**Hyundai Corporation and its subsidiaries**

Consolidated financial statements

for the years ended December 31, 2022 and 2021

with the independent auditor's report

**Hyundai Corporation and its subsidiaries**

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| **Buiding a better****working world** | Ernst & Young Han Young2-4F, 6-8F, Taeyoung Building, 111, Yeouigongwon-ro, Yeongdeungpo-gu, Seoul 07241 KoreaTel: +82 2 3787 6600 Fax: +82 2 783 5890 ey.com/kr |

**Independent auditor’s report**

(English Translation of a Report Originally Issued in Korean)

**The Shareholders and Board of Directors**

**Hyundai Corporation**

**Opinion**

We have audited the accompanying consolidated financial statements of Hyundai Corporation and its subsidiaries (collectively referred to as the “Group”), which comprise the consolidated statements of financial position as of December 31,2022 and 2021, and the consolidated statements of profit or loss and 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 consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31,2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (“KIFRS”).

**Basis for opinion**

We conducted our audits in accordance with Korean Standards on Auditing (“KSA”). 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 audit 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.

* **Occurrence of overseas sales and period to which they are attributable**

As described in Note 2 to the consolidated financial statements, the Group recognizes sales at the time of delivery, considering the terms of trade transactions, when a control of inventory is transferred to overseas customers. The Group's overseas sales for the year ended December 31, 2022 are W 5,411,880 million, accounting for about 88% of its total sales.

Since it is probable that the occurrence of overseas sales and period to which such sales are attributable will be recognized incorrect in identifying performance obligations and determining the timing of satisfaction of such performance obligations for the contract with customer relating to overseas sales of the Group, we identified the occurrence of overseas sales and the period to which such sales are attributable as a key audit matter.

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The main audit procedures we have performed for this key audit matter are as follows:

• We assessed revenue recognition accounting policies by the type of major overseas sales contract and changes in such policies, if any.

• We assessed contract documents by the type of overseas sales, including the assessment on identification of performance obligations, measurement of transaction amount, allocation of transaction price, and timing of revenue recognition.

• We tested details of overseas sales transactions occurring during the current period by comparing samples of sales to relevant documents.

• We checked whether the period to which overseas sales transactions is attributable is correct if such transactions occurred before or after the end of the reporting period.

**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 KSA 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 KSA, 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

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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 Hee Seong Moon.

March 21, 2023

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| --- |
| This audit report is effective as of 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. |

