LX International Corp. and its subsidiaries

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



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Independent auditor's report

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Independent auditor's report

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

Opinion

We have audited the consolidated financial statements of LX International Corp. (formerly, LG International Corp.) (the "Company") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2021 and 2020, and the consolidated statements of profit or loss, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2021 and 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("KIFRS").

Basis for opinion

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

Key audit matters

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

(1) Revenue recognition of overseas export sales

As described in Note 2 to the consolidated financial statements, the Group recognizes revenue when the performance obligation identified in contracts with customers is satisfied at the amount which it expects to receive in exchange for the goods or services. The Group's overseas export sales of goods are W6,512,085 million in total, accounting for approximately 39% of total sales. The Group recognizes revenue on overseas export sales when the control of goods, produced by the Group or purchased from suppliers, is transferred to the customers.

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



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

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

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

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

In preparing the consolidated financial statements, management is responsible for assessing the Group'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 Group or to cease operations, or has no realistic alternative but to do so.

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

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

- Identify and assess the risks of material misstatement of the consolidated 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 Group'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 Group'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 consolidated 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 Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

The engagement partner on the audit resulting in this independent auditor's report is Joon Yang Jeong.

Einst Joung Han Joung

March 16, 2022

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

LX International Corp. (formerly, LG International Corp.) and its subsidiaries

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

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

Chun-sung Yoon Chief Executive Officer LX International Corp.

LX International Corp. (formerly, LG International Corp.) and its subsidiaries Consolidated statements of financial position

as of December 31, 2021 and 2020 (Korean won in millions)

| х, , , , , , , , , , , , , , , , , , , | | | |
|----------------------------------------|----------------------|-------------|-------------|
| | Notes | 2021 | 2020 |
| Assets | | | |
| Current assets | | | |
| Cash and cash equivalents | 4, 5, 25, 26 | ∀ 841,883 | ₩ 689,988 |
| Short-term financial instruments | 4, 11, 15,25, 26 | 20,787 | 67,837 |
| Trade accounts receivable, net | 4, 11, 23, 25, 26 | 1,653,459 | 1,298,738 |
| Contract assets | 16 | 56,513 | 18,970 |
| Other accounts receivable, net | 4, 6, 11, 25, 26 | 265,274 | 193,442 |
| Accrued income, net | 4, 11, 25, 26 | 1,450 | 1,866 |
| Advance payments | | 131,993 | 78,101 |
| Prepaid expenses | | 213,018 | 90,452 |
| Other current assets | 4, 11, 28 | 165,081 | 62,760 |
| Inventories, net | 7 | 1,021,193 | 645,123 |
| Non-current assets held-for-sale | 21, 30 | 5,896 | 15,550 |
| | | 4,376,547 | 3,162,827 |
| Non-current assets | | | |
| Investment assets | 4, 8, 11, 23, 25, 26 | 174,031 | 159,677 |
| Investments in associates | 8, 21 | 322,501 | 279,426 |
| Property, plant and equipment, net | 9, 21, 29 | 806,503 | 742,372 |
| Investment properties, net | 9 | 4,851 | 4,609 |
| Intangible assets, net | 10, 21, 28 | 749,645 | 694,846 |
| Deferred tax assets | 22 | 98,263 | 140,041 |
| Other non-current assets | 4, 5, 11, 28 | 214,548 | 212,144 |
| | | 2,370,342 | 2,233,115 |
| Total assets | ¥ | ∀ 6,746,889 | ₩ 5,395,942 |

(Continued)

LX International Corp. (formerly, LG International Corp.) and its subsidiaries Consolidated statements of financial position as of December 31, 2021 and 2020 (cont'd)

(Korean won in millions)

| | Notes | 2021 | 2020 |
|--------------------------------------|------------------|-------------|-------------|
| Liabilities | | | |
| Current liabilities | | | |
| Short-term borrowings | 4, 12, 25, 26 | ₩ 415,971 | ₩ 106,804 |
| Trade accounts payable | 4, 23, 25, 26 | 1,619,765 | 1,547,820 |
| Other accounts payable | 4, 6, 23, 25, 26 | 345,214 | 253,885 |
| Advance received | 16 | 87,743 | 40,294 |
| Withholdings | 4, 25, 26 | 107,921 | 33,482 |
| Current tax liabilities | | 124,427 | 31,287 |
| Accrued expenses | 4, 25, 26 | 130,204 | 117,485 |
| Current portion of bonds | | | |
| and long-term borrowings | 4, 12, 25, 26 | 328,656 | 225,630 |
| Unearned revenue | 16 | 173,112 | 73,683 |
| Deposits received | 4, 25, 26 | 8,512 | 4,707 |
| Lease liabilities | 4, 25, 26, 29 | 77,774 | 68,804 |
| Liabilities directly associated with | | | |
| assets held for sale | 30 | 5,655 | 14,434 |
| Current portion of provisions | 13 | 5,994 | - |
| | | 3,430,948 | 2,518,315 |
| Non-current liabilities | | | |
| Bonds payable | 4, 12, 25, 26 | 269,462 | 359,307 |
| Long-term borrowings | 4, 12, 25, 26 | 343,586 | 506,567 |
| Defined benefit liabilities | 19 | 9,350 | 14,277 |
| Deferred tax liabilities | 22 | 62,124 | 57,329 |
| Lease liabilities | 4, 25, 26, 29 | 134,103 | 117,403 |
| Provisions | 13 | 99,159 | 41,067 |
| Other liabilties | 4, 6, 25, 26 | 13,913 | 23,346 |
| | | 931,697 | 1,119,296 |
| Total liabilities | | 4,362,645 | 3,637,611 |
| Equity | | | |
| Capital stocks | 14 | 193,800 | 193,800 |
| Capital surplus | 14 | 100,443 | 101,153 |
| Other components of equity | 14 | (41,300) | (41,300) |
| Accumulated other | | | x |
| comprehensive loss | 14 | (201) | (102,426) |
| Retained earnings | 14 | 1,522,220 | 1,186,951 |
| Equity attributable to | | | |
| owners of the parent | | 1,774,962 | 1,338,178 |
| Non-controlling interests | | 609,282 | 420,153 |
| Total equity | | 2,384,244 | 1,758,331 |
| Total liabilities and equity | | ₩ 6,746,889 | ₩ 5,395,942 |

LX International Corp. (formerly, LG International Corp.) and its subsidiaries Consolidated statements of profit or loss

for the years ended December 31, 2021 and 2020

(Korean won in millions, except earnings per share)

| | Notes | | 2021 | | 2020 |
|-------------------------------------|-----------|---|--------------|---|--------------|
| Sales | 3, 16, 23 | ₩ | 16,686,533 | ₩ | 11,282,632 |
| Cost of sales | 18, 23 | | (15,335,139) | | (10,550,255) |
| Gross profit | | | 1,351,394 | | 732,377 |
| Selling and administrative expenses | 17, 18 | | (695,177) | | (572,542) |
| Operating profit | 3 | | 656,217 | | 159,835 |
| Finance income | 4, 20 | | 272,414 | | 292,143 |
| Finance costs | 4, 20 | | (289,033) | | (358,176) |
| Share of profit of associates | 8, 20 | | 89,683 | | 339,422 |
| Other non-operating expenses, net | 20 | | 5,416 | | 22,639 |
| Profit before income tax | | | 734,697 | | 455,863 |
| Income tax expense | 22 | | (194,365) | | (94,257) |
| Profit for the year | | ₩ | 540,332 | ₩ | 361,606 |
| Attributable to: | | | | | |
| Owners of the parent | | ₩ | 350,069 | ₩ | 297,587 |
| Non-controlling interests | | ₩ | 190,263 | ₩ | 64,019 |
| Earnings per share attributable to | | | | | |
| owners of the parent: | | | | | |
| Basic earnings per share | 14 | ₩ | 9,733 | ₩ | 7,932 |
| Diluted earnings per share | 14 | ₩ | 9,733 | ₩ | 7,932 |

LX International Corp. (formerly, LG International Corp.) and its subsidiaries Consolidated statements of comprehensive income

for the years ended December 31, 2021 and 2020

(Korean won in millions)

| | Notes | | 2021 | | 2020 |
|-------------------------------------------------------------|---------|---|---------|---|----------|
| Profit for the year | | ₩ | 540,332 | ₩ | 361,606 |
| Other comprehensive income (loss) that may be reclassified | d | | | | |
| to profit or loss in subsequent periods: | | | | | |
| Gain (loss) on valuation of derivatives designated as | | | | | |
| cash flow hedges | 4, 6 | | 5,917 | | (7,538) |
| Equity adjustments in equity method | 8 | | 10,292 | | 742 |
| Change in retained earnings in equity method | 8 | | - | | (21) |
| Exchange differences on translation of foreign operations | | | 95,219 | | (50,661) |
| | | | 111,428 | | (57,478) |
| Other comprehensive income (loss) that will not be reclassi | fied to | | | | |
| profit or loss in subsequent periods: | | | | | |
| Gain (loss) on valuation of financial assets designated | | | | | |
| at fair value through OCI | 4, 8 | | 10,542 | | (39,094) |
| Remeasurement gain (loss) on defined benefit plans | 19 | | (1,315) | | 2,678 |
| | | | 9,227 | | (36,416) |
| Other comprehensive income (loss) for the year, net of tax | | | 120,655 | | (93,894) |
| Total comprehensive income | | | | | |
| Total comprehensive income for the year, net of tax | | ₩ | 660,987 | ₩ | 267,712 |
| | | | | | · · · · |
| Attributable to: | | | | | |
| Owners of the parent | | ₩ | 451,881 | ₩ | 218,055 |
| Non-controlling interests | | ₩ | 209,106 | ₩ | 49,657 |

LX International Corp. (formerly, LG International Corp.) and its subsidiaries Consolidated statements of changes in equity for the years ended December 31, 2021 and 2020 (Korean won in millions)

| | | | | | | Attributable to owners of the parent | owners of th | ie parent | | | | | | |
|----------------------------------------------------------------------|-------|---------|----------------|-----------------|---------|--------------------------------------|------------------|-----------------------|------------------------|---|-----------|--------------------------|--------|--------------|
| | | | | | | Other | Accun ot | Accumulated other | | | | Non- | | |
| | Notes | Capital | Capital stocks | Capital surplus | surplus | components of equity | compre | comprehensive loss | Retained earnings | | Total | controlling interests | - | Total equity |
| As of January 1, 2020 | | ₩ | 193,800 | × | 101,193 | W (1,579) | M (6. | (19,173) ¥ | W 897,241 | ₩ | 1,171,482 | W 377,134 | 4 ₩ | 1,548,616 |
| Profit for the year | | | • | | • | | | • | 297,587 | | 297,587 | 64,019 | 6 | 361,606 |
| Loss on valuation of derivatives designated as | | | | | | | | | | | | | | |
| cash flow hedges | | | • | | • | | | (7,176) | | | (7,176) | (362) | 2) | (7,538) |
| Equity adjustments in equity method | | | • | | • | | | 735 | | | 735 | | 7 | 742 |
| Change in retained earnings in equity method | | | ' | | • | | | , | (21) | - | (21) | | | (21) |
| Exchange differences on | | | | | | | | | | | | | | |
| translation of foreign operations | | | • | | • | | | (37,146) | | | (37,146) | (13,515) | 5) | (50,661) |
| Gain (loss) on valuation of financial assets designated | | | | | | | | | | | | | | |
| at fair value through OCI | | | • | | • | | | (39,666) | | | (39,666) | 572 | 2 | (39,094) |
| Remeasurement gain (loss) on defined benefit plans | | | • | | • | | | | 3,742 | | 3,742 | (1,064) | 4) | 2,678 |
| Total comprehensive income (loss) | | | • | | • | | | (83,253) | 301,308 | | 218,055 | 49,657 | 2 | 267,712 |
| Dividends | 15 | | • | | • | | | | (11,598) | _ | (11,598) | (11,515) | 5) | (23,113) |
| Paid-in capital increase of subsidiaries and acquisiton of interests | | | ' | | (40) | | | | | | (40) | 7 | 40 | |
| Change in the scope of consolidation | | | ' | | • | | | | | | • | 4,837 | 7 | 4,837 |
| Acquisition of treasury stock | | | • | | | (39,721) | (1) | | | | (39,721) | | | (39,721) |
| As of December 31, 2020 | | ₩ | 193,800 | w | 101,153 | W (41,300) | 0) W | (102,426) ¥ | W 1,186,951 | ₩ | 1,338,178 | W 420,153 | 3 ₩ | 1,758,331 |
| | | | | | | | | | | | | | | |

(Continued)

LX International Corp. (formerly, LG International Corp.) and its subsidiaries Consolidated statements of changes in equity for the years ended December 31, 2021 and 2020 (cont'd) (Korean won in millions)

| | | | | | Att | ributable to ow | Attributable to owners of the parent | t | | | | | |
|----------------------------------------------------------------------|-------|----------------|---------|-----------------|----------------------|---------------------|--------------------------------------|-------------|------------------------|-----------|---------------------|----------------------|--------------|
| | | | | | | | Accumulated | | | | | | |
| | | | | | U | Other components | other comprehensive | | Retained | | Non- controlling | b | |
| | Notes | Capital stocks | stocks | Capital surplus | | of equity | loss | | earnings | Total | interests | | Total equity |
| As of January 1, 2021 | | ₩ | 193,800 | W 10 | 101,153 W | (41,300) ₩ | W (102,426) W | M () | 1,186,951 W | 1,338,178 | W 420 | 420,153 W | 1,758,331 |
| Profit for the year | | | | | | ' | | | 350,069 | 350,069 | 190 | 190,263 | 540,332 |
| Gain on valuation of derivatives designated as | | | | | | | | | | | | | |
| cash flow hedges | | | • | | | ' | 5,627 | | | 5,627 | | 290 | 5,917 |
| Equity adjustments in equity method | | | • | | | ' | 10,294 | | | 10,294 | | (2) | 10,292 |
| Exchange differences on | | | | | | | | | | | | | |
| translation of foreign operations | | | • | | | ' | 75,902 | | | 75,902 | 15 | 19,317 | 95,219 |
| Gain on valuation of financial assets designated | | | | | | | | | | | | | |
| at fair value through OCI | | | • | | | ' | 10,402 | | 9 | 10,408 | | 134 | 10,542 |
| Remeasurement loss on defined benefit plans | | | • | | | ' | | | (419) | (419) | | (968) | (1,315) |
| Total comprehensive income | | | • | | | • | 102,225 | | 349,656 | 451,881 | 209 | 209,106 | 660,987 |
| Dividends | 15 | | • | | | ' | | | (14,387) | (14,387) | (17 | (17,395) | (31,782) |
| Paid-in capital increase of subsidiaries and acquisiton of interests | | | • | | | ' | | | | ' | | 757 | 757 |
| Change in the scope of consolidation | | | • | | (710) | ' | | | | (710) | (3 | (3,339) | (4,049) |
| As of December 31, 2021 | | æ | 193,800 | W 10 | 100,443 W | (41,300) | W (201) | <u>(</u> | 1,522,220 W | 1,774,962 | M 609 | 609,282 W | 2,384,244 |
| | | | | | | | | | | | | | |

LX International Corp. (formerly, LG International Corp.) and its subsidiaries Consolidated statements of cash flows

for the years ended December 31, 2021 and 2020

| | Notes | | 2021 | | 2020 |
|---------------------------------------------------------------------|--------|---|-------------|---|-------------|
| Cash flows from operating activities: | | | | | |
| Profit for the year | | ₩ | 540,332 | ₩ | 361,606 |
| Non-cash adjustments to reconcile profit | | | | | |
| for the year to net cash flows provided by operating activities | 27 | | 344,129 | | (39,477) |
| Working capital adjustments | 27 | | (619,354) | | (23,695) |
| Interest received | | | 11,487 | | 9,353 |
| Interest paid | | | (44,145) | | (36,675) |
| Dividends received | | | 19,663 | | 11,821 |
| Income taxes paid | | | (76,522) | | (28,147) |
| Net cash flows provided by operating activities | | | 175,590 | | 254,786 |
| Cash flows from investing activities: | | | | | |
| Decrease in financial instruments | | | 46,047 | | 10,658 |
| Decrease in loans | | | 8,278 | | 5,657 |
| Decrease in guarantee deposits | | | 9,817 | | 9,262 |
| Proceeds from disposal of equity instruments held for long-term | 8 | | 2,139 | | - |
| Proceeds from disposal of investments in associates | 8 | | 3,901 | | 333,585 |
| Proceeds from disposal of assets held for sale | 30 | | 8,842 | | 22,688 |
| Proceeds from disposal of property, plant and equipment | 9 | | 18,121 | | 62,145 |
| Proceeds from disposal of intangible assets | 10 | | 7,935 | | 9,208 |
| Government grants received | | | 837 | | - |
| Net cash flow from disposal of subsidiary | | | 525 | | - |
| Net cash flow from business combination | | | 798 | | - |
| Increase in financial instruments | | | (10,816) | | (66,916) |
| Increase in loans | | | (5,105) | | (14,526) |
| Increase in guarantee deposits | | | (13,253) | | (15,094) |
| Acquisition of equity instruments held for long-term | 8 | | (8,104) | | (3,000) |
| Acquisition of investments in associates | 8 | | (2,720) | | - |
| Acquisition of property, plant and equipment | 9 | | (71,790) | | (44,193) |
| Acquisition of intangible assets | 10 | | (43,793) | | (43,655) |
| Net cash provided by (used in) investing activities | | | (48,341) | | 265,819 |
| Cash flows from financing activities: | | | | | |
| Acquisition of treasury stock | 14 | | - | | (39,721) |
| Proceeds from finance liabilities | 27 | | 2,793,890 | | 1,331,280 |
| Repayment of finance liabilities | 27 | | (2,645,976) | | (1,412,102) |
| Payment of principal portion of lease liabilities | 27, 29 | | (98,149) | | (93,969) |
| Cash inflow from other financing activities | | | 380 | | - |
| Cash outflow from other financing activities | | | (10,139) | | - |
| Dividends paid | | | (31,782) | | (23,113) |
| Net cash provided by (used in) financing activities | | | 8,224 | | (237,625) |
| Net increase in cash and cash equivalents | | | 135,473 | | 282,980 |
| Cash and cash equivalents as of January 1 | | | 689,988 | | 423,582 |
| Exchange differences on translation of cash and cash equivalents | | | 16,422 | | (16,574) |
| Cash and cash equivalents as of December 31 | | ₩ | 841,883 | ₩ | 689,988 |
| | | | 0.1,000 | | 000,000 |

1. Organization and business

LX International Corp. ("LXI" or the "Parent Company") and its 83 subsidiaries including LX International (America) Inc. (collectively referred to as the "Group") prepare the consolidated financial statements in accordance with KIFRS 1110 *Consolidated Financial Statements*, and general information on the Group is as follows:

1.1 The Parent Company

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

LXI 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.

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

As LG Corp., the largest shareholder of the Parent Company, newly established LX Holdings Corp. through the spin-off on May 1, 2021, and the Parent Company was incorporated into LX Holdings Corp. LX Holdings Corp. holds 24.69% of the Parent Company's common shares as of December 31, 2021. The remaining equity shares are held by institutional investors, overseas investors, minority shareholders, and so on.

1.2 Consolidated subsidiaries

| Subsidiaries included in | Country of | Equity owne | ership (%) | Reporting | | |
|----------------------------------------------------------------------------------|-------------|-------------|------------|-----------|---------------------|----------------------|
| consolidation are as follows | domicile | 2021 | 2020 | date | Principal activity | Basis of control |
| LX International (America) Inc. (formerly, LG | | · | | | | |
| International (America) Inc.) (*1) | USA | 100.00 | 100.00 | Dec. 31 | Export and import | Ownership over 50% |
| LHC Solar LLC | USA | 100.00 | 100.00 | Dec. 31 | Solar energy | Ownership over 50% |
| LX International (Japan) Ltd. (formerly, LG | | | | | | |
| International (Japan) Ltd.) (*1) | Japan | 100.00 | 100.00 | Dec. 31 | Export and import | Ownership over 50% |
| LX International (HK) Ltd. (formerly, LG | | | | | Export and import | |
| International (Hong Kong) Ltd.) (*1) | Hong Kong | 100.00 | 100.00 | Dec. 31 | | Ownership over 50% |
| LX International (Singapore) Pte. Ltd. (formerly, | 0. | 100.00 | 100.00 | D 04 | Export and import | 0 1: 50% |
| LG International (Singapore) Pte. Ltd.) (*1) | Singapore | 100.00 | 100.00 | Dec. 31 | | Ownership over 50% |
| LX International (Deutschland) GmbH (formerly, LG International (Deutschland) | | | | | Export and import | |
| GmbH) (*1) | Deutschland | 100.00 | 100.00 | Dec. 31 | | Ownership over 50% |
| LX International (Shanghai) Ltd. | Deutschland | 100.00 | 100.00 | DC0. 01 | Export and import | Ownership over 0070 |
| (formerly, LG International (China) Ltd.) (*1) | China | 100.00 | 100.00 | Dec. 31 | | Ownership over 50% |
| Yantai LX International VMI Co., Ltd. (formerly, | | | | | | |
| Yantai VMI Hub LG International Co., Ltd.) (*1) | China | 100.00 | 100.00 | Dec. 31 | Hub | Ownership over 50% |
| Bowen Investment (Australia) Pty. Ltd. | Australia | 100.00 | 100.00 | Dec. 31 | Coal mining | Ownership over 50% |
| PT. Batubara Global Energy (BGE) | Indonesia | 100.00 | 100.00 | Dec. 31 | Coal mining | Ownership over 50% |
| PT. Megaprima Persada (MPP) | Indonesia | 75.00 | 75.00 | Dec. 31 | Coal mining | Ownership over 50% |
| PT. Mega Global Energy (MGE) | Indonesia | 100.00 | 100.00 | Dec. 31 | Coal mining | Ownership over 50% |
| PT. Ganda Alam Makmur (GAM) | Indonesia | 60.00 | 60.00 | Dec. 31 | Coal mining | Ownership over 50% |
| LX International India Private Limited | | | | | | |
| (formerly, LG International (India) Ltd.) (*1) | India | 100.00 | 100.00 | Mar. 31 | Export and import | Ownership over 50% |
| PT. Green Global Lestari (GGL) | Indonesia | 100.00 | 100.00 | Dec. 31 | Palm oil | Ownership over 50% |
| PT. Parna Agromas (PAM) | Indonesia | 95.00 | 95.00 | Dec. 31 | Palm oil | Ownership over 50% |
| PT. Grand Utama Mandiri (GUM) (*2) | Indonesia | 100.00 | 95.00 | Dec. 31 | Palm oil | Ownership over 50% |
| PT. Tintin Boyok Sawit Makmur (TBSM) (*2) | Indonesia | 100.00 | 95.00 | Dec. 31 | Palm oil | Ownership over 50% |
| PT. Tintin Boyok Sawit Makmur Dua | | | | | | |
| (TBSMD) (*2) | Indonesia | 100.00 | 95.00 | Dec. 31 | Palm oil | Ownership over 50% |
| PT. Green Global Utama (GGU) | Indonesia | 100.00 | 100.00 | Dec. 31 | Palm oil | Ownership over 50% |
| PT. LX International Indonesia (LXII) (formerly, | | | | 5 | . . | o I. 500/ |
| LG International Indonesia (LGII)) (*1) | Indonesia | 100.00 | 100.00 | Dec. 31 | Service | Ownership over 50% |
| PT. Binsar Natorang Energi (BNE) | Indonesia | 95.00 | 95.00 | Dec. 31 | Hydroelectric power | Ownership over 50% |
| PT. Enertgy Metal Indonesia (EMI) (*3) | Indonesia | 100.00 | - | Dec. 31 | Nickel | Ownership over 50% |
| PT. Global Investment Institusi (GII) (*3) | Indonesia | 100.00 | - | Dec. 31 | Health care | Ownership over 50% |
| PT. Satu Gen Indonesia (SGI) (*3) | Indonesia | 51.00 | - | Dec.31 | Health care | Ownership over 50% |
| Steel Flower Electric | China | 100.00 | 100.00 | Dec. 21 | Steel from or | Oursership over 500/ |
| & Machinary (Tianjin) Co., Ltd. | China | 100.00 | 100.00 | Dec. 31 | Steel frames | Ownership over 50% |
| | | | | | | |

1.2 Consolidated subsidiaries (cont'd)

| | Country of domie | Equity own 2021 | ership (%) 2020 | Reporting date | Principal activity | Basis of control |
|---------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------|--------------------|-------------------|--------------------|---------------------|
| Philco Resources Ltd. (Rapu-Rapu) | Malaysia | 60.00 | 60.00 | Dec. 31 | Copper mining | Ownership over 50% |
| Resource Investment (Hong Kong) | Malaysia | 00.00 | 00.00 | DC0. 01 | copper mining | Ownership over 0070 |
| Ltd. (Xinzhen) LX International Yakutsk, LLC (formerly, LG | Hong Kong | 100.00 | 100.00 | Dec. 31 | Coal mining | Ownership over 50% |
| International Yakutsk Ltd.) (*1) | Russia | 100.00 | 100.00 | Dec. 31 | Real estate | Ownership over 50% |
| Korea Carbon International Co., Ltd. (Shaanxi BBM) | Hong Kong | 60.00 | 60.00 | Dec. 31 | Renewable plant | Ownership over 50% |
| Colmineral, S.A. de.C.V. | Mexico | 100.00 | 100.00 | Dec. 31 | Iron ore | Ownership over 50% |
| Fertilizer Resources Investment Ltd. | Hong Kong | 100.00 | 100.00 | Dec. 31 | Fertilizer | Ownership over 50% |
| Dangjin Tank Terminal Co., Ltd. | Korea | 100.00 | 100.00 | Dec. 31 | Storage | Ownership over 50% |
| Haiphong Steel Flower Electrical & Machinery Company Limited | Vietnam | 100.00 | 100.00 | Dec. 31 | Steel frames | Ownership over 50% |
| LX Pantos Logistics Co., Ltd. | | | | | | · |
| (formerly, Pantos Logistics Co., Ltd.) (*1,4) Pantos Busan Newport Logistics | Korea | 51.00 | 51.00 | Dec. 31 | Logistics | Ownership over 50% |
| Center Co., Ltd. (*4) | Korea | 100.00 | 100.00 | Dec. 31 | Warehouse | Ownership over 50% |
| Helistar Air Co., Ltd (*4) | Korea | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Hanultari Co., Ltd (*4) | Korea | 100.00 | 100.00 | Dec. 31 | Other food retail | Ownership over 50% |
| Pantos Logistics (China) Co., Ltd. (*4) | China | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics (Shanghai) Co., Ltd. (*4) | China | 100.00 | 100.00 | Dec. 31 | Warehouse | Ownership over 50% |
| Pantos Logistics (Ningbo) Co., Ltd. (*4) | China | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Logistics (Shenzhen) Co., Ltd. (formerly, Pantos Logistics (Shenzhen) Co., | | | | | | |
| Ltd. (*1, 4) | China | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics (H.K.) Co., Ltd. (*4) | Hong Kong | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics (Taiwan) Co., Ltd. (*4) | Taiwan | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| PT. LX Pantos Logistics Indonesia (formerly, Pantos Logistics Indonesia) (*1, 4) | Indonesia | 99.00 | 99.00 | Dec. 31 | Logistics | Ownership over 50% |
| PT. LX Pantos Logistics Jakarta | | | | | | |
| (formerly, Pantos Logistics Jakarta) (*1, 4) LX Pantos Logistics Singapore Pte. Ltd. | Indonesia | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| (formerly, Pantos Logistics Sngapore Pte. Ltd.) (*1, 4) LX Pantos Logistics (Thailand) Co., Ltd. | Singapore | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| (formerly, Pantos Logistics (Thailand) Co., Ltd.) (*1, 4) | Thailand | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Logistics Malaysia Sdn. Bhd. (formerly, Pantos Logistics Malaysia Sdn. | | | | | | |
| Bhd.) (*1, 4) LX Pantos Logistics (India) Pvt. Ltd. (formerly, | Malaysia | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics (India) Pvt. Ltd. (*1, 4) LX Pantos (Cambodia) Co., Ltd. (formerly, | India | 100.00 | 100.00 | Mar. 31 | Logistics | Ownership over 50% |
| Pantos Logistics (Cambodia) Co., Ltd.) (*1, 4) LX Pantos Vietnam Co., Ltd. (formerly, | Cambodia | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Vietnam Co., Ltd.) (*1, 4) LX Pantos Australia Pty Ltd. (formerly, | Vietnam | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Australia Pty Ltd.) (*1, 4) LX Pantos Holdings (Thailand) Co., Ltd. | Australia | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| (formerly, Pantos Holdings (Thailand) Co., Ltd.) (*1, 4) | Thailand | 48.50 | 48.50 | Dec. 31 | Logistics | De facto control |
| Pantos Logistics Myanmar Co., Ltd. (*4) | Myanmar | 87.96 | 87.96 | Mar. 31 | Logistics | Ownership over 50% |
| LX Pantos U.K. Ltd (formerly, Pantos Logistics U.K. Ltd.) (*1, 4) | UK | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Netherlands B. V (formerly, Pantos Logistics Benelux B.V) (*1, 4) | Netherlands | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics France (*4) | France | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Poland SP.Z.O.O. (formerly, | Trance | 100.00 | 100.00 | Dec. 51 | LOGISTICS | Ownership over 50% |
| Pantos Logistics Poland) (*1, 4) | Poland | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Germany GmbH (formerly, Pantos Logistics Germany GmbH) (*1, 4) | Deutschland | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Spain Slu. (formerly, Pantos | Spain | 100.00 | 100.00 | Dec. 31 | | Ownership over 50% |
| Logistics Spain S.L.) (*1, 4) LX Pantos Turkey Lojistick Ve Ticaret Ltd. Sti. (formerly, Pantos Logistics Ve Tic.Lgd.Sti) | Spain | 100.00 | 100.00 | Dec. 31 | Logistics | |
| (10111eny, Fantos Logistics ve fic.Lgd.Str) (*1, 4) | Turkey | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Sweden AB (*4) | Sweden | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| | | | | | | |

1.2 Consolidated subsidiaries (cont'd)

| | Country of | Equity own | ership (%) | Reporting | | |
|------------------------------------------------|--------------|------------|------------|-----------|--------------------|--------------------|
| | domie | 2021 | 2020 | date | Principal activity | Basis of control |
| LX Pantos Mexico, S.A. DE C.V. (formerly, | | | | | | |
| Pantos Logistics Mexico) (*1, 4) | Mexico | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Logistica Do Brasil Ltda (formerly, | | | | | | |
| Pantos Do Brasil Logistica) (*1, 4) | Brazil | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Colombia SAS (formerly, Pantos | | | | | | |
| Logistics Colombia SAS) (*1, 4) | Colombia | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Chile SpA (*4) | Chile | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Panama, S.A (formerly, Pantos | | | | | | |
| Logistics Panama S.A.) (*1, 4) | Panama | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics AR S.A. (*4) | Argentina | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Solucoes Logisticas Do Brasil | | | | | | |
| Ltda. (formerly, Hi Logistics Brasil Servicos | | | | | | |
| De Logistica LTDA) (*1, 4) | Brasil | 100.00 | 100.00 | Dec. 31 | Warehouse | Ownership over 50% |
| FNS CIS LLC (*4) | Russia | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Kazakhstan (*4) | Kazakhstan | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Ukraine Ltd (*4) | Ukraine | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Customs Services LLC (*4, 5) | Russia | - | 100.00 | Dec. 31 | Customs | Ownership over 50% |
| Pantos Logistics L.L.C (Dubai) (*4) | Dubai | 49.00 | 49.00 | Dec. 31 | Logistics | De facto control |
| Pantos Logistics L.L.C (Oman) (*4, 5) | Oman | - | 70.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Co., LTD. Saudi Arabia | | | | | | |
| (*4) | Saudi Arabia | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Pantos Logistics Nigeria Limited (*4) | Nigeria | - | 99.93 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Japan Inc. (formerly, Pantos | | | | | | |
| Logistics Japan Inc,) (*1, 4) | Japan | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Hi Logistics (China) Co., Ltd. (*4) | China | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Hi Logistics RUS, LLC. (*4, 5) | Russia | - | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Solutions India Private Limited | | | | | Ū. | · |
| (formerly, Pantos Logistic Solutions India | | | | | | |
| Private Limited) (*1, 4) | India | 100.00 | 100.00 | Mar. 31 | Logistics | Ownership over 50% |
| Hi Logistics Egypt S.A.E (*4) | Egypt | 99.26 | 99.26 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos America, INC. (formerly, Pantos | | | | | | |
| North America, INC.) (*1, 4) | USA | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| LX Pantos Hungary KFT. (formerly, Pantos | | | | | | |
| Logistics Hungary KTF.) (*1, 4) | Hungary | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| Onecube International Logistics Co., Ltd. (*4) | China | 100.00 | 100.00 | Dec. 31 | Logistics | Ownership over 50% |
| PT. Pantos Express Indonesia (*4) | Indonesia | 49.00 | 49.00 | Dec. 31 | Logistics | De facto control |
| | | | | | | |

(*1) For the year ended December 31, 2021, name of the subsidiary was changed.

