained earnings	14	883,263	963,850
Total equity		<u>1,134,653</u>	<u>1,199,188</u>
Total liabilities and equity		<u>₩ 2,697,223</u>	<u>₩ 2,728,804</u>

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

LG International Corp.
Separate statements of profit or loss
for the years ended December 31, 2018 and 2017
(Korean won in millions, except per share amounts)

	Notes	2018	2017
Sales	3, 16, 25	₩ 2,904,287	₩ 2,808,960
Cost of sales	19, 25	<u>(2,779,299)</u>	<u>(2,626,537)</u>
Gross profit		124,988	182,423
Selling and administrative expenses	18, 19	<u>(146,020)</u>	<u>(152,711)</u>
Operating profit (loss)	3, 17	(21,032)	29,712
Finance income	4, 21, 25	98,660	145,140
Finance costs	4, 21	(116,606)	(163,701)
Share of profit of subsidiaries and associates	9, 21	189,016	102,650
Other non-operating expenses, net	22, 23	<u>(71,689)</u>	<u>(9,137)</u>
Profit before tax		78,349	104,664
Income tax expenses	24	<u>(148,278)</u>	<u>(41,880)</u>
Profit (loss) for the year		<u>₩ (69,929)</u>	<u>₩ 62,784</u>
Earnings (loss) per share:			
Basic and diluted, profit (loss) for the year	14	₩ (1,809)	₩ 1,624

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

LG International Corp.
Separate statements of other comprehensive income or loss
for the years ended December 31, 2018 and 2017

(Korean won in millions)

	<u>Notes</u>	<u>2018</u>	<u>2017</u>
Profit (loss) for the year		₩ (69,929)	₩ 62,784
<i>Other comprehensive income (loss)</i>			
<i>that may be reclassified to profit or loss</i>			
<i>in subsequent periods:</i>			
Net loss on valuation of			
available-for-sale financial assets	4, 8	-	(10,444)
Gain (loss) on valuation of derivatives designated as			
cash flow hedges	4, 6	(408)	(177)
Positive adjustments of equity in equity method	9	6,415	(47,841)
Negative adjustments of equity in equity method	9	2,855	(37,819)
Exchange differences on translation of foreign operations		122	(9,908)
		<u>8,984</u>	<u>(106,189)</u>
<i>Other comprehensive income (loss)</i>			
<i>that will not be reclassified to profit or loss</i>			
<i>in subsequent periods:</i>			
Gain on valuation of FVOCI	20	7,327	-
Re-measurement loss on defined benefit plans	20	(4,013)	(521)
Change in retained earnings in equity method	9	(758)	531
		<u>2,556</u>	<u>10</u>
Other comprehensive income (loss)			
for the year, net of tax		<u>11,540</u>	<u>(106,179)</u>
Total comprehensive income (loss)			
for the year, net of tax		<u>₩ (58,389)</u>	<u>₩ (43,395)</u>

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

LG International Corp.
Separate statements of changes in equity
for the years ended December 31, 2018 and 2017

(Korean won in millions)

	Issued capital	Share premium	Other components of equity	Accumulated other comprehensive income (loss)	Retained earnings	Total equity
As of January 1, 2017	₩ 193,800	₩ 102,125	₩ (968)	₩ 46,569	₩ 910,721	₩ 1,252,247
Profit for the year	-	-	-	-	62,784	62,784
Net loss on valuation of available-for-sale financial assets	-	-	-	(10,444)	-	(10,444)
Gain on valuation of derivatives designated as cash flow hedges	-	-	-	(177)	-	(177)
Positive adjustments of equity in equity method	-	-	-	(47,840)	-	(47,840)
Negative adjustments of equity in equity method	-	-	-	(37,819)	-	(37,819)
Exchange differences on translation of foreign operations	-	-	-	(9,908)	-	(9,908)
Re-measurement loss on defined benefit plans	-	-	-	-	(521)	(521)
Change in retained earnings in equity method	-	-	-	-	531	531
Total comprehensive income (loss)	-	-	-	(106,188)	62,794	(43,394)
Dividends (Note 15)	-	-	-	-	(9,665)	(9,665)
As of December 31, 2017	₩ 193,800	₩ 102,125	₩ (968)	₩ (59,619)	₩ 963,850	₩ 1,199,188

(Continued)

LG International Corp.
Separate statements of changes in equity
for the years ended December 31, 2018 and 2017 (cont'd)

(Korean won in millions)

	Issued capital	Share premium	Other components of equity	Accumulated other comprehensive income (loss)	Retained earnings	Total equity
As of January 1, 2018	₩ 193,800	₩ 102,125	₩ (968)	₩ (59,619)	₩ 963,850	₩ 1,199,188
Effect of adoption of new accounting standards (Note 2)	-	-	-	(259)	3,778	3,519
As of January 1, 2018 (restated)	193,800	102,125	(968)	(59,878)	967,628	1,202,707
Loss for the year	-	-	-	-	(69,929)	(69,929)
Loss on valuation of derivatives designated as cash flow hedges	-	-	-	(408)	-	(408)
Positive adjustments of equity in equity method	-	-	-	6,415	-	6,415
Negative adjustments of equity in equity method	-	-	-	2,855	-	2,855
Exchange differences on translation of foreign operations	-	-	-	122	-	122
Gain on valuation of FVOCI	-	-	-	7,327	-	7,327
Re-measurement loss on defined benefit plans	-	-	-	-	(4,013)	(4,013)
Change in retained earnings in equity method	-	-	-	-	(758)	(758)
Total comprehensive income (loss)	-	-	-	16,311	(74,700)	(58,389)
Dividends (Note 15)	-	-	-	-	(9,665)	(9,665)
As of December 31, 2018	₩ 193,800	₩ 102,125	₩ (968)	₩ (43,567)	₩ 883,263	₩ 1,134,653

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

LG International Corp.
Separate statements of cash flows
for the years ended December 31, 2018 and 2017

(Korean won in millions)

	Notes	2018	2017
Cash flows from operating activities:			
Profit (loss) for the year		₩ (69,929)	₩ 62,784
Non-cash adjustments to reconcile gain (loss) for the year to net cash flows provided by operating activities	29	103,071	(32,730)
Working capital adjustments	29	32,031	44,226
Interest received		15,602	5,566
Interest paid		(32,796)	(33,579)
Dividends received		63,837	62,030
Income tax paid		(77,022)	(28,520)
Net cash flows provided by operating activities		34,794	79,777
Cash flows from investing activities:			
Decrease in long-term and short-term financial instruments		-	90,002
Decrease in loans		4,037	7,516
Decrease in guarantee deposits		71	221
Proceeds from disposal and capital reduction of investment in associates		128,052	19,189
Proceeds from disposal of investment in subsidiaries		-	3
Proceeds from disposal of equity instruments held for long-term		2,197	4,426
Proceeds from disposal of non-current assets held for sale		-	7,361
Proceeds from disposal of property, plant and equipment		90	2,431
Proceeds from disposal of intangible assets		470	1,597
Proceeds from disposal of other investments assets		-	4
Increase in long-term and short-term financial instruments		-	(20,002)
Increase in loans		-	(1,256)
Increase in guarantee deposits		(48)	(54)
Acquisition of long-term equity instruments		(6,467)	(7,500)
Acquisition of investment in subsidiaries		(98,031)	(23,374)
Acquisition of investment in associates		(2,799)	(7,179)
Acquisition of property, plant and equipment		(1,874)	(908)
Acquisition of intangible assets		(451)	(1,303)
Acquisition of other investment assets		-	(3)
Net cash flows provided by investing activities		25,247	71,171
Cash flows from financing activities:			
Proceeds from financial liabilities	29	737,385	444,447
Repayments of financial liabilities	29	(822,249)	(535,672)
Dividends paid to stockholders		(9,665)	(9,665)
Net cash flows used in financing activities		(94,529)	(100,890)
Net increase (decrease) in cash and cash equivalents		(34,488)	50,058
Cash and cash equivalents at January 1		114,777	64,719
Exchange differences on translation of cash and cash equivalents		(200)	-
Cash and cash equivalents at December 31		₩ 80,089	₩ 114,777

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

1. Corporate information

LG 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 and to Lucky Industries Co., Ltd. in 1984. Its current name was adopted on March 1, 1995.

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 14 overseas branch offices, 10 liaison offices and 87 subsidiaries (including 61 sub-subsidiaries) as of December 31, 2018.

LG Corp. holds 24.69% of the Company's common stock as of the end of the reporting period by acquiring the Company's common stock during the last year. The remaining equity shares are held by institutional investors, overseas investors, and 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 auditors' 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 equity instruments held for long-term 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.

LG International Corp. is the parent company of its subsidiaries (collectively referred to as the "Group") 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 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. There are stated of cash on the statement of cash flows.

2.2.2 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.

2.2.3 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.

2.2.3.1 Financial assets

2.2.3.1.1 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. Refer to the accounting policies in section 2.3.23.

In order for a financial asset to be classified and measured at amortised 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 recognised on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

2.2.3.1.2 Subsequent measurement

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

- Financial assets at amortised 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
- Financial assets at fair value through profit or loss

Financial assets at amortised cost (debt instruments)

This category is the most relevant to the Company. The Company measures financial assets at amortised 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 amortised cost are subsequently measured using the effective interest (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, 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 amortised 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.

2.2.3.1.2 Subsequent measurement (cont'd)

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 recognised as other 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.

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 amortised 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 recognised 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.

2.2.3.1.3 Derecognition of financial assets

A financial asset (or, where applicable, a part of a financial asset or part of a group 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.

2.2.3.1.3 Derecognition of financial assets (cont'd)

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.

2.2.3.2 Impairment of financial assets

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

The Company recognises 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.

ECLs are recognised 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 recognises 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.

2.2.3.3 Financial liabilities

2.2.3.3.1 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, bonds, borrowings and derivative financial liabilities.

2.2.3.3.2 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.

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.

2.2.3.3.3 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.

2.2.3.4 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.

2.2.4 Derivative financial instruments and hedge accounting

2.2.4.1 Initial recognition and subsequent measurement

The Company uses derivative financial instruments such as commodity contracts to hedge its commodity price 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.

2.2.4.1 Initial recognition and subsequent measurement (cont'd)

Before January 1, 2018, the documentation includes identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged and how the Company will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Beginning January 1, 2018, 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.

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 recognised as other expense and the ineffective portion relating to commodity contracts is recognised in other operating income or expenses.

Before January 1, 2018, the Company designated all of the forward contracts as hedging instrument. Any gains or losses arising from changes in the fair value of derivatives were taken directly to profit or loss, except for the effective portion of cash flow hedges, which were recognised in OCI and later reclassified to profit or loss when the hedge item affects profit or loss.

Beginning January 1, 2018, the Company designates only the spot element of forward contracts as a hedging instrument. The forward element is recognised in OCI and accumulated in a separate component of equity under cost of hedging reserve.

2.2.4.1 Initial recognition and subsequent measurement (cont'd)

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 recognised 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.

2.2.5 Investment in subsidiaries and associates

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 and other comprehensive income 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.

2.2.5 Investment in subsidiaries and associates (cont'd)

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.

2.2.6 Non-current assets held for sale (or distribution to equity holders)

The Company classifies non-current assets and disposal groups as held for sale or for distribution to equity holders of the parent 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 or as held for distribution are measured at the lower of their carrying amount and fair value less costs to sell or to distribute. Costs to distribute are the incremental costs directly attributable to the distribution, excluding the finance costs and income tax expense.

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

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

2.2.7 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.

2.2.7 Property, plant and equipment (cont'd)

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 and others	20 ~ 40	Straight-line method
Structures	20 ~ 40	“
Machinery	5 ~ 8	“
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.

The assets' residual values, useful lives and depreciation method are reviewed at each financial year end, and adjusted prospectively, if appropriate.

2.2.8 Leases

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at inception date: whether fulfillment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset, even if that right is not explicitly specified in an arrangement.

Leases where the Company does not transfer substantially all the risks and benefits of ownership of the asset are classified as operating leases. Initial direct costs incurred in negotiating an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same bases as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

2.2.9 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.

2.2.10 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.

2.2.11 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.

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.

2.2.12 Pension benefits and other post-employment benefits

The Company operates a defined benefit pension plan in Korea, which 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

2.2.12 Pension benefits and other post-employment benefits (cont'd)

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

2.2.13 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.

2.2.14 Onerous contracts

If the Company has a contract that is onerous, the present obligation under the contract is recognised and measured as a provision. However, before a separate provision for an onerous contract is established, the Company recognises 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.

2.2.15 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.

2.2.16 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 recognised 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.

2.2.16.1 Sales of goods

Revenue from sale of goods is recognised 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.

2.2.16.2 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.

2.2.16.3 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 2.2.3.1

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 recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Company performs under the contract.

2.2.17 Foreign currency translation

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

2.2.17.1 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.

2.2.17.2 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 average exchange rates for the period. These exchange differences are recognized in a separate component of equity. On the disposal of a foreign operation, the cumulative amount of the exchange differences 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.

2.2.18 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 groups 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 to sell, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators.

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

Impairment losses of continuing operations, including impairment on inventories, are recognized in the statement of profit or loss in expense categories consistent with the function of the impaired asset.

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 (as of December 31) 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

Intangible assets with indefinite useful lives are tested for impairment annually as of December 31 either individually or at the cash generating unit level, as appropriate and when circumstances indicate that the carrying value may be impaired.

2.2.19 Taxes

2.2.19.1 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.

2.2.19.2 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.

2.2.19.2 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.

2.3 New and amended standards and interpretations

2.3.1 KIFRS 1115 Revenue from contracts with customers

KIFRS 1115 supersedes KIFRS 1011 Construction Contracts, KIFRS 1018 Revenue and related Interpretations and it applies, with limited exceptions, to all revenue arising from contracts with its customers. KIFRS 1115 establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognised at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

KIFRS 1115 requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers. The standard also specifies the accounting for the incremental costs of obtaining a contract and the costs directly related to fulfilling a contract. In addition, the standard requires extensive disclosures.

The Company adopted KIFRS 1115 using the modified retrospective method of adoption with the date of initial application of January 1, 2018. Under this method, the standard can be applied either to all contracts at the date of initial application or only to contracts that are not completed at this date. The Company elected to apply the standard to all contracts as of January 1, 2018.

The cumulative effect of initially applying KIFRS 1115 is recognised at the date of initial application as an adjustment to the opening balance of retained earnings. Therefore, the comparative information was not restated and continues to be reported under KIFRS 1011, KIFRS 1018 and related Interpretations.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

2.3.1 KIFRS 1115 Revenue from contracts with customers (cont'd)

As adopting KIFRS 1115, the role of the Company in some contracts with customers has been changed from a principal to an agent and the effect on the financial statements of the Company is as follows (Korean won in millions):

There was no effect on the Company's equity as of the date of adopting KIFRS 1115.

Impact on the statement of financial position as of December 31, 2018.

	In KIFRS 1115	Adjustment	In previous standards
Assets :			
Trade accounts receivable	₩ 302,456	₩ 23,477	₩ 325,933
Other accounts receivable	83,147	(23,477)	59,670
Total asset	2,697,223	-	2,697,223
Liabilities :			
Trade accounts payable	325,630	40,800	366,430
Other accounts payable	112,402	(40,800)	71,602
Total liability	1,562,571	₩ -	1,562,571
Total equity	1,134,652	₩ -	1,134,652

Impact on the statement of profit or loss for the year ended December 31, 2018.

	In KIFRS 1115	Adjustment	In previous standards
Sales	₩ 2,904,287	₩ 157,053	₩ 3,061,340
Cost of sales	(2,779,299)	(157,053)	(2,936,352)
Gross profit	124,988	-	124,988
Operating loss	(21,032)	-	(21,032)
Loss for the year	(69,929)	-	(69,929)
Total comprehensive loss for the year	(58,388)	₩ -	(58,388)

There was no effect on the Company's cashflow for the year ended December 31, 2018

2.3.2 KIFRS 1109 Financial Instrument

KIFRS 1109 Financial Instruments replaces KIFRS 1039 Financial Instruments: Recognition and Measurement for annual periods beginning on or after January 1, 2018, bringing together all three aspects of the accounting for financial instruments: classification and measurement; impairment; and hedge accounting.

The Company applied KIFRS 1109 prospectively, with an initial application date of January 1, 2018. The Company has not restated the comparative information. Differences arising from the adoption of KIFRS 1109 have been recognised directly in retained earnings and other components of equity in January 1, 2018.

Classification and measurement

Under KIFRS 1109, debt instruments are subsequently measured at fair value through profit or loss, amortised cost, or fair value through OCI. The classification is based on two criteria: the Company's business model for managing the assets; and whether the instruments' contractual cash flows represent 'solely payments of principal and interest' on the principal amount outstanding.

The assessment of the Company's business model was made as of the date of initial application, January 1, 2018. The assessment of whether contractual cash flows on debt instruments are solely comprised of principal and interest was made based on the facts and circumstances as of the initial recognition of the assets.