**Hyundai Corporation and its subsidiaries**

Consolidated financial statements

for the years ended December 31, 2022 and 2021

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

Anseok Jang

Chief Executive Officer

Hyundai Corporation

|  |  |  |  |
| --- | --- | --- | --- |
|  | Notes | 2022 | 2021 |
| **Assets****Current assets**Cash and cash equivalents Short-term financial instruments Trade receivables InventoriesDerivative financial assetsCurrent portion of finance lease receivablesOther current receivablesOther current assets | 4,7,94,74,7,8,10,36134,5,7,127,18,364,7,10,3614,36 | ~~W~~ 356,938,418,3615,000,000,000525,741,457,894293,977,634,2605,774,599,634344,317,94216,204,009,79231,234,406,879 | ~~W~~ 195,079,937,7862,000,000,000649,740,947,644213,245,326,3302,276,942,149372,918,61423,408,763,04925,285,001,980 |
|  |  | 1,235,214,844,762 | 1,111,409,837,552 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Non-current assets**Long-term financial instrumentsFinancial assets at fair value through profit or lossFinancial assets at fair value through other comprehensive incomeOther financial assetsInvestments in joint ventures and associatesLong-term loan receivablesInvestments in resource development projectsProperty, plant and equipmentInvestment propertiesRight-of-use assetsIntangible assetsDeferred tax assetsFinance lease receivables (non-current)Net defined benefit assets Other non-current receivables Other non-current assets | 75,7,115,7,11,16715,16,374,7,16,364,7,16,36171918,3620257,18,36237,104,7,14,36 | 19,000,0001,668,779,00052,647,035,802319,489,81784,781,119,07320,111,394,47320,552,109,43533,022,212,912347,000,000,0007,045,368,6279,750,486,1342,693,191,812159,016,9472,257,358,3769,133,550,8554,926,843,528 | 19,000,0002,559,763,60049,357,801,339349,990,74488,300,471,09628,386,959,58224,956,797,71429,453,821,160342,000,000,0008,416,278,0978,906,663,4996,252,665,226563,430,066-473,352,1515,976,343,782 |
|  |  | 596,086,956,791 | 595,973,338,056 |
| Total assets |  | ~~W~~ 1,831,301,801,553 | ~~W~~ 1,707,383,175,608 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Liabilities** **Current liabilities**Trade payables Other payables Advances from customers Short-term borrowings Current portion of debentures Current portion of provisions Current tax liabilities Derivative financial liabilities Current portion of lease liabilities Other current liabilities | 4,7,364,7,36364,7,8,22,344,7,22,344,7,24,354,5,7,124,7,18,347,21,36 | ~~W~~ 444,427,442,56345,187,532,038110,852,376,295290,967,447,54849,943,005,9152,223,034,74015,281,677,4895,678,949,6893,343,635,4929,346,822,558 | ~~W~~ 255,963,840,20164,184,440,21436,966,249,301466,626,083,42529,962,289,0131,948,999,9017,218,727,8591,435,869,9193,196,974,4076,281,628,950 |
|  |  | 977,251,924,327 | 873,785,103,190 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Non-current liabilities**Long-term other payables Debentures Long-term borrowings Net defined benefit liability ProvisionsDeferred tax liabilities Lease liabilities Other non-current liabilities Others | 4,74,7,22,344,7,22,34234,7,24,35254,7,18,344,7,21 | 9,865,13749,906,986,194322,931,932,176-4,833,561,05721,367,373,5394,780,894,1213,947,912,7439,677,070,184 | 4,875,52399,713,220,794322,737,812,6081,845,012,1065,820,822,29522,041,881,8626,608,337,5454,081,103,6157,915,702,115 |
|  |  | 417,455,595,151 | 470,767,768,463 |
| Total liabilities  |  | 1,394,707,519,478 | 1,344,552,871,653 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Equity****Equity attributable to owners of the parent**Issued capitalOther components of equity Accumulated other comprehensive income Retained earnings | 1262627 | 66,144,830,000(282,140,365,887)73,499,649,123575,527,682,561 | 66,144,830,000(281,978,480,507)72,639,148,872504,261,835,732 |
|  |  | 433,031,795,797 | 361,067,334,097 |
| **Non-controlling interests**  |  | 3,562,486,278 | 1,762,969,858 |
| **Total equity** |  | 436,594,282,075 | 362,830,303,955 |
| **Total liabilities and equity** |  | ~~W~~ 1,931,301,801,553 | ~~W~~ 1,707,383,175,608 |

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Notes** | **2022** | **2021** |
| **Sales**Cost of sales | 6,16,28,3613,16,28,29,36 | W 6,126,968,751,169(5,968,249,702,824) | W 3,782,497,523,034(3,671,382,343,166) |
| **Gross profit** |  | 158,719,048,345 | 111,115,179,868 |
|  |  |  |  |
| Selling and administrative expenses | 29,30 | (91,891,540,331) | (76,045,278,170) |
| **Operating profit** | 6 | 66,827,508,014 | 35,069,901,698 |
|  |  |  |  |
| Other incomeOther expensesShare of profit of associates and joint venturesFinance incomeFinance costs | 7,317,3115,167,327,32 | 207,497,033,387(199,867,253,077)29,302,476,10663,962,795,891(77,184,918,8870 | 85,269,529,390(66,410,539,985)7,268,796,47825,841,954,925(30,818,953,659) |
| **Profit before tax** |  | 90,537,641,434 | 56,220,688,847 |
|  |  |  |  |
| Income tax expenses | 25 | (11,851,315,729) | (18,214,692,550) |
| **Profit for the year** |  | ~~W~~ 78,686,325,705 | ~~W~~ 38,005,996,297 |
|  |  |  |  |
| **Profit (loss) for the year attributable to:** |  |  |  |
| Owners of the parentNon-controlling interests |  | ~~W~~  78,715,077,815(28,752,110) | ~~W~~ 37,789,612,149216,384,148 |
|  |  |  |  |
| **Earnings per share attributable to owners of the parent** |  |  |  |
| Basic earnings per share | 33 | ~~W~~ 6,554 | ~~W~~ 3,146 |