- (*2) For the year ended December 31, 2021, PT.Green Global Lestari (GGL), one of the subsidiaries, acquired 5% of remaining shares in PT. Grand Utama Mandiri (GUM) and PT. Tintin Boyok Sawit Markur (TBSM), respectively. Also, PT. Tintin Boyok Sawit Markur (TBSM), one of the subsidiaries, acquired 5% of remaining shares in PT. Tintin Boyok Sawit MakmurDua (TBSMD).
- (*3) For the year ended December 31, 2021, the Group included several subsidiaries in the consolidation scope by acquiring interests of PT. Global Investment Institusi (GII) directly, interests of PT. Satu Gen Indonesia (SGI) through its subsidiary, PT. Global Investment Institusi (GII), and interest of PT. Energy Metal Indonesia (EMI) through its subsidiary, PT. Batu bara Global Energy (BGE).
- (*4) As of December 31, 2021, the entities are subsidiaries of LX Pantos Logistics Co., Ltd., and the equity ownerships presented above are simple sums of equity interests held by LX Pantos Logistics Co., Ltd. and its subsidiaries.
- (*5) For the year ended December 31, 2021, the Group excluded several subsidiaries from the consolidation scope by liquidating Pantos Logistics L.L.C (Oman), Pantos Logistics Nigeria Limited, and Hi Logistics RUS LLC. and selling Pantos Customs Services LLC.

Meanwhile, as of January 1, 2022, the Group acquired 100% of equity interests of Pantos USA, INC, a corporation operating multimodal transportation business in the United States.

The summarized financial information of consolidated subsidiaries (before elimination of intra-group transactions) are as follows (Korean won in millions):

| | | | 2021 | | |
|------------------------------------------------------------------------------------------------|----------------|-----------------|------------------|-------------|-------------------------------|
| | Assets | Liabilities | Equity | Revenue | Profit (loss) for the year |
| LX International (America) Inc. (formerly, LG International (America) Inc.) | ₩ 402,590 | ₩ 359,217 ₩ | 43,373 | ₩ 1,711,415 | ₩ 3,467 |
| LHC Solar LLC | 3,475 | 967 | 43,373 | 316 | 11 |
| LX International (Japan) Ltd. (formerly, LG | -, | | _, | | |
| International (Japan) Ltd.) | 100,047 | 95,878 | 4,169 | 482,779 | 63 |
| LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.) | 111,314 | 101,232 | 10,082 | 572,449 | 866 |
| LX International (Singapore) Pte. Ltd. (formerly, LG International (Singapore) | 639,236 | 620,008 | 19,228 | 2 796 012 | 5,724 |
| Pte. Ltd.) LX International (Deutschland) GmbH (formerly, LG International (Deutschland) | 039,230 | 020,000 | 19,220 | 3,786,013 | 5,724 |
| GmbH) | 12,580 | 2,377 | 10,203 | 18,251 | 554 |
| LX International (Shanghai) Corp. (formerly, LG International (China) Ltd.) (*1 | 12,165 | 3,838 | 8,327 | 15,920 | 369 |
| Yantai VMI Hub LX International Co., Ltd. (formerly, Yantai VMI Hub LG | | | | | |
| International Co., Ltd.) | 6,820 | 1,552 | 5,268 | 3,308 | 753 |
| Bowen Investment (Australia) Pty Ltd. | 121,232 | 104,781 | 16,451 | 88,299 | 8,082 |
| PT. Batubara Global Energy (BGE) | 269,065 | 209,016 | 60,049 | 676,701 | 10,120 |
| PT. Megaprima Persada (MPP) | 16,116 | 24,196 | (8,080) | 5,202 | (8,855) |
| PT. Mega Global Energy (MGE) | 2,935 | 988 | 1,947 | - | (1,282) |
| PT. Ganda Alam Makmur (GAM) | 670,633 | 269,010 | 401,623 | 501,210 | 153,200 |
| LX International (India) Ltd. (formerly, LG International (India) Ltd.) | 3,250 | 1,412 | 1,838 | 802 | (24) |
| | 157,949 | 30,657 | 1,030 | 002 | (24) 871 |
| PT. Green Global Lestari (GGL) | 90,166 | 39,924 | 50,242 | - 64,128 | 9,229 |
| PT. Parna Agromas (PAM) PT. Grand Utama Mandiri (GUM) | 61,794 | 24,787 | 30,242 37,007 | 26,799 | 9,229 5,060 |
| PT. Tintin Boyok Sawit Makmur (TBSM) | 45,614 | 17,086 | 28,528 | 56,910 | 3,993 |
| PT. Tintin Boyok Sawit Makmur Dua (TBSMD) | 12,234 | 1,725 | 10,509 | 5,860 | 2,046 |
| PT. Green Global Utama (GGU) | 154,565 | 145,553 | 9,012 | 449,142 | 2,163 |
| PT. LX International Indonesia (LXII) (formerly, LG International Indonesia | | | | | |
| (LGII)) (*1) | 9,027 | 14,237 | (5,030) | | (5,600) |
| PT. Binsar Natorang Energi (BNE) | 255,293 | 159,174 | 96,119 | 24,936 | 6,901 188 |
| PT. Energy Metal Indonesia (EMI) | 13,208 | 12,282 2,503 | 1,026 | 7,569 | |
| PT. Global Investment institusi (GII) PT. Satu Gen Indonesia (SGI) | 9,542 2,177 | 2,503 | 7,039 2,153 | 1,569 | (678) (342) |
| Steel Flower Electric & Machinary (Tianjin) | 2,177 | 24 | 2,133 | - | (342) |
| Co., Ltd. | 44,617 | 8,960 | 35,657 | 105,016 | 3,745 |
| Philco Resources Ltd. (Rapu-Rapu) | 597 | 439 | 158 | - | (55) |
| Resource Investment (HongKong) Ltd. (Xinzhen) | 131,915 | 8 | 131,907 | - | 65,684 |
| LX International Yakutsk Ltd. (formerly, LG International Yakutsk Ltd.) | 6,501 | 13,793 | (7,292) | 1,066 | (416) |
| Korea Carbon International Co., Ltd. (Shaanxi BBM) | 8,615 | 8,615 | - | - | - |
| Colmineral, S.A. de.C.V. | 3 | - | 3 | - | - |
| Fertilizer Resources Investment Ltd. | 160,660 | - | 160,660 | - | 18,684 |
| Dangjin Tank Terminal Co., Ltd. | 91,578 | 712 | 90,866 | - | (2,470) |
| Haiphong Steel Flower Electrical & Machinery Company Limited | 36,552 | 29,464 | 7,088 | 47,031 | 2,052 |
| LX Pantos Logistics Co., Ltd. (formerly, Pantos Logistics Co., Ltd.) | 1,468,001 | 815,919 | 652,482 | 4,486,440 | 142,479 |
| Pantos Busan Newport Logistics Center Co., Ltd. | 13,906 | 2,980 | 10,926 | 14,976 | 666 |
| | | | | | |

| | | | 2021 | | |
|-------------------------------------------------------------------------------------|------------|------------------------|---------|-----------|-------------------------------|
| | Assets | Liabilities | Equity | Revenue | Profit (loss) for the year |
| Helistar Air Co., Ltd. | ₩ 20,051 ₩ | 15,804 ₩ | 4,247 ₩ | 132,552 ₩ | 2,581 |
| Hanultari Co., Ltd. | 392 | 255 | 137 | 818 | 6 |
| Pantos Logistics (China) Co., Ltd. | 212,246 | 164,558 | 47,688 | 786,792 | 16,585 |
| Pantos Logistics (Shanghai) Co., Ltd. | 119,740 | 87,763 | 31,977 | 381,744 | 8,885 |
| Pantos Logistics (Ningbo) Co., Ltd. | 1,887 | 44 | 1,843 | 615 | 59 |
| LX Pantos Logistics (Shenzhen) Co., Ltd. (formerly, Pantos Logistics (Shenzhen) | | | | | |
| Co., Ltd. | 57,370 | 32,454 | 24,916 | 235,030 | 6,877 |
| Pantos Logistics (H.K) Co., Ltd. | 71,799 | 22,697 | 49,102 | 134,351 | 6,263 |
| Pantos Logistics (Taiwan) Co., Ltd. | 10,675 | 7,202 | 3,473 | 33,883 | 767 |
| PT. LX Pantos Logistics Indonesia | | | | | |
| (formerly, Pantos Logistics Indonesia) | 53,112 | 40,844 | 12,268 | 172,770 | 5,811 |
| PT. Pantos Logistics Jakarta (formerly, | | a a 17 | | (= 0=0 | (=0=) |
| Pantos Logistics Jakarta) | 14,959 | 8,847 | 6,112 | 15,350 | (505) |
| LX Pantos Singapore Pte. Ltd. (formerly, Pantos Logistics Sngapore Pte. Ltd.) | 14,871 | 7,281 | 7,590 | 28,017 | 1,807 |
| LX Pantos (Thailand) Co., Ltd. (formerly, Pantos Logistics (Thailand) Co., Ltd.) | 36,713 | 23,515 | 13,198 | 137,618 | 1,365 |
| LX Pantos Malaysia Sdn. Bhd. (formerly, Pantos Logistics Malaysia Sdn. Bhd.) | 19,080 | 14,934 | 4,146 | 49,686 | 1,940 |
| LX Pantos (India) Pvt. Ltd. (formerly, | | | | | |
| Pantos Logistics (India) Pvt. Ltd. | 23,224 | 22,135 | 1,089 | 66,721 | (2,711) |
| LX Pantos (Cambodia) Co., Ltd. (formerly, Pantos Logistics (Cambodia) Co., Ltd.) | 1,902 | 1,536 | 366 | 5,716 | 148 |
| LX Pantos Vietnam Co., Ltd. (formerly, Pantos Logistics Vietnam Co., Ltd.) | 60,129 | 36,069 | 24,060 | 279,942 | 11,056 |
| LX Pantos Australia Pty Ltd. (formerly, | , | | , | , | , |
| Pantos Logistics Australia Pty Ltd.) LX Pantos Holdings (Thailand) Co., Ltd. | 5,136 | 2,766 | 2,370 | 14,268 | 543 |
| (formerly, Pantos Holdings (Thailand) Co., Ed. | | | | | |
| Ltd.) | 1,657 | 176 | 1,481 | 717 | 18 |
| Pantos Logistics Myanmar Co., Ltd. | 68 | 54 | 14 | - | (21) |
| LX Pantos U.K. Ltd. (formerly, Pantos | | | | | () |
| Logistics U.K. Ltd.) | 13,602 | 9,291 | 4,311 | 38,556 | 1,293 |
| LX Pantos Netherlands B.V (formerly, | | | | | |
| Pantos Logistics Benelux B.V) | 58,230 | 42,464 | 15,766 | 94,308 | 2,185 |
| Pantos Logistics France | 28,435 | 25,299 | 3,136 | 36,299 | 1,057 |
| LX Pantos Poland SP.Z.O.O (formerly, | | | | | |
| Pantos Logistics Poland) | 160,624 | 110,694 | 49,930 | 581,883 | 28,774 |
| LX Pantos Germany GmbH (formerly, | | | | | |
| Pantos Logistics Germany GmbH) | 21,024 | 9,416 | 11,608 | 64,192 | 3,190 |
| LX Pantos Spain Slu (formerly, Pantos | 10,100 | | | | |
| Logistics Spain S.L.) | 13,499 | 7,296 | 6,203 | 38,344 | 1,415 |
| LX Pantos Turkey Lojistik Ve Ticaret Ltd. Sti. (formerly, Pantos Logistics Ve | | | | | |
| Tic.Lgd.Sti) | 6,484 | 3,060 | 3,424 | 20,966 | 3,583 |
| Pantos Logistics Sweden AB | 2,816 | 3,489 | (673) | 5,208 | 170 |
| LX Pantos Mexico, S.A. DE C.V. (formerly, | | 0 - 00 <i>1</i> | 04 570 | ~~~~ | |
| Pantos Logistics Mexico) | 107,266 | 85,694 | 21,572 | 390,067 | 5,187 |
| LX Pantos Logistica Do Brasil Ltda (formerly, Pantos Do Brasil Logistica) | 12,230 | 4,504 | 7,726 | 66,646 | 3,421 |
| LX Pantos Colombia S.A.S (formerly, | | | 0.000 | 10 10- | |
| Pantos Logistics Colombia SAS) | 5,760 | 2,960 | 2,800 | 13,183 | 1,214 |
| Pantos Logistics Chile SpA | 4,367 | 3,380 | 987 | 11,461 | 1,211 |
| LX Pantos Panama S.A. (formerly, Pantos | | (| 0 -0- | 10.010 | 4 |
| Logistics Panama S.A.) | 7,427 | 4,660 | 2,767 | 13,312 | 1,828 |
| Pantos Logistics AR S.A. | 1,074 | 314 | 760 | 2,378 | 68 |
| | | | | | |

| | | 2021 | | | | | |
|--------------------------------------------|---|-------------|-------------|-------------|--------------|-------------------------------|--|
| | _ | Assets | Liabilities | Equity | Revenue | Profit (loss) for the year | |
| LX Pantos Solucoes Logisticas Do Brasil | | | | | | | |
| Ltda. (formerly, Hi Logistics Brasil | | | | | | | |
| Servicos De Logistica LTDA) | ₩ | 2,573 ₩ | 2,525 ₩ | 48 ₩ | 6,069 ₩ | (894) | |
| FNS CIS LLC | | 50,229 | 28,832 | 21,397 | 123,506 | 9,339 | |
| Pantos Logistics Kazakhstan | | 25 | 6 | 19 | 472 | (93) | |
| Pantos Logistics Ukraine Ltd | | - | - | - | - | - | |
| Pantos Logistics L.L.C (Dubai) | | 8,695 | 5,237 | 3,458 | 25,238 | 1,042 | |
| Pantos Logistics Co., LTD. Saudi Arabia | | 2,901 | 1,270 | 1,631 | 7,002 | 538 | |
| LX Pantos Japan Inc. (formerly, Pantos | | | | | | | |
| Logistics Japan Inc,) | | 28,919 | 19,230 | 9,689 | 100,711 | 2,618 | |
| Hi Logistics (China) Co., Ltd. | | 28,612 | 17,119 | 11,493 | 81,434 | 1,348 | |
| LX Pantos Solutions India Private Limited | | | | | | | |
| (formerly, Pantos Logistic Solutions India | | | | | | | |
| Private Limited) | | 11,618 | 8,619 | 2,999 | 76,342 | 249 | |
| Hi Logistics Egypt S.A.E | | 4,879 | 1,750 | 3,129 | 13,006 | 855 | |
| Pantos North America, INC. (formerly, | | | | | | | |
| Pantos North America, INC.) | | 38,335 | 15,865 | 22,470 | 130,112 | 4,112 | |
| Pantos Logistics Hungary KFT. (formerly, | | | | | | | |
| Pantos Logistics Hungary KTF.) | | 3,715 | 2,671 | 1,044 | 14,474 | 593 | |
| Onecube International Logistics Co., Ltd. | | 2,898 | 1,176 | 1,722 | 4,263 | (477) | |
| PT. Pantos Express Indonesia | _ | 215 | 232 | (17) | 510 | (193) | |
| | ₩ | 6,497,615 ₩ | 4,028,801 ₩ | 2,468,814 ₩ | 17,596,336 ₩ | 562,355 | |

| | 2020 | | | | |
|-----------------------------------------------------------------------------|-----------|-------------|----------|----------------|-------------------------------|
| | Assets | Liabilities | Equity | Revenue | Profit (loss) for the year |
| LX International (America) Inc. (formerly, | | | | | |
| LG International (America) Inc.) | ₩ 375,562 | ₩ 338,831 | ₩ 36,731 | ₩ 1,376,182 | ₩ 4,419 |
| LHC Solar LLC | 3,323 | 1,032 | 2,291 | 327 | 21 |
| LX International (Japan) Ltd. (formerly, LG | 75.050 | 74 457 | 4 000 | 000.050 | (0.45) |
| International (Japan) Ltd.) | 75,659 | 71,457 | 4,202 | 362,350 | (245) |
| LX International (HK) Ltd. (formerly, LG International (Hong Kong) Ltd.) | 111,187 | 102,758 | 8,429 | 308,791 | 2,924 |
| LX International (Singapore) Pte. Ltd. | 111,107 | 102,756 | 0,429 | 500,791 | 2,924 |
| (formerly, LG International (Singapore) | | | | | |
| Pte. Ltd.) | 601,567 | 589,301 | 12,266 | 2,348,661 | 2,318 |
| LX International (Deutschland) GmbH | , | , | , | _,_ ,_ ,_ ,_ , | _, |
| (formerly, LG International (Deutschland) | | | | | |
| ĠmbH) | 14,250 | 4,626 | 9,624 | 11,651 | 936 |
| LX International (Shanghai) Corp. | | | | | |
| (formerly, LG International (China) Ltd.) | 7,901 | 784 | 7,117 | 5,970 | 61 |
| Yantai VMI Hub LX International Co., Ltd. | | | | | |
| (formerly, Yantai VMI Hub LG | | | | | |
| International Co., Ltd.) | 4,834 | 821 | 4,013 | 3,077 | 798 |
| Bowen Investment (Australia) Pty Ltd. | 70,677 | 62,520 | 8,157 | 52,889 | (20,149) |
| PT. Batubara Global Energy (BGE) | 83,545 | 37,099 | 46,446 | 323,439 | 2,094 |
| PT. Megaprima Persada (MPP) | 14,434 | 14,434 | - | 412 | 849 |
| PT. Mega Global Energy (MGE) | 3,983 | 925 | 3,058 | - | (2,844) |
| PT. Ganda Alam Makmur (GAM) | 477,297 | 254,446 | 222,851 | 194,484 | 7,236 |
| LX International (India) Ltd. (formerly, LG | 0.450 | | 4 707 | 4 004 | 040 |
| International (India) Ltd.) | 2,153 | 416 | 1,737 | 1,221 | 212 |
| PT. Green Global Lestari (GGL) | 151,428 | 24,451 | 126,977 | - | 3,915 |
| PT. Parna Agromas (PAM) | 80,555 | 42,812 | 37,743 | 93,789 | 3,954 |
| PT. Grand Utama Mandiri (GUM) | 50,220 | 20,530 | 29,690 | 18,314 | (3,894) |
| PT. Tintin Boyok Sawit Makmur (TBSM) | 41,910 | 18,742 | 23,168 | 39,791 | (2,351) |
| PT. Tintin Boyok Sawit Makmur | 0.000 | 0.404 | 7 700 | 0.000 | 000 |
| Dua (TBSMD) | 9,923 | 2,131 | 7,792 | 3,332 | 396 |
| PT. Green Global Utama (GGU) | 79,625 | 73,323 | 6,302 | 268,385 | 1,830 |
| PT. LX International Indonesia (LXII) | | | | | |
| (formerly, LG International Indonesia (LGII)) | 12,258 | 11,503 | 755 | 4,766 | 370 |
| PT. Binsar Natorang Energi (BNE) | 237,492 | 161,327 | 76,165 | 28,341 | 7,553 |
| | 201,492 | 101,327 | 70,105 | 20,041 | 1,000 |

| | | | | | 2020 | | | | |
|---------------------------------------------------------------------------------------|---|-----------|-------------|-----|---------|-----|-----------|-----|-------------------------------|
| | | Assets | Liabilities | | Equity | F | Revenue | | Profit (loss) for the year |
| Steel Flower Electric & Machinary (Tianjin) | | 44 704 M | 40.050 | 117 | 00,400 | 117 | 00.450 | 117 | 0.707 |
| Co., Ltd. | ₩ | 44,794 ₩ | 16,356 | W | 28,438 | ₩ | 66,153 | Ŵ | 2,767 |
| Philco Resources Ltd. (Rapu-Rapu) | | 3,347 | 3,138 | | 209 | | - | | (144) |
| Resource Investment (HongKong) Ltd. (Xinzhen) | | 59,554 | - | | 59,554 | | - | | (6,551) |
| LX International Yakutsk Ltd. (formerly, LG International Yakutsk Ltd.) | | 6,050 | 12,327 | | (6,277) | | 1,057 | | (188) |
| Korea Carbon International Co., Ltd. (Shaanxi BBM) | | 7,909 | 7,909 | | - | | - | | 5,535 |
| Colmineral, S.A. de.C.V. | | 3 | - | | 3 | | - | | - |
| Fertilizer Resources Investment Ltd. | | 131,109 | - | | 131,109 | | - | | 10,643 |
| Dangjin Tank Terminal Co., Ltd. | | 92,261 | 626 | | 91,635 | | - | | (2,325) |
| Haiphong Steel Flower Electrical | | | | | | | | | |
| & Machinery Company Limited | | 20,318 | 15,847 | | 4,471 | | 34,558 | | 376 |
| LX Pantos Logistics Co., Ltd. (formerly, | | | | | | | | | |
| Pantos Logistics Co., Ltd.) | | 1,056,113 | 509,276 | | 546,837 | | 2,728,360 | | 72,019 |
| Pantos Busan Newport Logistics Center | | | | | | | | | |
| Co., Ltd. | | 13,432 | 2,825 | | 10,607 | | 11,377 | | 481 |
| Helistar Air Co., Ltd. | | 11,742 | 8,826 | | 2,916 | | 63,831 | | 1,401 |
| Hanultari Co., Ltd. | | 323 | 192 | | 131 | | 632 | | 5 |
| Pantos Logistics (China) Co., Ltd. | | 132,998 | 105,858 | | 27,140 | | 402,377 | | 8,537 |
| Pantos Logistics (Shanghai) Co., Ltd. | | 90,202 | 69,899 | | 20,303 | | 213,870 | | 3,675 |
| Pantos Logistics (Ningbo) Co., Ltd. | | 1,650 | 53 | | 1,597 | | 591 | | 193 |
| Pantos Logistics (Shenzhen) Co., Ltd. | | | | | | | | | |
| (formerly, Pantos Logistics (Shenzhen) | | 27 920 | 21.076 | | 15 962 | | 164 242 | | E 120 |
| Co., Ltd. | | 37,839 | 21,976 | | 15,863 | | 164,343 | | 5,139 |
| Pantos Logistics (H.K) Co., Ltd. | | 62,085 | 22,726 | | 39,359 | | 105,090 | | 13,159 |
| Pantos Logistics (Taiwan) Co., Ltd. | | 5,928 | 3,190 | | 2,738 | | 22,724 | | 461 |
| PT. LX Pantos Indonesia (formerly, Pantos Logistics Indonesia) | | 37,712 | 31,800 | | 5,912 | | 76,450 | | (200) |
| PT. LX Pantos Jakarta (formerly, Pantos Logistics Jakarta) | | 12,802 | 6,441 | | 6,361 | | 8,794 | | (265) |
| LX Pantos Singapore Pte. Ltd. (formerly, Pantos Logistics Sngapore Pte. Ltd.) | | 11,931 | 6,352 | | 5,579 | | 26,471 | | 1,296 |
| LX Pantos (Thailand) Co., Ltd. (formerly, Pantos Logistics (Thailand) Co., Ltd.) | | 36,334 | 24,236 | | 12,098 | | 96,147 | | 670 |
| LX Pantos Malaysia Sdn. Bhd. (formerly, | | , | , | | | | , | | |
| Pantos Logistics Malaysia Sdn. Bhd.) LX Pantos (India) Pvt. Ltd. (formerly, | | 8,889 | 6,847 | | 2,042 | | 24,428 | | 512 |
| Pantos Logistics (India) Pvt. Ltd. | | 14,274 | 10,656 | | 3,618 | | 37,310 | | (3,654) |
| LX Pantos (Cambodia) Co., Ltd. (formerly, Pantos Logistics (Cambodia) Co., Ltd.) | | 2,020 | 1,821 | | 199 | | 6,393 | | 546 |
| LX Pantos Vietnam Co., Ltd. (formerly, Pantos Logistics Vietnam Co., Ltd.) | | 35,509 | 22,821 | | 12,688 | | 142,063 | | 4,784 |
| LX Pantos Australia Pty Ltd. (formerly, Pantos Logistics Australia Pty Ltd.) | | 4,000 | 2,221 | | 1,779 | | 10,688 | | 160 |
| LX Pantos Holdings (Thailand) Co., Ltd. (formerly, Pantos Holdings (Thailand) Co., | | | | | | | | | |
| Ltd.) | | 1,619 | 125 | | 1,494 | | 821 | | (5) |
| Pantos Logistics Myanmar Co., Ltd. | | 99 | 58 | | 41 | | 1,697 | | (257) |
| LX Pantos U.K. Ltd | | | | | | | | | |
| (formerly, Pantos Logistics U.K. Ltd.) LX Pantos Netherlands B. V | | 13,934 | 11,158 | | 2,776 | | 29,405 | | 700 |
| (formerly, Pantos Logistics Benelux B.V) | | 60,633 | 43,661 | | 16,972 | | 76,279 | | (261) |
| Pantos Logistics France | | 16,205 | 14,125 | | 2,080 | | 27,510 | | (362) |