2.3.2 KIFRS 1109 *Financial Instrument (cont'd)*

The classification and measurement requirements of KIFRS 1109 did not have a significant impact to the Company. The Company continued measuring at fair value all financial assets previously held at fair value under KIFRS 1039. The following are the changes in the classification of the Company's financial assets:

- Trade receivables and other non-current financial assets classified as loans and receivables as of December 31, 2017 are held to collect contractual cash flows and give rise to cash flows representing solely payments of principal and interest. These are classified and measured as debt instruments at amortised cost beginning January 1, 2018.
- Equity investments not held for trading and acquired for strategic purposes classified as available-for-sales (AFS) financial assets as of December 31, 2017 are classified and measured as equity instruments designated at fair value through OCI beginning January 1, 2018. Other equity investments are classified as financial assets at fair value through profit or loss.
- As a result of the change in classification of the Company's AFS, the AFS reserve of ₩3,777 million related to financial assets at fair value through profit or loss that were previously presented under accumulated OCI, was reclassified to retained earnings as of January 1, 2018. The remaining amount of AFS reserve was reclassified to fair value reserve of financial assets designated at fair value through OCI.
- There are no changes in classification and measurement for the Company's financial liabilities.

Impairment

The adoption of KIFRS 1109 has changed the Company's accounting for impairment losses for financial assets by replacing KIFRS 1039's incurred loss approach with a forward-looking expected credit loss (ECL) approach. KIFRS 1109 requires the Company to recognise an allowance for ECLs for all debt instruments not held at fair value through profit or loss and contract assets.

Other adjustments

In addition to the adjustments described above, other item such as deferred taxes, was adjusted to retained earnings as necessary upon adoption of KIFRS 1109 as of January 1, 2018.

The impact on the financial statement of the Company as of January 1, 2018 as adoption of KIFRS 1109 is as follows (Korean won in millions):

The effect of reclassification required or elected for the financial assets

	Classification		Book value		Difference (*)
	KIFRS 1039	KIFRS 1109	KIFRS 1039	KIFRS 1109	
Deposits to financial institutions, etc.	Loans and receivables	Amortized cost measurement	₩ 714,815	₩ 714,815	₩ -
Equity instruments	Available-for-sale financial investments	FVOCI measurement FVTPL measurement	128,682	128,094 5,301	4,713
Total (excluding derivatives)			₩ 843,497	₩ 848,210	₩ 4,713

(*) The change in carrying amount is a result of the additional measurement of equity instruments as fair value in accordance with KIFRS 1109 which were measured at amorised cost in KIFRS 1039.

2.3.2 KIFRS 1109 *Financial Instrument (cont'd)*

Impact on the statement of financial position (Korean won in millions):

	Notes	January 1, 2018
Assets :		
Investment assets	8	₩ 4,713
Investment in subsidiaries (*)	9	(73)
Deferred tax assets (*)	24	(1,123)
Total		<u>3,517</u>
Equity :		
Accumulated other comprehensive income or loss (*)	14	₩ (260)
Retained earnings (*)	14	3,777
Total		<u>₩ 3,517</u>

(*) This includes the effect of reclassification of financial assets held by subsidiaries.

2.3.3 Amendments to KIFRS 2122 *Foreign Currency Transactions and Advance Consideration*

The Interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognises the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, then the entity must determine the transaction date for each payment or receipt of advance consideration. The amendments has no effect on the Company's financial statements.

2.3.4 Amendments to KIFRS 1040 *Investment Property — Transfers of Investment Property*

The amendments clarify when an entity should transfer property, including property under construction or development into, or out of investment property. The amendments state that a change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. A mere change in management's intentions for the use of a property does not provide evidence of a change in use. The amendments has no effect on the Company's financial statements.

2.3.5 Amendments to KIFRS 1102 *Share-based Payment — Classification and Measurement of Share-based Payment Transactions*

The amendments to KIFRS 1102 Share-based Payment that address three main areas: the effects of vesting conditions on the measurement of a cash-settled share-based payment transaction; the classification of a share-based payment transaction with net settlement features for withholding tax obligations; and accounting where a modification to the terms and conditions of a share-based payment transaction changes its classification from cash settled to equity settled

2.3.6 Amendments to KIFRS 1101 *First-time Adoption of International Financial Reporting Standards – Deletion of short-term exemptions for first-time adopters*

Short-term exemptions in paragraphs E3–E7 of KIFRS 1101 were deleted because they have now served their intended purpose. This amendment is not applicable to the Company.

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 27
- Sensitivity analyses disclosures Note 20, 27

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.

2.4.1 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.

2.4.2 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.

2.4.3 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.

2.4.4 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).

2.4.4 Provision for expected credit losses of trade receivables (cont'd)

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 analysed.

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.

2.5 Standards issued but not yet effective

The 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.

2.5.1 KIFRS 1116 Leases

KIFRS 1116 replaces KIFRS 1017 Leases, KIFRS 2104 Determining whether an Arrangement contains a Lease, KIFRS 2015 Operating Leases-Incentives and KIFRS 2027 Evaluating the Substance of Transactions Involving the Legal Form of a Lease. KIFRS 1116 sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under KIFRS 1017. The standard includes two recognition exemptions for lessees – leases of 'low-value' assets (e.g., personal computers) and short-term leases (i.e., leases with a lease term of 12 months or less). At the commencement date of a lease, a lessee will recognise a liability to make lease payments (i.e., the lease liability) and an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset). Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessees will be also required to remeasure the lease liability upon the occurrence of certain events (e.g., a change in the lease term, a change in future lease payments resulting from a change in an index or rate used to determine those payments). The lessee will generally recognise the amount of the remeasurement of the lease liability as an adjustment to the right-of-use asset. Lessor accounting under KIFRS 1116 is not significantly changed from today's accounting under KIFRS 1017. Lessors will continue to classify all leases using the same classification principle as in KIFRS 1017 and distinguish between two types of leases: operating and finance leases.

KIFRS 1116 is effective for annual periods beginning on or after January 1, 2019. KIFRS 1116 also requires lessees and lessors to make more extensive disclosures than under KIFRS 1017.

This Standard applies for annual periods beginning on or after 1 January 2019. Although early application is permitted, the entity first applies KIFRS 1115. The lessee may apply KIFRS 1116 using either the full retrospective approach or the modified retrospective approach. KIFRS 1116 allows for several practical expedients.

The Company will analyse the financial impact on its financial statements. The Company plans to apply KIFRS 1116 at the fixed effective date.

2.5.2 Amendments to KIFRS 1109 Prepayment Features with Negative Compensation

Under KIFRS 1109, a debt instrument can be measured at amortised cost or at fair value through other comprehensive income, provided that the contractual cash flows are 'solely payments of principal and interest on the principal amount outstanding' (the SPPI criterion) and the instrument is held within the appropriate business model for that classification. The amendments to KIFRS 1109 clarify that a financial asset passes the SPPI criterion regardless of the event or circumstance that causes the early termination of the contract and irrespective of which party pays or receives reasonable compensation for the early termination of the contract.

2.5 Standards issued but not yet effective (cont'd)

The amendments should be applied retrospectively and are effective from January 1, 2019, with earlier application permitted. These amendments have no impact on the financial statements of the Company.

2.5.3 Amendments to KIFRS 1110 and KIFRS 1028 *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture*

The amendments address the conflict between KIFRS 1110 and KIFRS 1028 in dealing with the loss of control of a subsidiary that is sold or contributed to an associate or joint venture. The amendments clarify that the gain or loss resulting from the sale or contribution of assets that constitute a business, as defined in KIFRS 1103, between an investor and its associate or joint venture, is recognised in full. Any gain or loss resulting from the sale or contribution of assets that do not constitute a business, however, is recognised only to the extent of unrelated investors' interests in the associate or joint venture. The KASB has deferred the effective date of these amendments indefinitely, but an entity that early adopts the amendments must apply them prospectively. The Company will apply these amendments when they become effective.

2.5.4 Amendments to KIFRS 1028 *Long-term interests in associates and joint ventures*

The amendments clarify that an entity applies KIFRS 1109 to long-term interests in an associate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the associate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in KIFRS 1109 applies to such long-term interests. The amendments also clarified that, in applying KIFRS 1109, an entity does not take account of any losses of the associate or joint venture, or any impairment losses on the net investment, recognised as adjustments to the net investment in the associate or joint venture that arise from applying KIFRS 1028 Investments in Associates and Joint Ventures. The amendments should be applied retrospectively and are effective from January 1, 2019, with early application permitted.

2.5.5 IFRIC Interpretation 2123 *Uncertainty over Income Tax Treatment*

The Interpretation addresses the accounting for income taxes when tax treatments involve uncertainty that affects the application of KIFRS 1012 and does not apply to taxes or levies outside the scope of KIFRS 1012, nor does it specifically include requirements relating to interest and penalties associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- Whether an entity considers uncertain tax treatments separately
- The assumptions an entity makes about the examination of tax treatments by taxation authorities
- How an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates
- How an entity considers changes in facts and circumstances

The Company has to determine whether to consider each uncertain tax treatment separately or together with one or more other uncertain tax treatments. The approach that better predicts the resolution of the uncertainty should be followed. The interpretation is effective for annual reporting periods beginning on or after January 1, 2019, but certain transition reliefs are available. The Company will apply the interpretation from its effective date. Since the Company operates in a complex multinational tax environment, applying the Interpretation may affect its consolidated financial statements. In addition, the Company may need to establish processes and procedures to obtain information that is necessary to apply the Interpretation on a timely basis.

2.5.6 Annual Improvements 2015-2017 Cycle

KIFRS 1103 *Business Combinations*

The amendments clarify that, when an entity obtains control of a business that is a joint operation, it applies the requirements for a business combination achieved in stages, including remeasuring previously held interests in the assets and liabilities of the joint operation at fair value. In doing so, the acquirer remeasures its entire previously held interest in the joint operation.

An entity applies those amendments to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. These amendments will apply on future business combinations of the Company.

2.5 Standards issued but not yet effective (cont'd)

KIFRS 1111 *Joint Arrangements*

A party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business as defined in KIFRS 1103. The amendments clarify that the previously held interests in that joint operation are not remeasured.

An entity applies those amendments to transactions in which it obtains joint control on or after the beginning of the first annual reporting period beginning on or after January 1, 2019, with early application permitted. These amendments are currently not applicable to the Company but may apply to future transactions.

KIFRS 1012 *Income Taxes*

The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognises the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognised those past transactions or events.

An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application is permitted. When an entity first applies those amendments, it applies them to the income tax consequences of dividends recognised on or after the beginning of the earliest comparative period. Since the Company's current practice is in line with these amendments, the Company does not expect any effect on its financial statements.

KIFRS 1023 *Borrowing Costs*

The amendments clarify that an entity treats as part of general borrowings any borrowing originally made to develop a qualifying asset when substantially all of the activities necessary to prepare that asset for its intended use or sale are complete.

An entity applies those amendments to borrowing costs incurred on or after the beginning of the annual reporting period in which the entity first applies those amendments. An entity applies those amendments for annual reporting periods beginning on or after January 1, 2019, with early application permitted. Since the Company's current practice is in line with these amendments, the Company does not expect any effect on its financial statements.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

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
Resources	Coal, oil & gas, metals, food & commodities, and others
Infra-business	Chemical plant, power generation, infrastructure, chemicals, electric/electronic parts, automotive, and others
Collectively grouped	Common group management

3.1 Segment sales and operating income

Segment sales and operating income (loss) of the Company are as follows (Korean won in millions):

	2018			2017		
	Sales	Operating income (loss)	Adjusted operating income (loss) (*)	Sales	Operating income (loss)	Adjusted operating income (loss) (*)
	Resources	₩ 704,538	₩ (36,292)	₩ (36,292)	₩ 707,443	₩ (6,045)
Infra-business	2,199,749	15,260	15,260	2,101,517	35,757	35,757
	<u>₩ 2,904,287</u>	<u>₩ (21,032)</u>	<u>₩ (21,032)</u>	<u>₩ 2,808,960</u>	<u>₩ 29,712</u>	<u>₩ 35,412</u>

(*) The Company included several items among non-operating income and costs as to present its operational performance more effectively in the adjusted operating income (Refer to Note 17).

3.2 Segment assets and liabilities

Segment assets and liabilities of the Company are as follows (Korean won in millions):

	2018		2017	
	Assets	Liabilities	Assets	Liabilities
Resources	₩ 1,079,589	₩ 408,694	₩ 1,032,856	₩ 455,380
Infra-business	714,201	557,851	623,740	489,666
Collectively grouped (*)	903,433	596,026	1,072,208	584,570
	<u>₩ 2,697,223</u>	<u>₩ 1,562,571</u>	<u>₩ 2,728,804</u>	<u>₩ 1,529,616</u>

(*) 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

Sales by geographic region of the Company are as follows (Korean won in millions):

	2018	2017
Korea	₩ 1,031,941	₩ 1,108,485
America	296,885	118,143
Europe	182,642	144,843
Asia	1,348,233	1,392,100
Others	44,586	45,389
	<u>₩ 2,904,287</u>	<u>₩ 2,808,960</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, 2018 and 2017 are as follows (Korean won in millions):

	2018				
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial assets at amortised cost	Hedge accounting-related assets	Total
Cash and cash equivalents	₩ -	₩ -	₩ 80,089	₩ -	₩ 80,089
Short term financial asset	-	-	2,663	-	2,663
Equity instruments held for long-term (*)	4,779	144,228	-	-	149,007
Trade accounts receivable	-	-	302,456	-	302,456
Other accounts receivable	1,451	-	81,696	-	83,147
Long-term loans	-	-	176,767	-	176,767
Other financial assets	-	-	33,235	70	33,305
	<u>₩ 6,230</u>	<u>₩ 144,228</u>	<u>₩ 676,906</u>	<u>₩ 70</u>	<u>₩ 827,434</u>

(*) In accordance with the implementation of KIFRS1109, available-for-sale financial assets was reclassified as financial assets at fair value through profit or loss and financial assets at fair value through OCI. Refer to Note 2.3

	2017				
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Hedge accounting-related assets	Total
Cash and cash equivalents	₩ -	₩ 114,777	₩ -	₩ -	₩ 114,777
Short term financial asset	-	5,459	-	-	5,459
Available-for-sale financial assets	-	-	128,682	-	128,682
Trade accounts receivable	-	340,293	-	-	340,293
Other accounts receivable	1,275	7,087	-	-	8,362
Long-term loans	-	202,235	-	-	202,235
Other financial assets	-	44,964	-	218	45,182
	<u>₩ 1,275</u>	<u>₩ 714,815</u>	<u>₩ 128,682</u>	<u>₩ 218</u>	<u>₩ 844,990</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

4.1.2 Financial liabilities

Financial liabilities by category as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting-related liabilities	Total
Trade accounts payable	₩ -	₩ 325,630	₩ -	₩ 325,630
Other accounts payable	574	111,828	-	112,402
Borrowings	-	463,311	-	463,311
Bonds payable	-	339,345	-	339,345
Current portion of bonds payable and long-term borrowings	-	225,875	-	225,875
Other financial liabilities	-	46,377	1,998	48,375
	<u>₩ 574</u>	<u>₩ 1,512,366</u>	<u>₩ 1,998</u>	<u>₩ 1,514,938</u>

	2017			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting-related liabilities	Total
Trade accounts payable	₩ -	₩ 304,154	₩ -	₩ 304,154
Other accounts payable	4,262	56,291	10	60,563
Borrowings	-	615,255	-	615,255
Bonds payable	-	329,310	-	329,310
Current portion of bonds payable and long-term borrowings	-	157,378	-	157,378
Other financial liabilities	-	49,564	6,268	55,832
	<u>₩ 4,262</u>	<u>₩ 1,511,952</u>	<u>₩ 6,278</u>	<u>₩ 1,522,492</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

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, 2018 and 2017 are as follows (Korean won in millions):

	2018				Total
	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial assets at amortised cost	Hedge accounting-related assets	
Net income:					
Interest income	₩ -	₩ -	₩ 13,350	₩ -	₩ 13,350
Dividend income	203	6,404	-	-	6,607
Gain and loss on foreign currency transactions	-	-	19,552	-	19,552
Gain and loss on foreign currency translation	-	-	4,390	-	4,390
Gain and loss on settlement of currency forwards	10,007	-	-	-	10,007
Gain and loss on valuation of currency forwards	1,451	-	-	-	1,451
Gain and loss on settlement of currency swaps	-	-	-	4,670	4,670
Bad debt expenses	-	-	(138)	-	(138)
Other bad debt expenses	-	-	(2,865)	-	(2,865)
Loss on disposal of receivables	-	-	(3,205)	-	(3,205)
Other comprehensive income (*):					
Gain on valuation of FVOCI	-	9,666	-	-	9,666
Gain on valuation of derivatives designated as cash flow hedges	-	-	-	(148)	(148)
	<u>₩ 11,661</u>	<u>₩ 16,070</u>	<u>₩ 31,084</u>	<u>₩ 4,522</u>	<u>₩ 63,337</u>

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

4.2.1 Gains and losses on financial assets (cont'd)

	2017				
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Hedge accounting-related assets	Total
Net income:					
Interest income	₩ -	₩ 7,659	₩ -	₩ -	₩ 7,659
Dividend income	-	-	6,094	-	6,094
Gain and loss on foreign currency transactions	-	(39,063)	-	-	(39,063)
Gain and loss on foreign currency translation	-	(25,959)	-	-	(25,959)
Gain and loss on settlement of currency forwards	(1,037)	-	-	-	(1,037)
Gain and loss on valuation of currency forwards	1,275	-	-	-	1,275
Gain and loss on settlement of commodity swaps	-	-	-	5,704	5,704
Reversal of allowances for doubtful accounts	-	8,202	-	-	8,202
Reversal of other allowances for doubtful accounts	-	8,054	-	-	8,054
Loss on disposal of receivables	-	(1,976)	-	-	(1,976)
Other comprehensive income (*):					
Loss on valuation of available-for-sale financial assets	-	-	(13,778)	-	(13,778)
Gain on valuation of derivatives designated as cash flow hedges	-	-	-	4	4
	<u>₩ 238</u>	<u>₩ (43,083)</u>	<u>₩ (7,684)</u>	<u>₩ 5,708</u>	<u>₩ (44,821)</u>