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Notes** | **2022** | **2021** |
| **Profit for the year** |  | ~~W~~ 78,686,325,705 | ~~W~~ 38,005,996,297 |
| **Other comprehensive income** |  |  |  |
| Items will not be reclassified to profit or loss in subsequent periods: |  |  |  |
| Remeasurement loss on defined benefit plans | 23 | (242,651,3860 | (961,960,238) |
| Gain on equity instruments designated at fair value through other comprehensive income | 5,7,11 | 2,863,492,435 | 2,847,943,438 |
| Share of other comprehensive income (loss) of associates and joint ventures | 15 | (8,483,742,904) | 4,760,729,134 |
|  |  |  |  |
| **Items that may be reclassified to profit or loss in subsequent periods:** |  |  |  |
| Share of other comprehensive income of associates and joint ventures | 15 | 4,953,970,259 | 4,314,659,629 |
| Gain on valuation of derivative instruments  |  | 354,483,195 | 254,268,398 |
| Exchange differences on translation of foreign operations |  | 1,135,512,932 | 6,330,843,319 |
| **Other comprehensive income for the year** |  | 581,064,531 | 17,546,483,680 |
| **Total comprehensive income for the year** |  | ~~W~~ 79,267,390,236 | ~~W~~ 55,552,479,977 |
|  |  |  |  |
| **Total comprehensive income for the year is attributable to:** |  |  |  |
| Owners of the parent |  | ~~W~~ 79,332,926,680 | ~~W~~ 55,216,976,255 |
| Non-controlling interests |  | (65,536,444) | 335,503,722 |

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

|  |  |  |  |
| --- | --- | --- | --- |
|   | Attributable to the owners of the parent |   |   |
|   | Issued capital | Other component of equity | Accumulated other comprehensive income | Retained earnings | Total | Non-controlling interests | Total equity |
| **As of January 1,2021**  | ~~W~~ 66,144,830,000 | ~~W~~ (281,978,480,507) | ~~W~~ 54,249,824,528 | ~~W~~ 474,640,763,421 | ~~W~~ 313,056,937,442 | ~~W~~ 1,407,466,136 | ~~W~~ 314,464,403,578 |
| **Comprehensive income** |   |   |   |   |   |   |   |
| Profit for the year | - | - | - | 37,789,612,149 | 37,789,612,149 | 216,384,148 | 38,005,996,297 |
| Gain on valuation of financial assets at fair value through other comprehensive income | - | - | 2,847,943,438 | - | 2,847,943,438 | - | 2,847,943,438 |
| Share of other comprehensive income of associates and joint ventures  |   |   |  9,071,877,949  |   |  9,071,877,949  |  3,510,814  |  9,075,388,763  |
| Remeasurement loss on defined benefit plans  |   |   |   | ( 961,960,238)  | (961,960,238)  |  | ( 961,960,238)  |
| Gain on valuation of derivative instruments |   |   |  254,268,398  |   |  254,268,398  |   |  254,268,398  |
| Exchange differences on translation of foreign operations  |   |   |  6,215,234,559  |   |  6,215,234,559  |  115,608,760  |  6,330,843,319  |
|   |   |   | 18,389,324,344 | 36,827,651,911 | 55,216,976,255 | 335,503,722 | 55,552,479,977 |
| Transaction with owners |   |   |   |   |   |   |   |
| Dividends (Note 27) |   |   |   |  (7,206,579,600)  | (7,206,579,600)  |   | (7,206,579,600)  |
| Equity transactions with non - controlling interests |   |   |   |   |   |  20,000,000  |  20,000,000  |
| **As of December 31, 2021** | ~~W~~ 66,144,830,000 | ~~W~~ (281,978,480,507) | ~~W~~ 72,639,148,872 |  ~~W~~ 504,261,835,732  |  ~~W~~ 361,067,334,097  |  ~~W~~ 1,762,969,858  |  ~~W~~ 362,830,303,955  |
|   |   |   |   |   |   |   |   |
| **As of January 1,2022**  | ~~W~~ 66,144,830,000 | ~~W~~ (281,978,480,507) | ~~W~~ 72,639,148,872 |  ~~W~~ 504,261,835,732  |  ~~W~~ 361,067,334,097  |  ~~W~~ 1,762,969,858  |  ~~W~~ 362,830,303,955  |
| **Comprehensive income** |   |   |   |   |   |   |   |
| Profit for the year |   |   |   |  78,715,077,815  |  78,715,077,815  | (28,752,110)  |  78,686,325,705  |
| Gain on valuation of financial assets at fair value through other comprehensive income |   |   |  2,863,492,435  |   |  2,863,492,435  |   |  2,863,492,435  |
| Share of other comprehensive income of associates and joint ventures  |   |   | (3,528,554,468 )  |   | (3,528,554,468)  | ( 1,218,177)  | (3,529,772,645 )  |
| Remeasurement loss on defined benefit plans  |   |   |  -  | (242,651,386)  | (242,651,386)  |   | (242,651,386)  |
| Gain on valuation of derivative instruments |   |   |  354,483,195  |   |  354,483,195  |   |  354,483,195  |
| Exchange differences on translation of foreign operations  |   |   |  1,171,079,089  |   |  1,171,079,089  |  (35,566,157 )  |  1,135,512,932  |
|   |   |   |  860,500,251  |  78,472,426,429  |  79,332,926,680  | (65,536,444)  |  79,267,390,236  |
| Transaction with owners |   |   |   |   |   |   |   |
| Dividends (Note 27) |   |   |   | (7,206,579,600)  |  (7,206,579,600)  |   | (7,206,579,600)  |
| Equity transactions with non - controlling interests |   |   |   |   |   |  1,865,052,864  |  1,865,052,864  |
|   |   |   |   | (7,206,579,600 )  | (7,206,579,600)  |  1,865,052,864  | (5,341,526,736 )  |
| Other capital adjustments |   | (161,885,380 )  |   |   | (161,885,380 )  |   | (161,885,380)  |
| **As of December 31, 2022** | ~~W~~ 66,144,830,000 | ~~W~~ (282,140,365,887) | ~~W~~ 73,499,649,123 | ~~W~~ 575,527,682,561 | ~~W~~ 433,031,795,797 | ~~W~~ 3,562,486,278 | ~~W~~ 436,594,282,075 |