| | | Pantos Logistics France | | | | | |
|---------------------------------------------------------------------------------------------------------------|---|-------------------------|-------------|---|-------------|--------------|-------------------------------|
| | _ | Assets | Liabilities | | Equity | Revenue | Profit (loss) for the year |
| LX Pantos Poland SP.Z.O.O. (formerly, Pantos Logistics Poland) | ₩ | 109,546 ₩ | 82,296 | ₩ | 27,250 ₩ | 360,516 ₩ | 12,149 |
| LX Pantos Germany GmbH (formerly, Pantos Logistics Germany GmbH) | | 16,413 | 7,997 | | 8,416 | 46,197 | 1,080 |
| LX Pantos Spain Slu. (formerly, Pantos Logistics Spain S.L.) LX Pantos Turkey Lojistick Ve Ticaret Ltd. | | 12,225 | 7,442 | | 4,783 | 29,099 | 514 |
| Sti.(formerly, Pantos Logistics Ve Tic.Lgd.Sti) | | 4,002 | 1,487 | | 2,515 | 19,285 | 1,071 |
| Pantos Logistics Sweden AB | | 3,276 | 4,127 | | (851) | 6,589 | (1,362) |
| LX Pantos Mexico, S.A. DE C.V. | | 5,270 | 7,121 | | (001) | 0,000 | (1,002) |
| (formerly, Pantos Logistics Mexico) | | 68,640 | 53,301 | | 15,339 | 202,140 | 3,479 |
| LX Pantos Logistica Do Brasil Ltda (formerly, Pantos Do Brasil Logistica) | | 9,481 | 5,251 | | 4,230 | 70,852 | 2,901 |
| LX Pantos Colombia SAS (formerly, Pantos Logistics Colombia | | | | | | | |
| SAS) | | 2,830 | 993 | | 1,837 | 6,620 | 362 |
| Pantos Logistics Chile SpA | | 1,896 | 2,037 | | (141) | 5,375 | 104 |
| LX Pantos Panama, S.A (formerly, Pantos | | 1,000 | 2,007 | | (141) | 0,070 | 104 |
| Logistics Panama S.A.) | | 6,746 | 5,944 | | 802 | 11,081 | (47) |
| Pantos Logistics AR S.A. | | 1,315 | 536 | | 779 | 3,080 | 406 |
| LX Pantos Solucoes Logisticas Do Brasil Ltda. (formerly, Hi Logistics Brasil | | , | | | | -, | |
| Servicos De Logistica LTDA) | | 1,710 | 780 | | 930 | 5,349 | (693) |
| FNS CIS LLC | | 21,861 | 10,917 | | 10,944 | 55,566 | 2,270 |
| Pantos Logistics Kazakhstan | | 638 | 147 | | 491 | 3,102 | (107) |
| Pantos Logistics Ukraine Ltd | | - | - | | - | - | - |
| Pantos Customs Services LLC | | 473 | 59 | | 414 | 701 | (61) |
| Pantos Logistics L.L.C (Dubai) | | 5,894 | 3,693 | | 2,201 | 17,293 | 20 |
| Pantos Logistics L.L.C (Oman) | | 82 | - | | 82 | - | - |
| Pantos Logistics Co., LTD. Saudi Arabia | | 3,214 | 1,029 | | 2,185 | 5,596 | 339 |
| Pantos Logistics Nigeria Limited | | 127 | 42 | | 85 | - | (13) |
| LX Pantos Japan Inc. (formerly, Pantos | | | | | | | . , |
| Logistics Japan Inc,) | | 16,247 | 8,398 | | 7,849 | 57,858 | 556 |
| Hi Logistics (China) Co., Ltd. | | 26,358 | 17,324 | | 9,034 | 63,052 | 1,011 |
| Hi Logistics RUS, LLC. | | 543 | - | | 543 | - | (252) |
| LX Pantos Solutions India Private Limited (formerly, Pantos Logistic Solutions India | | | | | | | |
| Private Limited) | | 10,556 | 7,997 | | 2,559 | 66,336 | (47) |
| Hi Logistics Egypt S.A.E | | 3,609 | 1,553 | | 2,056 | 9,411 | 423 |
| LX Pantos America, INC. (formerly, Pantos North America, INC.) | | 16,584 | 14,559 | | 2,025 | 82,926 | (283) |
| LX Pantos Hungary KFT. (formerly, Pantos Logistics Hungary KTF.) | | 1,211 | 735 | | 476 | 6,057 | (433) |
| Onecube International Logistics Co., Ltd. | | 3,418 | 1,425 | | 1,993 | 9,173 | 440 |
| PT. Pantos Express Indonesia | | 1,113 | 950 | | 163 | 2,105 | 254 |
| | ₩ | 4,893,409 ₩ | 3,058,634 | ₩ | 1,834,775 ₩ | 10,970,950 ₩ | 153,331 |

1.4 Summarized financial information of subsidiaries attributable to non-controlling interests

The summarized financial information of subsidiaries attributable to non-controlling interests which are material to the Group are as follows (Korean won in millions):

| | 2021 | | | | | |
|----------------------------------------------------|----------------------------------------------------------|---------|------------------------------|---------|----------------------------------------------------------|--------|
| | Profit attributable to non- _controlling interests | | Non-controlling interests | | Dividends distributed to non-controlling interests | |
| PT. Megaprima Persada (MPP) | ₩ | (2,214) | ₩ | (2,020) | ₩ | - |
| PT. Ganda Alam Makmur (GAM) | | 59,998 | | 159,174 | | - |
| PT. Binsar Natorang Energi (BNE) | | 345 | | 4,806 | | - |
| Pantos Logistics Co., Ltd. and its subsidiaries | | 131,513 | | 440,859 | | 17,395 |

| | 2020 | | | | | |
|----------------------------------------------------------------|-----------------------------------------------------------------|--------|------------------------------|---------|----------------------------------------------------------|--------|
| | Profit or loss attributable to non- controlling interests | | Non-controlling interests | | Dividends distributed to non-controlling interests | |
| PT. Megaprima Persada (MPP) | ₩ | 212 | ₩ | 45 | ₩ | - |
| PT. Ganda Alam Makmur (GAM) | | 2,666 | | 88,948 | | - |
| PT. Binsar Natorang Energi (BNE) Pantos Logistics Co., Ltd. | | 378 | | 3,808 | | - |
| and its subsidiaries | | 57,877 | | 319,322 | | 11,515 |

2. Significant accounting policies and basis of financial statements preparation

2.1 Basis of preparation

The Group prepares statutory consolidated 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 consolidated financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the consolidated financial statements or the independent auditor's report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

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

2.2 Basis of consolidation

The consolidated financial statements comprise the consolidated financial statements of the Group as of December 31, 2021. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- Power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee)
- > Exposure, or rights, to variable returns from its involvement with the investee
- > The ability to use its power over the investee to affect its returns

Generally, there is a presumption that a majority of voting rights results in control. To support this presumption and when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- > The contractual arrangement(s) with the other vote holders of the investee
- Rights arising from other contractual arrangements
- > The Group's voting rights and potential voting rights

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the statement of comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the Parent Company and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Parent Company loses control over a subsidiary, it derecognizes the related assets (including goodwill), liabilities, non-controlling interest and other components of equity, while any resultant gain or loss is recognized in profit or loss. Any investment retained is recognized at fair value.

2.3 Summary of significant accounting policies

2.3.1 Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, measured at acquisition date fair value and the amount of any non-controlling interest in the acquiree. For each business combination, the acquirer measures the non-controlling interest in the acquiree either at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition costs incurred are expensed and included in selling and administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as of the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Contingent consideration classified as equity is not remeasured and its subsequent settlement is accounted for within equity. Contingent consideration classified as an asset or liability that is a financial instrument and within the scope of KIFRS 1109 Financial Instruments, is measured at fair value with the changes in fair value recognized in the statement of profit or loss in accordance with KIFRS 1109. Other contingent consideration that is not within the scope of KIFRS 1109 is measured at fair value at each reporting date with changes in fair value recognized in profit or loss.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests, and any previous interest held over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognized at the acquisition date. If the re-assessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognized in profit or loss.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash generating units that are expected to benefit from the business combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill forms part of a cash-generating unit and part of the operation within that unit is disposed of, the goodwill associated with the operation disposed of is included in the carrying amount of the operation when determining the gain or loss on disposal of the operation. Goodwill disposed of in this circumstance is measured based on the relative values of the operation disposed of and the portion of the cash-generating unit retained.

2.3.2 Current versus non-current classification

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

An asset is current when it is:

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

All other assets are classified as non-current.

A liability is current when:

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

The Group classifies all other liabilities as non-current.

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

2.3.3 Cash and cash equivalents

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

2.3.4 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.

2.3.5 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.

2.3.5.1 Financial assets

2.3.5.1.1 Initial recognition and measurement

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

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

2.3.5.1.1 Initial recognition and measurement (cont'd)

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

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

2.3.5.1.2 Subsequent measurement

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

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

Financial assets at amortized cost (debt instruments)

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

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

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

Financial assets at fair value through OCI (debt instruments)

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

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

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

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

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other non-operating income in the statement of profit or loss when the right of payment has been established, except when the Group 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.

2.3.5.1.2 Subsequent measurement (cont'd)

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

Financial assets at fair value through profit or loss

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

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

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

This category includes derivatives and equity instruments that do not have an irrevocable choice of dealing with changes in fair value in OCI. Dividends on listed equity instruments are recognized in profit or loss at the time the rights are established.

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

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

2.3.5.1.3 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 Group 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 Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group 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 Group's continuing involvement in the asset. In that case, the Group 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 Group has retained.

2.3.5.2 Impairment of financial assets

Further disclosures relating to impairment of financial assets are also provided in Note 11.

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

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognized a loss allowance based on lifetime ECLs at each reporting date. The Group 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 Group applies the low credit risk simplification. At every reporting date, the Group 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 Group reassesses the internal credit rating of the debt instrument. In addition, the Group considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.

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

The Group considers a financial asset in default when contractual payments are 1 year past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

2.3.5.3 Financial liabilities

2.3.5.3.1 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 Group's financial liabilities include trade and other payables, borrowings including bonds and derivative financial liabilities.

2.3.5.3.2 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 of 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 Group 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.

2.3.5.3.3 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.

2.3.5.4 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.

2.3.6 Derivative financial instruments and hedge accounting

2.3.6.1 Initial recognition and subsequent measurement

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

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

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

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

2.3.6.1 Initial recognition and subsequent measurement (cont'd)

The documentation includes identification of the hedging instrument, the hedged item, the nature of the risk being hedged and how the Group 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 Group actually hedges and the quantity of the hedging instrument that the Group 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 Group uses forward currency contracts as hedges of its exposure to foreign currency risk in forecast transactions and firm commitments, as well as forward commodity contracts for its exposure to volatility in the commodity prices. The ineffective portion relating to foreign currency contracts is recognized as other expense and the ineffective portion relating to commodity contracts is recognized in other operating income or expenses.

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

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

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

2.3.6.1 Initial recognition and subsequent measurement (cont'd)

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.

2.3.7 Investment in associates and joint venture

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

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

The Group's investments in its associate and joint venture are accounted for using the equity method. Under the equity method, the investment in an associate or a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the associate or joint venture since the acquisition date. Goodwill relating to the 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 Group's share of the results of operations of the associate or joint venture. Any change in OCI of those investees is presented as part of the Group's OCI. In addition, when there has been a change recognized directly in the equity of the associate or joint venture, the Group recognizes its share of any changes, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Group and the associate or joint venture are eliminated to the extent of the interest in the associate or joint venture.

The aggregate of the Group's share of profit or loss of an 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 associate or joint venture.

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

After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investment in its associate or joint venture. At each reporting date, the Group determines whether there is objective evidence that the investment in the associate or joint venture is impaired. If there is such evidence, the Group 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 an associate and a joint venture' in the statement of profit or loss.

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

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

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

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

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

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

A disposal group qualifies as discontinued operation if it is:

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

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

2.3.9 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 Group 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 the asset after its use is included in the cost of the respective asset if the recognition criteria for a provision are met.

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

| | Useful lives | Depreciation method |
|---------------|--------------|----------------------|
| Buildings | 8 ~ 40 | Straight-line method |
| Structures | 8 ~ 50 | " |
| Machinery | 5~8 | n |
| Vehicles | 5 ~ 12 | " |
| Bearer plants | 20 | n |
| Others | 5 | n |

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 or loss arising on derecognition of the asset is included in the statement of profit or loss when the asset is derecognized.

2.3.9 **Property**, plant and equipment (cont'd)

The Group reviews the estimated residual values and expected useful lives of assets annually. In particular, the Group considers the impact of health, safety and environmental legislation in its assessment of expected useful lives and estimated residual values.

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

2.3.10 Leases

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

Group as a lessee

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

2.3.10.1 Right-of-use assets

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

| | Useful lives |
|-----------|--------------|
| | (years) |
| Land | 30 ~ 48 |
| Buildings | 1 ~ 30 |
| Vehicles | 1~5 |
| Others | 2~4 |

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment. See the accounting policies in section 2.3.21 Impairment of non-financial assets for details.

2.3.10.2 Lease liabilities

At the commencement date of the lease, the Group recognized lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including insubstance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate.

Variable lease payments that do not depend on an index or a rate are recognized as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

2.3.10.2 Lease liabilities (cont'd)

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

The Group's lease liabilities are included in Interest-bearing loans and borrowings (See Note 25).

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

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

2.3.11 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.

2.3.12 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 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 cost at the date of change in use. If owner occupied property becomes an investment property, the Group accounts for such property in accordance with the policy stated under property, plant and equipment up to the date of change in use.

2.3.13 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.

2.3.13 Intangible assets (cont'd)

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 is 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 assets.

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 Group'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 or production period | Straight-line method or unit |
| | | of production method |

(*) Oil, natural gas and other 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 Group commences tests on the assets for impairment. When the book value of the asset is greater than the estimated recoverable amounts for the residual period, the Group recognizes the difference as a loss on impairment.

2.3.14 Biological assets

Biological assets (excluding bearer plants) are measured at initial recognition and at the end of each reporting period at its fair value less costs to sell. Gain or loss arising on initial recognition of a biological asset at fair value less costs to sell and from a change in fair value of a biological asset shall be included in profit or loss for the period in which it arises. Agricultural products harvested from the Group's biological assets are measured at its fair value less costs to sell at the point of harvest which becomes the cost at that date. If an active market exists for a biological asset (excluding bearer plants) or agricultural products in its present location and condition, the quoted price in that market is the appropriate basis for determining the fair value of that asset. If an entity has access to different active markets, the entity uses the most relevant one. If an active market doesn't exist, the most recent market price, market price of similar asset can be used to assess fair value.

2.3.15 Pensions benefits and other post-employment benefits

The Group operates a defined benefit pension plan and defined contribution pension plan. The defined benefit pension plan in Korea requires contributions to be made to a separately administered fund. 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 other comprehensive income 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 Group recognizes restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognizes the following changes in the net defined benefit obligation under selling and administrative expenses in the consolidated 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

2.3.16 Provisions

Provisions are recognized when the Group 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 Group 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.

2.3.17 Onerous contracts

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

2.3.18 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 Group's own equity instruments.

2.3.19 Revenue from contracts with customers

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

2.3.19.1 Sales of goods

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

2.3.19.2 Principal versus agent consideration

When another party is involved in providing goods or services to its customer, the Group determines whether it is a principal or an agent in these transactions by evaluating the nature of its promise to the customer. The Group 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 Group's role is only to arrange for another entity to provide the goods or services, then the Group is an agent and will need to record revenue at the net amount that it retains for its agency services.

2.3.19.3 Contract balance

Trade receivables

A receivable represents the Group's right to an amount of consideration that is unconditional. Refer to accounting policies of financial assets in the Note 2.3.5.1

Contract liabilities

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

2.3.20 Foreign currency translation

The Group's consolidated financial statements are presented in Korean won, which is also the Parent Company's functional currency. Each entity in the Group determines its own functional currency and items included in the financial statements of each entity are measured using that functional currency.

2.3.20.1 Transactions and balances

Transactions in foreign currencies are initially recorded by the Group entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition.

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 Group'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 rates as of the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the dates when the fair value is determined.

2.3.20.2 Translation of foreign operations

On consolidation, the assets and liabilities of foreign operations are translated into Korean won at the rate of exchange prevailing at the reporting date and their income statement at exchange rates prevailing at the dates of the transactions, and these exchange differences are recognized in OCI. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is recognized in the statement of 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 are treated as assets and liabilities of the foreign operations and translated at the spot rate of exchange at the reporting date.

2.3.21 Impairment of non-financial assets

The Group 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 Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs of disposal and its value in use. The recoverable amount 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 of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

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

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

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 Group 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 and other comprehensive income unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

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

Goodwill

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

Impairment is determined for goodwill by assessing the recoverable amount of each cash-generating unit (or group 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.

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

Intangible assets with indefinite useful lives excluding goodwill

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

2.3.22 Taxes

2.3.22.1 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 Group 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.

2.3.22.2 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:

- Where 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

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:

- Where 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.

2.3.22.2 Deferred tax (cont'd)

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

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

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

2.3.22.3 Sales tax

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

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

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

2.3.23 Crypto assets

As there is no standard applicable to KIFRS for Crypto assets (e. g. "Klay"), the Group developed an accounting policy by applying *mutatis mutandis* to KIFRS 1038 in accordance with the interpretation announced by the IFRIC in June 2019.

2.3.23.1 Initial recognition of crypto assets

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

2.3.23.2 Subsequent measurement of crypto assets

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

2.3.23.3 Derecognition of crypto assets

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

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

2.4 New and amended standards and interpretations

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2022. The Group has not early adopted any standards, interpretations or amendments that have been issued but are not yet effective.

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

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

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

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

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

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

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

2.5 Significant accounting judgments, estimates and assumptions

The preparation of the Group's financial statement 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 Group's exposure to risks and uncertainties includes:

- Financial instruments risk management and policies Note 25
- Sensitivity analyses disclosures

2.5.1 Judgments

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

Note 19, 25

Determining the lease term of contracts with renewal and termination options – Group as lessee The Group determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised.

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

2.5.2 Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

The Group based its assumptions and estimates on parameters available when the consolidated 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 Group. Such changes are reflected in the assumptions when they occur.

2.5.2.1 Impairment of non-financial assets

The Group assesses at each reporting date whether there is any objective evidence that a non-financial asset is impaired. Goodwill and intangible assets with indefinite useful lives are tested when there are indications. Other non-financial asset is tested when there are indications that carrying amount is not to be collected. In assessing value in use, management estimates future cash flows from certain assets or CGUs and selects the appropriate discount rate to calculate the present value of future cash flow. Refer to Note 21 for information on the specific details of main assumptions.

2.5.2.2 Defined benefit pension plan

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

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

2.5.2.3 Fair value measurement of financial instruments

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

2.5.2.4 Provision for expected credit losses of trade receivables

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

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

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

2.5.2.5 Leases - Estimating the incremental borrowing rate

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

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

2.5.2.6 Deferred tax assets

Deferred tax assets are recognized for unused tax losses to the extent that it is probable that taxable profit will be available against which the losses can be utilized. Significant management judgment is required to determine the amount of deferred tax assets that can be recognized, based upon the likely timing and the level of future taxable profits together with future tax planning strategies. The Group has W76,796 million (2020: W78,323 million) of tax credits carried forward which can be used to offset future taxable income but with time constraint. Among the total tax credits carried forward, the Group has determined not to recognize deferred tax assets on W32,507 million of tax credits carried forward, due to lack of probability of occurrence. Refer to Note 22 for details.

2.5.2.7 Special tax provisions for promoting investment and collaborative cooperation

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

2.6 Standards issued but not yet effective

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

2.6.1 KIFRS 1117 Insurance Contracts

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

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

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

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

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

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

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

2.6.3 Reference to the Conceptual Framework – Amendments to KIFRS 1103

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2.6.8 KIFRS 1041 Agriculture – Taxation in fair value measurements

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

2.6.9 Definition of Accounting Estimates – Amendment to KIFRS 1008

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

2.6.10 Disclosure of Accounting Policies - Amendments to KIFRS 1001

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

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

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

3. Segment information

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

| Segment | Principal business activity |
|----------------------|--------------------------------------------------------------------------------------------------------------------------|
| Energy/Palm | Development and sales of coal, development of metals, Agro&Food, Indonesia palm |
| Industrial | |
| material/Solution | IT, chemicals, metal material, project, IT, platform and others |
| Logistics | Shipping, air transport, land transport, international courier, customs, warehousing, distribution consulting and others |
| Collectively grouped | Common group management |

3.1 Segment sales and operating income

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

| | | 20 | | 2020 | | | | | |
|------------------------------|-------------|--------------|-----------|---------|---|------------|---------------|----------|--|
| | | | Operating | | | C | perating | | |
| | | Sales income | | | | Sales | income (loss) | | |
| Energy/Palm | ₩ 2,466,789 | | ₩ | 259,889 | ₩ | 1,427,826 | ₩ | (21,349) | |
| Industrial material/Solution | | 6,466,760 | | 35,862 | | 5,179,166 | | 21,294 | |
| Logistics | _ | 7,752,984 | | 360,496 | | 4,675,640 | | 159,890 | |
| | ₩ | 16,686,533 | ₩ | 656,217 | ₩ | 11,282,632 | ₩ | 159,835 | |

3.2 Segment assets and liabilities

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

| | | 20 | | | | | | | |
|------------------------------|---|-------------|---|-------------|---|-----------|-------------|-----------|--|
| | | Assets | | Liabilities | | Assets | Liabilities | | |
| Energy/Palm | ₩ | 2,260,959 | ₩ | 957,423 | ₩ | 1,641,270 | ₩ | 730,006 | |
| Industrial material/Solution | | 1,260,799 | | 1,103,756 | | 1,117,152 | | 1,208,870 | |
| Logistics | | 1,934,459 | | 1,513,339 | | 1,278,748 | | 1,040,777 | |
| Collectively grouped (*1) | | 1,290,672 | | 788,127 | | 1,358,772 | | 657,958 | |
| | ₩ | ₩ 6,746,889 | | 4,362,645 | | 5,395,942 | ₩ | 3,637,611 | |

(*1) Assets and liabilities that individually do not have a material effect to a specific 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 Group are as follows (Korean won in millions):

| | | 2021 | 2020 | | |
|---------------------------|--------------|-------------|------|-------------|--|
| Korea | ₩ | 6,612,195 | ₩ | 4,650,143 | |
| Americas | | 3,293,025 | | 2,227,598 | |
| Europe | | 2,219,122 | | 1,564,957 | |
| Asia | | 9,369,791 | | 5,613,407 | |
| Others | | 192,739 | | 85,290 | |
| Consolidation adjustments | | (5,000,339) | | (2,858,763) | |
| | \mathbb{W} | 16,686,533 | ₩ | 11,282,632 | |

One major customer (LG Electronics Inc.) accounts for more than 10% of the Group's total sales for the year ended December 31, 2021 and 2020 (Refer to Note 23).

4. Classification of financial instruments

4.1 Financial instruments by category

4.1.1 Financial assets

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

| | | | | | 2 | 021 | | | | |
|-----------------------------|----------------------------------------------------------------|---------|-----------------------------------------------------|---------|------------------------------------------|-----------|----------------------------------------|-------|---|-----------|
| | Financial assets at fair value through profit or loss | | Financial assets at fair value through OCI | | Financial assets at amortized cost | | Hedge accounting- related assets | | | Total |
| Cash and cash equivalents | ₩ | 117,708 | ₩ | - | ₩ | 724,175 | ₩ | - | ₩ | 841,883 |
| Short-term financial | | | | | | | | | | |
| instruments | | - | | - | | 20,787 | | - | | 20,787 |
| Equity instruments held for | | | | | | | | | | |
| long-term | | 18,209 | | 133,472 | | - | | - | | 151,681 |
| Trade accounts receivable | | - | | - | | 1,653,459 | | - | | 1,653,459 |
| Other accounts receivable | | 198 | | - | | 263,334 | | 1,743 | | 265,275 |
| Long-term loans | | - | | - | | 22,350 | | - | | 22,350 |
| Other financial assets | | 587 | | _ | | 259,203 | | - | | 259,790 |
| | ₩ | 136,702 | ₩ | 133,472 | ₩ | 2,943,308 | ₩ | 1,743 | ₩ | 3,215,225 |

| | | | | | 2 | 2020 | | | |
|-----------------------------|----------------------------------------------------------------|---------|-----------------------------------------------------|---------|------------------------------------------|-----------|----------------------------------------|---|-----------|
| | Financial assets at fair value through profit or loss | | Financial assets at fair value through OCI | | Financial assets at amortized cost | | Hedge accounting- related assets | | Total |
| Cash and cash equivalents | ₩ | 233,273 | ₩ | - | ₩ | 456,715 | ₩ - | ₩ | 689,988 |
| Short-term financial | | | | | | | | | |
| instruments | | - | | - | | 67,837 | - | | 67,837 |
| Equity instruments held for | | | | | | | | | |
| long-term | | 14,082 | | 121,103 | | - | - | | 135,185 |
| Trade accounts receivable | | - | | - | | 1,298,738 | - | | 1,298,738 |
| Other accounts receivable | | 6,096 | | - | | 187,346 | - | | 193,442 |
| Long-term loans | | - | | - | | 24,492 | - | | 24,492 |
| Other financial assets | | _ | | - | | 238,710 | | | 238,710 |
| | ₩ | 253,451 | ₩ | 121,103 | ₩ | 2,273,838 | ₩ - | ₩ | 2,648,392 |

4.1.2 Financial liabilities

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

| | 2021 | | | | | | | | | | |
|--------------------------------------------------------------------|----------------------------------------|--------------------|---|-------------------------------------------------|-----|-----------------------------------------|-------|-----------|--|--|--|
| | Financial at fair through los | value profit or | m | ncial liabilities easured at ortized cost | acc | Hedge ounting-related liabilities | Total | | | | |
| Trade accounts payable | \mathbb{W} | - | ₩ | 1,619,765 | ₩ | - | ₩ | 1,619,765 | | | |
| Other accounts payable | | 1,240 | | 343,974 | | - | | 345,214 | | | |
| Borrowings | | - | | 759,556 | | - | | 759,556 | | | |
| Bonds payable Current portion of bonds payable and long-term | | - | | 269,462 | | - | | 269,462 | | | |
| borrowings | | - | | 328,656 | | - | | 328,656 | | | |
| Other financial liabilities | | _ | | 459,638 | | 9,449 | | 469,087 | | | |
| | ₩ | 1,240 | ₩ | 3,781,051 | ₩ | 9,449 | ₩ | 3,791,740 | | | |

4.1.2 Financial liabilities (cont'd)

| | | 2020 | | | | | | | |
|--------------------------------------------------------------------|------------------------------------------------------|------|------------------------------------------|-----------|---------------------------------------|--------|---|-----------|--|
| | Financial lial at fair val through pro loss | mea | al liabilities sured at tized cost | | Hedge Inting-related iabilities | Total | | | |
| Trade accounts payable | ₩ | - | ₩ | 1,547,820 | ₩ | - | ₩ | 1,547,820 | |
| Other accounts payable | | 578 | | 246,769 | | 6,538 | | 253,885 | |
| Borrowings | | - | | 613,370 | | - | | 613,370 | |
| Bonds payable Current portion of bonds payable and long-term | | - | | 359,307 | | - | | 359,307 | |
| borrowings | | - | | 225,630 | | - | | 225,630 | |
| Other financial liabilities | | - | | 348,019 | | 17,212 | | 365,231 | |
| | ₩ | 578 | ₩ | 3,340,915 | ₩ | 23,750 | ₩ | 3,365,243 | |

4.2 Gains and losses on financial instruments

4.2.1 Gains and losses on financial assets

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

| | | | | | | 2021 | | | |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|-------|-----------------------------------------------------|--------|------------------------------------------|----------|----------------------------------------|-----|----------|
| | Financial assets at fair value through profit or loss | | Financial assets at fair value through OCI | | Financial assets at amortized cost | | Hedge accounting- related assets | | Total |
| Profit or loss: | | | | | | | | | |
| Interest income | ₩ | 705 | ₩ | - | ₩ | 9,508 | ₩ | - ₩ | 10,213 |
| Dividend income | | - | | 7,285 | | - | | - | 7,285 |
| Gain and loss on foreign | | | | | | | | | |
| currency transactions | | - | | - | | 61,924 | | - | 61,924 |
| Gain and loss on foreign | | | | | | | | | |
| currency translation | | - | | - | | 16,055 | | - | 16,055 |
| Gain on currency forwards | | 7,537 | | - | | - | | - | 7,537 |
| Gain on currency swaps | | - | | - | | - | 3,684 | ŀ | 3,684 |
| Bad debt expenses | | - | | - | | (1,107) | | - | (1,107) |
| Other bad debt expenses | | - | | - | | (19,366) | | - | (19,366) |
| Loss on disposal of receivables | | - | | - | | (8,902) | | - | (8,902) |
| Gain on valuation equity | | | | | | | | | |
| options | | 565 | | - | | - | | - | 565 |
| Gain on financial asset | | | | | | | | | |
| valuation | | 9 | | - | | - | | - | 9 |
| Other comprehensive income (*1): Loss on valuation of financial assets at fair value through | | | | | | | | | |
| OCI Loss on valuation of derivatives designated as | | - | | 13,927 | | - | | - | 13,927 |
| cash flow hedges | | _ | | _ | | _ | 17 | , | 17 |
| sach now nougos | ₩ | 8,816 | ₩ | 21,212 | ₩ | 58,112 | ₩ 3,70 | | 91,841 |
| | v v | 0,010 | V V | Z1,Z1Z | V V | 50,112 | | V V | 51,011 |