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

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

4.2.2 Gains and losses on financial liabilities

Gains and losses on financial liabilities by category for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting-related liabilities	Total
Net income:				
Interest expenses	₩ -	₩ (33,489)	₩ -	₩ (33,489)
Loss on foreign currency transactions	-	(22,313)	-	(22,313)
Loss on foreign currency translation	-	(10,018)	-	(10,018)
Loss on settlement of currency forwards	(10,018)	-	-	(10,018)
Loss on valuation of currency forwards	(574)	-	-	(574)
Other comprehensive income (*):				
Loss on valuation of derivatives designated as cash flow hedges	-	-	(390)	(390)
	₩ (10,592)	₩ (65,820)	₩ (390)	₩ (76,802)

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

	2017			
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Hedge accounting-related liabilities	Total
Net income:				
Interest expenses	₩ -	₩ (32,458)	₩ -	₩ (32,458)
Gain on foreign currency transactions	-	45,096	-	45,096
Gain on foreign currency translation	-	50,193	-	50,193
Loss on settlement of currency forwards	(12,226)	-	-	(12,226)
Loss on valuation of currency forwards	(4,262)	-	-	(4,262)
Loss on valuation of currency swaps	-	-	(13,710)	(13,710)
Loss on settlement of commodity forwards	-	-	(4)	(4)
Other comprehensive income (*):				
Loss on valuation of derivatives designated as cash flow hedges	-	-	(238)	(238)
	₩ (16,488)	₩ 62,831	₩ (13,952)	₩ 32,391

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

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

5. Cash and cash equivalents

Details of cash and cash equivalents as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Cash on hand	₩	504	₩	623
Short-term deposits		79,585		114,154
	₩	80,089	₩	114,777

Outstanding balances of restricted deposits included in long-term financial instruments as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Restricted deposits	₩	10	₩	10

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, 2018 and 2017 are as follows (Korean won in millions):

	2018			2017		
	Gain on valuation	Loss on valuation	Other comprehensive income	Gain on valuation	Loss on valuation	Other comprehensive income
Currency forwards	₩ 1,451	₩ 574	₩ -	₩ 1,276	₩ 4,262	₩ -
Currency swaps	4,670	-	(400)	-	13,710	(228)
Interest rate swaps	-	-	(138)	-	-	(6)
	₩ 6,121	₩ 574	₩ (538)	₩ 1,276	₩ 17,972	₩ (234)

6.2 Currency forwards

As of December 31, 2018 and 2017, gains and losses on valuation of unsettled currency forward contracts are as follows (Korean won in millions and other currencies in thousands):

2018						
Position-buy	Buying amount	Position-sell	Selling amount	Contracted exchange rate	Gain on valuation	Loss on valuation
KRW	66,827	USD	59,401	1,109.1 ~ 1,130.5	₩ 499	₩ -
KRW	19	JPY	1,840	10.10	-	-
USD	94,922	KRW	104,935	1,055.60 ~ 1,127.17	952	(553)
KRW	6,130	EUR	4,800	1,277.00	-	(21)
					₩ 1,451	₩ (574)

2017						
Position-buy	Buying amount	Position-sell	Selling amount	Contracted exchange rate	Gain on valuation	Loss on valuation
KRW	87,100	USD	80,281	1,068.20 ~ 1,147.20	₩ 1,276	₩ (106)
USD	150,312	KRW	164,549	1,084.25 ~ 1,147.20	-	(4,156)
					₩ 1,276	₩ (4,262)

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

6.3 Currency swaps

As of December 31, 2018 and 2017, gains and losses on valuation of unsettled currency swap contracts are as follows (Korean won in millions and other currencies in thousands):

2018								
Contracted party	Buying amount	Selling amount	Contracted exchange rate	Receivable interest rate	Payment interest rate	Contracted term	Gain on valuation	Other comprehensive loss
The Export-Import Bank of Korea	USD 100,000	₩ 114,450	1,144.50	3ML + 2.30%	3.20%	2016.4.1 ~ 2021.4.1	₩ 4,670	₩ (400)

2017								
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 100,000	₩ 114,450	1,144.5	3ML + 2.30%	3.20%	2016.4.1 ~ 2021.4.1	₩ (13,710)	₩ (228)

6.4 Interest rate swaps

As of December 31, 2018 and 2017, gains and losses on valuation of unsettled interest rate swap contracts are as follows (Korean won in millions):

2018					
Contracted party	Contractual principal	Receivable interest rate	Payment interest rate	Contracted term	Other comprehensive loss
Shinhan Bank	₩ 20,000	CD (91 days)	1.21%	2016.6.30 ~ 2019.7.1	₩ (138)

2017					
Contracted party	Contractual principal	Receivable interest rate	Payment interest rate	Contracted term	Other comprehensive loss
Shinhan Bank	₩ 20,000	CD (91 days)	1.21%	2016.6.30 ~ 2019.7.1	₩ 4
Shinhan Bank	₩ 30,000	CD (91 days)	1.51%	2017.1.24 ~ 2018.1.2	(10)
					<u>₩ (6)</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

7. Inventories

Details of inventories as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		
	Acquisition cost	Valuation allowance	Book value
Merchandise	₩ 48,942	₩ -	₩ 48,942
Materials in transit	77,709	-	77,709
	<u>₩ 126,651</u>	<u>₩ -</u>	<u>₩ 126,651</u>
	2017		
	Acquisition cost	Valuation allowance	Book value
Merchandise	₩ 50,106	₩ (13)	₩ 50,093
Materials in transit	85,262	-	85,262
	<u>₩ 135,368</u>	<u>₩ (13)</u>	<u>₩ 135,355</u>

8. Investment assets

Details of investment assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Equity instruments held for long-term		
Available-for-sale financial assets	₩ -	₩ 128,682
Financial assets at fair value through profit or loss	4,779	-
Financial assets at fair value through OCI	144,228	-
Long-term loans receivable	176,767	202,236
	<u>₩ 325,774</u>	<u>₩ 330,918</u>

8.1 Equity instruments held for long-term

As of December 31, 2018, 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				
Aromatics Oman LLC	-	1.00	₩ 4,779	₩ 4,779
			<u>4,779</u>	<u>4,779</u>
Financial assets at fair value through OCI (*1)				
Korea Ras Laffan LNG Co., Ltd. (Qatar LNG project)	1,558,666	5.60	2,410	38,255
Vietnam Korea Exchange Ltd.	-	10.00	322	322
LG Int'l (Saudi) LLC (*2)	-	90.00	118	118
Minera Corocobre S.A.	-	11.18	1,286	586
Oilhub Korea Yeosu Co., Ltd.	131,000	5.00	7,205	7,848
GS E&R Co., Ltd.	1,303,334	7.50	73,623	78,844
Tianjin LG Bohai Chemical Co., Ltd.	-	10.00	11,737	17,109
Cobalt blue holdings Ltd.	7,093,959	6.11	6,467	1,146
			<u>103,168</u>	<u>144,228</u>
			<u>₩ 107,947</u>	<u>₩ 149,007</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

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

(*1) Financial assets measured at fair value through OCI include investments in shares of unlisted companies held as non-controlling interests. As the Company holds these investments for the purpose of business strategy, it chose them to be classified as financial asset at fair value through OCI, which is un-cancellable afterwards.

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

Changes in the net book value of equity instruments held for long-term for the year ended December 31, 2018 and changes in the net book value of available-for-sale financial assets for the year ended December 31, 2017 are as follows (Korean won in millions):

	2018					
	Equity ownership (%)	Jan.1	Effect of change in accounting policy (*1)	Acquisition (disposal) (*2)	Valuation	Dec. 31 (*3)
Financial assets at fair value through profit or loss						
LS VINA Industrial System Co., Ltd.	10.00	-	223	(223)	-	-
LG VINA Chemical JV Co., Ltd.	10.00	-	299	(299)	-	-
Aromatics Oman LLC	1.00	-	4,779	-	-	4,779
			5,301	(522)	-	4,779
Financial assets at fair value through OCI						
Korea Ras Laffan LNG Co., Ltd. (Qatar LNG project)	5.60	-	41,747	-	(3,492)	38,255
Vietnam korea Exchange Ltd.	10.00	-	322	-	-	322
LG Int'l (Saudi) LLC	90.00	-	118	-	-	118
Minera Corocobre S.A.	11.18	-	586	-	-	586
Oilhub Korea Yeosu Co., Ltd.	5.00	-	6,810	-	1,038	7,846
GS E&R Co., Ltd. (*4)	7.50	-	61,602	-	17,242	78,844
Tianjin LG Bohai Chemical Co., Ltd.	10.00	-	16,909	-	200	17,109
Cobalt blue holdings Ltd.	6.11	-	-	6,467	(5,321)	1,146
			128,094	6,467	9,667	144,228
			₩ 133,395	₩ 5,945	₩ 9,667	₩ 149,007

	2017				
	Equity ownership (%)	Jan.1	Acquisition (disposal)	Valuation (*5)	Dec. 31 (*3)
LG Fashion Corp. (*3)	-	₩ 1,504	₩ (576)	₩ (928)	₩ -
LG Uplus Corp. (*3)	-	2,271	(913)	(1,358)	-
Korea Ras Laffan LNG Co., Ltd. (Qatar LNG project)	5.60	54,039	-	(12,292)	41,747
Vietnam Korea Exchange Ltd.	10.00	322	-	-	322
LS VINA Industrial System Co., Ltd.	10.00	223	-	-	223
LG VINA Chemical J.V. Co., Ltd.	10.00	299	-	-	299
LG Int'l (Saudi) LLC	90.00	118	-	-	118
Minera Corocobre S.A.	11.18	586	-	-	586
Aromatics Oman LLC	1.00	4,779	-	-	4,779
Oilhub Korea Yeosu Co., Ltd.	5.00	7,205	-	-	7,205
GS E&R Co., Ltd. (*4)	7.50	53,302	7,500	800	61,602
Tianjin LG Bohai Chemical Co., Ltd.	10.00	11,801	-	-	11,801
		₩ 136,449	₩ 6,011	₩ (13,778)	₩ 128,682

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

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

- (*1) In accordance with the adoption of KIFRS1109, available-for-sale financial assets were reclassified as financial assets at fair value through profit or loss and financial assets at fair value through OCI. (Refer to Note 2.3)
- (*2) During the year ended December 31, 2018, the Group acquired 6.11% ownership of Cobalt blue holdings Ltd. and disposed all of its equity ownership of VINA Industrial System, LG VINA Chemical Joint Venture Co., Ltd.
- (*3) In 2017, the Company disposed all of its equity ownership in LF Corp. and LG Uplus Corp.
- (*4) During the year ended December 31, 2017, the Company participated in the capital increase with consideration of GS E&R Co., Ltd. without change in its equity ownership. Meanwhile, the Company has the right to purchase 351,111 shares of GS E&R Co., Ltd. held by GS Corp. at ₩62,463 per share, if GS E&R Co., Ltd. cannot undergo an initial public offering of its ordinary shares by February 28, 2019. GS Corp. also has the right to purchase all of the equity ownership in GS E&R Co. Ltd. which the Company holds (1,303,334 shares) at the fair value as of December 31, 2018, if the Company does not exercise the right within the agreed period.
- (*5) It includes the reclassification effect of gains and losses on available-for-sale financial assets disposed during previous year.

9. Investment in subsidiaries and associates

9.1 Investment in subsidiaries

As of December 31, 2018 and 2017, investments in subsidiaries are as follows.

	Country of domicile	Equity ownership (%)		Reporting date	Principal operation
		2018	2017		
LG International (America) Inc.	USA	100.00	100.00	Dec. 31	Export and import
LG International (Japan) Ltd.	Japan	100.00	100.00	Dec. 31	"
LG International (Hong Kong) Ltd.	Hong Kong	100.00	100.00	Dec. 31	"
LG International (Singapore) Pte. Ltd.	Singapore	100.00	100.00	Dec. 31	"
LG International (Deutschland) GmbH	Deutschland	100.00	100.00	Dec. 31	"
LG International (China) Ltd.	China	100.00	100.00	Dec. 31	"
Yantai VMI Hub LG International Co., Ltd.	China	100.00	100.00	Dec. 31	Hub
Guangzhou Steel Flower Electrical & Machinery Co., Ltd.	China	100.00	100.00	Dec. 31	Steel frames
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	"
LG International (India) Ltd.	India	100.00	100.00	Dec. 31	Export and import
PT. Green Global Lestari (GGL)	Indonesia	100.00	100.00	Dec. 31	Palm oil
PT. Indonesia Renewable Resources (IRR)	Indonesia	100.00	100.00	Dec. 31	Industrial planting
PT. Binsar Natorang Energi (BNE)	Indonesia	94.81	92.82	Dec. 31	Hydroelectric power
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. (Wantugou)	Hong Kong	100.00	100.00	Dec. 31	Coal mining
LG International Yakutsk Ltd.	Russia	100.00	100.00	Dec. 31	Real estate

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.1 Investment in subsidiaries (cont'd)

	Country of domicile	Equity ownership (%)		Reporting date	Principal operation
		2018	2017		
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
Highland Cement International Co., Ltd.	Myanmar	51.00	51.00	Mar. 31	Cement
Pantos Logistics Co., Ltd.	Korea	51.00	51.00	Dec. 31	Logistics

Details of the investments in subsidiaries as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018			2017
	Acquisition Cost	Net asset value	Net book value	Net book value
LG International (America) Inc.	₩ 21,156	₩ 27,313	₩ 27,217	₩ 31,684
LG International (Japan) Ltd.	401	8,265	7,863	11,108
LG International (Hong Kong) Ltd.	17,663	6,211	6,179	5,830
LG International (Singapore) Pte. Ltd.	3,288	12,929	12,855	20,125
LG International (Deutschland) GmbH	12,314	6,505	6,498	9,622
LG International (China) Ltd.	6,129	6,358	6,358	5,898
Yantai VMI Hub LG International Co., Ltd.	1,070	2,945	2,945	2,564
Guangzhou Steel Flower Electric & Machinery Co., Ltd.	15,108	18,953	18,953	19,068
Bowen Investment (Australia) Pty. Ltd.	26,707	27,916	27,916	9,024
PT. Batubara Global Energy (BGE)	11,753	42,048	42,878	43,013
PT. Ganda Alam Makmur (GAM)	241,090	310,583	238,605	227,185
LG International (India) Ltd.	943	1,470	1,470	1,312
PT. Green Global Lestari (GGL)	170,737	150,806	150,806	74,672
PT. Indonesia Renewable Resources (IRR)	98,231	1,536	1,536	1,545
PT. Binsar Natorang Energi (BNE)	56,904	70,819	68,745	41,886
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	7,419	20,965	21,181	18,680
Philco Resources Ltd. (Rapu-Rapu)	4,310	367	-	-
Resource Investment (Hong Kong) Ltd. (Wantugou)	53,176	74,848	74,848	74,191
LG International Yakutsk Ltd.	5,325	(5,682)	-	-
Korea Carbon International Co., Ltd. (Shaanxi BBM)	839	(5,244)	-	-
Colmineral, S.A. de.C.V.	5	4	4	4
Fertilizer Resources Investment Ltd.	97,580	105,566	105,566	93,767
Dangjin Tank Terminal Co., Ltd.	105,800	94,675	95,429	94,779
Haiphong Steel Flower Electrical & Machinery Company Limited	7,773	4,618	4,618	4,969
Highland Cement International Co., Ltd.	51,377	65,562	32,986	39,248
Pantos Logistics Co., Ltd.	314,721	504,955	388,551	361,005
	₩ 1,331,819	₩ 1,555,291	₩ 1,344,007	₩ 1,191,179

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.1 Investment in subsidiaries (cont'd)

The condensed financial information of major subsidiaries as of December 31, 2018 and 2017 is as follows (Korean won in millions):

	2018						
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Revenue	Profit (loss) for the year	Dividends paid by subsidiaries
LG International (America) Inc.	₩ 340,409	₩ 2,667	₩ 315,118	₩ 645	₩ 813,702	₩ 4,544	₩ 10,692
LG International (Japan) Ltd.	214,320	4,477	209,566	966	598,376	1,477	5,042
LG International (Hong Kong) Ltd.	97,804	2,744	94,337	-	258,605	60	-
LG International (Singapore) Pte. Ltd.	349,797	5,922	342,790	-	2,039,240	2,167	10,696
PT. Batubara Global Energy (BGE)	45,665	23,436	27,053	-	303,765	12,916	16,600
PT. Ganda Alam Makmur (GAM)	52,805	534,707	42,479	234,449	178,214	7,934	-
PT. Green Global Lestari (GGL)	8,483	165,381	1,851	21,206	-	3,429	-
Resource Investment (Hong Kong) Ltd. (Wantugou)	57	74,790	-	-	-	(173)	-
Fertilizer Resources Investment Ltd.	92	105,474	-	-	-	12,147	-
Dangjin Tank Terminal Co., Ltd.	99	94,609	23	9	-	(1,247)	-
Pantos Logistics Co., Ltd.	839,353	392,008	606,272	120,134	3,967,607	68,340	10,000