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

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Notes** | **2022** | **2021** |
| **Operating activities**Cash generated from operations Profit for the yearAdjustments to reconcile profit for the year to net cash flows provided by (used in) operating activities:Working capital adjustments:Interest received Interest paid Dividends received Income tax refund (payment) | 34 | W 365,065,824,65378,686,325,70517,928,792,862268,450,706,0864,051,327,874(19,869,216,573)35,636,439,3601,568,683,089 | W (340,267,012,756)38,005,996,29719,483,026,085(397,756,035,138)1,276,384,027(12,304,135,360)17,995,118,781(11,491,960,129) |
| **Net cash flows provided by (used in) operating activities** |  | 386,453,058,403 | (344,791,605,437) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Investing activities**Decrease in short-term financial instruments Proceeds from disposal of financial assets at fair value through profit or loss Collection of long-term loan receivables Proceeds from disposal of property, plant and equipment Proceeds from disposal of intangible assets Increase in leasehold deposits received Collection of finance lease receivables Proceeds from disposal of financial assets at amortized costProceeds from disposal of investments in joint ventures and associatesIncrease in short-term financial instruments Acquisition of financial assets at fair value through profit or lossIncrease in long-term loan receivablesAcquisition of property, plant and equipmentAcquisition of intangible assetsDecrease in leasehold deposits receivedAcquisition of investments in joint ventures and associatesIncrease in investments in resource development projectsAcquisition of investment properties |  | 2,000,000,0004,087,394,700128,172,201789,117,105-(13,544,817)428,578,40365,000,00014,420,329,374(5,000,000,000)(1,300,000,000)(1,096,879,583)(6,575,836,243)(1,440,773,666)(150,402,647)(8,999,276,864)(2,267,623,494)- | 6,703,000,000-301,077,60390,712,246345,454,546106,847,464411,463,998131,000,00011,328,122,903(6,527,000,000)(350,000,000)(3,524,612,381)(4,320,850,603)(2,034,696,142)-(12,102,317,582)(2,197,277,073(8,392,845,774) |
| **Net cash flows used in investing activities** |  | (4,925,245,531) | (20,028,920,795) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Financing activities**Proceeds from short-term borrowings Proceeds from long-term borrowings Proceeds from issuance of debentures Repayment of short-term borrowings Repayment of long-term borrowings Repayment of debentures Payment of lease liabilities Increase in non-controlling interest Dividends paid |  | 24,072,140,0001,146,330,748-(202,766,664,702)(1,254,229,840)(30,000,000,000)(4,398,519,221)1,980,000,000(7,261,353,698) | 337,871,327,3068,687,682,22449,791,780,000(45,145,803,000)(4,171,084,224)(30,000,000,000)(4,224,121,966)-(7,206,579,600) |
| **Net cash flows provided by (used in) financing activities** |  | (218,482,296,713) | 305,603,200,740 |