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

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

| | 2020 | | | | | | | | |
|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--------|-----------------------------------------------------|----------|------------------------------------------|----------|----------------------------------------|---|-----------|
| | Financial assets at fair value through profit or loss | | Financial assets at fair value through OCI | | Financial assets at amortized cost | | Hedge accounting- related assets | | Total |
| Profit or loss: | | | | <u> </u> | | | | | |
| Interest income | ₩ | - | ₩ | - | ₩ | 10,404 | ₩ - | ₩ | 10,404 |
| Dividend income | | - | | 4,376 | | - | - | | 4,376 |
| Gain and loss on foreign | | | | | | | | | |
| currency transactions | | - | | - | | (54,358) | - | | (54,358) |
| Gain and loss on foreign | | | | | | | | | |
| currency translation | | - | | - | | (19,163) | - | | (19,163) |
| Gain on currency forwards | | 13,738 | | - | | - | - | | 13,738 |
| Gain on currency swaps | | - | | - | | - | 1,688 | | 1,688 |
| Bad debt expenses | | - | | - | | (742) | - | | (742) |
| Other bad debt expenses | | - | | - | | (385) | - | | (385) |
| Loss on disposal of receivables | | - | | - | | (10,118) | - | | (10,118) |
| Other comprehensive income (*): Loss on valuation of financial assets at fair value through | | | | | | | | | |
| OCI | | - | | (51,584) | | - | - | | (51,584) |
| | ₩ | 13,738 | ₩ | (47,208) | ₩ | (74,362) | ₩ 1,688 | ₩ | (106,144) |

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

4.2.2 Gains and losses on financial liabilities

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

| | 2021 | | | | | | | | |
|---------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|----------------------------|--|--|--|--|--|
| | Financial liabilities at fair value through profit or loss | Financial liabilities measured at amortized cost | Hedge accounting-related liabilities | Total | | | | | |
| Profit or loss: | | | | | | | | | |
| Interest expenses | ₩ - | ₩ (34,101) | ₩ - | ₩ (34,101) | | | | | |
| Loss on foreign currency transactions | - | (52,552) | - | (52,552) | | | | | |
| Loss on foreign currency translation | - | (8,535) | - | (8,535) | | | | | |
| Loss on currency forwards | (19,228) | - | - | (19,228) | | | | | |
| Loss on currency swaps Gain on exemption from | - | - | - | - | | | | | |
| debt | - | 14,659 | - | 14,659 | | | | | |
| Other comprehensive loss (*1): | | | | | | | | | |
| Loss on valuation of derivatives designated as | | | 7 579 | 7 570 | | | | | |
| cash flow hedges | ₩ (19.228) | ₩ (80,529) | 7,573 ₩ 7,573 | <u>7,573</u> ₩ (92,184) | | | | | |
| | ₩ (19,228) | ₩ (80,529) | ₩ 7,573 | ₩ (92,184) | | | | | |

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

| | 2020 | | | | | | | | | |
|-----------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------------------|--------------------------------------------|------------|--|--|--|--|--|--|
| | Financial liabilities at fair value through profit or loss | Financial liabilities measured at amortized cost | Hedge accounting-related liabilities | Total | | | | | | |
| Profit or loss: | | | | | | | | | | |
| Interest expenses | ₩ - | ₩ (42,754) | ₩ - | ₩ (42,754) | | | | | | |
| Loss on foreign currency | | | | | | | | | | |
| transactions | - | 29,709 | - | 29,709 | | | | | | |
| Loss on foreign currency | | | | | | | | | | |
| translation | - | 18,915 | - | 18,915 | | | | | | |
| Loss on currency forwards | (9,919) | - | - | (9,919) | | | | | | |
| Loss on currency swaps Gain on exemption from | - | - | (8,552) | (8,552) | | | | | | |
| debt | | 7,067 | | | | | | | | |
| Other comprehensive loss (*1): | | | | | | | | | | |
| Loss on valuation of derivatives designated as cash flow hedges | _ | _ | (8,984) | (8,984) | | | | | | |
| each non nougeo | ₩ (9,919) | ₩ 12,937 | ₩ (17,536) | ₩ (21,585) | | | | | | |
| | (0,010) | 12,001 | (17,000) | (21,000) | | | | | | |

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

5. Cash and cash equivalents

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

| | | 2021 | | 2020 |
|---------------------|--------------|---------|---|---------|
| Cash on hand | \mathbb{W} | 3,356 | ₩ | 2,068 |
| Short-term deposits | | 838,527 | | 687,920 |
| | W | 841,883 | ₩ | 689,988 |

Outstanding balances on restricted deposits included in financial instruments as of December 31, 2021 amounted to #30,658 million (#25,210 million in 2020) which consisted of mine restoration deposits and others.

6. Derivative financial instruments

6.1 Valuation of derivative financial instruments

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

| | | | | 2021 | | | _ | | | 2020 | | |
|---------------------|------------------------------------------|-------|---|----------------------------------|----------------------|-------|----------------------|-------|------|---------------------------------|---|---------|
| | Gain on Loss on c valuation valuation | | | Other prehensive come (*1) | Gain on valuation | | Loss on valuation | | comp | Other prehensive ome (*1) | | |
| Currency forwards | ₩ | 198 | ₩ | 1,240 | ₩ | - | ₩ | 6,096 | ₩ | 578 | ₩ | - |
| Currency swaps | | 1,726 | | - | | 18 | | - | | 8,220 | | (409) |
| Interest rate swaps | | - | | - | | 7,428 | | - | | - | | (8,575) |
| Equity options (*2) | | 565 | | - | | | | - | | - | | - |
| | ₩ | 2,489 | ₩ | 1,240 | ₩ | 7,445 | ₩ | 6,096 | ₩ | 8,798 | ₩ | (8,984) |

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

(*2) This is a put option purchase agreement for PT. Global Investment Institusi's stake in PT. Pyridam Farma.

6.2 Currency forwards

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

| | | | 2021 | | | |
|--------------|---------------|---------------|----------------|-----------------------------|-------------------|-------------------|
| Position-buy | Buying amount | Position-sell | Selling amount | Contracted exchange rate | Gain on valuation | Loss on valuation |
| AED | 1,602 | KRW | 522 | 325.68 | ₩ - | ₩ 3 |
| CNY | 3,130 | KRW | 582 | 186.00 | 1 | - |
| EUR | 674 | KRW | 903 | 1,340.20 | 4 | - |
| KRW | 35,379 | AUD | 41,629 | 849.50 ~ 852.50 | - | 501 |
| KRW | 12,878 | EUR | 9,573 | 1,336.76 ~ 1,350.20 | 3 | 47 |
| KRW | 209,744 | USD | 176,919 | 1,160.50 ~ 1,192.00 | 190 | 399 |
| USD | 50,114 | KRW | 59,868 | 1,187.50 ~ 1,197.10 | | 290 |
| | | | | | ₩ 198 | ₩ 1,240 |

| | | | 2020 | | | | | |
|--------------|---------------|---------------|----------------|---------------------|--------|--------------|---------|-----------|
| | | | | Contracted | | | | |
| Position-buy | Buying amount | Position-sell | Selling amount | exchange rate | Gain o | on valuation | Loss on | valuation |
| KRW | 149,116 | USD | 131,493 | 1,087.00 ~ 1,192.30 | ₩ | 6,095 | ₩ | 1 |
| USD | 27,143 | KRW | 30,096 | 1,087.00 ~ 1,180.80 | | 1 | | 568 |
| AED | 1,602 | KRW | 483 | 301.55 | | - | | 9 |
| | | | | | ₩ | 6.096 | ₩ | 578 |

6.3 Currency swaps

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

| | | | | 202 | 21 | | | | | |
|---------------------------------------|----------------------|-------------------|--------------------------------|--------------------------|-----------------------------|---------------------------------------|--------|-----------------|---|-----------------------|
| Contracted party | Buying amount | Selling amount | Contracted exchange rate | Receivable interest rate | Payment interest rate | Contracted term | Gain | on valuation | | Other nensive gain |
| Shinhan Bank | USD 20,000 | ₩ 21,984 | 1,099.20 | 3ML + 0.90% | 1.08% | 2021.1.21 ~ 2022.1.18 | ₩ | 1,726 | ₩ | 17 |
| | | | | 202 | 20 | | | | | |
| Contracted party | Buying amount | Selling amount | Contracted exchange rate | Receivable interest rate | Payment interest rate | Contracted term | Loss o | n valuation | | nprehensive oss |
| The Export Import Bank of Korea | USD 25,000 USD | ₩ 28,613 | 1,144.50 | 3ML + 2.30% 3ML + | 3.20% | 2016.4.1 ~ 2021.4.1 2020.4.29 ~ | ₩ | (1,745) | ₩ | (346) |
| Hana Bank | 50,000 | ₩ 60,875 | 1,217.50 | 1.50% | 1.80% | 2021.2.15 | ₩ | (6,475) (8,220) | ₩ | (63) |

6.4 Interest rate swaps

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

| | | | 2 | 021 | | |
|---------------------------|-----|-------------------|--------------------------|--------------------------|-------------------------|--------------------------------|
| Contracted party | | ractual ncipal | Receivable interest rate | Payment interest rate | Contracted term | Other comprehensive gain |
| Korea Development Bank | USD | 102,620 | LIBOR | 2.77% | 2017.02.27 ~ 2034.09.25 | 7,428 |
| | | | 2 | 020 | | |
| Contracted party | | ractual ncipal | Receivable interest rate | Payment interest rate | Contracted term | Other comprehensive loss |
| Korea Development Bank | USD | 102,620 | LIBOR | 2.77% | 2017.02.27 ~ 2034.09.25 | (8,575) |

7. Inventories

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

| | | | | 2021 | | | | |
|----------------------|------------------|---------------|---|-----------|------------|------------|--|--|
| | | | | Valuation | | | | |
| | Acquisition cost | | | allowance | | Book value | | |
| Merchandise | \mathbb{W} | 640,545 | ₩ | (2,441) | ₩ | 638,104 | | |
| Finished goods | | 48,848 | | - | | 48,848 | | |
| Raw materials | | 16,815 | | (7) | | 16,808 | | |
| Stored goods | | 2,313 | | - | | 2,313 | | |
| Materials in transit | | 315,120 | | - | | 315,120 | | |
| | ₩ | 1,023,641 | ₩ | (2,448) | ₩ | 1,021,193 | | |
| | 2020 | | | | | | | |
| | Valuatior | | | | | | | |
| | Acqu | uisition cost | | allowance | Book value | | | |
| Merchandise | ₩ | 296,810 | ₩ | (3,448) | ₩ | 293,362 | | |
| Finished goods | | 23,854 | | - | | 23,854 | | |
| Raw materials | | 12,139 | | (6) | | 12,133 | | |
| Stored goods | | 1,294 | | - | | 1,284 | | |
| Materials in transit | | 314,490 | | - | | 314,490 | | |
| | ₩ | 648,577 | ₩ | (3,454) | ₩ | 645,123 | | |

For the year ended December 31, 2021, the Group recognized ₩1,006 million (2020: ₩3,099 million) as a reversal of loss on valuation of inventories carried at net realizable value. This is recognized in cost of sales.

8. Investment assets and Investments in associates

8.1 Investment assets

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

| | | 2021 | | 2020 |
|-------------------------------------------------------|---|---------|---|---------|
| Equity instruments held for long-term: | | | | |
| Financial assets at fair value through profit or loss | ₩ | 18,209 | ₩ | 14,082 |
| Financial assets at fair value through OCI | | 133,472 | | 121,103 |
| Long-term loans receivable | | 22,350 | | 24,492 |
| | ₩ | 174,031 | ₩ | 159,677 |

8.2 Equity instruments held for long-term

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

| | Number of shares | Equity ownership (%) | Acquisition cost | Book value |
|-----------------------------------------------|------------------|----------------------|------------------|------------|
| Financial assets at fair value | | | | |
| through profit or loss VL Future | | | | |
| Environment Industry Fund | _ | 14.16 | ₩ 2,900 | ₩ 2,900 |
| Pablo Airline | 2,408 | 5.84 | , | 2,499 |
| Futureplay Co. | 15,730 | 2.98 | 3,000 | 3,003 |
| Global Dynasty Natural | 10,100 | 2.00 | 0,000 | 0,000 |
| Resources Private Equity | | | | |
| Fund. (*1) | - | 7.46 | 2,242 | - |
| EIC Properties Pte. Ltd. | 5,296,350 | 15.50 | 3,589 | 7,337 |
| PT. Pyridam Farma | 29,429,400 | 1 5.50 | 2,705 | 2,470 |
| | | | 16,935 | 18,209 |
| Financial assets at fair value | | | | |
| through OCI (*2) Korea Ras Laffan LNG Co., | | | | |
| Ltd. (Qatar LNG project) | 1,558,666 | 5.60 | 2,410 | 18,637 |
| Vietnam Korea Exchange Ltd. | - | 10.00 | 322 | 322 |
| LX Int'l (Saudi) LLC (*3) | - | 90.00 | 118 | 118 |
| Oilhub Korea Yeosu Co., Ltd. | 131,000 | 5.00 | 7,205 | |
| GS E&R Co., Ltd. | 1,654,445 | 9.52 | 95,585 | 54,043 |
| Tianjin LG Bohai Chemical | | | | |
| Co., Ltd | - | 10.00 | 11,737 | 37,629 |
| Cobalt blue holdings Ltd. | 7,093,959 | 2.35 | 6,467 | 3,016 |
| PT Resources Alam Indonesia | 050 000 000 | F 00 | 0.407 | F 474 |
| Tbk. Tangshan Caofeidian Steam | 250,000,000 | 5.00 | 9,497 | 5,474 |
| Coal Storage & Blending Co., | | | | |
| Ltd. | - | 1.50 | 1,075 | 1,208 |
| RedcapTour Co., Ltd. | 250,000 | 2.91 | 428 | 5,200 |
| iPort Co., Ltd. | 4,523 | 5.26 | 500 | 500 |
| Liveron Co.,Ltd. | 30 | 0.11 | 6 | - |
| Woongjin Energy Co., Ltd | 754 | 0.01 | 8 | 8 |
| | | | 135,358 | 133,472 |
| | | | ₩ 152,293 | ₩ 151,681 |

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

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

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

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

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

| Equity Acquisition Translation gain Dec. 31 Financial assets at fair value idisposal) Valuation (loss) Dec. 31 Financial assets at fair value idisposal) Valuation (loss) Dec. 31 Financial assets at fair value idisposal 2,499 - - 2,499 QQ Aromatics LLC (formerly, Aromatics Oman LLC) (*2) 1.00 4,779 - - 4,779 Futureplay Co. (*1) 2,98 3,003 - - - 3,003 EIC Properties Pite. Ltd. 15,50 6,301 - 456 580 7,337 PT. Pyridam Farma (*1) 5.50 - 2,705 (448) 213 2,470 Intrologin OCI Korea Ras Laffan LNG Limited 14,063 8,104 8 (3,986) 18,209 Vietnam Korea Res Laffan LNG Limited 0.00 322 - - 322 Utati Suddi LLC 90.00 118 - - 118 Oilhub Korea Res Laffan LNG Limited 0. | | | | | 2021 | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-------------|-----------|------------|-----------|-----------|-----------|
| Financial assets at fair value W W W W W W W W Q, 2,000 Environment Industry Fund 14.16 W W 2,499 - 2,499 - 2,499 QQ Aromatics LLC (formerly, Aromatics Onnan LLC) (*2) 1.00 4,779 - - 4,779 - - 3,003 EIC Properties Pte, Ltd. 15.50 6,301 - - 3,003 - - - 3,003 FT. Pyridam Farma (*1) 5.50 - - 2,705 (448) 213 2,470 Financial assets at fair value - - - - 3,023 - - - 3,023 Financial assets at fair value - - - - 18,637 - - 3,220 - - - 18,637 - 18,637 - - - 118,037 - - - 118,037 - - - 118,037 - - - 118,037 - - - 118,037 - <th>_</th> <th>Equity</th> <th>.lan 1</th> <th></th> <th>Valuation</th> <th></th> <th>Dec. 31</th> | _ | Equity | .lan 1 | | Valuation | | Dec. 31 |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | | (diopodal) | Valuation | (1000) | 200.01 |
| $ \begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | | | | | |
| Pablo Airline (*1) 5.84 - 2,499 - - 2,499 QQ Aromatics LLC (formerly, Aromatics Oman LLC) (*2) 1.00 4,779 - - (4,779) Futureplay Co. (*1)) 2.98 3,003 - - - 3,003 EIC Properties Pte. Ltd. 15.50 6,301 - 456 580 7,337 PT. Pyridam Farma (*1) 5.50 2,1500 - (448) 213 2,470 Imough OCI Korea Ras Laffan LNG Limited 10.00 322 - - 322 LX Int' (Saudi) LLC 9.00 118 - - 118 Ollhub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GE E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 2.00 7,535 - (59) 448 5,474 Tangshan Corielian Steam Cool Storage & Blending - - 125 1,208 Redcap Tour Co., Ltd. 2.26 500 - - | | | 117 | 117 0.000 | 117 | 117 | 117 0.000 |
| QQ Aromatics LLC LLO LLO LLO LLO LLO (formerly, Aromatics Oman LLC) (*2) 1.00 4,779 - - (4,779) - Futureplay Co. (*1) 2.98 3,003 - - - 3,003 EIC Properties Pte. Ltd. 15.50 6,301 - 456 580 7,337 PT. Pyridam Farma (*1) 5.50 2,705 (448) 213 2,470 Kroea Ras Laffan LNG Limited (Qatar LNG project) 5.60 21,500 - (2,863) - 18,637 Vietnam Korea Exchange Ltd. 10.00 3222 - - - 3222 LX Int't (Saudi) LLC 90.00 118 - - - 3222 Cohat blue holdings Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tangin LG Bohai Chemical Co., Ltd 10.00 21,819 - 1,5810 - 37 | | | | 2,000 | - | | _, |
| (formerly, Aromatics Oman LLC) (*2) 1.00 4,779 - - (4,779) - Futureplay Co. (*1)) 2.98 3,003 - - - 3,003 EIC Properties Pte. Ltd. 15.50 6,301 - 456 580 7,337 PT. Pyridam Farma (*1) 5.50 - 2,705 (448) 213 2,470 Financial assets at fair value 14,083 8,104 8 (3,986) 18,209 Korea Ras Laffan LNG Limited - - 2,800 - 322 (Qatar LNG project) 5.60 21,500 - (2,863) - 18,637 Vietnam Korea Exchange Ltd. 10.00 322 - - 322 LX Int! (Saudi) LLC 90.00 118 - - 118 Oihub Korea Yeosu Co., Ltd. 5.00 7,530 - (1,057) 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 1,947 - 3,016 PT Resources Alam - 1,947 - 5,005 - (59) 448 | | 5.84 | - | 2,499 | - | - | 2,499 |
| Futureplay Co. (*1)) 2.98 3,003 - - - - 3,003 EIC Properties PLe. Ltd. 15.50 6,301 - 456 580 7,337 PT. Pyridam Farma (*1) 5.50 - 2,705 (448) 213 2,470 Financial assets at fair value 14,083 8,104 8 (3,986) 18,209 Financial assets at fair value 14,083 8,104 8 (3,986) 18,209 Korea Ras Laffan LNG Limited (Qatar LNG project) 5.60 21,500 - (2,863) - 18,637 Vietnam Korea Exchange Ltd. 10.00 3222 - - 18,637 Cik Id Counce 90.00 118 - - 118 Oilhub Korea Yeosu Co., Ltd. 9.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tinajin LG Bohai Chemical Co., Ltd 0.00 21,819 - 1,947 - < | |) (*2) 1.00 | 1 770 | 1 | | (4 770) | |
| EIC Properties Pte. Ltd. 15.50 6,301 - 456 580 7,337 PT. Pyridam Farma (*1) 5.50 - 2,705 (448) 213 2,470 Financial assets at fair value through OCI - 14,083 8,104 8 (3,986) 18,209 Financial assets at fair value through OCI - - 2,663 - 18,637 Korea Ras Laffan LNG Limited (Qatar LNG project) 5.60 21,500 - (2,863) - 18,637 Olihub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9,52 55,100 - (1,057) - 54,043 Tainjin LG Bohai Chemical Co., Ltd 10,00 21,819 - 15,810 - 37,629 Cobal blue holdings Ltd. 2.35 1,069 - (59) 448 5,474 Tangshan Caofeidian Steam Coal Storage & Blending Co., Ltd. 1,083 - - 125 1,208 RedcapTour Co., Ltd. 5.26 | | | , | | - | (4,775) | 3 003 |
| PT. Pyridam Farma (*1) 5.50 2,705 (448) 213 2,470 Financial assets at fair value through OCI 14,083 8,104 8 (3,986) 18,209 Korea Ras Laffan LNG Limited (Qatar LNG project) 5.60 21,500 - (2,863) - 18,637 Vietnam Korea Exchange Ltd. 10.00 322 - - 322 LX Int'l (Saudi) LLC 90.00 118 - - 118 Oilhub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 1,947 - 3,016 PT Resources Alam - - 1947 - 3,016 - 5,200 - - - 2,200 - - - 2,200 - - - 3,016 - - 1,208 - - - - - - - - - - - <td></td> <td></td> <td></td> <td></td> <td>456</td> <td>- 580</td> <td>,</td> | | | | | 456 | - 580 | , |
| Financial assets at fair value through OCI 14,083 8,104 8 (3,986) 18,209 Korea Ras Laffan LNG Limited (Qatar LNG project) 5.60 21,500 - (2,863) - 18,637 Vietnam Korea Exchange Ltd. 10.00 322 - - 322 XI ntfl (Saudi) LLC 90.00 118 - - 118 Oilhub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 1,947 - 3,016 PT Resources Alam - - 125 1,028 - 1,208 Coal Storage & Blending - - 125 1,208 - - 5,200 Chosun Broadcasting - - - - 5,000 - - 5,000 Information & Communication - - - - <td>•</td> <td></td> <td>0,501</td> <td></td> <td></td> <td></td> <td></td> | • | | 0,501 | | | | |
| Financial assets at fair value through OCI Image: Constraint of the system | r ri r ynadir r dinid (r) | 0.00 | 14 083 | | | | |
| (Qatar LNG project) 5.60 21,500 - (2,863) - 18,637 Vietnam Korea Exchange Ltd. 10.00 322 - - 322 LX Int'l (Saudi) LLC 90.00 118 - - 118 Oilhub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 15,810 - 37,629 Cobalt blue holdings Ltd. 2.35 1,069 - 1,947 - 3,016 PT Resources Alam - 10.00 5,085 - (59) 448 5,474 Tangshan Caofeidian Steam - - 125 1,208 - - - - - - - - - - - - - - - - - - - - - - <td></td> <td></td> <td></td> <td>0,.01</td> <td></td> <td>(0,000)</td> <td></td> | | | | 0,.01 | | (0,000) | |
| Vietnam Korea Exchange Ltd. 10.00 322 - - 322 LX Int'l (Saudi) LLC 90.00 118 - - 118 Oilhub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co., Ltd. 9.52 55,100 - (1,057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 15,810 - 37,629 Cobalt blue holdings Ltd. 2.35 1,069 - 1,947 - 3,016 PT Resources Alam - - 125 1,208 - - 125 1,208 Tangshan Caofeidian Steam - - 125 1,208 - - - 5,200 Co., Ltd. 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Corporation - 2,160 (2,121) (39) - - - iPort Co., Ltd. 5.26 500 - | Korea Ras Laffan LNG Limited | | | | | | |
| LX Int'l (Saudi) LLC 90.00 118 118 Oilhub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 15,810 - 37,629 Cobalt blue holdings Ltd. 2.35 1,069 - 1,947 - 3,016 PT Resources Alam Indonesia Tbk 5.00 5,085 - (59) 448 5,474 Tangshan Caofeidian Steam Coal Storage & Blending Co., Ltd. 1.50 1,083 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting Corporation - 2,160 (2,121) (39) iPort Co., Ltd. 5.26 500 500 Information & Communication Financial Cooperative (*3) - 17 (17) 500 Information & Communication Financial Cooperative (*3) - 17 (17) Hanmi Flexible Co., Ltd. 0.11 | | 5.60 | 21,500 |) - | (2,863) | - | 18,637 |
| Oilhub Korea Yeosu Co., Ltd. 5.00 7,530 - (213) - 7,317 GS E&R Co, Ltd. 9.52 55,100 - (1,057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 15,810 - 37,629 Cobalt blue holdings Ltd. 2.35 1,069 - 1,947 - 3,016 PT Resources Alam Indonesia Tbk 5.00 5,085 - (59) 448 5,474 Tangshan Caofeidian Steam - 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,000 Corporation - 2,160 (2,121) (39) - - iPort Co., Ltd. 5.26 500 - - 500 - - 500 Information & Communication - 17 (17) - - - - - Financial Cooperative (*3) | 5 | 10.00 | 322 | | - | - | 322 |
| GS E&R Co, Ltd. 9.52 55,100 - (1.057) - 54,043 Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 15,810 - 37,629 Cobalt blue holdings Ltd. 2.35 1,069 - 1,947 - 3,016 PT Resources Alam Indonesia Tbk 5.00 5,085 - (59) 448 5,474 Tangshan Caofeidian Steam Coal Storage & Blending - 125 1,208 Co., Ltd. 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting - 2,160 (2,121) (39) - - Corporation - 2,160 (2,121) (39) - - - Information & Communication - 17 (17) - - - - - - - - - - - - - - - - - - - - - | () | 90.00 | 118 | | - | - | 118 |
| Tianjin LG Bohai Chemical Co., Ltd 10.00 21,819 - 15,810 - 37,629 Cobalt blue holdings Ltd. 2.35 1,069 - 1,947 - 3,016 PT Resources Alam - 1,947 - 3,016 Indonesia Tbk 5.00 5,085 - (59) 448 5,474 Tangshan Caofeidian Steam - 125 1,208 Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting - - 125 1,208 Corporation - 2,160 (2,121) (39) - - Information & Communication - 17 (17) - - - Financial Cooperative (*3) - 17 (17) - - - Liveron Co., Ltd. 0.11 - - - - - - Woongjin Energy Co., Ltd. (*1) 0.01 - 8 - - 8 - - 8 - - 8 - - | | 5.00 | 7,530 |) – | (213) | - | 7,317 |
| Cobalt blue holdings Ltd. 2.35 1,069 - 1,947 - 3,016 PT Resources Alam Indonesia Tbk 5.00 5,085 - (59) 448 5,474 Tangshan Caofeidian Steam Coal Storage & Blending Co., Ltd. 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting Corporation - 2,160 (2,121) (39) - - iPort Co., Ltd. 5.26 500 - - 500 - - iPort Co., Ltd. 5.26 500 - - - 500 Information & Communication Financial Cooperative (*3) - 17 (17) - - - Liveron Co., Ltd. 0.11 - - - - - - Woongjin Energy Co., Ltd. (*1) 0.01 - 8 - - 8 - 8 - 8 - 8 | , | | 55,100 |) – | (1,057) | - | 54,043 |
| PT Resources Alam Indo In | | Ltd 10.00 | 21,819 |) – | 15,810 | - | 37,629 |
| Indonesia Tbk 5.00 5,085 - (59) 448 5,474 Tangshan Caofeidian Steam Coal Storage & Blending 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting - 2,160 (2,121) (39) - - Corporation - 2,160 (2,121) (39) - - IPort Co., Ltd. 5.26 500 - - 500 - Information & Communication - 17 (17) - - - Hanmi Flexible Co.,Ltd. (*3) - - - - - - Liveron Co.,Ltd. 0.11 - - - - - - Woongjin Energy Co.,Ltd. (*1) 0.01 - 8 - - 8 121,103 (2,130) 13,926 573 133,472 | Cobalt blue holdings Ltd. | 2.35 | 1,069 |) – | 1,947 | - | 3,016 |
| Tangshan Caofeidian Steam Coal Storage & Blending Co., Ltd. 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting Corporation - 2,160 (2,121) (39) - - IPort Co., Ltd. 5,26 500 - - 500 Information & Communication Financial Cooperative (*3) - 17 (17) - - Hanmi Flexible Co., Ltd. 0.11 - - - - - Liveron Co., Ltd. 0.11 - 8 - - 8 121,103 (2,130) 13,926 573 133,472 | | | | | | | |
| Coal Storage & Blending 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting - 2,160 (2,121) (39) - - Corporation - 2,160 (2,121) (39) - - Information & Communication 5.26 500 - - 500 Financial Cooperative (*3) - 17 (17) - - - Hanmi Flexible Co.,Ltd. (*3) - - - - - - Liveron Co.,Ltd. 0.11 - - - - - - Woongjin Energy Co.,Ltd. (*1) 0.01 - 8 - - 8 121,103 (2,130) 13,926 573 133,472 | | 5.00 | 5,085 | ; - | (59) | 448 | 5,474 |
| Co., Ltd. 1.50 1,083 - - 125 1,208 RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting - 2,91 4,800 - 400 - 5,200 Chosun Broadcasting - - 2,160 (2,121) (39) - - iPort Co., Ltd. 5.26 500 - - - 500 Information & Communication - 17 (17) - - - Financial Cooperative (*3) - 17 (17) - - - - Hanmi Flexible Co.,Ltd. (*3) - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - | | | | | | | |
| RedcapTour Co., Ltd. 2.91 4,800 - 400 - 5,200 Chosun Broadcasting - 2,160 (2,121) (39) - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 500 - - - - - 500 - - - 500 - - - 500 - - - 500 - - - 500 - - - 500 - - - 500 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - | | 1 50 | 1 093 | , | | 105 | 1 209 |
| Chosun Broadcasting Corporation - 2,160 (2,121) (39) - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td></td> <td></td> <td>,</td> <td></td> <td>400</td> <td>125</td> <td>,</td> | | | , | | 400 | 125 | , |
| Corporation - 2,160 (2,121) (39) - - - - - - - - - - - - 500 - - - - 500 - - - 500 - - - 500 - - - 500 - - 500 - - - 500 - - - 500 - - - 500 - - - 500 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>•</td> <td>2.91</td> <td>4,000</td> <td>-</td> <td>400</td> <td>-</td> <td>5,200</td> | • | 2.91 | 4,000 | - | 400 | - | 5,200 |
| iPort Co., Ltd. 5.26 500 - - 500 Information & Communication - 17 (17) - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - | 0 | - | 2 160 | (2 121) | (39) | - | - |
| Information & Communication - 17 (17) - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <t< td=""><td></td><td>5.26</td><td>,</td><td>(, ,</td><td>(00)</td><td>-</td><td>500</td></t<> | | 5.26 | , | (, , | (00) | - | 500 |
| Hanmi Flexible Co.,Ltd. (*3) - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<> | | | | | | | |
| Liveron Co.,Ltd. (*1) 0.11 | Financial Cooperative (*3) | - | 17 | · (17) | - | - | - |
| Woongjin Energy Co.,Ltd. (*1) 0.01 8 8 121,103 (2,130) 13,926 573 133,472 | Hanmi Flexible Co.,Ltd. (*3) | - | - | · · · | - | - | - |
| <u>121,103</u> (2,130) <u>13,926</u> <u>573</u> <u>133,472</u> | Liveron Co.,Ltd. | 0.11 | - | | - | - | - |
| | Woongjin Energy Co.,Ltd. (*1) | 0.01 | - | . 8 | - | - | 8 |
| | | | 121,103 | 3 (2,130) | 13,926 | 573 | 133,472 |
| | | | ₩ 135,186 | 8 ₩ 5,974 | ₩ 13,934 | ₩ (3,413) | ₩ 151,681 |