	2017						
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Revenue	Profit (loss) for the year	Dividends paid by subsidiaries
LG International (America) Inc.	₩ 297,959	₩ 2,544	₩ 267,092	₩ 950	₩ 1,971,922	₩ 3,062	₩ 16,992
LG International (Japan) Ltd.	219,510	4,118	211,546	1,001	1,771,130	2,161	8,462
LG International (Hong Kong) Ltd.	151,335	2,729	148,171	-	1,123,851	2,103	-
LG International (Singapore) Pte. Ltd.	358,325	5,064	343,290	-	1,897,256	927	11,328
PT. Batubara Global Energy (BGE)	47,970	30,940	35,627	-	279,761	21,963	13,501
PT. Ganda Alam Makmur (GAM)	40,819	529,765	31,541	249,067	128,732	12,269	-
PT. Green Global Lestari (GGL)	12,618	82,859	232	20,573	-	11,477	-
Resource Investment (Hong Kong) Ltd. (Wantugou)	55	74,135	-	-	-	5,952	-
Fertilizer Resources Investment Limited	107	93,669	9	-	-	969	-
Dangjin Tank Terminal Co., Ltd.	62	93,993	25	6	-	(1,060)	-
Pantos Logistics Co., Ltd.	761,249	301,077	571,172	40,156	3,615,992	46,439	10,000

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.1 Investment in subsidiaries (cont'd)

Changes in the net book value of investments in subsidiaries by equity method for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018						
	Jan. 1	Acquisition (disposal) and transfer	Dividends	Equity adjustments in equity method	Share of profit or loss	Others (*)	Dec. 31
LG International (America) Inc.	₩ 31,684	₩ -	₩ (10,692)	₩ 999	₩ 5,226	₩ -	₩ 27,217
LG International (Japan) Ltd.	11,108	-	(5,042)	749	1,048	-	7,863
LG International (Hong Kong) Ltd.	5,830	-	-	258	91	-	6,179
LG International (Singapore) Pte. Ltd.	20,125	-	(10,696)	(2,575)	2,068	3,933	12,855
LG International (Deutschland) GmbH	9,622	3,262	-	31	(6,417)	-	6,498
LG International (China) Ltd.	5,898	-	-	(43)	503	-	6,358
Yantai VMI Hub LG International Co., Ltd.	2,564	-	-	(22)	403	-	2,945
Guangzhou Steel Flower Electric & Machinery Co., Ltd.	19,068	-	-	(103)	(12)	-	18,953
Bowen Investment (Australia) Pty. Ltd.	9,024	-	-	(1,360)	20,252	-	27,916
PT. Batubara Global Energy (BGE)	43,013	-	(16,600)	2,450	14,015	-	42,878
PT. Ganda Alam Makmur (GAM)	227,185	-	-	7,604	3,816	-	238,605
LG International (India) Ltd.	1,312	-	-	(59)	217	-	1,470
PT. Green Global Lestari (GGL)	74,672	75,316	-	(2,611)	3,429	-	150,806
PT. Indonesia Renewable Resources (IRR)	1,545	-	-	(58)	49	-	1,536
PT. Binsar Natorang Energi (BNE)	41,886	15,367	-	4,259	7,233	-	68,745
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	18,680	-	-	(159)	2,660	-	21,181
Philco Resources Ltd. (Rapu-Rapu)	-	-	-	-	-	-	-
Resource Investment (Hong Kong) Ltd. (Wantugou)	74,191	-	-	830	(173)	-	74,848
LG International Yakutsk Ltd.	-	-	-	(1,210)	(79)	1,289	-
Colmineral, S.A. de.C.V.	4	-	-	-	-	-	4
Fertilizer Resources Investment Ltd.	93,767	-	-	(348)	12,147	-	105,566
Dangjin Tank Terminal Co., Ltd.	94,779	1,900	-	(3)	(1,247)	-	95,429
Haiphong Steel Flower Electrical & Machinery Company Limited	4,969	-	-	102	(453)	-	4,618
Highland Cement International Co., Ltd.	39,248	2,186	-	(2,983)	(5,465)	-	32,986
Pantos Logistics Co., Ltd.	361,005	-	(5,100)	(1,390)	34,881	(845)	388,551
	<u>₩ 1,191,179</u>	<u>₩ 98,031</u>	<u>₩ (48,130)</u>	<u>₩ 4,358</u>	<u>₩ 94,192</u>	<u>₩ 4,377</u>	<u>₩ 1,344,007</u>

(*) Others include the effects of policy changes due to the adoption of KIFRS 1109. (Refer to Note 2.3)

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.1 Investment in subsidiaries (cont'd)

	2017						
	Jan. 1	Acquisition (disposal) and transfer	Dividends	Equity adjustments in equity method	Share of profit or loss	Others	Dec. 31
LG International (America) Inc.	₩ 51,468	₩ -	₩ (16,992)	₩ (5,079)	₩ 2,287	₩ -	₩ 31,684
LG International (Japan) Ltd.	18,236	-	(8,462)	(1,003)	2,337	-	11,108
LG International (Hong Kong) Ltd.	4,081	-	-	(609)	2,358	-	5,830
LG International (Singapore) Pte. Ltd.	34,121	-	(11,328)	(3,670)	1,002	-	20,125
LG International (Deutschland) GmbH	8,002	-	-	78	1,542	-	9,622
LG International (China) Ltd.	5,539	-	-	(324)	683	-	5,898
Yantai VMI Hub LG International Co., Ltd.	2,166	-	-	(133)	531	-	2,564
Guangzhou Steel Flower Electric & Machinery Co., Ltd.	19,480	-	-	(1,096)	684	-	19,068
Bowen Investment (Australia) Pty. Ltd.	5,050	-	-	(373)	4,347	-	9,024
PT. Batubara Global Energy (BGE)	40,921	-	(13,501)	(6,459)	22,052	-	43,013
PT. Ganda Alam Makmur	243,011	-	-	(21,758)	5,932	-	227,185
LG International (India) Ltd.	1,285	-	-	(81)	108	-	1,312
PT. Green Global Lestari (GGL)	71,602	-	-	(8,407)	11,477	-	74,672
PT. Indonesia Renewable Resources (IRR)	1,924	-	-	(286)	(93)	-	1,545
Hebei Youneng Trading Ltd.	2,313	-	-	(107)	-	(2,206)	-
PT. Binsar Natorang Energi Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	28,782	14,742	-	(5,749)	4,111	-	41,886
Philco Resources Ltd. (Rapu-Rapu) Resource Investment (Hong Kong) Ltd. (Wantugou)	14,772	-	-	(879)	2,590	2,197	18,680
LG International Investment (Canada) Ltd. (Raven)	986	-	-	(356)	(630)	-	-
LG International Yakutsk Ltd.	74,237	-	-	(5,977)	5,952	(21)	74,191
Colmineral, S.A. de.C.V.	18	(3)	-	702	-	(717)	-
Fertilizer Resources Investment Limited	-	-	-	893	(477)	(416)	-
Dangjin Tank Terminal Co., Ltd.	4	-	-	-	-	-	4
Haiphong Steel Flower Electrical & Machinery Company Limited	98,874	-	-	(6,076)	969	-	93,767
Highland Cement International Co., Ltd.	95,242	600	-	(3)	(1,060)	-	94,779
Pantos Logistics Co., Ltd.	6,793	-	-	(696)	(1,128)	-	4,969
	38,204	8,032	-	(5,094)	(1,894)	-	39,248
	347,974	-	(5,100)	(6,050)	23,629	552	361,005
	₩ 1,215,085	₩ 23,371	₩ (55,383)	₩ (78,592)	₩ 87,309	₩ (611)	₩ 1,191,179

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.2 Investment in associates

As of December 31, 2018 and 2017, investments in associates are as follows.

	Domicile	Equity ownership (%)		Reporting date	Principal business activity
		2018	2017		
Overseas Resources Development Fund (*1)	Korea	7.46	7.46	12.31	Overseas resources development
Heungkuk Investment Fund	Korea	50.00	50.00	12.31	"
POSCO-IPPC (India Pune Processing Center)	India	35.00	35.00	12.31	Processing and selling steel
POSCO-PWPC (Poland Wroclaw Processing Center)	Poland	40.00	40.00	12.31	"
LG Holdings (HK) Ltd.	Hong Kong	25.00	25.00	12.31	Leasing real estate
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
Sal de Vida Korea Corp.	Korea	33.33	33.33	12.31	Mining and selling lithium
United Copper & Moly LLC (Rosemont)	USA	50.00	50.00	12.31	Mining and selling cooper
Dongbu Thai Steel Co., Ltd. (*2)	Thailand	-	22.59	12.31	Processing and selling steel
GeoPark Chile S.A. (*2)	Chile	-	20.00	12.31	Oil and gas
GeoPark TdF S.A. (*1,2)	Chile	-	14.00	12.31	"
GeoPark Colombia Cooperate U.A. (*2)	Netherland	-	20.00	12.31	"
Elvatec Co., Ltd. (*2)	Korea	-	26.09	12.31	Rechargeable battery
Oman International Petrochemical Industry Company LLC	Oman	30.00	30.00	12.31	Manufacturing and selling PTA, PET
Musandam Power Company SAOC	Oman	30.00	30.00	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, 2018, the Company disposed its equity ownership of Dongbu Thai Steel Co., Ltd, GeoPark Chile S.A., GeoPark TdF S.A. and GeoPark Colombia Cooperate U.A. Elvatec Co., Ltd. was liquidated and excluded from the associates of the Company.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.2 Investment in associates (cont'd)

Details of the investments in associates as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
	Acquisition cost	Net asset value	Net book value	Net book value
Overseas Resources Development Fund	₩ 2,242	₩ (931)	₩ -	₩ 1,495
Heungkuk Investment Fund	4,566	(8,729)	-	2,624
POSCO-IPPC (India Pune Processing Center)	9,184	27,533	9,637	8,166
POSCO-PWPC (Poland Wroclaw Processing Center)	5,244	15,827	6,355	6,367
LG Holdings (HK) Ltd.	37,983	220,671	55,168	50,607
Kernhem B.V.	2,005	(67,165)	-	-
ADA Oil LLP	22,011	(72,677)	3,302	3,324
GS HP Sunflower Village Int'l Corp.	2,911	11,870	3,561	2,756
Sal de Vida Korea Corp.	6,300	188	2,418	2,418
United Copper & Moly LLC (Rosemont)	39,618	74,812	37,406	35,844
Dongbu Thai Steel Co., Ltd.	-	-	-	1,564
GeoPark Chile S.A.	-	-	-	2,011
GeoPark TdF S.A.	-	-	-	-
GeoPark Colombia Cooperate U.A.	-	-	-	31,220
Elvatec Co., Ltd.	-	-	-	207
Oman International Petrochemical Industry Company LLC	19,766	57,596	-	15,142
Musandam Power Company SAOC	6,535	29,501	8,850	7,337
Gansu Wuwei Cogeneration Power Plant	55,932	175,337	53,049	53,677
	₩ 214,297	₩ 463,833	₩ 179,746	₩ 224,759

The condensed financial information of major associates as of December 31, 2018 and 2017 is as follows (Korean won in millions):

	2018						
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Revenue	Profit (loss) for the year	Dividends paid by associates
LG Holdings (HK) Ltd.	₩ 24,133	₩ 196,562	₩ -	₩ 24	₩ -	₩ 18,578	₩ -
Kernhem B.V.	774	67,000	-	134,940	-	(3,587)	-
ADA Oil LLP	9,698	65,572	1,249	146,699	46,444	(1,228)	-
United Copper & Moly LLC (Rosemont)	-	74,814	-	2	-	(11)	-
	2017						
	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Revenue	Profit (loss) for the year	Dividends paid by associates
LG Holdings (HK) Ltd.	₩ 21,643	₩ 180,784	₩ -	₩ -	₩ -	₩ 13,586	₩ -
Kernhem B.V.	774	62,409	-	133,396	-	(2,468)	-
ADA Oil LLP	10,798	73,948	1,391	163,524	31,519	(2,957)	-
United Copper & Moly LLC (Rosemont)	-	71,689	-	2	-	(86)	-
GeoPark Chile S.A.	8,600	476,644	11,389	339,553	29,652	(27,874)	-
GeoPark Colombia Cooperate U.A.	43,525	217,244	79,776	24,893	228,094	78,614	2,731

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.2 Investment in associates (cont'd)

Changes in the net book value of investments in associates for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018						Dec. 31
	Jan.1	Acquisition (disposal)	Dividends	Change in equity adjustment in equity method	Share of profit or loss	Impairment and others (*)	
Overseas Resources development Fund	₩ 1,495	₩ -	₩ -	₩ -	₩ (1,495)	₩ -	₩ -
Heungkuk Investment Fund	2,624	-	-	-	(2,624)	-	-
POSCO-IPPC (India Pune Processing Center)	8,166	-	-	(370)	1,841	-	9,637
POSCO-PWPC (Poland Wroclaw Processing Center)	6,367	-	-	(186)	174	-	6,355
LG Holdings (HK) Ltd. (LG Building Ltd.)	50,607	-	-	(84)	4,645	-	55,168
Kernhem B.V.	-	-	-	1,091	(1,091)	(900)	-
ADA Oil LLP	3,324	-	-	1,090	(1,112)	-	3,302
GS HP Sunflower Village Int'l Corp.	2,756	-	(262)	111	956	-	3,561
Sal de Vida Korea Corp.	2,418	-	-	-	-	-	2,418
United Copper & Moly LLC (Rosemont)	35,844	5	-	1,562	(5)	-	37,406
Dongbu Thai Steel Co., Ltd.	1,564	(1,514)	-	212	(262)	-	-
GeoPark Chile S.A.	2,011	1,508	-	(831)	(2,688)	-	-
GeoPark Colombia Cooperate U.A.	31,220	(50,488)	(8,717)	389	27,596	-	-
Elvatec Co., Ltd.	207	(225)	-	26	(8)	-	-
Oman International Petrochemical Industry Company LLC	15,142	2,794	-	714	(458)	(18,192)	-
Musandam Power Company SAOC	7,337	-	-	339	1,174	-	8,850
Gansu Wuwei Cogeneration Power Plant	53,677	-	-	(282)	(346)	-	53,049
	₩ 224,759	₩ (47,920)	₩ (8,979)	₩ 4,681	₩ 26,297	₩ (19,092)	₩ 179,746

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

9.2 Investment in associates (cont'd)

	2017						
	Jan. 1	Acquisition (disposal)	Dividends	Change in equity adjustment in equity method	Share of profit or loss	Impairment and others	Dec. 31
Overseas Resources development Fund	₩ 1,548	₩ 9	₩ -	₩ -	₩ (62)	₩ -	₩ 1,495
Heungkuk Investment Fund	2,750	18	-	-	(144)	-	2,624
POSCO-IPPC (India Pune Processing Center)	3,346	-	-	(396)	5,216	-	8,166
POSCO-PWPC (Poland Wroclaw Processing Center)	6,124	-	-	389	(146)	-	6,367
LG Holdings (HK) Ltd. (LG Building Ltd.)	70,441	(19,122)	-	(4,109)	3,397	-	50,607
Kernhem B.V.	-	-	-	2,929	(771)	(2,158)	-
ADA Oil LLP	3,989	-	-	1,702	(2,367)	-	3,324
GS HP Sunflower Village Int'l Corp.	2,311	-	(125)	(345)	915	-	2,756
Sal de Vida Korea Corp.	2,418	-	-	-	-	-	2,418
United Copper & Moly LLC (Rosemont)	40,464	14	-	(4,589)	(45)	-	35,844
Dongbu Thai Steel Co., Ltd.	1,532	-	-	(32)	64	-	1,564
GeoPark Chile S.A.	11,405	-	-	(3,820)	(5,574)	-	2,011
GeoPark Colombia Cooperate U.A.	18,992	-	(546)	(2,949)	15,723	-	31,220
Elvatec Co., Ltd.	2,542	-	-	(4)	(2,331)	-	207
Oman International Petrochemical Industry Company LLC	16,630	1,028	-	(1,919)	(597)	-	15,142
Musandam Power Company SAOC	324	6,111	-	(776)	1,678	-	7,337
SLA Global Co., Ltd.	171	(67)	-	-	(104)	-	-
Gansu Wuwei Cogeneration Power Plant	55,546	-	-	(3,084)	1,215	-	53,677
	₩ 240,533	₩ (12,009)	₩ (671)	₩ (17,003)	₩ 16,067	₩ (2,158)	₩ 224,759

(*) Refer to Note 23.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

10. Property, plant and equipment and investment properties

10.1 Property, plant and equipment

Details of property, plant and equipment as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018			
	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Net book value
Land	₩ 4,406	₩ -	₩ -	₩ 4,406
Buildings	21,814	(9,397)	-	12,417
Structures	1,425	(812)	-	613
Machinery and equipment	19,855	(10,452)	(9,349)	54
Vehicles	11,450	(2,264)	-	9,186
Others	11,497	(10,574)	-	923
Construction-in-progress	107	-	-	107
	<u>₩ 70,554</u>	<u>₩ (33,499)</u>	<u>₩ (9,349)</u>	<u>₩ 27,706</u>

	2017			
	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Net book value
Land	₩ 4,406	₩ -	₩ -	₩ 4,406
Buildings	21,747	(8,852)	-	12,895
Structures	1,425	(754)	-	671
Machinery and equipment	19,830	(10,439)	(9,349)	42
Vehicles	11,630	(1,430)	-	10,200
Others	11,434	(10,325)	-	1,109
Construction-in-progress	466	-	-	466
	<u>₩ 70,938</u>	<u>₩ (31,800)</u>	<u>₩ (9,349)</u>	<u>₩ 29,789</u>

Changes in the net book value of property, plant and equipment for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018					
	Jan.1	Additions	Transfer	Disposals	Depreciation	Dec. 31
Land	₩ 4,406	₩ -	₩ -	₩ -	₩ -	₩ 4,406
Buildings	12,895	-	66	-	(544)	12,417
Structures	671	-	-	-	(58)	613
Machinery and equipment	42	25	-	-	(13)	54
Vehicles	10,200	-	-	(47)	(967)	9,186
Others	1,109	104	-	-	(290)	923
Construction-in-progress	466	1,745	(2,104)	-	-	107
	<u>₩ 29,789</u>	<u>₩ 1,874</u>	<u>₩ (2,038)</u>	<u>₩ (47)</u>	<u>₩ (1,872)</u>	<u>₩ 27,706</u>

	2017					
	Jan.1	Additions	Transfer	Disposals	Depreciation	Dec. 31
Land	₩ 4,406	₩ -	₩ -	₩ -	₩ -	₩ 4,406
Buildings	13,439	-	-	-	(544)	12,895
Structures	729	-	-	-	(58)	671
Machinery and equipment	33	20	-	-	(11)	42
Vehicles	13,926	57	-	(2,521)	(1,262)	10,200
Others	1,246	200	-	(10)	(327)	1,109
Construction-in-progress	75	629	(238)	-	-	466
	<u>₩ 33,854</u>	<u>₩ 906</u>	<u>₩ (238)</u>	<u>₩ (2,531)</u>	<u>₩ (2,202)</u>	<u>₩ 29,789</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

10.2 Investment properties

Details of investment properties as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		
	Acquisition cost	Accumulated depreciation	Net book value
Land	₩ 6,672	₩ -	₩ 6,672
Buildings	32,270	(14,142)	18,128
	₩ 38,942	₩ (14,142)	₩ 24,800

	2017		
	Acquisition cost	Accumulated depreciation	Net book value
Land	₩ 6,672	₩ -	₩ 6,672
Buildings	32,170	(13,336)	18,834
	₩ 38,842	₩ (13,336)	₩ 25,506

Changes in the net book value of investment properties for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Jan. 1	₩	25,506	₩	26,310
Transfer		100		-
Depreciation		(806)		(804)
Dec. 31	₩	24,800	₩	25,506

The fair values of investment properties amounted to ₩69,251 million for land and ₩52,029 million for buildings which were determined based on the market approach and cost approaches, and the amounts include the properties occupied and used by the Company. The Company elected not to re-measure the fair values as of December 31, 2018 as any changes arising from revaluation would not be material.