|  |  |  |  |
| --- | --- | --- | --- |
| Net increase (decrease) in cash and cash equivalents Net foreign exchange difference Cash and cash equivalents as of January 1 |  | 163,045,516,159(1,187,035,584)195,079,937,786 | (59,217,325,492)6,262,215,248248,035,048,030 |
| **Cash and cash equivalents as of December 31** |  | ~~W~~ 356,938,418,361 | ~~W~~ 195,079,937,786 |

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

**1. Corporate information**

The consolidated financial statements include Hyundai Corporation (the “Company”), and its twenty six (26) consolidated subsidiaries, including Hyundai Corp. USA (collectively referred to as the “Group”), and twelve (12) associates and joint ventures, including PT HD INTI. DEVE., which are accounted for using the equity method.

**1.1 Overview of the Company**

The Company was established on December 8, 1976, under the Commercial Code of the Republic of Korea to primarily engage in the export and import of goods. On December 1, 1977, the Company's shares were listed on the Korea Stock Exchange. The Company has been designated as a general trading company by the government of the Republic of Korea since February 11, 1978. As of December 31,2022, the Company has 20 overseas branches and mainly exports vehicles, steel products, machinery, construction equipment and vessels, and plants on a deferred payment basis. The Company also engages in the import and domestic sale of merchandise and resource development business, such as overseas exploration of petroleum and minerals.

The Company is authorized to issue 80 million shares with a par value of W 5,000 per share and its issued capital was W 50 million at incorporation. As of December 31, 2022, the Company has 13,228,966 common shares issued and outstanding, and through several capital increases, conversions of convertible bonds and capital reductions, its issued capital amounts to W 66,145 million.

The Company’s major shareholders and their shareholdings as of December 31,2022 are as follows:

|  |  |  |
| --- | --- | --- |
| Shareholders | Number of shares | Percentage of ownership (%) |
| HYUNDAI CORPORATION HOLDINGS Co., Ltd.KCC Corporation National Pension Service Chung Mong-hyuk Chung Mong-seok Halla Holdings CorporationMIDAS Active Value Securities Investment Company - EquityHyundai Home Shopping Network Corporation Hyundai Department Store Co., Ltd.Others | 2,882,0001,587,475761,614319,601264,579264,579132,776132,289132,2895,533,764 | 21.7912.005.752.422.002.001.001.001.0041.83 |
| Treasuay shares | 12,010,9661,218,000 | 90.799.21 |
|  | 13,228,966 | 100.00 |