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

| | | | | 2020 | | |
|-----------------------------------------------|---------------|-----------|-------------|------------|------------------|-----------|
| - | Equity | | Acquisition | | Translation gain | |
| | ownership (%) | Jan. 1 | (disposal) | Valuation | (loss) | Dec. 31 |
| Financial assets at fair value | | | | | | |
| through profit or loss | | | | | | |
| Futureplay Co. (*1) | 3.05 | ₩ - | ₩ 3,000 | ₩ 3 | ₩ - | ₩ 3,003 |
| QQ Aromatics LLC | | | | | | |
| formerly, Aromatics Oman LLC | | 4,779 | - | - | - | 4,779 |
| EIC Properties Pte. Ltd. | 15.50 | 6,361 | | 351 | (412) | 6,300 |
| | | 11,140 | 3,000 | 354 | (412) | 14,082 |
| Financial assets at fair value through OCI | | | | | | |
| Korea Ras Laffan LNG Limited | | | | | | |
| (Qatar LNG project) | 5.60 | 33,853 | - | (12,353) | - | 21,500 |
| Vietnam Korea Exchange Ltd. | 10.00 | 322 | - | - | - | 322 |
| LX Int'l (Saudi) LLC | 90.00 | 118 | _ | _ | - | 118 |
| Oilhub Korea Yeosu Co., Ltd. | 5.00 | 9,707 | _ | (2,177) | _ | 7,530 |
| GS E&R Co, Ltd. | 9.52 | 96,961 | | (41,861) | | 55,100 |
| Tianjin LG Bohai Chemical Co. | | 19,358 | - | 2,461 | - | 21,819 |
| Cobalt blue holdings Ltd. | 10100 | , | - | , | - | , |
| PT Resources Alam | 2.92 | 805 | - | 264 | - | 1,069 |
| Indonesia Tbk | 5.00 | 4,879 | | 543 | (337) | 5,085 |
| Tangshan Caofeidian Steam | 5.00 | 4,079 | - | 545 | (337) | 5,065 |
| Coal Storage & Blending | | | | | | |
| Co., Ltd. | 1.50 | 1,075 | _ | _ | 8 | 1,083 |
| RedcapTour Co., Ltd. | 2.91 | 3,913 | | 888 | 0 | 4,801 |
| Chosun Broadcasting | 2.51 | 5,915 | - | 000 | - | 4,001 |
| Corporation | 0.68 | 1.509 | _ | 651 | - | 2.160 |
| iPort Co., Ltd. | 5.26 | 500 | | 001 | | 500 |
| Information & Communication | 5.20 | 500 | - | - | - | 500 |
| Financial Cooperative | _ | 16 | _ | _ | _ | 16 |
| Hanmi Flexible Co.,Ltd. | 0.03 | 10 | | | | 10 |
| Liveron Co.,Ltd. | | - | - | - | - | - |
| Enveron Co., Etd. | 0.11 | | | | - | |
| | | 173,016 | | (51,584) | (329) | 121,103 |
| | | ₩ 184,156 | ₩ 3,000 | ₩ (51,230) | ₩ (741) | ₩ 135,185 |

(*1) For the year ended December 31, 2021, the Group acquired 5.5% of equity interests of PT. Pyridam Farma, 14.16% of equity interests of VL Environmental Future Private Equity Fund and 5.84% of equity interests of Pablo Air Co., Ltd. and classified them as financial assets at fair value through profit or loss. During the year ended December 31, 2020, the Group acquired 3.23% of equity interests of Futureplay Co., Ltd. and classified it as financial assets at fair value through profit or loss.

(*2) For the year ended December 31, 2021, the Group classified the equity interests of QQ Aromatics LLC in entirety as non-current assets held for sale (See Note 30).

(*3) For the year ended December 31, 2021, the Group disposed the equity interests of Chosun Broadcasting Corporation and Information & Communication Financial Cooperative in entirety.

8.3 Investments in associates

| As of December 31, 2021 and 2020, det | tails of investments in associates are as follows. | |
|---------------------------------------|----------------------------------------------------|--------|
| Country of | Equity ownership (%) | Princi |

| | Country of | Equity owne | rship (%) | | Principal business |
|-------------------------------------------------------------|------------|-------------|-----------|----------------|--------------------------------------------------------|
| | domicile | 2021 | 2020 | Reporting date | activity |
| Heungkuk Highclass Private Special Asset PEF E1 | Korea | 50.00 | 50.00 | 12.31 | Overseas resources development Manufacturing and |
| Bio Friends INC. (*1, 3) POSCO-IPPC (India Pune | Korea | 11.36 | - | 12.31 | selling clean energy Processing and |
| Processing Center) POSCO-PWPC (Poland | India | 35.00 | 35.00 | .31 | selling steel |
| Wroclaw Processing Center) | Poland | 40.00 | 40.00 | 12.31 | " |
| Kernhem B.V. | Netherland | 30.00 | 30.00 | 12.31 | Oil and gas |
| ADA Oil LLP (*1) GS HP Sunflower Village | Kazakhstan | 12.50 | 12.50 | 12.31 | " |
| Int'l Corp. Oman International | Vietnam | 30.00 | 30.00 | 12.31 | Leasing real estate |
| Petrochemical | Omen | 30.00 | 30.00 | 12.31 | Manufacturing and |
| Industry Company LLC Musandam Power Company | Oman | 30.00 | 30.00 | 12.51 | selling PTA, PET Thermal power |
| SAOC (*1) | Oman | 18.00 | 18.00 | 12.31 | plant |
| Gansu Wuwei Cogeneration | 01.1 | 00.00 | 00.00 | 10.01 | Generating |
| Power Plant KM Resources Ltd. | China | 30.00 | 30.00 | 12.31 | cogeneration Mining and selling |
| (Rapu-Rapu) (*2) | Malaysia | 70.00 | 70.00 | 12.31 | cooper |
| Inner Mongolia Diamond Coal Industry Co., Ltd (formerly, | | | | | |
| Mongolia Boyuan Coal Co., Ltd. | | | | | Mining and selling |
| (Wantugou)) (*4) | China | 30.00 | 30.00 | 12.31 | coal |
| Shaanxi BBM Biomass Power | <u>.</u> | | | 10.01 | Generating new & |
| Generation Co., Ltd. Inner Mongolia BDSD | China | 30.00 | 30.00 | 12.31 | renewable energy Manufacturing |
| Chemical Co., Ltd. | China | 29.00 | 29.00 | 12.31 | fertilizer |
| LX Pantos Philippines, Inc. (formerly, Pantos Logistics | | | | | |
| Philippines Inc.) (*4) | Philippine | 39.99 | 39.99 | 12.31 | Logistics |

(*1) The entity is classified as an associate even though the Group holds less than 20% equity ownership. As the Group has rights to elect the directors of the entity and its executive participates in management as a director, it is considered that the Group has significant influence over the entities.

- (*2) As major decision making is decided unanimously, it is difficult to judge that control is held, so it has been classified as associate.
- (*3) For the year ended December 31, 2021, the Group acquired and classified the equity interests of the entity as investments in associates.
- (*4) For the year ended December 31, 2021, the name of associates were changed.

8.3 Investments in associates (cont'd)

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

| | | | 2020 | | | | |
|--------------------------------------------------------------------------------------------------------|------|-----------------|------|----------------------|----------------|-----|------------|
| | Acqu | isition cost | Net | asset value | Net book value | Net | book value |
| Heungkuk Highclass Private Special Asset PEF E1 | ₩ | 4,566 | ₩ | (8,998) | ₩ - | ₩ | - |
| Bio Friends INC. | | 2,720 | | 17,881 | 2,550 | | - |
| POSCO-IPPC (India Pune Processing Center) | | 9,184 | | 41,290 | 14,451 | | 9,769 |
| POSCO-PWPC (Poland Wroclaw Processing Center) | | 5,244 | | 22,227 | 8,915 | | 6,752 |
| Kernhem B.V. ADA Oil LLP | | 2,005 22,011 | | (65,890) (60,619) | - | | - |
| GS HP Sunflower Village Int'l Corp. Oman International Petrochemical Industry Company L.L.C (*1) | | 2,911 19,766 | | 17,732 64,587 | 5,320 | | 4,395 - |
| Musandam Power Company SAOC | | 6,535 | | 34,790 | 6,662 | | 5,409 |
| Gansu Wuwei Cogeneration Power Plant | | 55,932 | | 196,788 | 59,485 | | 59,647 |
| KM Resources Ltd.(Rapu-Rapu) (*1) Inner Mongolia Diamond Coal Industry Co., Ltd | | 40,493 | | 3,666 | - | | - |
| (formerly, Mongolia Boyuan Coal Co., Ltd. (Wantugou)) | | 54,801 | | 100,661 | 56,005 | | 54,528 |
| Shaanxi BBM Biomass Power Generation Co., Ltd. | | 8,255 | | 28,640 | 8,592 | | 7,886 |
| Inner Mongolia BDSD Chemical Co., Ltd. LX Pantos Philippines, Inc | | 97,837 | | 520,769 | 160,484 | | 131,040 |
| (formerly, Pantos Logistics Philippines Inc.) | | 1,273 | | 92 | 37 | | - |
| | ₩ | 333,533 | ₩ | 913,526 | ₩ 322,501 | ₩ | 279,426 |

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

The summarized financial information of associates which were material to the Group as of December 31, 2021 and 2020 is as follows (Korean won in millions):

| | | | | | | | | 2021 | | | | | | |
|-----------------------------------------------------------------------------------------------------------------|-------|------------|---|-------------|---|-------------|---|-------------|---|---------|-------------------------------|--------------|---------------------------------|---------|
| | 0 | | | Non-current | | Current | | lon-current | - | | Profit (loss) for the year | | Dividends paid by associates | |
| | Curre | ent assets | | assets | | liabilities | | liabilities | | Revenue | | ie year | by ass | ociates |
| POSCO-IPPC (India Pune Processing Center) POSCO-PWPC (Poland Wroclaw | ₩ | 161,741 | ₩ | 29,017 | ₩ | 137,571 | ₩ | 11,897 | ₩ | 403,314 | ₩ | 11,044 | ₩ | - |
| Processing Center) | | 73,142 | | 7,791 | | 58,701 | | 5 | | 125,524 | | 5,481 | | - |
| Musandam Power Company SAOC Gansu Wuwei Cogeneration Power | | 84,929 | | 215,252 | | 65,909 | | 199,482 | | 77,836 | | 10,021 | | 1,041 |
| Plant Inner Mongolia Diamond Coal | | 98,877 | | 429,488 | | 57,824 | | 273,753 | | 191,269 | | (7,496) | | 4,381 |
| Industry Čo., Ltd (formerly, Mongolia Boyuan Coal Co., Ltd. (Wantugou)) Inner Mongolia BDSD Chemical Co., | | 80,974 | | 453,705 | | 347,316 | | 86,702 | | 390,189 | | 217,914 | | 70,135 |
| Ltd. | | 141,943 | | 627,551 | | 207,242 | | 41,483 | | 380,922 | | 65,288 | | 5,089 |
| | | | | | | | | 2020 | | | | | | |
| | | | N | on-current | | Current | N | lon-current | | | | t (loss) for | Dividen | ds paid |
| | Curre | ent assets | | assets | | liabilities | | liabilities | F | Revenue | tł | ne year | by ass | ociates |
| POSCO-IPPC (India Pune Processing Center) POSCO-PWPC (Poland Wroclaw | ₩ | 96,289 | ₩ | 38,821 | ₩ | 85,426 | ₩ | 21,772 | ₩ | 267,760 | ₩ | 5,060 | ₩ | - |
| Processing Center) Gansu Wuwei Cogeneration Power | | 50,541 | | 10,778 | | 41,873 | | 2,626 | | 108,292 | | 2,325 | | - |
| Plant Inner Mongolia Diamond Coal | | 95,422 | | 404,354 | | 39,820 | | 262,628 | | 176,972 | | 18,771 | | 2,490 |
| Industry Co., Ltd (formerly, Mongolia Boyuan Coal Co., Ltd. (Wantugou)) Inner Mongolia BDSD Chemical Co., | | 78,996 | | 372,262 | | 275,037 | | 75,625 | | 86,094 | | (21,575) | | - |
| Ltd. | | 114,004 | | 604,481 | | 270,429 | | 26,092 | | 275,431 | | 36,735 | | - |

8.3 Investments in associates (cont'd)

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

| | | | | | | 2021 | | | | | | |
|----------------------------------------------------------------------|----|---------|---------------------------|---|----------|----------------------------------------------------|----------|----------------------------|---|-------------------|---|---------|
| | Ja | an.1 | Acquisition (disposal) | | | Change in equity adjustment in equity method | | Share of profit or loss | | airment others | [| Dec. 31 |
| Bio Friends INC. | ₩ | - | ₩ 2,720 | ₩ | - | ₩ | - | ₩ (206) | ₩ | 36 | ₩ | 2,550 |
| POSCO-IPPC (India Pune | | | | | | | | | | | | |
| Processing Center) | | 9,769 | | - | - | 81 | 17 | 3,865 | | - | | 14,451 |
| POSCO-PWPC (Poland | | | | | | | | | | | | |
| Wroclaw Processing Center) | | 6,752 | | - | - | • | 29) | 2,192 | | - | | 8,915 |
| Kernhem B.V. | | - | | - | - | (25 | 51) | 153 | | 98 | | - |
| ADA OII LLP | | - | | - | - | (12 | 24) | 660 | | (536) | | - |
| GS HP Sunflower Village | | | | | | | | | | | | |
| Int'l Corp. | | 4,395 | | - | (50) | 48 | 30 | 495 | | - | | 5,320 |
| Musandam Power | | | | | | | | | | | | |
| Company SAOC | | 5,409 | | - | (1,041) | 49 | 90 | 1,804 | | - | | 6,662 |
| Gansu Wuwei Cogeneration | | | | | | | | | | | | |
| Power Plant | | 59,647 | | - | (4,381) | 6,46 | 57 | (2,248) | | - | | 59,485 |
| Inner Mongolia Diamond Coal Industry Co., Ltd (formerly, Mongolia | | | | | | | | | | | | |
| Boyuan Coal Co., Ltd. (Wantugou)) | | 54,528 | | - | (70,135) | 50 |)3 | 64,633 | | 6.476 | | 56,005 |
| Shaanxi BBM Biomass Power | | 01,020 | | | (10,100) | | | 01,000 | | 0,110 | | 00,000 |
| Generation Co., Ltd. | | 7,886 | | - | - | | - | - | | 706 | | 8,592 |
| Inner Mongolia BDSD | | ., | | | | | | | | | | 0,002 |
| Chemical Co., Ltd. | | 131,040 | | - | (5,089) | 3,25 | 57 | 18,934 | | 12,342 | | 160,484 |
| LX Pantos Philippines, Inc | | - , | | | (-,, | -, - | | -, | | , - | | , - |
| (formerly, Pantos Logistics | | | | | | | | | | | | |
| Philippines Inc.). | | - | | - | - | | (4) | 41 | | - | | 37 |
| | ₩ | 279,426 | ₩ 2,720 | ₩ | (80,696) | - | <u> </u> | ₩ 90,323 | ₩ | 19,122 | ₩ | 322,501 |
| | | | | | | | | | | | | |

| Jan.1 | Acquisition (disposal) | Dividends | Change in equity adjustment in equity method | Share of profit or loss | Impairment and others | Dec. 31 |
|---------|----------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | | |
| ₩ 8,864 | ₩ - | ₩ - | ₩ (866) | ₩ 1,771 | ₩ - | ₩ 9,769 |
| 6 1 1 3 | _ | _ | (201) | 030 | _ | 6,752 |
| 0,113 | - | - | (231) | 330 | - | 0,752 |
| 44,660 | (32,690) | - | (12,367) | 397 | - | - |
| - | - | - | 2,437 | (1,310) | (1,127) | - |
| - | - | - | 1,419 | (545) | (874) | - |
| | | | | | | |
| , | | (183) | (268) | 517 | (21) | 4,395 |
| 30 | (30) | - | - | - | - | - |
| | | (4.070) | (00.4) | 4 0 - 0 | | = 100 |
| 4,939 | - | (1,079) | (324) | 1,873 | - | 5,409 |
| 56 100 | | (2.400) | 316 | 5 631 | | 59,647 |
| 50,190 | - | (2,490) | 510 | 5,051 | - | 59,047 |
| | | | | | | |
| 62,609 | - | - | 2,160 | (6,912) | (3,329) | 54,528 |
| | | | | | | |
| 8,392 | - | - | - | - | (506) | 7,886 |
| 100 001 | | | 0.040 | 40.050 | (0,000) | 101 010 |
| 120,381 | - | - | 8,342 | 10,653 | (8,336) | 131,040 |
| | | | | | | |
| 79 | - | - | 15 | (94) | - | - |
| | | ₩ (3,752) | | | ₩ (14,193) | ₩ 279,426 |
| | ₩ 8,864 6,113 44,660 - 4,350 30 4,939 56,190 62,609 8,392 120,381 79 | Jan. 1 (disposal) ₩ 8,864 ₩ - 6,113 - 44,660 (32,690) - - 4,350 - 30 (30) 4,939 - 56,190 - 62,609 - 120,381 - 79 - | Jan. 1 (disposal) Dividends ₩ 8,864 ₩ - ₩ - 6,113 - - - 44,660 (32,690) - - - - - - 44,660 (32,690) - - - - - - 4,350 - (183) 30 (30) - 4,939 - (1,079) 56,190 - (2,490) 62,609 - - 120,381 - - | Jan.1 Acquisition (disposal) Dividends adjustment in equity method W 8,864 W W W W (866) 6,113 - - (291) 44,660 (32,690) - (12,367) - - 2,437 - - 2,437 - - 1,419 4,350 - (183) (268) 30 (30) - - 4,939 - (1,079) (324) 56,190 - (2,490) 316 62,609 - - 2,160 8,392 - - - 120,381 - - 8,342 | Jan.1 Acquisition (disposal) Dividends adjustment in equity method Share of profit or loss W 8,864 W | Jan.1Acquisition (disposal)Dividendsadjustment in equity methodShale of profit or lossImpairment and others W 8,864 W $ W$ W (866) W 1,771 W $-$ 6,113 $ -$ (291)930 $ (291)$ 930 $-$ 44,660(32,690) $ (12,367)$ 397 $ 2,437$ $(1,310)$ $(1,127)$ $ 2,437$ $(1,310)$ $(1,127)$ $ 1,419$ (545)(874)4,350 $ (183)$ (268) 517 (21) 30 (30) $ 4,939$ $ (1,079)$ (324) $1,873$ $ 62,609$ $ 2,160$ $(6,912)$ $(3,329)$ $8,392$ $ (506)$ $120,381$ $ 8,342$ $10,653$ $(8,336)$ |

(*1) See Note 21.

9. Property, plant and equipment and Investment properties

9.1 Property, plant and equipment

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

| | 2021 | | | | | | | | |
|------------------------------|------|-----------|----------|------------|---|---------|--|--|--|
| | | | Accu | mulated | | | | | |
| | Acqu | depr | eciation | Book value | | | | | |
| Land | ₩ | 107,424 | ₩ | - | ₩ | 107,424 | | | |
| Buildings | | 219,611 | | (45,907) | | 173,703 | | | |
| Structures | | 189,044 | | (53,952) | | 135,092 | | | |
| Machinery and equipment | | 111,525 | | (55,109) | | 56,416 | | | |
| Vehicles | | 26,915 | | (14,496) | | 12,419 | | | |
| Mature biological assets | | 115,205 | | (41,304) | | 73,901 | | | |
| Non-mature biological assets | | 3,914 | | - | | 3,914 | | | |
| Others | | 70,785 | | (50,748) | | 20,037 | | | |
| Construction-in-progress | | 16,589 | | - | | 16,589 | | | |
| Right-of-use assets | | 339,330 | | (132,323) | | 207,007 | | | |
| | ₩ | 1,200,342 | ₩ | (393,839) | ₩ | 806,503 | | | |

| | 2020 | | | | | | | | | |
|------------------------------|------|--------------|---|--------------------------|---|----------------------------|----------------|---------|--|--|
| | Acqu | isition cost | | Accumulated depreciation | | Accumulated mpairment loss | Net book value | | | |
| Land | ₩ | 105,670 | ₩ | - | ₩ | - | ₩ | 105,670 | | |
| Buildings | | 213,400 | | (36,017) | | - | | 177,383 | | |
| Structures | | 164,383 | | (32,685) | | - | | 131,698 | | |
| Machinery and equipment | | 89,705 | | (51,233) | | (9,349) | | 29,123 | | |
| Vehicles | | 31,658 | | (15,947) | | - | | 15,711 | | |
| Mature biological assets | | 107,330 | | (32,902) | | - | | 74,428 | | |
| Non-mature biological assets | | 1,448 | | - | | - | | 1,448 | | |
| Others | | 61,248 | | (44,805) | | - | | 16,443 | | |
| Construction-in-progress | | 4,809 | | - | | - | | 4,809 | | |
| Right-of-use assets | | 271,344 | | (85,685) | | - | | 185,659 | | |
| | ₩ | 1,050,995 | ₩ | (299,274) | ₩ | (9,349) | ₩ | 742,372 | | |

9.1 **Property**, plant and equipment (cont'd)

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

| | 2021 | | | | | | | | | | |
|----------------------------------------------|------|-----------------|-----------------|---------------|---|------------------|---------------|--------------------------------------|---|--------------|-----------------|
| | | Jan.1 | Addition | Transfer (*1) | | Disposals | Depreciation | Change in the scope of consolidation | | Others (*2) | Dec. 31 |
| Land | ₩ | 105,670 | ₩ - | ₩ - | ₩ | (706) 1 | ₩ - | ₩ - | ₩ | 2,460 ₩ | 107,424 |
| Buildings | | 177,383 | 254 | 949 | | (1,738) | (8,281) | - | | 5,137 | 173,704 |
| Structures | | 131,698 | 1,607 | 1,205 | | (443) | (6,594) | - | | 7,619 | 135,092 |
| Machinery and equipment | | 29,123 | 26,311 | 13,862 | | (1,022) | (12,636) | - | | 778 | 56,416 |
| Vehicles | | 15,711 | 5,654 | (26) | | (7,068) | (2,606) | - | | 754 | 12,419 |
| Mature biological assets | | 74,428 | - | (132) | | (24) | (5,764) | - | | 5,393 | 73,901 |
| Non-mature biological assets Others | | 1,448 16,443 | 2,368 12,562 | | | (148) (2,112) | - (10,710) | - | | 193 (302) | 3,914 20,037 |
| Construction-in- progress Right-of-use | | 4,809 | 23,160 | (12,377) | | (42) | - | 377 | | 662 | 16,589 |
| Assets | | 185,659 | 129,921 | | | (12,238) | (100,034) | | | 3,699 | 207,007 |
| | ₩ | 742,372 | ₩ 201,837 | ₩ 7,690 | ₩ | (25,541) | ₩ (146,625) | ₩ 377 | ₩ | 26,393 ₩ | 806,503 |

| | | 2020 | | | | | | | | | | | | | | |
|----------------------------------------|---|---------|---|---------|------|------------|---|-----------|---|--------------|---|----------------------------------------|---|-------------|---|---------|
| | | Jan.1 | A | ddition | Trar | nsfer (*1) | | Disposals | | Depreciation | : | ange in the scope of nsolidation | | Others (*2) | | Dec. 31 |
| Land | ₩ | 126,154 | ₩ | - | ₩ | - | ₩ | (18,974) | ₩ | - | ₩ | - | ₩ | (1,510) | ₩ | 105,670 |
| Buildings | | 172,113 | | 1,244 | | 37,667 | | (21,509) | | (6,864) | | - | | (5,268) | | 177,383 |
| Structures Machinery and | | 141,737 | | 763 | | 895 | | (41) | | (6,632) | | 7 | | (5,031) | | 131,698 |
| equipment | | 34,189 | | 2,539 | | 850 | | (390) | | (7,347) | | 41 | | (759) | | 29,123 |
| Vehicles | | 15,421 | | 3,763 | | 11 | | (49) | | (2,820) | | 18 | | (633) | | 15,711 |
| Mature biological assets Non-mature | | 85,866 | | - | | 174 | | - | | (5,919) | | - | | (5,693) | | 74,428 |
| biological assets | | 88 | | 1,604 | | (144) | | (107) | | - | | - | | 7 | | 1,448 |
| Others Construction-in- | | 15,173 | | 10,161 | | 1,445 | | (787) | | (9,432) | | 20 | | (137) | | 16,443 |
| progress Right-of-use | | 25,113 | | 24,118 | | (44,181) | | - | | - | | (361) | | 120 | | 4,809 |
| Assets | | 148,754 | | 146,254 | | - | | (14,626) | | (90,263) | | (4,915) | | 455 | | 185,659 |
| | ₩ | 764,608 | ₩ | 190,446 | ₩ | (3,283) | ₩ | (56,483) | ₩ | (129,277) | ₩ | (5,190) | ₩ | (18,449) | ₩ | 742,372 |

(*1) For the year ended December 31, 2020, construction-in-progress which are amounting to $\mathbb{W}3,219$ million was transferred to the intangible assets.

(*2) Includes the effects of fluctuation in foreign currency exchange rates.

9.2 Investment properties

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

| | | 2021 | | 2020 |
|---------------------------------|---|-----------|---|-----------|
| | | Buildings | | Buildings |
| Acquisition cost Accumulated | ₩ | 6,257 | ₩ | 5,734 |
| depreciation | | (1,406) | | (1,125) |
| Net book value | ₩ | 4,851 | ₩ | 4,609 |

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

| | | 2021 | 2020 |
|--------------|--------------|---------|---------|
| Jan. 1 | \mathbf{W} | 4,609 ₩ | 5,982 |
| Depreciation | | (157) | (165) |
| Others | | 399 | (1,208) |
| Dec. 31 | ₩ | 4,851 ₩ | 4,609 |

The fair value of investment properties held by the Group cannot be reliably estimated.