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

	Insured assets	Insurance institution	Insured amount	
			2018	2017
Property insurance	Plant & equipment, etc.	KB insurance Co. Ltd. and others	₩ 160,761	₩ 171,085

11. Intangible assets

Details of intangible assets as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
License	₩	16,479	₩	16,031
Overseas resources development		-		36,976
Others		1,821		1,644
	₩	18,300	₩	54,651

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

11. Intangible assets (cont'd)

Changes in the net book value of intangible assets for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018						
	Jan. 1	Additions	Disposals	Transfer	Amortization	Impairment (*)	Dec. 31
License	₩ 16,031	₩ -	₩ (610)	₩ 1,058	₩ -	₩ -	₩ 16,479
Overseas resources development	36,976	-	-	-	(7,910)	(29,066)	-
Others	1,644	451	-	879	(1,153)	-	1,821
	<u>₩ 54,651</u>	<u>₩ 451</u>	<u>₩ (610)</u>	<u>₩ 1,937</u>	<u>₩ (9,063)</u>	<u>₩ (29,066)</u>	<u>₩ 18,300</u>
	2017						
	Jan. 1	Additions	Disposals	Transfer	Amortization	Impairment (*)	Dec. 31
Industrial property rights	₩ 1	₩ -	₩ -	₩ -	₩ (1)	₩ -	₩ -
License	16,216	1,303	(1,645)	157	-	-	16,031
Overseas resources development	49,565	15,920	-	-	(9,998)	(18,511)	36,976
Others	3,234	-	-	81	(1,671)	-	1,644
	<u>₩ 69,016</u>	<u>₩ 17,223</u>	<u>₩ (1,645)</u>	<u>₩ 238</u>	<u>₩ (11,670)</u>	<u>₩ (18,511)</u>	<u>₩ 54,651</u>

(*) Refer to Note 23

12. Trade and other receivables

Details of trade and other receivables as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018			2017		
	Total amount	Allowance for doubtful accounts	Net value	Total amount	Allowance for doubtful accounts	Net value
Current:						
Trade receivables	₩ 343,065	₩ (40,609)	₩ 302,456	₩ 384,404	₩ (44,111)	₩ 340,293
Short-term loans	2,663	-	2,663	5,459	-	5,459
Other receivables	93,353	(10,207)	83,146	17,935	(9,573)	8,362
Accrued income	34,989	(10,062)	24,927	44,805	(9,661)	35,144
Short-term deposits	424	-	424	417	-	417
	<u>474,493</u>	<u>(60,878)</u>	<u>413,615</u>	<u>453,020</u>	<u>(63,345)</u>	<u>389,675</u>
Non-current:						
Long-term loans	246,867	(70,100)	176,767	270,101	(67,865)	202,236
Long-term other receivables	4,570	(45)	4,525	6,218	(60)	6,158
Long-term bank deposits	10	-	10	10	-	10
Long-term deposits	4,910	(1,492)	3,418	4,943	(1,492)	3,451
	<u>256,357</u>	<u>(71,637)</u>	<u>184,720</u>	<u>281,272</u>	<u>(69,417)</u>	<u>211,855</u>
	<u>₩ 730,850</u>	<u>₩ (132,515)</u>	<u>₩ 598,335</u>	<u>₩ 734,292</u>	<u>₩ (132,762)</u>	<u>₩ 601,530</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

12. Trade and other receivables (cont'd)

Changes in the net book value of allowance for doubtful accounts for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
	Trade receivables	Other receivables	Trade receivables	Other receivables
Jan. 1	₩ 44,111	₩ 88,651	₩ 52,313	₩ 99,283
Bad debt expenses	138	2,865	-	-
Reversal of allowance for doubtful accounts	-	-	(8,202)	(8,054)
Others	(3,640)	390	-	(2,578)
Dec. 31	₩ 40,609	₩ 91,906	₩ 44,111	₩ 88,651

Aging analyses of trade receivables as of December 31, 2018 and 2017 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, 2018	₩ 277,396	₩ 4,004	₩ 1,261	₩ 7,657	₩ 52,747	₩ 343,065
Dec. 31, 2017	306,012	13,718	4,551	8,566	51,557	384,404

As of the December 31, 2018 and 2017, details of trade accounts receivable that were transferred or factored but not derecognized because they unsatisfied the derecognition criteria are as follows (Korean won in millions):

	2018	2017	Description
Trade accounts receivable	₩ 82	₩ 2,264	Recourse

13. Borrowings and bonds

13.1 Short-term borrowings

Details of short-term borrowings as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Financial institution	Description	Annual interest rate as of Dec. 31,	
		2018	2017
Agricultural Bank of China and others	General borrowings	-	₩ -
KEB Hana Bank	Banker's usance	2.72%~3.08%	₩ 384
Woori Bank and others	Commercial paper discount (*)	-	₩ 82
			₩ 466
			₩ 63,122

(*) The Company entered into commercial paper discounts agreements with financial institutions such as Woori Bank, Shinhan Bank, KEB Hana Bank, Korea Development Bank and others. Those amounts that are not due as of reporting date and that do not satisfy the derecognition criteria are recorded as short-term borrowings.

The Company entered into bank overdraft facilities agreements (credit limit of ₩18,000 million) with Shinhan Bank and two other banks as of December 31, 2018. In relation to the bank overdraft facilities, long-term financial instruments are provided as collateral.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

13.2 Long-term borrowings

Details of long-term borrowings as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	Financial institution	Annual interest rate as of Dec. 31, 2018	2018	2017
Local currency	Korea Energy Agency	Special energy fund rate - 2.25%	₩ 8,432	₩ 9,599
	Forestry Cooperative in Korea	1.50%	12,105	13,170
	Woori International the 1 st Co., Ltd.	2.89%~2.91%	130,000	130,000
	The Export-Import Bank of Korea	Export-Import	133,360	67,400
		Financial Debentures		
		3 month + (1.30~1.39%)		
	KL International the 1 st Co., Ltd.	2.59%	30,000	40,000
	China Construction Bank Corporation	CD (91 days) + 0.95%	20,000	20,000
			333,987	280,169
		Less: current portion	(65,740)	(19,022)
		₩ 268,157	₩ 261,147	
Foreign currency	Korea Energy Agency	Special energy fund rate - 2.25%	₩ 39,041	₩ 38,261
	The Export-import Bank of Korea	6ML + (2.07 ~ 2.62%), 3ML + (2.0 ~ 2.3%)	203,494	269,682
	Nonghyup Bank	3ML + 2.3%	16,772	16,071
	NH Investment & Securities (H.K.)	3ML + 2.3%	5,591	5,357
			264,898	329,371
		Less: current portion	(70,210)	(38,385)
			194,688	290,986
		₩ 462,845	₩ 552,133	

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

13.3 Bonds

Details of bonds as of December 31, 2018 and 2017 are as follows (Korean won in millions):

Series	Issue date	Maturity date	Annual interest rate	2018	2017	Warranty
114th	Feb. 28, 2013	Feb. 28, 2018	3.05%	₩ -	₩ 40,000	Non-warranty
115th	Mar. 03, 2015	Mar. 03, 2022	2.74%	50,000	50,000	"
116-1st	May. 28, 2015	May. 28, 2018	2.08%	-	60,000	"
116-2nd	May. 28, 2015	May. 28, 2020	2.43%	70,000	70,000	"
116-3rd	May. 28, 2015	May. 28, 2022	2.86%	90,000	90,000	"
117-1st	Sep. 05, 2016	Sep. 05, 2019	1.74%	90,000	90,000	"
117-2nd	Sep. 05, 2016	Sep. 05, 2021	2.02%	30,000	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	-	"
Less: discount on bonds				(730)	(719)	
Less: current portion of bonds				(90,000)	(100,000)	
Less: current portion of discount on bonds				75	29	
				<u>₩ 339,345</u>	<u>₩ 329,310</u>	

The Company issued the 114th, 115th, 116-1st, 116-2nd, 116-3rd, 117-1st, 117-2nd, 118-1st and 118-2nd unsecured bonds at discounts with the condition of full redemption on maturity date, and those interests are payable every 3 month. Bond discounts were amortized using the effective interest rate method during redemption period and recognized as finance costs.

14. Issued capital and others

14.1 Issued capital

Details of issued capital as of December 31, 2018 and 2017 are as follows (Korean won in millions, except per share amounts):

	2018	2017
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>

14.2 Share premium

Details of share premium as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Paid-in capital in excess of par value	₩ 47,106	₩ 47,106
Asset revaluation surplus (*)	37,286	37,286
Other capital surplus	17,732	17,732
	<u>₩ 102,124</u>	<u>₩ 102,124</u>

(*) 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.

14.3 Other components of equity

Details of other components of equity as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017
Treasury stock	₩	(968)	₩ (968)

14.4 Accumulated other comprehensive income or loss

Details of accumulated other comprehensive income or loss as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017
Net gain on valuation of available-for-sale financial assets	₩	-	₩ 20,635
Gain on valuation of FVOCI		31,605	
Gain on valuation of derivatives designated as cash flow hedges		539	948
Positive adjustments of equity in equity method		20,670	14,255
Negative adjustments of equity in equity method		(90,952)	(89,905)
Exchange differences on translation of foreign operations		(5,429)	(5,552)
	₩	(43,567)	₩ (59,619)

14.5 Retained earnings

Details of retained earnings as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017
Legal reserve	₩	35,140	₩ 34,174
Business rationalization reserve		1,511	1,510
Improvement of financial structure reserve		13,693	13,693
Voluntary reserves and retained earnings before appropriations		832,919	914,473
	₩	883,263	₩ 963,850

14.6 Earnings per share

The Company's per share amounts for the years ended December 31, 2018 and 2017 are computed as follows (Korean won):

	2018		2017
Profit (loss) for the year	₩	(69,928,838,787)	₩ 62,784,492,572
Weighted-average number of ordinary shares outstanding (*)		38,659,249	38,659,249
Basic earnings (loss) per share	₩	(1,809)	₩ 1,624

(*) The Company's weighted-average number of ordinary shares for the years ended December 31, 2018 and 2017 are computed as follows:

	2018		2017
Number of common share issued		38,760,000	38,760,000
Number of ordinary shares outstanding		38,659,249	38,659,249
Weighted-average number of treasury shares		100,751	100,751
Weighted-average number of ordinary shares outstanding		38,659,249	38,659,249

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

14.6 Earnings per share (cont'd)

The Company's weighted-average number of treasury shares for the years ended December 31, 2018 and 2017 is computed as follows:

	2018		
	Number of shares issued	Days	Number of shares weighted
As of January 1	100,751	365	36,774,115
			(÷) 365
Weighted-average number of treasury shares			<u>100,751</u>
	2017		
	Number of shares issued	Days	Number of shares weighted
As of January 1	100,751	365	36,774,115
			(÷) 365
Weighted-average number of treasury shares			<u>100,751</u>

14.7 Statements of appropriation of retained earnings

The statements of appropriation of retained earnings for the years ended December 31, 2018 and 2017 are as follows (Korean won):

	2018	2017
Retained earnings before appropriations:		
Unappropriated retained earnings carried forward from the prior year	₩ -	₩ -
Effect of adoption of new accounting standards	3,776,533,560	-
Re-measurement loss on defined benefit plans	(4,012,718,982)	(521,327,644)
Change in retained earnings in equity method	(757,569,712)	530,516,990
Profit (loss) for the year	<u>(69,928,838,787)</u>	<u>62,784,492,572</u>
	(70,922,593,921)	62,793,681,918
Reversal of voluntary reserves:		
Voluntary reserves	<u>81,553,887,396</u>	-
	81,553,887,396	-
Appropriation:		
Legal reserve	(966,481,225)	(966,481,225)
Cash dividends (Note 15)	(9,664,812,250)	(9,664,812,250)
Voluntary reserve	-	(52,162,388,443)
	<u>(10,631,293,475)</u>	<u>(62,793,681,918)</u>
Unappropriated retained earnings to be carried forward to the next year	<u>₩ -</u>	<u>₩ -</u>

The statement of appropriation of retained earnings for the year ended December 31, 2018 is scheduled to be approved at the annual stockholder's meeting to be held on March 15, 2019. The statement of appropriation of retained earnings for the year ended December 31, 2017 was approved at the annual stockholder's meeting on March 16, 2018.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

15. Dividends

For the years ended December 31, 2018 and 2017, dividends paid are as follows (Korean won in millions, except per share amounts):

	2018		2017	
Dividend per share	₩	250	₩	250
Dividends paid		9,665		9,665

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

	2018		2017	
Dividend per share	₩	250	₩	250
Dividends		9,665		9,665

16. Sales

Revenue from contracts with customers for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
	Resources	Infra-business	Resources	Infra-business
Revenue recognized at point of time				
Sales of goods	₩ 701,114	₩ 2,153,036	₩ 703,759	₩ 2,025,477
Sales of services	1,635	17,473	1,865	28,510
	702,750	2,170,509	705,625	2,053,987
Revenue recognized over period				
Sales of services	1,788	29,241	1,819	47,530
	₩ 704,538	₩ 2,199,749	₩ 707,443	₩ 2,101,517

Details of contract liabilities (advance payments) arising from contracts with customers as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Resource	₩	61	₩	827
Infra-business		835		1,621
	₩	896	₩	2,448

17. Adjusted operating income (loss)

Adjusted operating income (loss) by adding several items among non-operating income and costs to present the Company's operational performance more effectively to the operating income (loss) in the statements of profit or loss for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Operating income (loss)	₩	(21,032)	₩	29,712
Related gain (*)		-		5,704
Related loss (*)		-		(4)
	₩	(21,032)	₩	35,412

(*) Gain (loss) on valuation of commodity futures and swaps and settlement of commodity futures and swaps.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

18. Selling and administrative expenses

Details of selling and administrative expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Salaries	₩ 38,300	₩ 44,141
Retirement benefits	6,819	5,585
Employee welfare benefits	7,988	7,924
Travel	3,076	3,229
Rents	1,724	1,620
Depreciation	2,679	3,007
Insurance	1,106	1,272
Freight	38,618	36,621
Service	28,164	32,971
Loading and unloading	450	787
Amortization	1,153	1,673
Bad debt expenses (reversal of allowance for doubtful accounts)	138	(8,202)
Sales commissions	1,294	2,955
Expenses for overseas branch office	9,515	10,555
Others	4,996	8,573
	₩ 146,020	₩ 152,711

19. Expenses classified by nature

Expenses classified by nature for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Cost of merchandise sales	₩ 2,742,323	₩ 2,598,028
Employee benefits (salaries, retirement benefits)	45,119	49,725
Distribution costs (custody charges, packaging costs, transportation expenses)	39,304	37,707
Depreciation and amortization	11,742	14,676
Others	86,831	79,112
	₩ 2,925,319	₩ 2,779,248

20. Pension benefits

The Company has two defined benefit pension plans, the final salary plan and the average salary plan, covering substantially all of its employees. Both plans require contributions to be made to separately administered funds.