**1.2 Subsidiaries**

Details of subsidiaries as of December 31, 2022 and 2021 are as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Percentage of ownership (%) |  |  |
| Name |   | 2022 | 2021 |  Closing month | Main business |
| HYUNDAI CORP. USA | U.S.A | 100 | 100 | December | Trading |
| HYUNDAI AUSTRALIA PTY., LTD. | Australia | 100 | 100 | December | Trading |
| HYUNDAI JAPAN CO., LTD. | Japan | 100 | 100 | December | Trading |
| HYUNDAI CANADA INC. | Canada | 100 | 100 | December | Trading |
| HYUNDAI CORP. EUROPE GMBH | Germany | 100 | 100 | December | Trading |
| HYUNDAI CORPORATION SINGAPORE PTE. LTD. | Singapore | 100 | 100 | December | Trading |
| HYUNDAI CORPORATION (SHANGHAI) CO., LTD. | China | 100 | 100 | December | Trading |
| POS-HYUNDAI STEEL MFG. (I) PVT. LTD. | India | 94 | 94 | March | Manufacture of steel |
| HYUNDAI RENEWABLE LAB | Korea | 100 | 100 | December | Photovoltatic power generation |
| Hangang Domestic Specialized Private Equity in Real Estate Investment Trust No.13 (\*5) | Korea | 100 | 100 | May/November | Real estate trust |
| HYUNDAI PLATFORM CORP (\*3) | U.S.A | 100 | 100 | December | Transport and Installation |
| HYUNDAI RENEWABLE LAB JAPAN (\*1) | Japan | 100 | 100 | December | Photovoltatic power generation |
| HYUNDAI ONE EUROPE GMBH (\*3) | Germany | 100 | 100 | December | Trading |
| HYUNDAI FUELS PTE. LTD. (\*2) | Singapore | 100 | 100 | December | Trading |
| HYUNDAI ONE ASIA PTE. LTD. (\*2) | Singapore | 100 | 100 | December | Trading |
| HYUNDAI CORPORATION (CAMBODIA) CO., LTD. (\*2) | Cambodia | 100 | 100 | December | Trading |

**1.2 Subsidiaries (cont’d)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Percentage of ownership (%) |  |  |
| Name |   | 2022 | 2021 | Closing month | Main business |
| HYUNDAI CORPORATION PHNOM PENH INVESTMENT CO., LTD. (\*2, \*6) | Cambodia | 49 | 49 | December | Trading and farming |
| SHANGHAI ONE ASIA LOGISTICS CO., LTD (\*3) | China | 100 | 100 | December | Transport |
| HANOI ONE ASIA LOGISTICS (\*3) | Vietnam | 80 | 80 | December | Transport |
| HYUNDAI RENEWABLE LAB MIMASAKA (\*1) | Japan | 100 | 100 | December | Photovoltatic power generation |
| HYUNDAI NAVIS CO., LTD. | Korea | 100 | 100 | December | Transport |
| HYUNDAI RENEWABLE LAB YUMESAKI (\*1) | Japan | 100 | 100 | December | Photovoltatic power generation |
| HYUNDAI RENEWABLE LAB EHIME (\*1) | Japan | 100 | 100 | December | Photovoltatic power generation |
| PROLOGUE VENTURES INC. | Korea | 82 | 82 | December | Management consulting |
| PT HYUNDAI CORP INDONESIA (\*7) | Indonesia | 100 | - | December | Trading |
| HYUNDAI CORPORATION ITALIA S.R.L. (\*4, \*7) | Italia | 100 | - | December | Trading |
| HYUNDAI CORPORATION MEXICO, S. DE R.L DE C.V. (\*7) | Mexico | 100 | - | December | Trading |

(\*1) The subsidiary of HYUNDAI JAPAN CO., LTD.

(\*2) The subsidiary of HYUNDAI CORPORATION SINGAPORE PTE. LTD.

(\*3) The subsidiary of HYUNDAI NAVIS CO., LTD.

(\*4) The subsidiary of HYUNDAI CORP. EUROPE GMBH.

(\*5) The Group holds preferential acquisition rights to major real estate of private equity real estate investment trusts, and the percentage of ownership was calculated based on the holding rate of Type 2 beneficiary securities held by the Group.

(\*6) Although the Group owns less than 50% of the voting rights of HYUNDAI CORPORATION PHNOM PENH INVESTMENT CO., LTD., the Group is considered to have control over HYUNDAI CORPORATION PHNOM PENH INVESTMENT CO., LTD., as the Group has a right to appoint or dismiss the majority of its Board of Directors by virtue of an agreement with the other investors.

(\*7) Newly established during the year ended December 31, 2022.