9.3 Assets provided as collateral

The details of the assets provided as collateral as of December 31, 2021 are as follows (Korean won in millions):

| | Net book value | | Agreed de | bt limit | Security holder | Description |
|--------------------|----------------|--------|-----------|----------|---------------------------|-------------------|
| Land and Buildings | ₩ | 98,161 | ₩ | 92,400 | Korea Development Bank | Mortgages payable |
| Land and Buildings | ₩ | 6,139 | ₩ | 4,268 | Kashikorn Bank | Mortgages payable |

9.4 Insurance

As of December 31, 2021, the assets covered by insurance policies are as follows (Korean won in millions):

| Insurance type | Covered assets | | Insured up to | Insurance institutions | | |
|--------------------|-------------------|---|---------------|------------------------|--|--|
| | Inventories and | | | | | |
| | property, plant | | | KB Insurance Co., Ltd. | | |
| Property insurance | and equipment | ₩ | 279,775 | And others | | |

In addition, the Group carries liability insurance for loads, warehousing liability insurance, and international transport liability insurance.

10. Intangible assets

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

| | | 2021 | 2020 | | |
|--------------------------------|---|---------|------|---------|--|
| Goodwill | ₩ | 180,409 | ₩ | 180,080 | |
| Industrial property rights | | 10 | | 19 | |
| License | | 19,042 | | 18,731 | |
| Overseas resources development | | 257,040 | | 256,667 | |
| Others | | 239,144 | | 239,349 | |
| | ₩ | 749,645 | ₩ | 694,846 | |

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

| | | | | | | | | 2021 | | | | | | |
|----------------------------|---|---------|---|------------|---|-----------|---|------|---|-------------------------------------|---|-------------|---|---------|
| | | Jan.1 | A | Addition [| | Disposals | | | | Amortization /Impairment (*2) | | Others (*3) | | Dec. 31 |
| Goodwill | ₩ | 180,080 | ₩ | 1 | ₩ | - | ₩ | - | ₩ | - | ₩ | 328 | ₩ | 180,409 |
| Industrial property rights | | 19 | | - | | - | | - | | (9) | | - | | 10 |
| License | | 18,731 | | 2,302 | | (2,682) | | - | | 540 | | 151 | | 19,042 |
| Overseas resources | | | | | | | | | | | | | | |
| development | | 256,667 | | - | | (4,657) | | - | | (22,400) | | 27,430 | | 257,040 |
| Others | | 239,349 | | 29,305 | | (1,476) | | 822 | | (18,057) | | 43,201 | | 293,144 |
| | ₩ | 694,846 | ₩ | 31,608 | ₩ | (8,815) | ₩ | 822 | ₩ | (39,926) | ₩ | 71,110 | ₩ | 749,645 |

| | | 2018 | | | | | | | | | | | | |
|-----------------------|---|---------|---|----------|----|---------|---|------------------|---|-------------------------------------|--------------------------------------------|---|-------------|---------|
| | | Jan.1 | | Addition | Di | sposals | | Transfer (*1) | | Amortization /Impairment (*2) | Change in the scope of consolidation | | Others (*3) | Dec. 31 |
| Goodwill | ₩ | 180,408 | ₩ | 40 | ₩ | - | ₩ | - | ₩ | - | ₩ - | ₩ | (328) ₩ | 180,080 |
| Industrial | | | | | | | | | | | | | | |
| property rights | | 31 | | 1,016 | | - | | - | | (6,364) | - | | (419) | 19 |
| License | | 25,142 | | 1,479 | | (8,990) | | 1,259 | | (7,256) | - | | (59) | 18,731 |
| Overseas | | | | | | | | | | | | | | |
| resources development | | 296,237 | | 4,745 | | - | | - | | (5,582) | - | | (12,415) | 256,667 |
| Others | | 225,042 | | 36,375 | | (90) | | 3,355 | | (2,673) | 27 | | (9,864) | 239,349 |
| | ₩ | 726,860 | ₩ | 43,655 | ₩ | (9,080) | ₩ | 4,614 | ₩ | (31,466) | ₩ 27 | ₩ | (23,085) ₩ | 694,846 |

(*1) Represents amounts transferred from property, plant and equipment (i.e. construction-in-progress).

(*2) See Note 21.

(*3) Represents the effects of fluctuation in foreign currency exchange rates.

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

11. Trade and other receivables

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

| | | 2021 | | | | | 2020 | | | | | |
|-----------------------------|-----|-------------|-----|-----------------------|-----|-----------|------|------------|-----|-----------------------|-----------|-----------|
| | Т | tal amount | c | wance for loubtful | | Netvolue | т. | tal amount | c | wance for loubtful | Notivelue | |
| Current: | 10 | otal amount | a | ccounts | | Net value | 10 | tal amount | a | ccounts | | Net value |
| Trade accounts | | | | | | | | | | | | |
| receivable | ₩ | 1,697,509 | ₩ | (44,050) | ₩ | 1,653,459 | ₩ | 1,341,905 | ₩ | (43,167) | ₩ | 1,298,738 |
| Short-term loans | | 8,123 | | (7,350) | | 773 | | 11,818 | | (6,706) | | 5,112 |
| Other accounts | | 0,125 | | (7,550) | | 115 | | 11,010 | | (0,700) | | 5,112 |
| Receivable (*1) | | 283,270 | | (19,936) | | 263,334 | | 198,405 | | (11,059) | | 187,346 |
| Current portion of | | 200,270 | | (10,000) | | 200,004 | | 100,400 | | (11,000) | | 107,040 |
| Long-term other | | | | | | | | | | | | |
| accounts | | | | | | | | | | | | |
| receivable | | 5,928 | | - | | 5,928 | | - | | - | | - |
| Present value | | - , | | | | - , | | | | | | |
| discount | | (210) | | - | | (210) | | - | | - | | - |
| Accrued income | | 5,558 | | (4,108) | | 1,450 | | 4,570 | | (2,704) | | 1,866 |
| Short-term deposits | | 13,950 | | - | | 13,950 | | 3,081 | | - | | 3,081 |
| Current portion of | | 10,000 | | | | 10,000 | | 0,001 | | | | 0,001 |
| long-term other | | | | | | | | | | | | |
| accounts receivable | | 23,583 | | - | | 23,583 | | 21,644 | | - | | 21,644 |
| Finance lease | | -, | | | | -, | | , - | | | | , - |
| receivable | | 1,260 | | - | | 1,260 | | - | | - | | - |
| | | 2,038,971 | | (75,444) | | 1,963,527 | | 1,581,423 | | (63,636) | | 1,517,787 |
| Non-current: | | | | · · · | | | | | | · · · · | | |
| Long-term | | | | | | | | | | | | |
| receivables | ₩ | 159,015 | ₩ | - | ₩ | 159,015 | ₩ | 151,381 | ₩ | - | ₩ | 151,381 |
| Long-term loans | | 132,010 | | (109,660) | | 22,350 | | 122,501 | | (97,009) | | 24,492 |
| Long-term other | | , | | (, , | | , | | , | | (, , | | , |
| accounts receivable (| *1) | 14,297 | | (119) | | 14,178 | | 19,367 | | (193) | | 19,174 |
| Present value discou | nt | (1,585) | | - | | (1,585) | | (2,644) | | - | | (2,644) |
| Long-term accrued | | | | | | (, , | | | | | | |
| income | | 12,842 | | (8,218) | | 4,624 | | 15,924 | | (7,407) | | 8,517 |
| Long-term bank | | | | | | | | | | | | |
| deposits (*2) | | 9,705 | - | - | | 9,705 | | 3,556 | - | - | | 3,556 |
| Long-term deposits | | 00 704 | | (4.000) | | 05 474 | | 00.404 | | (4.000) | | 00.404 |
| Finance laces | | 29,764 | | (4,290) | | 25,474 | | 36,424 | | (4,290) | | 32,134 |
| Finance lease receivable | | 1,546 | | | | 1,546 | | | | | | |
| receivable | | | | - | | | | - | | - | | - |
| | *** | 357,594 | 117 | (122,287) | 117 | 235,307 | 117 | 345,509 | 117 | (108,899) | 117 | 236,610 |
| | ₩ | 2,396,565 | ₩ | (197,731) | ₩ | 2,198,834 | ₩ | 1,926,932 | ₩ | (172,535) | ₩ | 1,754,397 |

- (*1) As of December 31, 2021, other receivables related to derivatives of ₩1,941 million (₩6,096 million in 2020) and equity options of ₩587 million were excluded.
- (*2) As of December 31, 2021, it presents the amount after excluding ₩993 million of excessive amount of plan assets (see Note 19).

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

| | | 20 | 21 | | | 202 | 20 | | |
|-------------------|-------|-------------|-------|-------------|---------|-------------|-------------------|---------|--|
| | Trade | receivables | Other | receivables | Trade I | receivables | Other receivables | | |
| Jan. 1 | ₩ | 43,167 | ₩ | 129,368 | ₩ | 44,716 | ₩ | 123,664 | |
| Bad debt expenses | | 1,107 | | 19,366 | | 742 | | 385 | |
| Others (*1) | | (224) | | 4,947 | | (2,291) | | 5,319 | |
| Dec. 31 | ₩ | 44,050 | ₩ | 153,681 | ₩ | 43,167 | ₩ | 129,368 | |

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

11. Trade and other receivables (cont'd)

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

| | Less than 3 months | 3 to 6 months | 6 to 12 months | 1 to 3 years | More than 3 years | Total |
|------|-----------------------|------------------|-------------------|-----------------|----------------------|-------------|
| 2021 | ₩ 1,627,536 | ₩ 15,697 | ₩ 6,776 | ₩ 1,401 | ₩ 46,099 | ₩ 1,697,509 |
| 2020 | 1,279,617 | 12,806 | 1,298 | 3,176 | 45,008 | 1,341,905 |

Derecognition of financial instruments

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

12. Borrowings and bonds

12.1 Short-term borrowings

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

| | | Annual interest rate as of Dec. 31, | | | | |
|----------------------------|--------------------------|-------------------------------------|---|---------|---|---------|
| | Description | 2020 | | 2021 | | 2020 |
| Short-term operating loans | Woori Bank and others | 3ML + 1.00% and others | ₩ | 397,079 | ₩ | 102,661 |
| Banker's usance | Hana Bank | 0.38% ~ 0.45% | | 2,375 | | 652 |
| Others | - | - | | 16,517 | | 3,491 |
| | | | ₩ | 415,971 | ₩ | 106,804 |

(*) The Group has contracts of commercial paper discount with Woori, Shinhan, Hana and Korea Development Bank. Amounts that have not reached maturity after discounts and do not meet the requirements of financial asset derecognition are accounted as short-term borrowings.

The Group has signed individual and comprehensive loan agreements (credit limit of #53,587 million) with Shinhan Bank and three other banks in relation to bank overdraft facilities as of December 31, 2021. In relation to the bank overdraft facilities above, long-term financial instruments are provided as collateral.

12.2 Long-term borrowings

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

| | Financial institution | Annual interest rate as of Dec. 31, 2020 | _ | 2021 | | 2020 |
|-----------------------|------------------------------------------------------|---------------------------------------------|---|-----------|---|----------|
| Local currency | Woori International the 1 st Co., Ltd and | 2.89% and others | | | | |
| | others | | ₩ | 500,167 | ₩ | 469,744 |
| Foreign currency | Korea Energy | Representative loan | | | | |
| | Agency and others | interest rate -2.25% | | 32,094 | | 112,492 |
| | | | | 532,261 | | 582,236 |
| Less: current portion | | | | (188,675) | | (75,669) |
| | | | ₩ | 343,586 | ₩ | 506,567 |

12.3 Bonds

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

| | | | Annual | | | | | |
|-----------------|-----------------|---------------|---------------|---|-----------|---|-----------|--------------|
| Series | Issue date | Maturity date | interest rate | | 2021 | | 2020 | Warranty |
| 115th | Mar. 03, 2015 | Mar. 03, 2022 | 2.74% | | 50,000 | | 50,000 | Non-warranty |
| 116-3rd | May. 28, 2015 | May. 28, 2022 | 2.86% | | 90,000 | | 90,000 | " |
| 117-2nd | Sep. 05, 2016 | Sep. 05, 2021 | 2.02% | | - | | 30,000 | " |
| 118-1st | Jan. 23, 2018 | Jan. 22, 2021 | 2.57% | | - | | 70,000 | " |
| 118-2nd | Jan. 23, 2018 | Jan. 20, 2023 | 2.95% | | 30,000 | | 30,000 | " |
| 119th | May. 13, 2020 | May. 13, 2030 | 3.10% | | 50,000 | | 50,000 | " |
| 120-1st | May. 27, 2020 | May. 27, 2023 | 1.80% | | 90,000 | | 90,000 | " |
| 120-2nd | May. 27, 2020 | May. 27, 2025 | 2.07% | | 50,000 | | 50,000 | " |
| 121-1st | Aug. 06, 2021 | Aug. 06, 2026 | 2.29% | | 20,000 | | - | " |
| 121-2nd | Aug. 06, 2021 | Aug. 06, 2031 | 3.10% | | 30,000 | | - | " |
| Pantos bond | Jun. 15, 2018 | Jun. 15, 2021 | 3.11% | | - | | 50,000 | " |
| Less: discount | on bonds | | | | (557) | | (733) | |
| Less: current p | ortion of bonds | | | | (140,000) | | (150,000) | |
| Less: current p | ortion of | | | | | | | |
| discount | on bonds | | | | 19 | | 40 | |
| | | | | ₩ | 269,462 | ₩ | 359,307 | |

As of the January 28, 2022, the Group additionally issued a total of \mathbb{W} 300 billion in the 122-1st, 122-2nd and 122-3rd bonds.

13. Provisions

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

| | | 20 | 2020 | | | | | | |
|---------------------------|---|--------|------|----------|---------|--|---|-----|----------|
| | С | urrent | Non | -Current | Current | | | Non | -Current |
| Rehabilitation provisions | ₩ | 8 | ₩ | 80,597 | ₩ | | - | ₩ | 15,681 |
| Onerous contracts | | 5,986 | | 13,396 | | | - | | 24,873 |
| Provisions for litigation | | - | | 5,152 | | | - | | 475 |
| Others | | - | | 14 | | | - | | 38 |
| | ₩ | 5,994 | ₩ | 99,159 | ₩ | | - | ₩ | 41,067 |

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

| | 2021 | | | | | | | | | |
|---------------------------|------|--------|----|-----------|---|---------|---|---------|---------|---------|
| - | | Jan. 1 | Re | cognition | | Used | | Others | Dec. 31 | |
| Rehabilitation | | | | | | | | | | |
| provisions | ₩ | 15,681 | ₩ | 15,638 | ₩ | (2,350) | ₩ | 51,636 | ₩ | 80,605 |
| Onerous contracts | | 24,873 | | (1,785) | | (5,864) | | 2,158 | | 19,382 |
| Provisions for litigation | | 475 | | 4,635 | | - | | 42 | | 5,152 |
| Others | | 38 | | 686 | | (691) | | (19) | | 14 |
| | ₩ | 41,067 | ₩ | 19,174 | ₩ | (8,905) | ₩ | 53,817 | ₩ | 105,153 |
| | | | | | | 2020 | | | | |
| | | Jan. 1 | Re | cognition | | Used | | Others | | Dec. 31 |
| Rehabilitation | | | | | | | | | | |
| provisions | ₩ | 10,605 | ₩ | 6,951 | ₩ | (1,160) | ₩ | (715) | ₩ | 15,681 |
| Onerous contracts | | 39,354 | | (7,663) | | (4,889) | | (1,929) | | 24,873 |
| Provisions for litigation | | 505 | | - | | - | | (30) | | 475 |
| Others | | 2 | | 566 | | (509) | | (21) | | 38 |
| | ₩ | 50,466 | ₩ | (146) | ₩ | (6,558) | ₩ | (2,695) | ₩ | 41,067 |

14. Capital stocks and others

14.1 Capital stocks

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

| | | 2021 | 2020 | | |
|------------------------|---|------------|------|------------|--|
| Ordinary shares issued | | 38,760,000 | | 38,760,000 | |
| Par value per share | ₩ | 5,000 | ₩ | 5,000 | |
| | ₩ | 193,800 | ₩ | 193,800 | |

14.2 Capital surplus

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

| | | 2021 | | 2020 |
|----------------------------------------|---|---------|---|---------|
| Paid-in capital in excess of par value | ₩ | 47,106 | ₩ | 47,106 |
| Asset revaluation reserves (*1) | | 37,286 | | 37,286 |
| Other capital surplus | | 16,052 | | 16,761 |
| | ₩ | 100,444 | ₩ | 101,153 |

(*1) The Parent 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, 2021 and 2020 are as follows (Korean won in millions):

| | | 2021 | | 2020 |
|---------------------------|---|---------------|---|----------|
| Treasury stock (*1) | ₩ | (40,689) | ₩ | (40,689) |
| Other capital adjustments | | (611 <u>)</u> | | (611) |
| | ₩ | (41,300) | ₩ | (41,300) |

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

14.4 Accumulated other comprehensive loss

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

| | | 2021 | | 2020 |
|------------------------------------------------------------------------|---|----------|---|-----------|
| Loss on valuation of financial assets at fair value through OCI | ₩ | (7,203) | ₩ | (17,605) |
| Loss on valuation of derivatives designated as cash flow hedges | | (7,471) | | (13,097) |
| (Negative) changes in equity arising from equity method investments | | (18,742) | | (29,036) |
| Exchange differences on translation of foreign operations | | 33,215 | | (42,688) |
| | ₩ | (201) | ₩ | (102,426) |

14.5 Retained earnings

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

| | | 2021 | 2020 |
|--------------------------------------------|---|-------------|-----------|
| Legal reserve | ₩ | 45,607 ₩ | 43,741 |
| Business rationalization reserve | | 1,511 | 1,511 |
| Improvement of financial structure reserve | | 13,693 | 13,693 |
| Other legal reserve | | 2,211 | 2,211 |
| Retained earnings before appropriations | | 1,459,198 | 1,125,795 |
| | ₩ | 1,522,220 ₩ | 1,186,951 |

14.6 Earnings per share

Earnings per share attributable to the owners of the Parent Company for the years ended December 31, 2021 and 2020 are computed as follows (Korean won):

| | 2021 | | | 2020 |
|--------------------------------------|------|-----------------|---|-----------------|
| Profit for the year attributable | | | | |
| to the owners of the Parent Company | ₩ | 350,069,144,537 | ₩ | 297,586,971,040 |
| Weighted-average number of ordinary | | | | |
| shares outstanding (*1) | | 35,967,920 | | 37,517,383 |
| Basic and diluted earnings per share | ₩ | 9,733 | ₩ | 7,932 |

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

| | 202 | .1 | 2020 | | | |
|-----------------------------------------------------------|------------------|----------------------------------------|------------------|----------------------------------------|--|--|
| | Number of shares | Number of shares*days of holding | Number of shares | Number of shares*days of holding | | |
| Number of common shares issued | 38,760,000 | 14,147,400,000 | 38,760,000 | 14,186,160,000 | | |
| Treasury shares | (2,792,074) | (1,019,109,218) | (2,792,074) | (454,797,807) | | |
| Number of ordinary shares outstanding | 35,967,902 | 13,128,290,782 | 35,967,926 | 13,731,362,193 | | |
| Days of holding | | 365 days | | 366 days | | |
| Weighted-average number of ordinary shares outstanding | | 35,967,920 | | 37,517,383 | | |

15. Dividends

For the years ended December 31, 2021 and 2020, dividends attributable to the owners of the Parent Company are as follows (Korean won in millions, except per share amounts):

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

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

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

16. Sales

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

| | | 2021 | | | | | 2020 | | | | | |
|---------------------------------------------|----|----------------|------|-------------|---|-----------|----------------|-----------|-------|------------|---|-----------|
| | | Industrial ma- | | | | | Industrial ma- | | | | | |
| | En | iergy/Palm | teri | al/Solution | | Logistics | En | ergy/Palm | teria | l/Solution | L | ogistics |
| Revenue recognized at a point of time | | | | | | | | | | | | |
| Sales of goods | ₩ | 2,446,867 | ₩ | 6,441,676 | ₩ | 23,327 | ₩ | 1,397,778 | ₩ | 5,155,148 | ₩ | 19,820 |
| Sales of services | | 1,768 | | 21,842 | | - | | 4,326 | | 20,876 | | - |
| | | 2,448,635 | | 6,463,518 | | 23,327 | | 1,402,104 | | 5,176,024 | | 19,820 |
| Revenue recognized over period | | | | | | | | | | | | |
| Sales of services | | 18,154 | | 3,242 | | 7,729,657 | | 25,722 | | 3,142 | | 4,655,820 |
| | ₩ | 2,466,789 | ₩ | 6,466,760 | ₩ | 7,752,984 | ₩ | 1,427,826 | ₩ | 5,179,166 | ₩ | 4,675,640 |

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

| | Segment | | 2021 | | 2020 |
|----------------------|------------------------------|---|---------|---|---------|
| Contract assets | Logistics | ₩ | 56,513 | ₩ | 18,970 |
| | | ₩ | 56,513 | ₩ | 18,970 |
| Contract liabilities | | | | | |
| Advance received | Energy/Palm | ₩ | 77,281 | ₩ | 32,617 |
| | Industrial material/Solution | | 5,091 | _ | 2,054 |
| | | | 82,372 | | 34,671 |
| Unearned revenue | Energy/Palm | | 2 | | 2 |
| | Logistics | | 173,104 | | 73,674 |
| | | | 173,106 | | 73,676 |
| | | ₩ | 255,478 | ₩ | 108,347 |

16. Sales (cont'd)

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

| | | | | | 2021 | | | | |
|-------------------------------------------------|----------------------------------------------------------------------------|---|-------------------------------------------------------------------------|---|---------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------|---|-------------------------------------------------------------------------|
| | Segment | | Jan. 1 | | Increase | C |)ecrease | | Dec. 31 |
| Contract assets | Logistics | ₩ | 18,970 | ₩ | 56,513 | ₩ | (18,970) | ₩ | 56,513 |
| | | ₩ | 18,970 | ₩ | 56,513 | ₩ | (18,970) | ₩ | 56,513 |
| Contract liabilities | | | | | | | | | |
| Advance received | Energy/Palm Industrial | ₩ | 32,617 | ₩ | 69,832 | ₩ | (25,168) | ₩ | 77,281 |
| | material/Solution | | 2,054 | | 8,348 | | (5,311) | | 5,091 |
| | | | 34,671 | | 78,180 | | (30,479) | | 82,372 |
| Unearned revenue | Energy/Palm | | 2 | | - | | - | | 2 |
| | Logistics | | 73,674 | | 161,713 | | (62,283) | | 173,104 |
| | | | 73,676 | | 161,713 | | (62,283) | | 173,106 |
| | | ₩ | 108,347 | ₩ | 239,893 | ₩ | (92,762) | ₩ | 255,478 |
| | | | | | 2020 | | | | |
| | | | | | 2020 | | | | |
| | Segment | | Jan. 1 | | Increase | C | ecrease | | Dec. 31 |
| Contract assets | Segment Logistics | ₩ | Jan. 1 10,324 | ₩ | | C ₩ | ecrease (10,324) | ₩ | Dec. 31 18,970 |
| Contract assets | | ₩ | | | Increase | | | ₩ | |
| Contract assets Contract liabilities | | | 10,324 | | Increase 18,970 | ₩ | (10,324) | | 18,970 |
| | | | 10,324 | ₩ | Increase 18,970 | ₩₩ | (10,324) | | 18,970 |
| Contract liabilities | Logistics Energy/Palm | ₩ | 10,324 10,324 | ₩ | Increase 18,970 18,970 | ₩₩ | (10,324) (10,324) | ₩ | 18,970 18,970 |
| Contract liabilities Advance received | Logistics Energy/Palm Industrial | ₩ | 10,324 10,324 7,715 | ₩ | Increase 18,970 18,970 41,466 | ₩₩ | (10,324) (10,324) (16,564) | ₩ | <u>18,970</u> <u>18,970</u> 32,617 |
| Contract liabilities | Logistics Energy/Palm Industrial material/Solution Energy/Palm | ₩ | <u>10,324</u> <u>10,324</u> 7,715 <u>14,310</u> 22,025 3 | ₩ | Increase 18,970 18,970 41,466 4,012 45,478 51 | ₩₩ | (10,324) (10,324) (16,564) (16,268) (32,832) (52) | ₩ | <u>18,970</u> <u>18,970</u> 32,617 <u>2,054</u> 34,671 2 |
| Contract liabilities Advance received | Logistics Energy/Palm Industrial material/Solution | ₩ | 10,324 10,324 7,715 14,310 22,025 3 56,221 | ₩ | Increase 18,970 18,970 41,466 4,012 45,478 51 61,242 | ₩₩ | (10,324) (10,324) (16,564) (16,268) (32,832) (32,832) (52) (43,789) | ₩ | 18,970 18,970 32,617 2,054 34,671 2 73,674 |
| Contract liabilities Advance received | Logistics Energy/Palm Industrial material/Solution Energy/Palm | ₩ | <u>10,324</u> <u>10,324</u> 7,715 <u>14,310</u> 22,025 3 | ₩ | Increase 18,970 18,970 41,466 4,012 45,478 51 | ₩₩ | (10,324) (10,324) (16,564) (16,268) (32,832) (52) | ₩ | <u>18,970</u> <u>18,970</u> 32,617 <u>2,054</u> 34,671 2 |

17. Selling and administrative expenses

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

| | | 2021 | | 2020 |
|-------------------------------------|----------------|---------|---|---------|
| Salaries | \overline{W} | 303,082 | ₩ | 245,829 |
| Pension benefits | | 17,200 | | 16,091 |
| Employee welfare benefits | | 69,798 | | 50,690 |
| Travel | | 5,594 | | 4,726 |
| Taxes and dues | | 8,647 | | 10,300 |
| Rents | | 9,356 | | 10,619 |
| Depreciation | | 31,568 | | 30,192 |
| Amortization | | 23,291 | | 21,063 |
| Insurance | | 5,349 | | 4,686 |
| Custody | | 1,682 | | 1,387 |
| Freight | | 93,717 | | 72,783 |
| Load and unload | | 214 | | 365 |
| Service | | 94,037 | | 70,479 |
| Bad debt expenses | | 1,107 | | 742 |
| Expenses for overseas branch office | | 8,097 | | 7,411 |
| Others | | 22,438 | | 25,178 |
| | ₩ | 695,177 | ₩ | 572,541 |

18. Expenses classified by nature

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

| | _ | 2021 | 2020 |
|-------------------------------------------------------------------------------------------|---|------------|--------------|
| Cost of goods sales | ₩ | 7,732,952 | ₩ 5,880,310 |
| Use of raw materials and supplies | | 539,435 | 399,068 |
| Employee benefits (salaries, retirement benefits) Distribution costs (custody charges, | | 430,835 | 355,137 |
| packaging costs, transportation expenses) | | 105,941 | 80,468 |
| Cost of logistics sales | | 6,341,192 | 3,721,182 |
| Depreciation and amortization | | 187,247 | 163,624 |
| Others | | 692,714 | 523,008 |
| | ₩ | 16,030,316 | ₩ 11,122,797 |

19. Pension benefits

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

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

| | | 2021 | | 2020 |
|---------------------------------------------|---|-----------|---|-------------------|
| Present value of defined benefit obligation | ₩ | 148,578 | ₩ | 135,298 |
| Fair value of plan assets (*1) | | (140,222) | | (121,021 <u>)</u> |
| | ₩ | 8,356 | ₩ | 14,277 |

(*1) As of December 31, 2021, the Group classified #993 million of excessive amount of plan assets as other non-current assets.