Details of employee benefit liabilities as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Present value of defined benefit obligation	₩ 41,213	₩ 33,008
Fair value of plan assets	(32,574)	(30,491)
	₩ 8,639	₩ 2,517

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

20. Pension benefits (cont'd)

Expenses recognized in respect of the defined benefit plans for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Current service costs	₩	4,398	₩	4,273
Net interest costs		71		47
Management costs of plan assets		76		82
	₩	4,545	₩	4,402

Changes in the present value of defined benefit obligation for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
As of January 1	₩	33,008	₩	31,195
Current service costs		4,398		4,273
Interest costs		880		729
Benefits paid		(2,132)		(3,725)
Transfer in (out)		68		(73)
Re-measurement loss (gain) on defined benefit plans		4,991		609
As of December 31	₩	41,213	₩	33,008

Changes in the fair value of plan assets for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
As of January 1	₩	30,491	₩	29,286
Return on plan assets		809		682
Contribution payable		3,779		4,534
Benefits paid		(2,138)		(3,735)
Transfer out		(54)		-
Re-measurement loss on defined benefit plans		(237)		(194)
Management costs of plan assets		(76)		(82)
As of December 31	₩	32,574	₩	30,491

The main operational items of plan assets as a percentage of the total fair value of plan assets as of December 31, 2018 and 2017 are as follows:

	2018		2017	
Debt securities		100.00%		89.82%
Deposits		0.00%		10.09%
Others		0.00%		0.09%
		100.00%		100.00%

The principal assumptions used in actuarial calculation as of December 31, 2018 and 2017 are as follows:

	2018		2017	
Salary increase rate		6.29%		5.67%
Discount rate		2.39%		2.82%

20. Pension benefits (cont'd)

Sensitivity analyses on the principal assumptions used in actuarial calculation as of December 31, 2018 are as follows (Korean won in millions):

	Defined benefit obligation		
	Dec. 31	Increase by 1%	Decrease by 1%
Salary increase rate	₩ 41,213	₩ 43,940	₩ 38,740
Discount rate	41,213	38,658	44,104

Expenses by operating a defined contribution plan for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Retirement benefits	₩ 104	₩ 80

21. Finance income and costs

21.1 Finance income

Details of finance income for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Interest income	₩ 13,350	₩ 7,659
Gain on foreign currency transactions	51,786	71,243
Gain on foreign currency translation	9,146	50,770
Gain on settlement of currency forwards	10,007	6,286
Gain on valuation of currency forwards	1,451	1,276
Gain on valuation of currency swaps	4,670	-
Dividend income	6,607	6,094
Commission revenue from guarantees	1,643	1,813
	₩ 98,660	₩ 145,141

21.2 Finance costs

Details of finance costs for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Interest expenses	₩ 33,489	₩ 32,458
Loss on foreign currency transactions	54,547	65,210
Loss on foreign currency translation	14,773	26,536
Loss on settlement of currency forwards	10,018	19,548
Loss on valuation of currency forwards	574	4,262
Loss on valuation of currency swap	-	13,710
Loss on disposal of receivables	3,205	1,976
	₩ 116,606	₩ 163,700

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, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Share of profit of subsidiaries and associates	₩	144,423	₩	120,799
Share of loss of subsidiaries and associates		(23,934)		(17,423)
Gain on disposal of investment in subsidiaries and associates		86,759		-
Loss on disposal of investment in subsidiaries and associates		(40)		(726)
Impairment loss on investment in subsidiaries and associates (*)		(18,192)		-
	₩	<u>189,016</u>	₩	<u>102,650</u>

(*) Refer to note 23

22. Other non-operating income and expenses

Other non-operating income and expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Gain on settlement of commodity swaps	₩	-	₩	5,704
Reversal of other allowance for doubtful accounts (other bad debt expenses)		(2,866)		8,054
Loss on settlement of commodity futures		-		(4)
Impairment loss on intangible assets (*1)		(29,066)		(18,511)
Loss on disposal of other investments assets (*2)		(35,825)		-
Others		(3,932)		(4,380)
	₩	<u>(71,689)</u>	₩	<u>(9,137)</u>

(*1) Refer to note 23

(*2) The loss on disposal of the long-term loans to GeoPark Chile S.A. during the year ended December 31, 2018

23. Impairment

Details of impairment recognized for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018	
	Investment in associates	Intangible assets (*)
Segment	Infra-business	Resource
Cause of impairment	Decline in business performances	Decline in business performances
Assets	Chemical plant	Crude oil / Gas
Area	Middle East	Asia
Impairment loss	₩ 18,192	₩ 29,066
Measuring of recoverable amount	Value in use	Value in use
Basis of estimates	-	-
Discount rate	-	-

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

23. Impairment (cont'd)

(*) The company has recognized a provision amounting to ₩38,099 million as the present value of expected net loss to observe the onerous contracts related to the impaired assets, the contributed amount of which was recognized as cost of sales considering its business relatedness.

	2017	
	Intangible assets	
	Resource	
	Decline in business performances	
	Crude oil / Gas	
	Asia	
Segment		
Cause of impairment		
Assets		
Area		
Impairment loss	₩	18,511
Measuring of recoverable amount	Value in use	
Basis of estimates		-
Discount rate		-

24. Income tax

The major components of income tax expenses for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Current income tax (*1)	₩	76,166	₩	9,514
Changes in deferred tax (*2)		77,526		15,964
Deferred tax related to items recognized in other comprehensive income (loss)		(5,414)		16,402
Income tax expenses reported in the statement of profit or loss	₩	148,278	₩	41,880

(*1) The amount includes the imposed tax amount of ₩71,129 million as the result of the periodic tax investigation for the years from 2012 to 2016 and the related local income tax amount.

(*2) Decrease in deferred tax assets (₩ 55,187 million) related to the un-deducted and carried over foreign tax paid are included.

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, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
Profit before income tax	₩	78,349	₩	104,665
Statutory income tax at the tax rate of 23.6% (23.4% in 2017)		18,530		24,867
Adjustments:				
Effect of unrecognized deferred tax for temporary differences		54,846		13,283
Current year adjustment related to the income tax on previous years		74,475		-
Effect of non-deductible expenses for tax purposes		1,339		5,670
Tax credit		(6,825)		(10,122)
Foreign income tax directly charged		5,234		6,309
Others		679		1,873
Income tax expenses	₩	148,278	₩	41,880
Effective tax rate (income tax expenses/ profit before income tax)		189.25%		40.01%

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

24. Income tax (cont'd)

The major components of deferred income tax charged directly to equity for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
	₩		₩	
Gain on valuation of FVOCI		(3,480)		-
Unrealized gain (loss) on valuation of available-for-sale financial assets		-		3,334
Positive adjustments of equity in equity method		313		4,759
Negative adjustments of equity in equity method		(3,522)		5,176
Exchange differences on translation of foreign operations		(39)		3,163
Cash flow hedge		130		(303)
Re-measurement loss on defined benefit plans		1,184		273
Change in retained earnings in equity method		-		-
	₩	(5,414)	₩	16,402

Temporary differences and deferred taxes for the years ended December 31, 2018 and 2017 consist of the following (Korean won in millions):

	Accumulated temporary differences				Deferred tax assets (liabilities)	
	Jan. 1, 2018	Effect of adoption of new accounting standards	Net changes	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018
Deferred income tax due to temporary differences :						
Impairment of available-for-sale financial assets	₩ 199,153	₩ -	₩ (164,770)	₩ 34,383	₩ 46,984	₩ 7,110
Stock dividend	12,999	-	-	12,999	3,146	3,146
Allowance for doubtful accounts	145,932	-	(22,757)	123,775	34,329	28,737
Bad debt expenses	-	-	3,492	3,492	-	845
Accrued income	(42)	-	38	(4)	(10)	(1)
Interest income	2,540	-	164	2,704	615	654
Allowance for inventories	13	-	(13)	-	3	-
Gain on commodity futures	(1,250)	-	538	(712)	(303)	(172)
Reserve fund of compressed register(land)	(8,601)	-	-	(8,601)	(2,081)	(2,081)
Accrued expenses	1,524	-	29	1,553	369	376
Admission and denial on depreciation cost	6,240	-	-	6,240	1,510	1,510
Bonus	13,657	-	(7,406)	6,251	3,305	1,513
Interest related to loans or construction	(618)	-	135	(483)	(150)	(117)
Brand loyalty	(490)	-	412	(78)	(119)	(19)
Present value of defined benefit obligation	32,471	-	7,743	40,214	7,858	9,732
Fair value of plan assets	(27,617)	-	(4,830)	(32,447)	(6,683)	(7,852)
Gain (loss) on foreign currency translation	(28,108)	-	10,888	(17,220)	(6,802)	(4,167)
Interest and translation of debt related on success	3,437	-	486	3,923	832	949
Rewards for long term employee	804	-	146	950	194	230

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

24. Income tax (cont'd)

	Accumulated temporary differences			Deferred tax assets (liabilities)		
	Jan. 1, 2018	Effect of adoption of new accounting standards	Net changes	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018
Impairment right of membership	4,239	-	(990)	3,249	1,026	786
Investment in subsidiaries and associates	113,551	-	(104,141)	9,410	4,144	(17,387)
Available-for-sale financial assets	(27,373)	27,373	-	-	-	-
Financial assets at fair value through OCI	-	(27,373)	(14,379)	(41,752)	(6,624)	(11,392)
Impairment loss	183,538	-	28,787	212,325	44,416	51,383
Provisions	-	-	44,400	44,400	-	10,745
Taxes and dues	8,968	-	(3,715)	5,253	1,696	796
Guarantee commission	22,483	-	(664)	21,819	536	375
Deemed dividend	13,898	-	(6,982)	6,916	3,363	1,673
Gains from assets contributed	-	-	1,529	1,529	-	370
Amount exceeding limit of donation	-	-	567	567	-	137
Transfer price	-	-	7,423	7,423	-	-
Commission fees	9,103	-	(678)	8,425	834	654
	680,451	-	(223,948)	456,503	132,388	78,533
Tax credit carry forward	115,285	-	(87,699)	27,586	73,278	23,913
Losses	-	-	106,174	106,174	-	25,694
					<u>₩ 205,666</u>	<u>₩ 128,140</u>

Temporary differences for which the deferred tax assets (liabilities) have not been recognized for the years ended December 31, 2018 and 2017 consist of the following (Korean won in millions):

	2018	2017
Investment in subsidiaries, associates or joint venture (*)	₩ 102,335	₩ 37,656
Guarantee commission and others	29,653	7,931
	<u>₩ 131,988</u>	<u>₩ 45,587</u>

(*) The Company hasn't recognized deferred income tax regarding temporary differences which consist of accumulated losses and other comprehensive income or loss related to its subsidiaries and associates because they are not expected to be disposed in the foreseeable future.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures

Consolidated subsidiaries as of December 31, 2018 are as follows:

	Country of Domicile	Equity ownership (%)		Reporting date	Principal activity
		2018	2017		
LG International (America) Inc.	USA	100.00	100.00	Dec. 31	Export and import
LHC Solar LLC	USA	100.00	100.00	Dec. 31	Solar energy
LG International (Japan) Ltd.	Japan	100.00	100.00	Dec. 31	Export and import
LG International (Hong Kong) Ltd.	Hong Kong	100.00	100.00	Dec. 31	-
LG International (Singapore) Pte. Ltd.	Singapore	100.00	100.00	Dec. 31	-
LG International (Deutschland) GmbH	Deutschland	100.00	100.00	Dec. 31	-
LG International (China) Ltd.	China	100.00	100.00	Dec. 31	-
Nanjing LG International VMI Co., Ltd.	China	100.00	100.00	Dec. 31	Hub
LG International (Shanghai) Ltd.	China	100.00	100.00	Dec. 31	Export and import
Yantai VMI Hub LG International Co., Ltd.	China	100.00	100.00	Dec. 31	Hub
Guangzhou Steel Flower Electric & Machinery Co., Ltd.	China	100.00	100.00	Dec. 31	Steel frames
Bowen Investment (Australia) Pty Ltd (*1)	Australia	100.00	100.00	Dec. 31	Coal mining
Resource Investment (Marree) Pty. Ltd. (*1)	Australia	-	100.00	Dec. 31	Uranium
PT. Batubara Global Energy (BGE)	Indonesia	100.00	100.00	Dec. 31	Coal mining
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	-
LG International (India) Ltd.	India	100.00	100.00	Dec. 31	Export and import
PT. Green Global Lestari (GGL)	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) (*1)	Indonesia	95.00	-	Dec. 31	-
PT. Tintin Boyok Sawit Makmur (TBSM) (*1)	Indonesia	95.00	-	Dec. 31	-
PT. Tintin Boyok Sawit Makmur Dua (TBSMD) (*1)	Indonesia	95.00	-	Dec. 31	-
PT. Indonesia Renewable Resources (IRR)	Indonesia	100.00	100.00	Dec. 31	Industrial planting
PT. Binsar Natorang Energi (BNE)	Indonesia	94.81	92.82	Dec. 31	Hydroelectric energy
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. (Wantugou)	Hong Kong	100.00	100.00	Dec. 31	Coal mining
LG International Yakutsk Ltd.	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
Highland Cement International Co., Ltd.	Myanmar	51.00	51.00	Mar. 31	Cement

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures (cont'd)

	Country of domicile	Equity ownership (%)		Reporting date	Principal activity
		2018	2017		
Pantos Logistics Co., Ltd. (*2)	Korea	51.00	51.00	Dec. 31	Logistics
Pantos Busan Newport Logistics Center Co., Ltd. (*2)	Korea	100.00	100.00	Dec. 31	Warehouse
Helistar air Co., Ltd. (*2)	Korea	100.00	100.00	Dec. 31	Logistics
Hanultari Co., LTD., (*1,2)	Korea	100.00	-	Dec. 31	Whole sale & Retail
Pantos Logistics (China) Co., Ltd. (*2)	China	100.00	100.00	Dec. 31	-
FNS (Beijing) Logistics Co., Ltd. (*2)	China	100.00	100.00	Dec. 31	-
Pantos Logistics (Shanghai) Co., Ltd. (*2)	China	100.00	100.00	Dec. 31	Warehouse
Pantos Logistics (Ningbo) Co., Ltd. (*2)	China	100.00	100.00	Dec. 31	Logistics
Pantos Logistics (Shenzhen) Co., Ltd. (*2)	China	100.00	100.00	Dec. 31	-
Pantos Logistics (H.K) Co., Ltd. (*2)	Hong Kong	100.00	100.00	Dec. 31	-
Pantos Logistics (Taiwan) Co., Ltd. (*2)	Taiwan	100.00	100.00	Dec. 31	-
PT. Pantos Logistics Indonesia (*2)	Indonesia	99.00	99.00	Dec. 31	-
PT. Pantos Logistics Jakarta (*2)	Indonesia	100.00	100.00	Dec. 31	-
Pantos Logistics Singapore Pte. Ltd. (*2)	Singapore	100.00	100.00	Dec. 31	-
Pantos Logistics (Thailand) Co., Ltd. (*2)	Thailand	100.00	100.00	Dec. 31	-
Pantos Logistics Malaysia Sdn. Bhd. (*2)	Malaysia	100.00	100.00	Dec. 31	-
Pantos Logistics (India) Pvt. Ltd. (*2)	India	100.00	100.00	Mar. 31	-
Pantos Logistics (Cambodia) Co., Ltd. (*2)	Cambodia	100.00	99.98	Dec. 31	-
Pantos Logistics Vietnam Co., Ltd. (*2)	Vietnam	99.00	99.00	Dec. 31	-
Pantos Logistics Australia Pty. Ltd. (*2)	Australia	100.00	100.00	Dec. 31	-
Pantos Holdings (Thailand) Co., Ltd. (*2)	Thailand	48.50	48.50	Dec. 31	-
Pantos Logistics Myanmar Co., Ltd. (*2)	Myanmar	69.99	69.99	Mar. 31	-
Pantos Logistics U.K. Ltd (*2)	UK	100.00	100.00	Dec. 31	-
Pantos Logistics Benelux B.V (*2)	Netherlands	100.00	100.00	Dec. 31	-
Pantos Logistics France (*2)	France	100.00	100.00	Dec. 31	-
Pantos Logistics Poland (*2)	Poland	100.00	100.00	Dec. 31	-
Pantos Logistics Germany GmbH (*2)	Deutschland	100.00	100.00	Dec. 31	-
Pantos Logistics Spain S.L. (*2)	Spain	100.00	100.00	Dec. 31	-
Pantos Logistics Ve Tic.Lgd.Sti (*2)	Turkey	100.00	100.00	Dec. 31	-
Pantos Logistics Sweden (*1,2)	Sweden	100.00	-	Dec. 31	-
Pantos USA Inc. (*1,2)	USA	-	100.00	Dec. 31	-
Pantos Logistics Mexico (*2)	Mexico	100.00	100.00	Dec. 31	-
Pantos Do Brasil Logistica (*2)	Brazil	100.00	100.00	Dec. 31	-
Pantos Logistics Colombia SAS (*2)	Colombia	100.00	100.00	Dec. 31	-
Pantos Logistics Chile SpA (*2)	Chile	100.00	100.00	Dec. 31	-
Pantos Logistics Panama S.A (*2)	Panama	100.00	100.00	Dec. 31	-
Pantos Logistics AR S.A (*1,2)	Argentina	100.00	100.00	Dec. 31	-
Hi Logistics Brasil Servicos De Logistica LTDA (*2)	Brazil	100.00	100.00	Dec. 31	Warehouse
Great America Trans, Inc. (*1, 2)	USA	-	100.00	Dec. 31	Logistics
FNS CIS LLC (*2)	Russia	100.00	100.00	Dec. 31	-
Pantos Logistics Kazakhstan (*2)	Kazakhstan	100.00	100.00	Dec. 31	-
Pantos Logistics Ukraine Ltd. (*2)	Ukraine	100.00	100.00	Dec. 31	-
Pantos Customs Services LLC (*2)	Russia	100.00	99.00	Dec. 31	Customs
Pantos Logistics L.L.C (Dubai) (*2)	Dubai	49.00	49.00	Dec. 31	Logistics
Pantos Logistics L.L.C (Oman) (*2)	Oman	70.00	70.00	Dec. 31	-
Pantos Logistics CO., LTD. Saudi Arabia (*1,2)	Saudi Arabia	100.00	100.00	Dec. 31	-
Pantos Logistics Nigeria Limited (*1,2)	Nigeria	99.93	-	Dec. 31	-
Pantos Logistics Japan Inc. (*2)	Japan	100.00	100.00	Dec. 31	-
Hi Logistics (China) Co., Ltd. (*2)	China	100.00	100.00	Dec. 31	-
Pantos Logistics Solutions India Private Limited (*1, 2)	India	100.00	100.00	Dec. 31	-
Hi Logistics Malaysia SDN. BHD. (*2)	Malaysia	100.00	100.00	Dec. 31	-
Hi Logistics USA Inc. (*2)	USA	100.00	100.00	Dec. 31	-
Hi Logistics RUS LLC. (*2)	Russia	100.00	100.00	Dec. 31	-
Hi Logistics Egypt S.A.E (*2)	Egypt	98.00	98.00	Dec. 31	-
Hi Logistics Vietnam Co., Ltd. (*2)	Vietnam	100.00	100.00	Dec. 31	-

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures (cont'd)

(*1) During the year ended December 31, 2018, the Group established Hanultari Co., LTD., Pantos Logistics Nigeria Limited, and Pantos Logistics Sweden as a subsidiary to be consolidated. In addition, PT.Green Global Lestari (GGL) acquired PT.Grand Utama Mandiri (GUM), PT. Tintin Boyok Sawit Mkmur (TBSM), PT. Tintin Boyok Sawit Makmur Dua (TBSMD, subsidiary of TBSM) as a subsidiary to be consolidated. On the other hand, the Group has liquidated Resources Investments (Marree) Pty. Ltd. and disposed Pantos USA, Inc. and Great America Trans, Inc. and excluded them from the Group's subsidiaries. Pantos Logistics L.L.C (KSA) was renamed Pantos Logistics CO., Ltd. SaudiArabia, and Hi Logistics India Private Limited was renamed Pantos Logistics Solutions India Private Limited. During the year ended December 31, 2017, the Group established Pantos Logistics AR S.A and Great America Trans,INC as a subsidiary to be consolidated. Hi Logistics NJ Inc. was renamed as Pantos USA, Inc., Natural Resources Investment (Australia) Pty. Ltd. was renamed as Bowen Investment (Australia) Pty. Ltd.

(*2) As of December 31, 2018 and 2017, the entities are subsidiaries of Pantos Logistics Co., Ltd., and the above equity ownerships are merely the sums of equity ownership held by Pantos Logistics Co., Ltd. and its subsidiaries.

Transactions with the related parties for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018			2017		
	Sales	Purchase	Service	Sales	Purchase	Service
Corporations that have significant influence on the Company at the end of the current year:						
LG Corp. (*1)	₩ -	₩ -	₩ 2,893	₩ -	₩ -	₩ 2,903
	-	-	2,893	-	-	2,903
Subsidiaries:						
LG International (America) Inc.	296,920	948	-	113,707	485	386
LG International (Japan) Ltd.	3,768	32,078	757	21,839	43,307	10
LG International (Hong Kong) Ltd.	1,799	-	-	78,559	527	289
LG International (Singapore) Pte. Ltd.	396,909	8,395	-	189,472	42,354	-
LG International (Deutschland) GmbH	13,222	300	746	1,416	-	533
LG International (China) Ltd.	112	-	-	185	876	1
LG International (Shanghai) Ltd.	1	-	1,460	-	-	1,443
Guangzhou Steel Flower Electric & Machinery Co., Ltd.	6,803	-	145	9,502	-	-
Bowen Investment (Australia) Pty Ltd	1,957	-	-	2,073	-	2
PT. Batubara Global Energy (BGE)	-	256,559	810	-	256,820	-
PT. Ganda Alam Makmur (GAM)	3,189	-	-	1,365	-	-
LG International (India) Ltd.	-	-	1,527	-	-	942
PT. Green Global Lestari (GGL)	841	-	-	796	-	-
PT. Indonesia Renewable Resources (IRR)	525	-	-	424	-	-
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	45	-	-	54	-	-
PT. Binsar Natorang Energi (BNE)	3	-	130	4	-	111
LG International Yakutsk Ltd.	590	-	-	629	-	-
Dangjin Tank Terminal Co., Ltd.	158	-	-	159	-	-
Highland Cement International Co., Ltd.	7	-	-	1	-	-
Haiphong Steel Flower Electrical & Machinery Company Limited	4,929	-	52	8,023	-	28
Pantos Logistics Co., Ltd.	25	19,297	7,382	24	21,004	5,857
Pantos Logistics Japan Inc.	-	-	8,813	10	338	9,262
	731,803	317,577	21,822	428,242	365,711	18,864

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures (cont'd)

	2018			2017		
	Sales	Purchase	Service	Sales	Purchase	Service
Associates:						
POSCO-IPPC (India Pune Processing Center)	₩ 147	₩ -	₩ -	₩ 1,716	₩ -	₩ -
POSCO-PWPC (Poland Wroclow Processing Center)	-	-	13	-	-	10
Kernhem B.V	2,627	-	-	667	-	-
ADA Oil LLP	639	-	-	154	-	-
Dongbu Thai Steel Co., Ltd	-	-	-	-	96	-
GeoPark Chile S.A. (*2)	1,993	-	-	1,670	-	-
GeoPark Colombia Cooperate U.A. (*2)	140	-	24	105	-	29
Musandam Power Company SAOC	244	-	-	25	-	-
	<u>5,790</u>	<u>-</u>	<u>37</u>	<u>4,337</u>	<u>96</u>	<u>39</u>
Other related parties: (*3)						
LG Electronics Inc.	480,429	51,406	19	466,221	80,750	83
LG Chem Ltd.	79,617	288,434	83	76,877	298,514	83
LG Display Co., Ltd.	6,059	26,521	-	9,127	16,950	-
Others	314,205	2,197	14,599	378,938	2,095	14,002
	<u>880,310</u>	<u>368,558</u>	<u>14,701</u>	<u>931,163</u>	<u>398,309</u>	<u>14,168</u>
	<u>₩ 1,617,903</u>	<u>₩ 686,135</u>	<u>₩ 39,453</u>	<u>₩ 1,363,742</u>	<u>₩ 764,116</u>	<u>₩ 35,974</u>

(*1) LG Corp. acquired the Company's common stock during the current year and holds 24.69% of the Company's common stock as of December 31, 2017.

(*2) During the year ended December 31, 2018, the shares of GeoPark Chile S.A and Geopark Colombia Cooperate U.A were sold and excluded from the list of associates.

(*3) It is not included in the scope of related parties per K-IFRS 1024, Disclosure of Related Parties, but it belongs to the same large-scale business groups under the Act on Monopoly Regulation and Fair Trade.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures (cont'd)

Receivables and payables from transactions with the related parties as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018				
	Accounts receivable	Loans	Other receivables	Accounts payable	Other payables
Corporations that have significant influence on the Company at the end of the current year:					
LG Corp.	₩ -	₩ -	₩ 503	₩ -	₩ -
	-	-	503	-	-
Subsidiaries:					
LG International (America) Inc.	54,231	-	5,799	-	6,271
LG International (Japan) Ltd.	127	-	1,110	8,750	74
LG International (Hong Kong) Ltd.	7	-	53	-	16
LG International (S'pore) Pte. Ltd.	57,831	-	3,018	1,427	17,283
LG International (Deutschland) GmbH	2,431	-	120	299	503
LG International (China) Ltd.	-	-	28	-	-
LG International (Shanghai) Ltd.	-	-	-	-	1
Yantai VMI Hub LG International Co., Ltd.	-	-	9	-	2
Guangzhou Steel Flower Electric & Machinery Co., Ltd.	1,858	-	9	-	26
Haiphong Steel Flower Electrical & Machinery Company Limited	1,814	-	7	-	22
Bowen Investment (Australia) Pty Ltd	-	56,430	117	-	-
PT. Batubara Global Energy (BGE)	-	-	55	22,808	331
PT. Megaprima Persada (MPP)	-	-	151	-	1
PT. Mega Global Energy (MGE)	-	-	44	-	-
PT. Ganda Alam Makmur (GAM)	-	40,252	15,098	-	-
LG International (India) Ltd.	-	-	7	-	-
PT. Green Global Lestari (GGL)	-	18,862	993	-	-
PT. Parna Agromas (PAM)	-	-	48	-	-
PT. Indonesia Renewable Resources (IRR)	-	7,766	378	-	-
PT. Binsar Natorang Energi (BNE)	-	-	16	-	73
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	-	-	54	-	-
LG International Yakutsk Ltd.	-	10,611	1,534	-	2
Dangjin Tank Terminal Co., Ltd.	-	-	21	-	-
Highland Cement International Co., Ltd.	-	-	620	-	-
Pantos Logistics Co., Ltd.	-	-	65	-	1,342
Pantos Logistics Japan Inc.	-	-	-	-	249
PT. Grand Utama Madiri (GUM)	-	-	22	-	-
PT. Tintin Boyok Sawit Makmur (TBSM)	-	-	27	-	-
	118,299	133,921	29,403	33,284	26,196
Associates:					
POSCO-IPPC (India Pune Steel Processing Center)	-	-	-	-	1
POSCO-PWPC (Poland Wroclaw Steel Processing Center)	-	-	7	-	-
Kernhem B.V.	-	44,526	6,880	-	-
ADA Oil LLP	-	11,051	731	-	-
Musandam Power Company SAOC	-	2,663	23	-	-
	-	58,240	7,441	-	1
Other related parties:					
LG Electronics Inc.	33,355	-	58	13,198	1,739
LG Chem Ltd.	6,484	-	-	43,122	711
LG Display Co., Ltd.	265	-	-	4,971	2,641
Others	11,187	-	27,490	929	1,065
	51,291	-	27,548	62,220	6,156
	₩ 165,590	₩ 192,161	₩ 64,895	₩ 95,504	₩ 32,353

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures (cont'd)

	2017				
	Accounts receivable	Loans	Other receivables	Accounts payable	Other payables
Corporations that have significant influence on the Company at the end of the current year:					
LG Corp.	₩ -	₩ -	₩ 907	₩ -	₩ -
	-	-	907	-	-
Subsidiaries:					
LG International (America) Inc.	20,478	-	20	-	2,049
LG International (Japan) Ltd.	96	-	36	2,085	1
LG International (Hong Kong) Ltd.	8,946	-	82	-	151
LG International (S'pore) Pte. Ltd.	64,919	-	2,876	1,248	10,838
LG International (Deutschland) GmbH	-	-	8	-	1
LG International (China) Ltd.	-	-	195	-	-
LG International (Shanghai) Ltd.	-	-	2	-	1
Yantai VMI Hub LG International Co., Ltd.	-	-	8	-	1
Guangzhou Steel Flower Electric & Machinery Co., Ltd.	4,069	-	21	-	5
Bowen Investment (Australia) Pty Ltd	-	59,821	5,577	-	-
PT. Batubara Global Energy (BGE)	-	-	26	35,758	332
PT. Megaprima Persada (MPP)	-	-	27	-	1
PT. Mega Global Energy (MGE)	-	-	4	-	-
PT. Ganda Alam Makmur	-	38,570	12,477	-	-
LG International (India) Ltd.	-	-	10	-	-
PT. Green Global Lestari (GGL)	-	18,075	219	-	-
PT. Parna Agromas (PAM)	-	-	16	-	-
PT. Indonesia Renewable Resources (IRR)	-	7,442	160	-	-
PT. Binsar Natorang Energi	-	-	25	-	69
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	-	-	39	-	-
LG International Yakutsk Ltd.	-	10,168	1,387	-	2
Dangjin Tank Terminal Co., Ltd.	-	-	22	-	-
Haiphong Steel Flower Electrical & Machinery Company Limited	6,115	-	4	-	-
Highland Cement International Co., Ltd.	-	-	592	-	-
Pantos Logistics Co., Ltd.	-	-	16	-	453
Pantos Logistics Japan Inc.	-	-	-	-	468
	104,623	134,076	23,849	39,091	14,372
Associates:					
POSCO-IPPC (India Pune Steel Processing Center)	-	-	-	-	1
Kernhem B.V.	-	42,667	8,050	-	-
ADA Oil LLP	-	10,590	1,883	-	-
GeoPark Chile S.A.	-	27,771	5,679	-	-
GeoPark Colombia Cooperate U.A	23	-	-	-	-
Musandam Power Company SAOC	-	5,459	25	-	-
	23	86,487	15,637	-	1
Other related parties:					
LG Electronics Inc.	38,047	-	-	17,752	1,548
LG Chem Ltd.	12,136	-	102	47,428	700
LG Display Co., Ltd.	1,329	-	334	3,392	2,694
Others	33,983	-	8,011	228	901
	85,495	-	8,447	68,800	5,843
	₩ 190,141	₩ 220,563	₩ 48,840	₩ 107,891	₩ 20,216

The Company recognized reversal of allowance for doubtful accounts of ₩742 million for the year ended December 31, 2018 (2017: Bad debt expenses of ₩210 million) and recognized allowance for doubtful accounts of ₩25,327 million as of December 31, 2018 (2017: ₩25,680 million) for the trade and other accounts receivable from the related parties.

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures (cont'd)

Transfers under finance arrangements with the related parties for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018			
	Dividends	Investments in cash (capital reduction)	Loans	Collection
Subsidiaries:				
LG International (America) Ltd.	₩ 10,692	₩ -	₩ -	₩ -
LG International (Japan) Ltd.	5,042	-	-	-
LG International (Singapore) Pte. Ltd.	10,696	-	-	-
LG International (Deutschland) GmbH	-	3,262	-	-
PT. Batubara Global Energy (BGE)	16,600	-	-	-
PT. Green Global Lestari (GGL)	-	75,316	-	-
PT. Binsar Natorang Energi (BNE)	-	15,367	-	-
Dangjin Tank Terminal Co., Ltd.	-	1,900	-	-
Highland Cement International Co., Ltd.	-	2,186	-	-
Pantos Logistics Co., Ltd.	5,100	-	-	-
	<u>48,130</u>	<u>98,031</u>	<u>-</u>	<u>-</u>
Associates:				
Oman International Petrochemical Industry Company L.L.C	-	2,794	-	-
United Copper & Moly LLC	-	5	-	-
GeoPark Chile S.A.	-	-	-	1,130
GS HP Sunflower Int'l Village Corp.	262	-	-	-
GeoPark Colombia Cooperate U.A.	8,717	-	-	-
Musandam Power Company SAOC	-	-	-	2,908
	<u>8,979</u>	<u>2,799</u>	<u>-</u>	<u>4,038</u>
Other related parties:				
Others	203	-	-	-
	<u>203</u>	<u>-</u>	<u>-</u>	<u>-</u>
	<u>₩ 57,312</u>	<u>₩ 100,829</u>	<u>₩ -</u>	<u>₩ 4,038</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

25. Related party disclosures (cont'd)

	2017			
	Dividends	Investments in cash (capital reduction)	Loans	Collection
Subsidiaries:				
LG International (America) Ltd.	₩ 16,992	₩ -	₩ -	₩ -
LG International (Japan) Ltd.	8,462	-	-	-
LG International (Singapore) Pte. Ltd.	11,328	-	-	-
PT. Batubara Global Energy (BGE)	13,501	-	-	-
PT. Binsar Natorang Energi	-	14,742	-	-
PT. Green Global Lestari (GGL)	-	-	-	7,516
Highland Cement International Co., Ltd.	-	8,032	-	-
Pantos Logistics Co., Ltd.	5,100	-	-	-
Dangjin Tank Terminal Co., Ltd.	-	600	-	-
	<u>55,383</u>	<u>23,374</u>	<u>-</u>	<u>7,516</u>
Associates:				
Overseas Resources Development Fund	-	9	-	-
Heungkuk Investment Fund	-	18	-	-
LG Holdings(HK) Ltd.(LG Building Ltd.)	-	(19,122)	-	-
GS HP Sunflower Int'l Village Corp.	125	-	-	-
United Copper & Moly LLC	-	14	-	-
GeoPark Colombia Cooperate U.A.	546	-	-	-
GeoPark Chile S.A.	-	-	-	-
Oman International Petrochemical Industry Company L.L.C	-	1,028	1,256	-
Musandam Power Company SAOC	-	6,111	5,545	-
	<u>671</u>	<u>(11,942)</u>	<u>6,801</u>	<u>-</u>
Other related parties:				
Others	69	-	-	-
	<u>69</u>	<u>-</u>	<u>-</u>	<u>-</u>
	<u>₩ 56,123</u>	<u>₩ 11,432</u>	<u>₩ 6,801</u>	<u>₩ 7,516</u>

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

	2018		2017	
Short-term employee benefits	₩	11,080	₩	9,972
Retirement benefits		1,791		1,302
	<u>₩</u>	<u>12,871</u>	<u>₩</u>	<u>11,274</u>

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

26. Commitments and contingencies

26.1 Guarantees provided

Guarantees provided by the Company as of December 31, 2018 as follows (Korean won in millions):

	Financial institution	Object	Limit	Outstanding
Subsidiaries:				
LG International (America) Inc.	Mizuho and others	Local finance	₩ 134,172	₩ -
LG International (Japan) Ltd.	BTMU and others	"	132,099	384
LG International (Hong Kong) Ltd.	SMBC and others	"	453,045	745
LG International (Singapore) Pte. Ltd.	SMBC and others	"	343,420	28
LG International (Deutschland) GmbH	SMBC and others	"	50,826	-
Bowen Investment (Australia) Pty Ltd	ANZ and others	"	59,648	21,268
LG International (China) Corp.	KEB Hana and others	"	29,410	-
LG International (Shanghai) Corp.	SC	"	-	-
LG International India Private Limited	Citi	"	30	3
PT. Batubara Global Energy (BGE)	SMBC and others	"	40,352	11
Steel Flower Electric & Machinery (Tianjin) Co., Ltd.	HSBC and others	"	46,278	10,905
PT. Parna Agromas (PAM)	SMBC and others	"	9,530	8
Guangzhou Steel Flower Electrical & Machinery Co., Ltd.	KEB Hana and others	"	7,422	-
PT. Megaprima Persada (MPP)	SMBC and others	"	16,956	11
PT. Ganda Alam Makmur (GAM) (*)	KDB and others	"	60,546	45,300
PT. Binsar Natorang Energi	Woori	"	1,132	1,132
Haipong Steel Flower Electrical & Machinery Co., Ltd.	HSBC and others	"	13,276	4,395
Highland Cement International Co., Ltd.	Shinhan	"	12,819	7,966
			<u>₩ 1,410,961</u>	<u>₩ 92,156</u>

(*) 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.