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

| | | 2021 | 2020 |
|--------------------------------|---|----------|--------|
| Current service costs | ₩ | 18,645 ₩ | 18,278 |
| Net interest costs | | 145 | 328 |
| Management cost of plan assets | | 313 | 184 |
| | ₩ | 19,103 ₩ | 18,790 |

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

| | | 2021 | | 2020 |
|----------------------------------------------|---|---------|---|---------|
| January 1 | ₩ | 135,298 | ₩ | 127,118 |
| Current service costs | | 18,645 | | 18,278 |
| Interest costs | | 2,592 | | 2,489 |
| Benefits paid | | (8,516) | | (8,472) |
| Transfer out | | (661) | | (283) |
| Re-measurement gain on defined benefit plans | | 1,100 | | (3,415) |
| Change in the scope of consolidation | | - | | 35 |
| Others | | 120 | | (452) |
| December 31 | ₩ | 148,578 | ₩ | 135,298 |

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

| | | 2021 | | 2020 |
|----------------------------------------------|---|---------|---|---------|
| January 1 | ₩ | 121,021 | ₩ | 104,672 |
| Return on plan assets | | 2,447 | | 2,161 |
| Contribution payable | | 24,286 | | 22,511 |
| Benefits paid | | (6,841) | | (8,190) |
| Re-measurement loss on defined benefit plans | | (411) | | 56 |
| Management costs of plan assets | | (313) | | (184) |
| Others | | 33 | | (5) |
| December 31 | ₩ | 140,222 | ₩ | 121,021 |

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

| | 2021 | 2020 |
|----------------------|---------------|---------------|
| Salary increase rate | 5.00% | 5.00% |
| Discount rate | 1.75% ~ 2.80% | 1.75% ~ 2.25% |

19. Pension benefits (cont'd)

Sensitivity analyses on the principal assumptions used in actuarial calculation as of December 31, 2021 and 2020 are as follows (Korean won in millions):

| | Defined benefit obligation | | | | | |
|----------------------|----------------------------|---------|----------------|---------|----------------|---------|
| | Dec. 31 | | Increase by 1% | | Decrease by 1% | |
| Salary increase rate | ₩ | 148,578 | ₩ | 160,939 | ₩ | 137,569 |
| Discount rate | | 148,578 | | 137,520 | | 161,272 |

The Group operates defined contribution plans for certain employees of which expenses amounting to #436 million and #264 million were recognized in 2021 and 2020, respectively.

20. Other non-operating income and costs

20.1 Finance income

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

| | | 2021 | 2020 |
|---------------------------------------|---|-----------|---------|
| Interest income | ₩ | 10,213 ₩ | 10,404 |
| Gain on foreign currency transactions | | 206,017 | 214,517 |
| Gain on foreign currency translation | | 37,678 | 47,420 |
| Gain on currency forwards | | 7,537 | 13,738 |
| Gain on currency swaps | | 3,684 | 1,688 |
| Dividend income | | 7,285 | 4,376 |
| | ₩ | 272,414 ₩ | 292,143 |

20.2 Finance costs

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

| | | 2021 | | 2020 |
|-----------------------------------------------|---|---------|---|---------|
| Interest expenses | ₩ | 34,101 | ₩ | 42,753 |
| Loss on foreign currency transactions | | 196,644 | | 239,166 |
| Loss on foreign currency translation | | 30,158 | | 47,668 |
| Loss on currency forwards | | 19,228 | | 9,919 |
| Loss on currency swaps | | - | | 8,552 |
| Loss on disposal of trade accounts receivable | | 8,902 | | 10,118 |
| | ₩ | 289,033 | ₩ | 358,176 |

20.3 Share of profit or loss of associates

Details of share of profit or loss of associates for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

| | | 2021 | | 2020 |
|---------------------------------------------------------------------------------------------|---|---------|---|---------|
| Share of profit of associates | ₩ | 92,778 | ₩ | 21,772 |
| Share of loss of associates | | (2,455) | | (8,861) |
| Gain on disposal of investments in associates (*1) Loss on disposal of investments in | | 36 | | 336,764 |
| associates (*2) | | (676) | | (642) |
| Impairment loss on investments in associates (*3) | | - | | (9,611) |
| | ₩ | 89,683 | ₩ | 339,422 |

(*1) During the year ended December 31, 2020, gains on disposal of investment in LG Holdings(HK) Ltd.(LG Building Ltd.) are included.

(*2) See Note 30.

(*3) See Note 21.

20.4 Other non-operating income and expenses

Other non-operating income and expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

| | _ | 2021 | | 2020 |
|---------------------------------------------------|---|----------|---|----------|
| Other bad debt expenses | ₩ | (19,366) | ₩ | (385) |
| Gain on disposal of property, plant and equipment | | 6,030 | | 18,969 |
| Gain on disposal of intangible assets | | 804 | | 605 |
| Impairment loss on intangible assets (*1) | | - | | (13,963) |
| Impairment loss on assets held for sale | | - | | (783) |
| Gain on exemption from debt | | 14,659 | | 7,067 |
| Others | | 3,289 | | 11,129 |
| | ₩ | 5,416 | ₩ | 22,639 |

(*1) See Note 21.

21. Impairment

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

| | | | 2020 | | | |
|--------------------|-------------------|---------------------------------|------------------------------|-------------------|-------------------------|--|
| | Intangible assets | Investment in associates | Assets held for sale (*1) | Intangible assets | Intangible assets | |
| Segment | Energy/Palm | Industrial material/Solution | Energy/Palm | Logistics | Collectively grouped | |
| Nature of asset | Coal mining | Palm oil | Coal mining | Logistics | License | |
| Related region | Oceania | Asia | Asia | Asia | Asia | |
| Impairment loss | ₩ 13,816 | ₩ 9,611 | ₩ 783 | ₩ 40 | ₩ 107 | |
| Measuring of | | | Fair value less | Fair value less | | |
| recoverable amount | Value in use | Value in use | costs to sell | costs to sell | Value in use | |
| | Zero-Growth / | Zero-Growth / | | | | |
| Basis of estimates | DCF | DCF | - | | | |
| Discount rate | 5.04% | 9.96% | - | - | _ | |

(*1) See Note 30.

22. Income tax

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

| | | 2021 | | 2020 |
|------------------------------------------------------------------------------|---|----------|---|--------|
| Current income tax (*1) | ₩ | 164,602 | ₩ | 78,845 |
| Changes in deferred tax Deferred tax related to items recognized | | 46,573 | | 1,089 |
| in other comprehensive income | | (16,810) | | 14,323 |
| Income tax expenses (benefit) reported in the statement of profit or loss | ₩ | 194,365 | ₩ | 94,257 |

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

22. Income tax (cont'd)

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

| | | 2021 | | 2020 |
|-----------------------------------------------------------------------|-----|----------|-----|----------|
| Profit before income tax | ₩ | 734,697 | ₩ | 455,863 |
| Statutory income tax at the tax rate | | | | |
| (24.1% in 2021) | | 177,335 | | 109,857 |
| Adjustments: | | | | |
| Effect of unrecognized deferred tax | | | | |
| for temporary differences | | 36,123 | | (3,153) |
| Current year adjustment related to the income tax | | | | |
| on previous years | | (1,107) | | (18,781) |
| Effect of non-deductible expenses | | (293) | | 2 720 |
| for tax purposes Tax credit | | · · · | | 2,730 |
| Foreign income tax directly charged | | (8,686) | | (8,967) |
| | | 3,938 | | 4,155 |
| Income tax on non-recirculation | | 1,834 | | 3,737 |
| Others | | (14,779) | | 4,679 |
| Income tax expenses reported | 117 | 101.005 | 117 | 04.057 |
| in the statement of profit or loss | ₩ | 194,365 | ₩ | 94,257 |
| Effective tax rate (income tax expenses/ profit before income tax) | | 26% | | 21% |

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

| | | 2021 | | 2020 |
|---------------------------------------------------------------------------------------|---|----------|---|--------|
| Loss (gain) on valuation of financial assets at fair value through OCI | ₩ | (3,385) | ₩ | 12,615 |
| Equity adjustments in equity method Exchange differences on translation of foreign | | (1,315) | | 169 |
| operations | | (10,634) | | 886 |
| Loss (gain) on valuation of derivatives | | (1,673) | | 1,446 |
| • | s | 197 | | (793) |
| | ₩ | (16,810) | ₩ | 14,323 |

22. Income tax (cont'd)

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

| | Accum | ulated temporary dif | ferences | Deferred tax as | ssets (liabilities) |
|------------------------------------------|--------------|---------------------------------------|---------------------------------------|-----------------|---------------------|
| | Jan. 1, 2021 | Net changes | Dec. 31, 2021 | Dec. 31, 2020 | Dec. 31, 2021 |
| Deferred income tax | ` | | · · · · · · · · · · · · · · · · · · · | · · · · · · | |
| due to temporary | | | | | |
| differences: | | | | | |
| Impairment of available- | | | | | |
| for-sale financial | ₩ 147.608 | ₩ - | ₩ 147,608 | ₩ 34.510 | ₩ 34.510 |
| assets Steels dividend | , | | , | 0.,0.0 | 0 1,0 10 |
| Stock dividend Allowance for doubtful | 12,999 | - | 12,999 | 3,146 | 3,146 |
| accounts | 157,039 | 17,962 | 175,001 | 36,570 | 39,468 |
| Bad debt expenses | 3,492 | | 3,492 | 845 | 845 |
| Accrued income | (5 | | (2) | (1) | 0+0 |
| Interest income | 3,038 | | (2) 3,213 | 735 | - 778 |
| Allowance for | 3,030 | 175 | 3,213 | 755 | 110 |
| inventories | _ | 508 | 508 | _ | 123 |
| Gain on commodity | | 000 | 000 | | 120 |
| futures | | - (17) | (17) | - | (4) |
| Loss on commodity | | | () | | |
| futures | 145 | (145) | - | 35 | - |
| Accrued expenses | 1,581 | (5) | 1,576 | 383 | 381 |
| Admission and denial | | | | | |
| on depreciation cost | 4,863 | · · · · · · · · · · · · · · · · · · · | 1,015 | 1,177 | 246 |
| Bonus | 2,113 | 15,481 | 17,594 | 511 | 4,258 |
| Interest related to | | | | | |
| loans or construction | (483 | • | (483) | (117) | (117) |
| Brand loyalty | 62 | (62) | - | 15 | - |
| Present value of | | | | | |
| defined benefit | 34,304 | 128 | 24 422 | 8,302 | 8,332 |
| obligation Fair value of plan | 54,504 | 120 | 34,432 | 0,302 | 0,332 |
| assets | (32,619 |) (1,387) | (34,006) | (7,894) | (8,229) |
| Gain (loss) on foreign | (02,010 |) (1,001) | (01,000) | (1,001) | (0,220) |
| currency translation | (16,938 |) 7,283 | (9,655) | (4,099) | (2,337) |
| Interest and translation | • | , | | | |
| of debt related on | | | | | |
| success | 3,997 | 1,129 | 5,126 | 967 | 1,241 |
| Rewards for long term | | (74) | 4 070 | 077 | 050 |
| employee | 1,144 | (74) | 1,070 | 277 | 259 |
| Impairment right of membership | 2,022 | (540) | 1,482 | 489 | 359 |
| Investment in | 2,022 | (0+0) | 1,402 | -03 | 000 |
| subsidiaries and | | | | | |
| associates | (100,765 |) (437,631) | (538,396) | (29,392) | (75,153) |
| Financial assets at fair | • | , , , | | | |
| value through OCI | 16,362 | (13,625) | 2,737 | 3,960 | 662 |
| Impairment loss | 79,155 | (25,517) | 53,638 | 19,155 | 12,980 |
| Provisions | 31,648 | (5,448) | 26,200 | 7,659 | 6,340 |
| Taxes and dues | 4,016 | 3,589 | 7,605 | 498 | 1,366 |
| Guarantee commission | 21,569 | - | 21,569 | 375 | 373 |
| Deemed dividend | 40,126 | 2,065 | 42,191 | 9,710 | 10,210 |
| | | | | | |

22. Income tax (cont'd)

| | | Accum | lated | temporary dif | ference | es | De | ferred tax as | sets (li | abilities) |
|---------------------------------------------------------------|---|----------------|-------|---------------|---------|----------------|------|---------------|----------|-------------------|
| | _ | Jan. 1, 2021 | Net | t changes | Dec | . 31, 2021 | Dec. | . 31, 2020 | Dec | . 31, 2021 |
| Gains from assets contributed Transfer price | ₩ | 1,529 7.423 | ₩ | - | ₩ | 1,529 7,423 | ₩ | 370 | ₩ | 370 |
| Capital lease | | 138 | | 45 | | 183 | | 34 | | 44 |
| Commission fees | | 7,414 | | 68 | | 7,482 | | 573 | | 590 |
| Others | _ | (186,013) | | (9,680) | | (195,693) | | (45,015) | | (47,358) |
| | _ | 246,964 | | (449,543) | | (202,579) | | 43,778 | | (6,317) |
| Tax credits Charged income tax due to non-recirculation | • | | | | | | | 38,934 | | 44,289 (1,833) |
| | | | | | | | ₩ | 82,712 | ₩ | 36,139 |
| Reflected on the statements of financial position: | | | | | | | | | | |
| Deferred tax assets | | | | | | | | 140,041 | | 98,263 |
| Deferred tax liabilities | | | | | | | | 57,329 | | 62,124 |
| Deferred tax assets, net | | | | | | | ₩ | 82,712 | ₩ | 36,139 |

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

| | | 2021 | 2020 |
|-----------------------------------|--------------|---------|-----------|
| Investment in subsidiaries, | | | |
| associates or joint ventures (*1) | \mathbb{W} | 191,847 | ₩ 264,839 |
| Commissions and others | | 29,411 | 29,403 |
| | ₩ | 221,258 | ₩ 294,242 |

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

23. Related party disclosures

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

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

| | 2021 | | | | | | 2020 | | | | | |
|-------------------------------------------|------|-----------|---|---------|---|---------|------|-----------|---|---------|---|---------|
| | | Sales | P | urchase | | Service | | Sales | Р | urchase | | Service |
| Associates: | | | | | | | | | | | | |
| Kernhem B.V | ₩ | 1,972 | ₩ | - | ₩ | - | ₩ | 1,088 | ₩ | - | ₩ | - |
| ADA OII LLP | | 327 | | - | | - | | 319 | | - | | - |
| Musandam Power Company SAOC | | 31 | | - | | 3 | | 72 | | - | | - |
| LX Pantos Philippines, Inc. (formerly, | | | | | | | | | | | | |
| Pantos Logistics Philippines Inc.) | | 3,082 | | - | | 2,059 | | 3,806 | | - | | 1,492 |
| POSCO-PWPC(Poland Wroclaw | | | | | | | | | | | | |
| Processing Center) | | 918 | | - | | - | | 209 | | - | | - |
| Bio Friends INC. | | 1,392 | | - | | - | | - | | - | | - |
| | | 7,722 | | - | | 2,062 | | 5,494 | | - | | 1,492 |
| Other related parties (*1): | | | | | | | | | | | | |
| LG Corp. | | 572 | | - | | 9,996 | | 4 | | - | | 10,707 |
| LG Electronics Inc. and its subsidiaries | | 7,516,838 | | 45,641 | | 9,111 | | 5,575,189 | | 66,536 | | 7,804 |
| LG Chem. Ltd. and its subsidiaries | | 1,552,070 | | 96,234 | | 290 | | 953,301 | | 57,801 | | 1,031 |
| LG Display Co., Ltd. and its subsidiaries | | 286,689 | | 574,645 | | 2,866 | | 261,007 | | 381,200 | | 255 |
| Others | | 218,518 | | 390 | | 44,723 | | 130,521 | | 751 | | 42,602 |
| | | 9,574,687 | | 716,910 | | 66,986 | | 6,920,022 | | 506,288 | | 62,399 |
| | ₩ | 9,582,409 | ₩ | 716,910 | ₩ | 69,048 | ₩ | 6,925,516 | ₩ | 506,288 | ₩ | 63,891 |

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

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

| | | | 2021 | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------|-------------------|------------------|----------------|
| | Accounts receivable | Loans | Other receivables | Accounts payable | Other payables |
| Corporations that have significant influence on the Group at the end of the current year: | | | | | |
| LX Corp. | ₩ - | ₩ - | | ₩ - | ₩ 4,065 |
| | | | 2 | | 4,065 |
| Associates: | | | | | |
| ADA OII LLP | - | 11,246 | 26 | - | - |
| Kernhem B.V | - | 47,210 | 4,847 | - | - |
| KM Resources Ltd.(Rapu-Rapu) POSCO-PWPC(Poland Wroclaw | - | 9,279 | - | - | - |
| Processing Center) POSCO-IPPC(India Pune Processing | 904 | - | - | - | - |
| Center) | - | - | - | - | 1 |
| Gansu Wuwei Cogeneration Power Plant | - | - | 1 | - | - |
| LX Pantos Philippines, Inc (formerly, Pantos Logistics Philippines Inc.) Inner Mongolia Diamond Coal Indusrty Co., Ltd (formerly, Mongolia Boyuan | 121 | 2,785 | 24 | 96 | - |
| Coal(Wantugou)) | - | - | 75,791 | - | - |
| BIO Friends INC. | 221 | - | | | <u> </u> |
| | 1,246 | 70,520 | 80,689 | 96 | 1 |
| Other related parties: | | | | | |
| LG Corp. | - | - | 6,846 | - | 8,130 |
| LG Electronics Inc. and its subsidiaries | 526,053 | - | 9,757 | 4,753 | 33,267 |
| LG Chem. Ltd. and its subsidiaries | 191,105 | - | 5,708 | 2,652 | 33,241 |
| LG Display Co., Ltd. and its subsidiaries | 36,144 | - | 23,786 | 93,052 | 3,057 |
| Others | 23,493 | | 4,421 | 108 | 11,414 |
| | 776,795 | | 50,518 | 100,565 | 89,109 |
| | ₩ 778,041 | ₩ 70,520 | ₩ 131,209 | ₩ 100,661 | ₩ 93,175 |

23. Related party disclosures (cont'd)

| | | | | | 2020 | | | | |
|--------------------------------------------------------------------------------------------------------------------|---|---------------------|---|--------|----------------|-----|------------------|-----|-------------|
| | - | ccounts ceivable | | Loans | Other receivab | les | Accounts payable | Oth | er payables |
| Corporations that have significant influence on the Group at the end of the current year: | | | | | | | | | |
| LG Corp. | ₩ | | ₩ | | , | 957 | ₩ - | ₩ | 8,403 |
| | | - | | | 6,9 | 957 | | | 8,403 |
| Associates: | | | | | | | | | |
| ADA OII LLP | | - | | 10,754 | - | 650 | - | | - |
| Kernhem B.V | | - | | 43,328 | 7,9 | 984 | - | | - |
| KM Resources Ltd.(Rapu-Rapu) | | - | | 4,352 | | - | - | | - |
| POSCO-PWPC(Poland Wroclaw | | 197 | | | | | | | |
| Processing Center) POSCO-IPPC(India Pune Processing | | 197 | | - | | - | - | | - |
| Center) | | - | | - | | - | - | | 1 |
| Musandam Power Company SAOC | | - | | - | | 2 | - | | - |
| GS HP Sunflower Village Int'l Corp. Inner Mongolia Diamond Coal Indusrty Co., Ltd (formerly, Mongolia Boyuan | | - | | - | | 49 | - | | - |
| Coal(Wantugou)) LX Pantos Philippines, Inc (formerly, | | | | | 5,0 | 017 | | | |
| Pantos Logistics Philippines Inc.) | | 174 | | 2,557 | | 15 | 182 | | - |
| | | 371 | | 60,991 | 13,7 | 717 | 182 | | 1 |
| Other related parties: | | | | | | | | | |
| LG Electronics Inc. and its subsidiaries | | 537,503 | | - | 65,3 | 387 | 4,212 | | 5,778 |
| LG Chem. Ltd. and its subsidiaries | | 99,482 | | - | 4,4 | 130 | 168 | | 4,909 |
| LG Display Co., Ltd. and its subsidiaries | | 22,265 | | - | 4,9 | 997 | 81,001 | | 360 |
| Others | | 11,009 | | - | 6,0 |)96 | 345 | | 16,030 |
| | | 670,259 | | - | 80,9 | 910 | 85,726 | | 27,077 |
| | ₩ | 670,630 | ₩ | 60,991 | ₩ 101,5 | 584 | ₩ 85,908 | ₩ | 35,481 |

The Group recognized allowance for doubtful accounts of W48,819 million as of December 31, 2021 (2020: W53,402 million) for the trade and other receivable from the related parties.

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

| | 2021 | | | | | | | | | |
|---------------------------------------------------------------------------------------------|------|----------|---------|-------------|-------|-------|------------|-----|--|--|
| | Di | vidends | Investm | ent in cash | Loans | | Collection | | | |
| Associates: | | <u> </u> | | | | | | | | |
| ADA OII LLP | ₩ | - | ₩ | - | ₩ | - | ₩ | 466 | | |
| GS HP Sunflower Village Int'l Corp. | | 50 | ₩ | - | | - | | - | | |
| KM Resources Ltd.(Rapu-Rapu) | | - | | - | | 4,303 | | - | | |
| Musandam Power Company SAOC | | 1,041 | | - | | - | | - | | |
| Gansu Wuwei Cogeneration Power Plant | | 4,382 | | - | | - | | - | | |
| Inner Mongolia BDSD Chemical Co., Ltd | | 5,089 | | - | | - | | - | | |
| Inner Mongolia Diamond Coal Indusrty Co., Ltd (formerly, Mongolia Boyuan Coal(Wantugou)) | | 70,135 | | - | | - | | - | | |
| Bio Friends INC. | | - | | 2,720 | | | | - | | |
| | | 80,697 | | 2,720 | | 4,303 | | 466 | | |
| Other related parties: | | | | | | | | | | |
| LG Chem. Ltd. and its subsidiaries | | 453 | | - | | | | - | | |
| | | 453 | | | | | | - | | |
| | ₩ | 81,150 | ₩ | 2,720 | ₩ | 4,303 | ₩ | 466 | | |

| | | | | 20 | 20 | | | |
|-----------------------------------------------|---|-----------|----------|-------------|----|-------|---|------------|
| | | Dividends | Investme | ent in cash | | Loans | | Collection |
| Associates: | | | | | | | | |
| GS HP Sunflower Village Int'l Corp. | ₩ | 183 | ₩ | - | ₩ | - | ₩ | - |
| KM Resources Ltd.(Rapu-Rapu) | | - | | - | | 4,798 | | - |
| Musandam Power Company SAOC | | 1,079 | | - | | - | | - |
| Gansu Wuwei Cogeneration Power Plant | | 2,490 | | - | | - | | - |
| LX Pantos Philippines, Inc. (formerly, Pantos | | | | | | | | |
| Logistics Philippines Inc.) | | - | | - | | 1,523 | | - |
| | ₩ | 3,752 | ₩ | - | ₩ | 6,321 | ₩ | - |

23. Related party disclosures (cont'd)

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

| | | 2021 | | 2020 |
|------------------------------|--------------|--------|---|--------|
| Short-term employee benefits | \mathbb{W} | 14,358 | ₩ | 9,584 |
| Pension benefits | | 2,745 | | 4,439 |
| | \mathbb{W} | 17,103 | ₩ | 14,023 |

24. Commitments and contingencies

24.1 Guarantees provided

| | Financial institution | Object | Limit | Used |
|--------------------------------|-----------------------|---------------|------------|------------|
| Subsidiaries: | | | | |
| | KEXIM and | | | |
| PT.Ganda Alam Makmur (*1) | others | Local finance | USD 40,500 | USD 40,500 |
| Associates: | | | | |
| | Bank Muscat | | | |
| Musandam Power Company S.A.O.C | Oman | Local finance | OMR 941 | OMR 941 |

(*1) The Parent Company is contingently liable for payment guarantees issued on behalf of a subsidiary, PT. Ganda Alam Markmur (GAM) and each stockholder of this subsidiary is jointly liable to provide additional capital related to guarantees.

24.2 Major agreements such as opening letters of credit

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

| Description | Financial institution | Conti | ract amount |
|-------------------|-----------------------------------|-------|-------------|
| Bills bought | Korea Development Bank and others | USD | 60,500 |
| Letter of credits | Shinhan Bank and others | USD | 93,530 |
| Payment guarantee | KB Kookmin Bank and others | USD | 90,500 |
| | | AUD | 1,000 |
| | | KRW | 39,692 |
| Bank overdrafts | Hana Bank and others | KRW | 21,400 |
| | | GBP | 800 |
| | | EUR | 4,000 |
| | | CNY | 100,000 |
| | | INR | 120,000 |
| Line of credit | Hana Bank China and others | USD | 252,400 |
| | | EUR | 7,000 |
| | | AUD | 22,000 |
| | | CNY | 200,000 |
| | | IDR | 677,425,000 |
| | | VND | 450,920,000 |
| | | KRW | 101,800 |
| B2B purchase loan | Shinhan Bank | KRW | 17,000 |
| Trade financing | Woori Bank and others | USD | 1,239,400 |
| | | JPY | 13,100,000 |
| | | AUD | 50,692 |
| | | CNY | 210,000 |
| | | KRW | 129,800 |
| | | USD | 1,736,330 |
| | | KRW | 309,692 |
| | | GBP | 800 |
| T .(1) | | AUD | 73,692 |
| Total | | EUR | 11,000 |
| | | JPY | 13,100,000 |
| | | | 510,000 |
| | | | 120,000 |
| | | VND | 450,920,000 |
| | | IDR | 677,425,000 |

24.3 Guarantees received

Guarantees received by the Group as of December 31, 2021 and 2020 are as follows (Korean won in millions and foreign currencies in thousands):

| 2021 | Financial institution | Guarantee amount | Description |
|-------|-----------------------|------------------|---------------------------------------------------------------------------------------|
| Bonds | Hana Bank and others | | KRW 50,690, USD 11,798, EUR 618, HKD 7,756, SGD 757, VND 317,440,000, OMR 941, IDR |
| | | ₩ 91,457 | 55,969,500 |
| | | | |
| 2020 | Financial institution | Guarantee amount | Description |
| Bonds | Hana Bank and others | | KRW 54,098, USD 8,186, EUR 669, HKD 6,314, |
| | | | SGD 727, AUD 22, PHP 48,600, VND 60,530,000, |
| | | ₩ 72,982 | OMR 942, IDR 12,459,532 |

24.4 Pledged notes and checks

The Group pledged 18 notes and 9 checks as collateral to its customers, creditors and guarantors related to various guarantees and borrowings as of December 31, 2021.

24.5 License agreement

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

24.6 Joint and several liability on guarantees

The Parent Company and newly incorporated entity, LF Corp. (formerly LX Fashion Corporation), are jointly and severally liable for the obligations of LXI existing prior to the spin-off.

24.7 Pending lawsuits

The Group is a defendant in various lawsuits with claims aggregating to #14,419 million, and as of December 31, 2021, the outcomes of litigation are not reliably determinable. However, in some litigation cases, it was determined that there is a possibility of an outflow of resources and that the effect can be measured reliably. In this regard, the effect is already reflected in the consolidated financial statements (see Note 13).

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

24.8 Other commitments

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

| Type of commitment | Counterparty | Description |
|-----------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Put option | Inner Mongolia BDSD Chemical Co., Ltd. | As of August 27, 2013, the Group signed a put option contract with Inner Mongolia BERUN Holding Group Co., Ltd. to acquire a 29% of equity interests of Inner Mongolia BDSD Chemical Co., Ltd., which has a coal chemical plant in Inner Mongolia, China. |
| Put option | Gansu Wuwei Cogeneration Power Plant | As of October 10, 2015, the Group signed a put option contract with Gansu Province Electricity Investment Group Co., Ltd. to acquire 30% of equity interests of Gansu Wuwei Cogeneration Power Plant for a capital increase. |
| Put option | Bio Friends INC. | As of May 20, 2021, the Group signed a put option contract with Bio Friends INC. and its stakeholder, Won-Jun Jo, to acquire equity shares of Bio Friends INC. |
| Put option | Pablo Air Co., Ltd. | As of December 1, 2021, the Group signed two contracts for the acquisition of convertible preferred stocks of Pablo Air Co., Ltd. with Pablo Air Co., Ltd. and its stakeholder, Young-Jun Kim, and signed a put option contract for the new stocks to be acquired. |

24.9 Uncertainty regarding the influence of COVID-19

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

The accounts that are influenced by Covid-19 are mostly the recoverability of accounts receivable (see Note 11), impairment of the investment in associates (see Note 8, 21) and so on. The Group has prepared the consolidated financial statements by reasonably estimating the impact of Covid-19. However, the spread or termination of Covid-19 may affect the Group's estimation and assumptions, but the ultimate therefrom is not reasonably estimable as of December 31, 2020.

24.10 Uncertainty regarding the Russia-Ukraine war

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

25. Financial risk management objectives and policies

The Group'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 Group's operations. The Group has trade receivables, loans and other receivables, and cash and short-term deposits that derive directly from its operations. The Group 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 Group 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 Group's policy that no trading in derivatives for speculative purposes is to be undertaken.

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

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

The analysis excludes the impact of movements in market variables on the carrying value of pension and other post-retirement obligations, provisions and on the non-financial assets and liabilities of foreign operations. The following assumptions have been made in calculating the sensitivity analyses:

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

25.1.1 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 Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with floating interest rates.