26.2 Guarantees received

Details of guarantees received as of December 31, 2018, are as follows (Korean won in millions and foreign currencies in thousands):

	Guarantee amount	Description
Bonds	₩ 12,390	KRW 12,390
Others	5,160	KRW 1,064 USD 3,633
	<u>₩ 17,550</u>	

26.3 Pledged notes and checks

The Company pledged 22 notes and 10 checks as collateral to its customers, creditors and guarantors related to various guarantees and borrowings as of December 31, 2018.

26.4 License agreement

As of December 31, 2018, the Company maintains a license agreement with LG Corp. for the use of "LG" brand.

26.5 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.

26.6 Pending lawsuits

The Company is a defendant in numerous litigation with claims aggregating to ₩3,773 million, but as of December 31, 2018, the outcomes of litigation cannot be reliably determinable.

The Company has been imposed with income tax amounting to ₩71,129 million as a result of periodic tax investigation for the years from 2012 to 2016. The Company filed a petition for a tax referee claim during the year with respect to the objection of the imposed charges. The Company received a notice of citation on February 15, 2019, of ₩47,547 million among the petitioned amount, which was refunded on February 28, 2019. The Company has not been able to estimate the outcome of the appeal reasonably as of end of the reporting period and therefore did not reflect any effect related to the tax referee claim in the financial statements for the year ended December 31, 2018.

27. 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 loans and other receivables, trade 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.

27.1 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, equity instruments held for long-term, and derivative financial instruments.

The sensitivity analysis in the following sections relate to the financial position as of December 31, 2018 and 2017.

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, 2018.

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, 2018 and 2017 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, 2018 associate with changes in underlying assets.

27.1.1 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 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.

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):

	2018		2017	
	Increase by 1%	Decrease by 1%	Increase by 1%	Decrease by 1%
Interest income	₩ 4,180	₩ (4,180)	₩ 3,516	₩ (3,516)
Interest expenses	(4,519)	4,519	(5,252)	5,252
Net effect	₩ (339)	₩ 339	₩ (1,736)	₩ 1,736

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

27.1.2 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.

27.1.1 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):

	2018		2017	
	Increase by 10%	Decrease by 10%	Increase by 10%	Decrease by 10%
Gain (loss) on foreign currency translation	₩ (7,049)	₩ 7,049	₩ (7,094)	₩ 7,094
Gain (loss) on valuation of derivative financial instruments	3,278	(3,278)	7,389	(7,389)
Net effect (*)	₩ (3,771)	₩ 3,771	₩ 295	₩ (295)

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

27.2 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, 2018 and 2017 are as follows (Korean won in millions):

	2018	2017
Cash equivalents (*)	₩ 79,585	₩ 114,154
Short-term financial instruments	2,663	5,459
Equity instruments held for long-term :		
Available-for-sale financial assets	-	128,682
Financial assets at fair value through profit or loss	4,779	-
Financial assets at fair value through OCI.	144,228	-
Trade accounts receivable	302,456	340,293
Other accounts receivable	83,147	8,362
Long-term loans	176,767	202,235
Other financial assets	33,305	45,182
	₩ 826,930	₩ 844,367

(*) Excludes cash on hand

27.3 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):

	2018				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Cash and cash equivalents	₩ 80,089	₩ -	₩ -	₩ -	₩ 80,089
Short-term financial assets	2,663	-	-	-	2,663
Trade accounts receivable	287,562	14,079	424	391	302,456
Other accounts receivable	73,230	9,917	-	-	83,147
Long-term loans	-	74,841	-	101,926	176,767
Other financial assets	25,352	3,415	4,538	-	33,305
	<u>₩ 468,896</u>	<u>₩ 102,252</u>	<u>₩ 4,962</u>	<u>₩ 102,317</u>	<u>₩ 678,427</u>

	2017				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Cash and cash equivalents	₩ 114,777	₩ -	₩ -	₩ -	₩ 114,777
Short-term financial assets	- 5,459	-	-	-	5,459
Trade accounts receivable	324,716	15,174	402	-	340,292
Other accounts receivable	8,362	-	-	-	8,362
Long-term loans	-	53,288	44,465	104,483	202,236
Other financial assets	35,562	3,448	6,172	-	45,182
	<u>₩ 488,876</u>	<u>₩ 71,910</u>	<u>₩ 51,039</u>	<u>₩ 104,483</u>	<u>₩ 716,308</u>

27.4 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):

	2018				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Borrowings	₩ 136,415	₩ 193,397	₩ 158,364	₩ 111,085	₩ 599,261
Bonds	89,925	169,695	169,650	-	429,270
Other financial liabilities	478,753	7,653	-	-	486,406
	<u>₩ 705,093</u>	<u>₩ 370,745</u>	<u>₩ 328,014</u>	<u>₩ 111,085</u>	<u>₩ 1,514,937</u>

	2017				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
Borrowings	₩ 120,529	₩ 289,136	₩ 140,517	₩ 122,479	₩ 672,661
Bonds	99,971	159,704	169,606	-	429,281
Other financial liabilities	408,626	11,923	-	-	420,549
	<u>₩ 629,126</u>	<u>₩ 460,763</u>	<u>₩ 310,123</u>	<u>₩ 122,479</u>	<u>₩ 1,522,491</u>

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

27.5 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, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017
Total liabilities (A)	₩ 1,562,571	₩	1,529,616
Total equity (B)	1,134,652		1,199,188
Cash and cash equivalents (C)	80,089		114,777
Total borrowings (D)	1,028,531		1,101,942
Debt ratio (A / B)	137.71%		127.55%
Net borrowing ratio ((D-C) / B)	83.59%		82.32%

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

28. Fair value

28.1 Fair value of financial instruments

The book value and fair value of financial instruments as of December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017	
	Book value	Fair value	Book value	Fair value
Financial assets:				
Financial assets measured at amortized cost:				
Cash and cash equivalents	₩ 80,089	₩ 80,089	₩ 114,777	₩ 114,777
Short-term financial assets	2,663	2,663	5,459	5,459
Trade accounts receivable	302,456	302,456	340,293	340,293
Long-term loans	176,767	176,767	202,235	202,235
Other accounts receivable	81,696	81,696	7,086	7,086
Other financial assets	33,234	33,234	44,964	44,964
	<u>676,905</u>	<u>676,905</u>	<u>714,814</u>	<u>714,814</u>
Financial assets recognized at fair value:				
Accounts receivable related derivatives	1,452	1,452	1,276	1,276
Equity instruments held for long-term	149,007	149,007	128,682	128,682
Other financial assets	70	70	218	218
	<u>150,529</u>	<u>150,529</u>	<u>130,176</u>	<u>130,176</u>
	<u>₩ 827,434</u>	<u>₩ 827,434</u>	<u>₩ 844,990</u>	<u>₩ 844,990</u>
	2018		2017	
	Book value	Fair value	Book value	Fair value
Financial liabilities:				
Financial liabilities measured at amortized cost:				
Borrowings	₩ 463,311	₩ 463,311	₩ 615,255	₩ 615,255
Bonds	339,345	339,345	329,310	329,310
Current portion of bonds and long-term borrowings	225,875	225,875	157,378	157,378
Other financial liabilities	483,834	483,834	410,008	410,008
	<u>1,512,365</u>	<u>1,512,365</u>	<u>1,511,951</u>	<u>1,511,951</u>
Financial liabilities recognized at fair value:				
Accounts payable related derivatives	575	575	4,272	4,272
Other financial liabilities	1,998	1,998	6,268	6,268
	<u>2,573</u>	<u>2,573</u>	<u>10,540</u>	<u>10,540</u>
	<u>₩ 1,514,938</u>	<u>₩ 1,514,938</u>	<u>₩ 1,522,491</u>	<u>₩ 1,522,491</u>

28.2 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, 2018, 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):

	2018		
	Level 1	Level 2	Level 3
Assets and liabilities measured at fair value:			
Financial assets at fair value through profit or loss:			
Accounts receivable related to derivatives	-	1,452	-
Financial assets at fair value through OCI:			
Equity securities (*)	1,146	-	142,056
Financial liabilities at fair value through profit or loss:			
Accounts payable related to derivatives	-	575	-
Derivatives related to hedge accounting:			
Other financial assets	-	70	-
Other financial liabilities	-	1,998	-
Assets and liabilities for which fair values are disclosed:			
Cash and cash equivalents	80,089	-	-
Short-term financial assets	-	2,663	-
Trade accounts receivable	-	-	302,456
Long-term loans	-	-	176,767
Other accounts receivable	-	-	81,696
Other financial assets	-	-	33,234
Investment properties	-	-	121,280
Borrowings	-	463,311	-
Bonds payable	-	339,345	-
Current portion of bonds payable and long-term borrowings	-	225,875	-
Other financial liabilities	-	-	483,834

(*) 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.

There was no movement between the levels of the fair value hierarchy for the year ended December 31, 2018

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

	2017		
	Level 1	Level 2	Level 3
Assets and liabilities measured at fair value:			
Financial assets at fair value through profit or loss:			
Accounts receivable related to derivatives	-	1,276	-
Available-for-sale financial assets:			
Equity securities (*)	-	-	103,349
Financial liabilities at fair value through profit or loss:			
Accounts payable related to derivatives	-	4,262	-
Derivatives related to hedge accounting:			
Other accounts payables related to derivatives	-	10	-
Other financial assets	-	218	-
Other financial liabilities	-	6,268	-
Assets and liabilities for which fair values are disclosed:			
Cash and cash equivalents	114,777	-	-
Short-term financial assets	-	5,459	-
Trade accounts receivable	-	-	340,293
Long-term loans	-	-	202,235
Other accounts receivable	-	-	7,086
Other financial assets	-	-	44,964
Available-for-sale financial assets	-	-	25,333
Investment properties	-	-	121,280
Borrowings	-	615,255	-
Bonds payable	-	329,310	-
Current portion of bonds payable and long-term borrowings	-	157,378	-
Other financial liabilities	-	-	410,008

(*) Equity securities whose fair value cannot be measured reliably because they are not traded in an active market 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 1.93% during the period (2017: 1.66%).

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 5.8~10.75% during the period (2017: 5.29~9.7%).

Investment properties were evaluated by an independent appraiser (See Note 10.2).

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

29. Statements of cash flows

Non-cash adjustments to reconcile profit for the year to net cash flows for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017
Depreciation	₩ 2,679	₩	3,006
Amortization	9,063		11,670
Impairment loss on intangible assets	29,066		18,511
Retirement benefits	4,545		4,402
Bad debt expenses (Reversal of bad debt allowances)	3,004		(16,256)
Interest income	(13,350)		(7,659)
Gain on foreign currency translation	(9,146)		(50,770)
Interest expenses	33,489		32,458
Loss on foreign currency translation	14,774		26,536
Impairment loss on available-for-sale financial assets	18,192		-
Others	10,755		(54,628)
	₩ 103,071	₩	(32,730)

Working capital adjustments for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018		2017
Decrease (increase) in trade accounts receivable	₩ 7,421	₩	(6,360)
Decrease (increase) in other accounts receivable	(41,700)		16,821
Decrease (increase) in advance payments	(5,348)		6,333
Decrease (increase) in inventories	8,179		(48,522)
Decrease (increase) in other operating assets	3,069		(7,230)
Increase in trade payable	54,082		85,142
Increase in other accounts payable	17,677		10,824
Decrease in advance received	(1,552)		(8,640)
Severance and retirement benefits paid	(2,063)		(3,798)
Increase in plan assets	(1,587)		(799)
Increase (decrease) in other operating liabilities	(6,687)		455
	₩ 32,031	₩	44,226

LG International Corp.
Notes to the separate financial statements
December 31, 2018 and 2017

29. Statements of cash flows (cont'd)

The adjustment of liabilities arising from financing activities for the years ended December 31, 2018 and 2017 are as follows (Korean won in millions):

	2018				
	Jan. 1	Cash flows in financing activities	Non-cash changes		Dec. 31
			Foreign currency translation	Others	
Short-term borrowings	₩ 63,122	₩ (62,656)	₩ -	₩ -	₩ 466
Long-term borrowings	609,540	(21,809)	11,064	-	598,795
Bonds payable	429,481	(399)	-	388	429,270
	<u>₩ 1,101,943</u>	<u>₩ (84,864)</u>	<u>₩ 11,064</u>	<u>₩ 388</u>	<u>₩ 1,028,531</u>
	2017				
	Jan. 1	Cash flows in financing activities	Non-cash changes		Dec. 31
			Foreign currency translation	Others	
Short-term borrowings	₩ 62,959	₩ 231	₩ (68)	₩ -	₩ 63,122
Long-term borrowings	744,883	(91,456)	(42,147)	(1,740)	609,540
Bonds payable	428,932	-	-	349	429,281
	<u>₩ 1,236,774</u>	<u>₩ (91,225)</u>	<u>₩ (42,215)</u>	<u>₩ (1,391)</u>	<u>₩ 1,101,943</u>

30. Approval of financial statements

The financial statements of the Company for the year ended December 31, 2018 were approved and authorized for issue by the Board of Directors on January 31, 2019

Independent auditor's review report on internal control over financial reporting

Chief Executive Officer
LG International Corp.

We have reviewed the accompanying management's report on the operations of the internal control over financial reporting ("ICFR") of LG International Corp. (the "Company") as of December 31, 2018. The Company's management is responsible for design and operations of its ICFR, including the reporting of its operations. Our responsibility is to review the management's ICFR report and issue a report based on our review. The management's report on the operations of the ICFR of the Company states that "Based on the assessment of the operations of the ICFR, the Company's ICFR has been effectively designed and has operated as of December 31, 2018, in all material respects, in accordance with the ICFR standard."

We conducted our review in accordance with the ICFR review standards established by the Korean Institute of Certified Public Accountants. These standards require that we plan and perform our review to obtain less assurance than an audit as to management's report on the operations of the ICFR. A review includes the procedures of obtaining an understanding of the ICFR, inquiring as to management's report on the operations of the ICFR and performing a review of related documentation within limited scope, if necessary.

A company's ICFR consists of an establishment of related policies and organization to ensure that it is designed to provide reasonable assurance on the reliability of financial reporting and the preparation of financial statements for external financial reporting purposes in accordance with Korean International Financial Reporting Standards. However, because of its inherent limitations, the ICFR may not prevent or detect material misstatements of the financial statements. Also, projections of any assessment of the ICFR on future periods are subject to the risk that ICFR may become inadequate due to the changes in conditions, or that the degree of compliance with the policies or procedures may be significantly reduced.

Based on our review of the management's report on the operations of the ICFR, nothing has come to our attention that causes us to believe that the management's report referred to above is not presented fairly, in all material respects, in accordance with the ICFR standards.

We conducted our review of the ICFR in place as of December 31, 2018, and we did not review the ICFR subsequent to December 31, 2018. This report has been prepared for Korean regulatory purposes pursuant to the *Act on External Audit for Stock Companies*, and may not be appropriate for other purposes or for other users.



March 7, 2019

This report is annexed in relation to the audit of the financial statements as of December 31, 2018 and the review of internal accounting control system pursuant to Article 8 of the *Act on External Audit for Stock Companies* of the Republic of Korea.

Managements' Assessment on Internal Control over Financial Reporting

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

We, as the Chief Executive Officer and the Internal Accounting Manager of the Company, assessed operating status of the Company's Internal Control over Financial Reporting ("ICFR") for the year ending December 31, 2018.

Design and operation of ICFR is the responsibility of the Company's management, including the Chief Executive Officer and the Internal Accounting Manager.

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, 2018, in all material respects, in accordance with the 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting'.

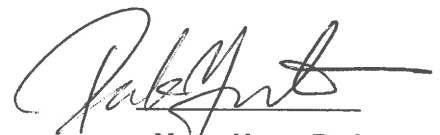
We certify that this report does not contain any untrue statement of a fact, or omit to state a fact necessary to be presented herein. We also certify that this report does not contain or present any statements which might cause material misunderstandings of the readers, and we have reviewed and verified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

January 31, 2019



Chi-Ho Song

Chief Executive Officer



Yong-Hwan Park

Internal Control over Financial Reporting Officer