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

The Group 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 Group's profit before tax is affected through the impact on floating rate borrowings as follows. The Group's exposure to interest rate risk is considered to have an immaterial impact on equity (Korean won in millions).

| | | 20 | 21 | | | 20 | 20 | |
|-------------------|--------|-----------|-------|------------|-------|-----------|-----|--------------|
| | Increa | ise by 1% | Decre | ease by 1% | Incre | ase by 1% | Dec | crease by 1% |
| Interest income | ₩ | 2,112 | ₩ | (2,112) | ₩ | 3,311 | ₩ | (3,311) |
| Interest expenses | | (1,458) | | 1,458 | | (2,534) | | 2,534 |
| Net effect | ₩ | 654 | ₩ | (654) | ₩ | 777 | ₩ | (777) |

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

Interest rate benchmark reform

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

| · | | | (Korean won in millions) |
|----------------|---------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| | | 2021 | |
| Interest rate | | Valuation amount | Average maturity (Year) |
| LIBOR USD (6M) | \mathbb{W} | 7,428 | 12.7 |
| LIBOR USD (3M) | | 21,984 | 0.1 |
| | | 2020 | |
| Interest rate | | Valuation amount | Average maturity (Year) |
| LIBOR USD (6M) | ₩ | (8,575) | 13.7 |
| LIBOR USD (3M) | | (8,629) | 0.2 |
| | LIBOR USD (6M) LIBOR USD (3M) Interest rate LIBOR USD (6M) | LIBOR USD (6M) W LIBOR USD (3M) | Interest rateValuation amountLIBOR USD (6M)₩7,428LIBOR USD (3M)21,98420202020Interest rateValuation amountLIBOR USD (6M)₩(8,575) |

25.1.2 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 Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities (when revenue or expense are denominated in a different currency from the Group's functional currency) and the Group's net investments in foreign subsidiaries.

The Group is exposed to foreign exchange risk arising from international operations and transactions with different foreign currencies. The most prevalent foreign currencies used are the US Dollar, Euro, Japanese Yen and others.

25.1.2 Foreign currency risk (cont'd)

The Group manages its foreign currency risk for each subsidiary. Each subsidiary manages its foreign currency risk by entering into hedge agreements such as, a forward contract or foreign currency loans with the Group. Exposure to currency translation risk is largely dependent on the accounting standards of the local jurisdiction and the translation methods required by such jurisdiction.

Foreign currency sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in the exchange rate, with all other variables held constant, on the Group's profit before tax (due to changes in the fair value of monetary assets and liabilities including non-designated foreign currency derivatives) (Korean won in millions):

| | 20 |)21 | 20 | 20 |
|-------------------------------------------------------------------------------------------------------|----------------------|-----------------------------|---------------------|---------------------|
| | Increase by 10% | Decrease by 10% | Increase by 10% | Decrease by 10% |
| Gain (loss) on foreign currency translation Gain (loss) on valuation of derivative financial | ₩ 61,837 | ₩ (61,837) | ₩ 14,713 | ₩ (14,713) |
| instruments Net effect (*1) | (20,702) ₩ 41,135 | <u>20,702</u> ₩ (41,135) | (3,139) ₩ 11,574 | 3,139 ₩ (11,574) |

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

25.2 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 Group is exposed to credit risk from its operating activities (primarily for trade receivables and loan notes) and from its financing activities, including deposits with banks and financial institutions, foreign exchange transactions and other financial instruments.

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

| | | 2021 | 2020 |
|--------------------------------------------------|---|-----------|-------------|
| Cash equivalents (*1) | ₩ | 838,527 | ₩ 687,920 |
| Short-term financial instruments | | 20,787 | 67,837 |
| Equity instruments held for long-term: | | 151,681 | 135,185 |
| Financial assets at fair value through profit or | | | |
| loss | | 18,209 | 14,082 |
| Financial assets at fair value through | | | |
| OCI | | 133,472 | 121,103 |
| Trade accounts receivable | | 1,653,459 | 1,298,738 |
| Other accounts receivable (*2) | | 263,333 | 187,346 |
| Long-term loans | | 22,350 | 24,492 |
| Other financial assets (*2) | | 259,790 | 238,710 |
| | ₩ | 3,209,927 | ₩ 2,640,228 |

(*1) Excludes cash on hand

(*2) Excludes other receivables in relation to derivatives

25.3 Maturity profile of financial assets

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

| | | | | | | 2021 | | | | |
|--------------------------------------------------------------------------------------------|--------|-------------------------------------------------|---|---------------------------------|---|----------------------------------|---|---------------------|---|-------------------------------------------|
| | L | ess than | | 1 to 3 | | 3 to 5 | M | ore than | | |
| | | 1 year | | years | | years | 5 | 5 years | | Total |
| Cash and cash equivalents | ₩ | 841,883 | ₩ | - | ₩ | - | ₩ | - | ₩ | 841,883 |
| Short-term financial instruments | | 20,787 | | - | | - | | - | | 20,787 |
| Trade accounts receivable | | 1,651,200 | | 2,259 | | - | | - | | 1,653,459 |
| Other accounts receivable | | 265,138 | | 137 | | - | | - | | 265,275 |
| Long-term loans | | - | | 22,350 | | - | | - | | 22,350 |
| Other financial assets | | 45,962 | | 39,890 | | 11,102 | | 162,836 | | 259,790 |
| | ₩ | 2,824,970 | ₩ | 64,636 | ₩ | 11,102 | ₩ | 162,836 | ₩ | 3,063,544 |
| | | | | | | | | | | |
| | | | | | | 2020 | | | | |
| | — | ess than | | 1 to 3 | | 2020 3 to 5 | M | ore than | | |
| | L | ess than 1 year | | 1 to 3 years | | | | ore than 5 years | | Total |
| Cash and cash equivalents | L ₩ | | W | | ₩ | 3 to 5 | | | W | Total 689,988 |
| Cash and cash equivalents Short-term financial instruments | | 1 year | ₩ | | ₩ | 3 to 5 | 5 | | ₩ | |
| • | | <u>1 year</u> 689,988 | ₩ | | ₩ | 3 to 5 | 5 | | ₩ | 689,988 |
| Short-term financial instruments | | <u>1 year</u> 689,988 67,837 | ₩ | years - - | ₩ | 3 to 5 years - | 5 | ō years - - | ₩ | 689,988 67,837 |
| Short-term financial instruments Trade accounts receivable | | <u>1 year</u> 689,988 67,837 1,295,023 | ₩ | <u>years</u> - - 3,334 | ₩ | 3 to 5 years - | 5 | ō years - - | ₩ | 689,988 67,837 1,298,738 |
| Short-term financial instruments Trade accounts receivable Other accounts receivable | | <u>1 year</u> 689,988 67,837 1,295,023 | ₩ | years - 3,334 501 | ₩ | 3 to 5 years - - 381 | 5 | ō years - - | ₩ | 689,988 67,837 1,298,738 193,442 |

25.4 Liquidity risk

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

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

| | | | 2021 | | |
|-------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------|------------------------------|--------------------------|------------------------------------------------------------------------------------|
| | Less than | 1 to 3 | 3 to 5 | More than | |
| | 1 year | years | years | 5 years | Total |
| Trade accounts payable | ₩ 1,619,765 | -₩ | ₩ - | ₩ - | ₩ 1,619,765 |
| Other accounts payable | 345,214 | - | - | - | 345,214 |
| Borrowings | 604,646 | 140,300 | 37,564 | 165,721 | 948,231 |
| Bonds payable | 139,981 | 119,831 | 69,819 | 79,812 | 409,443 |
| Lease liabilities | 77,774 | 83,097 | 30,194 | 20,811 | 211,876 |
| Other financial liabilities | 246,637 | 10,574 | - | - | 257,211 |
| | ₩ 3,034,017 | ₩ 353,802 | ₩ 137,577 | ₩ 266,344 | ₩ 3,791,740 |
| | | | 2020 | | |
| | Less than | 1 to 3 | 3 to 5 | More than | |
| | | | | | |
| | 1 year | years | years | 5 years | Total |
| Trade accounts payable | 1 year ₩ 1,547,820 | | years ₩ - | <u>5 years</u> ₩ - | Total ₩ 1,547,820 |
| Trade accounts payable Other accounts payable | , | ₩ - | | | |
| | ₩ 1,547,820 | ₩ - | ₩ - | | ₩ 1,547,820 |
| Other accounts payable | ₩ 1,547,820 253,885 | ₩ - - 156,998 | ₩ - - 76,241 | ₩ - | ₩ 1,547,820 253,885 |
| Other accounts payable Borrowings | ₩ 1,547,820253,885182,473 | ₩ - 156,998 259,608 | ₩ - - 76,241 49,826 | ₩ - 273,328 | ₩ 1,547,820253,885689,040 |
| Other accounts payable Borrowings Bonds payable | ₩ 1,547,820 253,885 182,473 149,961 | ₩ - 156,998 259,608 71,244 | ₩ - - 76,241 49,826 | ₩ - 273,328 49,872 | ₩ 1,547,820 253,885 689,040 509,267 |

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

25.5 Capital management

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

The Group monitors capital using a gearing ratio including debt and net debt ratios. The Group includes within total borrowings, interest bearing loans and borrowings, trade and other payables.

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

| | | 2021 | 2020 | | |
|---------------------------------|----------------|-----------|-------------|--|--|
| Total liabilities (A) | \overline{W} | 4,362,645 | ₩ 3,637,611 | | |
| Total equity (B) | | 2,384,244 | 1,758,331 | | |
| Cash and cash equivalents (C) | | 841,883 | 689,988 | | |
| Total borrowings (D) | | 1,569,550 | 1,383,514 | | |
| Debt ratio (A / B) | | 182.98% | 206.88% | | |
| Net borrowing ratio ((D-C) / B) | | 30.52% | 39.50% | | |

26. Fair value of financial instruments

26.1 Fair value of financial instruments

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

| | 2021 | | | | | 2020 | | | |
|--------------------------------------------------------------------------------------|------|-------------------|-----------------|----------------|------------|-------------------|---|-------------------|--|
| | B | ook value | | Fair value | Book value | | F | air value | |
| Financial assets: Financial assets measured at amortized cost: | | | | | | | | | |
| Cash and cash equivalents Short-term financial instruments | ₩ | 724,175 20,787 | ₩ | 724,175 20,787 | ₩ | 456,715 67,837 | ₩ | 456,715 67,837 | |
| Trade accounts receivable | | 1,653,459 | | 1,653,459 | | 1,298,738 | | 1,298,738 | |
| Long-term loans | | 22,350 | | 22,350 | | 24,492 | | 24,492 | |
| Other accounts receivable | | 263,334 | | 263,334 | | 187,346 | | 187,346 | |
| Other financial assets | | 259,203 | | 259,203 | | 238,710 | | 238,710 | |
| | | 2,943,308 | | 2,943,308 | | 2,273,838 | | 2,273,838 | |
| Financial assets recognized at fair value: | | <u> </u> | | i | | | | <u> </u> | |
| Cash and cash equivalents Other accounts receivable related | | 117,708 | | 117,708 | | 233,273 | | 233,273 | |
| derivatives | | 1,941 | | 1,941 | | 6,096 | | 6,096 | |
| Equity instruments held for long-term | | 151,681 | | 151,681 | | 135,185 | | 135,185 | |
| Other financial assets | | 587 | | 587 | | - | | - | |
| | | 271,917 | | 271,917 | | 374,554 | | 217,570 | |
| | ₩ | 3,215,225 | ₩ | 3,215,225 | ₩ | 2,648,392 | ₩ | 2,176,167 | |
| | | 2 | 02 [.] | | 2020 | | | | |
| | B | ook value | | Fair value | Bo | ook value | F | air value | |
| Financial liabilities: Financial liabilities measured at amortized cost: | | | | | | | | | |
| Borrowings | ₩ | 759,556 | ₩ | 759,556 | ₩ | 613,370 | ₩ | 613,370 | |
| Bonds payable | | 269,462 | | 269,462 | | 359,307 | | 359,307 | |
| Current portion of bonds and long-term borrowings | | 328,656 | | 328,656 | | 225,630 | | 225,630 | |
| Other financial liabilities | | 2,423,377 | | 2,423,377 | | 2,142,608 | | 2,142,608 | |
| | | 3,781,051 | | 3,781,051 | | 3,340,915 | | 3,340,915 | |
| Financial liabilities recognized at fair value: Other accounts payable related | | | | | | | | | |
| derivatives | | 1,240 | | 1,240 | | 7,116 | | 7,116 | |
| Others | | 9,449 | | 9,449 | | 17,212 | | 17,212 | |
| | | 10,689 | | 10,689 | | 24,328 | | 24,328 | |
| | ₩ | 3,791,740 | ₩ | 3,791,740 | ₩ | 3,365,243 | ₩ | 3,365,243 | |

26.2 Fair value measurement of assets and liabilities on the statements of financial position

The Group 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, 2021 and 2020, the Group holds assets and liabilities measured at fair value on the statements of financial position, and assets and liabilities for which the fair values were disclosed as following (Korean won in millions):

| | 2021 | | | | | | |
|-------------------------------------------------------------|---------|--------|---|---------|---------|-----------|--|
| | Level 1 | | | Level 2 | Level 3 | | |
| Assets and liabilities measured at fair value: | | | | | | | |
| Financial assets at fair value through profit or loss: | | | | | | | |
| Cash and cash equivalents | ₩ | - | ₩ | 117,708 | ₩ | - | |
| Other accounts receivable related to derivatives | | - | | 198 | | - | |
| Other financial assets related to derivatives | | - | | 587 | | | |
| Long-term equity securities (*1) | | 2,470 | | - | | 15,740 | |
| Financial assets at fair value through OCI: | | | | | | | |
| Long-term equity securities (*1) | | 13,690 | | - | | 117,626 | |
| Financial liabilities at fair value through profit or loss: | | | | | | | |
| Other accounts payable related to derivatives | | - | | 1,240 | | - | |
| Derivatives related to hedge accounting: | | | | | | | |
| Other financial assets | | - | | 1,743 | | - | |
| Other financial liabilities | | - | | 9,449 | | - | |
| Assets and liabilities for which | | | | | | | |
| fair values are disclosed: | | | | | | | |
| Cash and cash equivalents | ₩ | 3,356 | ₩ | 720,819 | ₩ | - | |
| Short-term financial instruments | | - | | 20,014 | | 773 | |
| Trade accounts receivable | | - | | - | | 1,653,459 | |
| Long-term loans | | - | | - | | 22,350 | |
| Other accounts receivable | | - | | - | | 263,334 | |
| Other financial assets | | - | | 9,988 | | 249,215 | |
| Borrowings | | - | | 759,556 | | - | |
| Bonds payable | | - | | 269,462 | | - | |
| Current portion of bonds payable | | | | | | | |
| and long-term borrowings | | - | | 328,656 | | - | |
| Other financial liabilities | | - | | - | | 2,423,377 | |

(*) 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 were no movements between the levels of the fair value hierarchy for the year ended December 31, 2021.

26.2 Fair value measurement of assets and liabilities on the statements of financial position (cont'd)

| | 2020 | | | | | | | |
|-------------------------------------------------------------|------|--------|----|---------|---|-----------|--|--|
| | Le | evel 1 | Le | vel 2 | L | evel 3 | | |
| Assets and liabilities measured at fair value: | | | | | | | | |
| Financial assets at fair value through profit or loss: | | | | | | | | |
| Cash and cash equivalents | ₩ | - | ₩ | 233,273 | ₩ | - | | |
| Other accounts receivable related to derivatives | | - | | 6,096 | | - | | |
| Equity securities (*1) | | - | | - | | 9,303 | | |
| Financial assets at fair value through OCI: | | | | | | | | |
| Equity securities (*1) | | 10,953 | | - | | 108,109 | | |
| Financial liabilities at fair value through profit or loss: | | | | | | | | |
| Other accounts payable related to derivatives | | - | | 578 | | - | | |
| Derivatives related to hedge accounting: | | | | | | | | |
| Other financial assets | | - | | 6,538 | | - | | |
| Other financial liabilities | | - | | 17,212 | | - | | |
| Assets and liabilities for which | | | | | | | | |
| fair values are disclosed: | | | | | | | | |
| Cash and cash equivalents | ₩ | 2,068 | ₩ | 454,647 | ₩ | - | | |
| Short-term financial instruments | | - | | 62,725 | | 5,112 | | |
| Trade accounts receivable | | - | | - | | 1,298,738 | | |
| Long-term loans | | - | | - | | 24,492 | | |
| Other accounts receivable | | - | | - | | 187,346 | | |
| Other financial assets | | - | | 3,556 | | 235,154 | | |
| Borrowings | | - | | 613,370 | | - | | |
| Bonds payable | | - | | 359,307 | | - | | |
| Current portion of bonds payable | | | | | | | | |
| and long-term borrowings | | - | | 225,630 | | - | | |
| Other financial liabilities | | - | | - | | 2,142,608 | | |

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

Valuation method and interest rate used to determine fair value

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

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

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

27. Statements of cash flows

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

| | | 2021 | | 2020 |
|------------------------------------------------------|---|----------|---|-----------|
| Depreciation | ₩ | 146,781 | ₩ | 129,442 |
| Amortization | | 40,466 | | 34,181 |
| Pension benefits | | 19,103 | | 18,791 |
| Bad debt expenses | | 20,473 | | 1,127 |
| Interest income | | (10,213) | | (10,452) |
| Gain on foreign currency translation | | (37,678) | | (47,420) |
| Interest expenses | | 34,101 | | 42,754 |
| Loss on foreign currency translation | | 30,158 | | 47,668 |
| Loss (gain) on disposal of investments in associates | | 640 | | (336,764) |
| Impairment loss on investments in associates | | - | | 9,611 |
| Impairment loss on intangible assets | | - | | 13,963 |
| Share of profit of associates | | (92,778) | | (21,772) |
| Share of loss of associates | | 2,455 | | 8,861 |
| Income tax expenses | | 194,365 | | 94,257 |
| Gain on exemption from debt | | (14,659) | | (7,067) |
| Dividend income | | (7,285) | | (4,376) |
| Increase in provisions (reversal) | | 17,803 | | (833) |
| Others | | 397 | | (11,448) |
| | ₩ | 344,129 | ₩ | (39,477) |

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

| | | 2021 | | 2020 |
|--------------------------------------------------|---|-----------|---|-----------|
| Increase in trade accounts receivable | ₩ | (195,889) | ₩ | (314,616) |
| Decrease (increase) in other accounts receivable | | (11,288) | | 95,126 |
| Increase in advance payments | | (55,029) | | (31,190) |
| Increase in inventories | | (339,138) | | (128,780) |
| Increase in other operating assets | | (121,583) | | (11,193) |
| Increase (decrease) in trade accounts payable | | (111,365) | | 426,667 |
| Increase (decrease) in other accounts payable | | 103,759 | | (45,489) |
| Increase (decrease) in advance received | | 45,938 | | (6,857) |
| Pension benefits paid | | (9,177) | | (8,755) |
| Decrease in plan assets | | (17,445) | | (14,321) |
| Decrease in provisions | | (8,903) | | (7,335) |
| Increase in other operating liabilities | | 100,766 | | 23,048 |
| | ₩ | (619,354) | ₩ | (23,695) |

27. Statements of cash flows (cont'd)

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

| | 2021 | 2020 | | |
|--------------------------------------------------------------------------------------------|--------------------|---------------|--|--|
| Other accounts receivable related to disposal of investment assets | ₩ - | ₩ 9,325 | | |
| Other accounts receivable related to disposal of property, plant and equipment | (185) | 9 | | |
| Other accounts payable related to acquisition of property, plant and equipment | (234) | 510 | | |
| Other accounts receivable related to acquisition of intangible assets | (11,825) | 10,245 | | |
| Transfer construction-in-process (property, plant and equipment) to account | 11,555 | 40,962 | | |
| Transfer construction-in-process (intangible assets) to account | 822 | 3,219 | | |
| Transfer inventories to property, plant and equipmen Acquisition of right-of-use assets | t 8,512 129,921 | 68 146,254 | | |

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

| | 2021 | | | | | | | | | | | | |
|-----------------------|-------------|------------------|------------------|------------|-------------|--|--|--|--|--|--|--|--|
| | | Non-cash changes | | | | | | | | | | | |
| | | . . | oreign rrency | | | | | | | | | | |
| | Jan. 1 | 0 | , | thers (*1) | Dec. 31 | | | | | | | | |
| Short-term borrowings | ₩ 106,804 | ₩ 297,825 ₩ | 11,342 ₩ | - | ₩ 415,971 | | | | | | | | |
| Long-term borrowings | 582,236 | (49,785) | 12,554 | (12,744) | 532,261 | | | | | | | | |
| Bonds payable | 509,267 | (100,126) | - | 302 | 409,443 | | | | | | | | |
| Lease liabilities | 186,207 | (98,149) | 5,903 | 117,915 | 211,876 | | | | | | | | |
| | ₩ 1,384,514 | ₩ 49,765 ₩ | 29,799 ₩ | 105,473 | ₩ 1,569,551 | | | | | | | | |

(*1) Including the decrease of liabilities owing to the exemption of debt .

| | 2020 | | | | | | | | | | | |
|-----------------------|------|-----------|---------------|------------|----------|-------------|---|---------|---|-----------|--|--|
| | | | | | Non-cash | | | | | | | |
| | | | Cash flows in | | | Foreign | | | | | | |
| | | | f | financing | | currency | | | | | | |
| | | Jan. 1 | | activities | | translation | | Others | | Dec. 31 | | |
| Short-term borrowings | ₩ | 136,375 | ₩ | (12,537) | ₩ | (10,005) | ₩ | (7,029) | ₩ | 106,804 | | |
| Long-term borrowings | | 788,885 | | (187,643) | | (22,470) | | 3,464 | | 582,236 | | |
| Bonds payable | | 389,528 | | 119,359 | | - | | 380 | | 509,267 | | |
| Lease liabilities | | 147,204 | | (93,969) | | (70) | | 133,042 | | 186,207 | | |
| | ₩ | 1,461,992 | ₩ | (174,790) | ₩ | (32,545) | ₩ | 129,857 | ₩ | 1,384,514 | | |

28. Service concession arrangements

As of December 31, 2021, details of Service Concession Arrangements of the Group are as follows:

| Content of contract | The Group entered into a contract to build a hydroelectric power plant in Sumatra, Indonesia, and to conduct electricity sales business which is generated by the facility. |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project period | In accordance with this agreement, for 30 years from the commencement date of electricity sales (based on electricity sales contract) |
| Classification | BOO (Build-Own-Operate) |
| Accounting standard | KIFRS 2112 Service Concession Arrangements |
| Others | The Group has recognized the minimum guaranteed price and operating rights of the facility as financial assets and intangible assets, respectively, which are acquired in exchange for the construction services for the hydroelectric power plants. For the year ended December 31, 2021, there was no revenue or cost recognized as construction services. |

29. Leases

As of December 31, 2021 and 2020, details of right-of-use assets of the Group are as follows (Korean won in millions):

| | | | | | | 2021 | | | | |
|---------------------------------|------|-------|---|-----------|---|----------|---|--------|-------|-----------|
| | Land | | | Buildings | | Vehicles | | Others | Total | |
| Acquisition cost Accumulated | ₩ | 1,314 | ₩ | 314,818 | ₩ | 23,181 | ₩ | 17 | ₩ | 339,330 |
| depreciation | _ | (84) | | (118,599) | | (13,632) | | (8) | _ | (132,323) |
| Net book value | ₩ | 1,230 | ₩ | 196,219 | ₩ | 9,549 | ₩ | 9 | ₩ | 207,007 |
| | | | | | | 2020 | | | | |
| | | Land | | Buildings | | Vehicles | | Others | | Total |
| Acquisition cost Accumulated | ₩ | 1,103 | ₩ | 248,256 | ₩ | 21,970 | ₩ | 15 | ₩ | 271,344 |
| depreciation | | (48) | | (72,614) | | (13,019) | | (4) | | (85,685) |
| Net book value | ₩ | 1,055 | ₩ | 175,642 | ₩ | 8,951 | ₩ | 11 | ₩ | 185,659 |

Changes in right-of-use assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

| | 2021 | | | | | | | | | | |
|--------------|------|-------|---|-----------|---|----------|---|--------|---|-----------|--|
| | Land | | | Buildings | | Vehicles | | Others | | Total | |
| Jan.1 | ₩ | 1,055 | ₩ | 175,642 | ₩ | 8,951 | ₩ | 11 | ₩ | 185,659 | |
| Additions | | 92 | | 115,539 | | 14,290 | | - | | 129,921 | |
| Depreciation | | (29) | | (83,156) | | (16,846) | | (3) | | (100,034) | |
| Disposals | | - | | (11,923) | | (315) | | - | | (12,238) | |
| Others | | 112 | | 117 | | 3,469 | | 1 | | 3,699 | |
| Dec. 31 | ₩ | 1,230 | ₩ | 196,219 | ₩ | 9,549 | ₩ | 9 | ₩ | 207,007 | |

| | 2020 | | | | | | | | | |
|----------------------------|------|---------|---|-----------|---|----------|---|--------|---|----------|
| | | Land | E | Buildings | | Vehicles | | Others | | Total |
| Jan.1 | ₩ | 5,558 | ₩ | 133,579 | ₩ | 9,602 | ₩ | 15 | ₩ | 148,754 |
| Additions (*1) | | 29 | | 129,723 | | 16,502 | | - | | 146,254 |
| Depreciation | | (165) | | (73,996) | | (16,099) | | (3) | | (90,263) |
| Disposals Held for sale | | - | | (13,794) | | (832) | | - | | (14,626) |
| reclassified (*2) | | (4,915) | | - | | - | | - | | (4,915) |
| Others | | 548 | | 130 | | (222) | | (1) | | 455 |
| Dec. 31 | ₩ | 1,055 | ₩ | 175,642 | ₩ | 8,951 | ₩ | 11 | ₩ | 185,659 |

(*1) For the year ended December 31, 2020, the Group signed sales and leaseback contracts, and the related right-of-use assets is ₩2,829 million as of December 31, 2021 (2020 : ₩3,698 million). Loss on disposal of property, plant and equipment of ₩3,698 million was recognized for the year ended December 31, 2020.

(*2) See Note 30.

29. Leases (cont'd)

The details of changes in lease liabilities for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

| | | 2021 | 2020 |) |
|---------------------------------|---|-----------|------|----------|
| Jan.1 | ₩ | 186,207 | ₩ | 147,204 |
| Additions (*1) | | 130,157 | | 146,103 |
| Interest expense | | 6,316 | | 6,834 |
| Payment | | (104,465) | | (93,969) |
| Termination | | (12,333) | | (14,961) |
| Held for sale reclassified (*2) | | - | | (5,015) |
| Others | | 5,994 | | 11 |
| Dec. 31 | | 211,876 | | 186,207 |

(*1) During the year ended December 31, 2021, the Group signed sale and leaseback contracts, and the related lease liabilities amounted to ₩3,737 million. (2020 : ₩5,534 million)

(*2) See Note 30.

Details of expenses came from short-term leases and leases of low-value assets for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

| | | 2021 | 2 | 020 |
|----------------------------|---|--------|---|--------|
| Short-term leases | ₩ | 55,740 | ₩ | 47,480 |
| Leases of low-value assets | | 2,567 | | 2,176 |
| | | 58.307 | | 49,656 |

For the year ended December 31, 2021, the Group signed sub-lease contracts, and the amount of finance lease receivables thereof is $\frac{1}{2}$,806 million.

30. Non-current assets held for sale

As of December 31, 2021 and 2020, the capital directly related to non-current assets held for sale and non-current assets held for sale are as follows (Korean won in millions):

| | | 2021 | | | | | |
|--------------------------------------------------------------|---------------------------------------------------------------------------------|----------------|-------------|--------|---|--|--|
| | | Assets | Liabilities | Equity | | | |
| Equity instruments held for long-term Associates | OQ Aromatics LLC (formerly, Aromatics Oman LLC) (*1) ZAO CONTRANS (*2) | 4,779 1,116 | 5,655 - | | - | | |
| | | 2020 | | | | | |
| | | Assets | Liabilities | Equity | _ | | |
| Subsidiaries | PT. Megaprima Persada(MPP) (*3) | 14,434 | 14,434 | | _ | | |
| Associates | ZAO CONTRANS (*2) | 1,116 | - | | - | | |

- (*1) For the year ended December 31, 2021, the Group decided to dispose 1% of its stake in QQ Aromatics LLC, which had been classified as equity instruments held for long-term, and reclassified the related assets and liabilities as non-current assets held for sale and non-current liabilities held for sale, respectively.
- (*2) For the year ended December 31, 2017, the Group has decided to sell 51% of its equity in ZAO CONTRANS. Accordingly, the assets recognized as investment assets on associate are reclassified as non-current assets held for sale. Although the period has been extended to complete the sale during the current term, the management of the Group still has specific plans for the sale.
- (*3) For the year ended December 31, 2021, the Group has changed the classification to the existing assets, liabilities and equity due to the cancellation of the sale plan. As of December 31, 2021, the amount was remeasured from the amount before classification as held for sale to the amount reflecting changes that occurred during the period of classification as held for sale.

Meanwhile, for the year ended December 31, 2020, the Group sold 100% of its stake in Guangzhou Steel Flower Electrical & Machinary Co., Ltd., which had been classified as held for sale, and recognized gain on disposal of W2,216 million. Also, the Group sold 100% of its stake in Highland Cement International Co., Ltd., which was classified as held for sale, and recognized loss on disposal of W612 million.

31. Approval of consolidated financial statements

The consolidated financial statements of the Group for the year ended December 31, 2021 were approved by the Parent Company's Board of Directors on January 28, 2022.