**1.3 Summarized financial information**

Summarized financial information of consolidated subsidiaries as of and for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Company name | Assets | Liabilities | Equity | Sales | Frofit (loss) for the year | Total comprehensive income (loss) |
| HYUNDAI CORP. USA | ~~W~~ 142,162 | ~~W~~ 78,105 | ~~W~~ 64,057 | ~~W~~ 566,732 | ~~W~~ 17,610 | ~~W~~ 20,294 |
| HYUNDAI AUSTRALIA PTY., LTD. | 15,212 | 14,036 | 1,176 | 10,228 | 321 | 72 |
| HYUNDAI JAPAN CO., LTD. | 73,233 | 52,750 | 20,483 | 255,325 | 896 | (718) |
| HYUNDAI CANADA INC. | 90,460 | 77,108 | 13,352 | 226,761 | 802 | 821 |
| HYUNDAI CORP. EUROPE GMBH | 54,865 | 46,244 | 8,621 | 178,654 | 782 | 830 |
| HYUNDAI CORPORATION SINGAPORE PTE. LTD. | 48,512 | 39,183 | 9,329 | 207,864 | 821 | 1,371 |
| HYUNDAI CORPORATION (SHANGHAI) CO., LTD. | 9,097 | 4,068 | 5,029 | 42,814 | 100 | (36) |
| POS-HYUNDAI STEEL MFG. (I) PVT. LTD. | 45,398 | 24,845 | 20,553 | 70,996 | 153 | (567) |
| HYUNDAI RENEWABLE LAB | 11,178 | 1,309 | 9,869 | 1,255 | 526 | 526 |
| Hangang Domestic Specialized Private Equity in Real Estate Investment Trust No. 13 | 356,418 | 321,482 | 34,936 | 20,186 | 2,714 | 2,714 |
| HYUNDAI PLATFORM CORP | 2,354 | 497 | 1,857 | 6,829 | 52 | 168 |
| HYUNDAI RENEWABLE LAB JAPAN | 2,152 | 1,546 | 606 | 287 | 77 | 32 |
| HYUNDAI ONE EUROPE GmbH | 5,537 | 889 | 4,648 | 13,955 | 329 | 355 |
| HYUNDAI FUELS PTE. LTD. | 142,665 | 119,805 | 22,860 | 1,381,044 | 10,828 | 11,714 |
| HYUNDAI ONE ASIA PTE. LTD. | 10,316 | 5,377 | 4,939 | 24,404 | 1,318 | 1,528 |
| HYUNDAI CORPORATION (CAMBODIA) CO., LTD.  | 25 | 32 | (7) | - | (7) | (7) |
| HYUNDAI CORPORATION PHNOM PENH |   |   |   |   |   |   |
| INVESTMENT CO., LTD. | 8 | - | 8 | - | - | 1 |
| SHANGHAI ONE ASIA LOGISTICS CO., LTD | 3,873 | 1,439 | 2,434 | 8,763 | 769 | 682 |
| HANOI ONE ASIA LOGISTICS | 2,992 | 674 | 2,318 | 9,984 | 589 | 626 |
| HYUNDAI RENEWABLE LAB MIMASAKA | 891 | 575 | 316 | 129 | 23 | (1) |
| HYUNDAI NAVIS CO., LTD. | 32,434 | 12,838 | 19,596 | 159,638 | 1,536 | 1,536 |
| HYUNDAI RENEWABLE LAB YUMESAKI | 1,804 | 1,260 | 544 | 165 | 59 | 18 |
| HYUNDAI RENEWABLE LAB EHIME | 3,863 | 3,027 | 836 | 212 | (19) | (58) |
| PROLOGUE VENTURES INC. | 10,052 | 39 | 10,013 | 43 | (823) | (823) |
| PT HYUNDAI CORP INDONESIA | 1,391 | 223 | 1,168 | 779 | 7 | (26) |
| HYUNDAI CORPORATION ITALIA S.R.L. | 1,226 | 34 | 1,192 | 50 | (79) | (60) |
| HYUNDAI CORPORATION MEXICO, S. DE R.L DE |   |   |   |   |   |   |
| C.V. | 1,303 | - | 1,303 | - | - | (80) |

**1.4 Summarized Financial Information (cont’d)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Company name | Assets | Liabilities | Equity | Sales | Frofit (loss) for the year | Total comprehensive income (loss) |
| HYUNDAI CORP. USA | ~~W~~ 167,778 | ~~W~~ 124,015 | ~~W~~ 43,763 | ~~W~~ 287,152 | ~~W~~ 7,023 | ~~W~~ 10,276 |
| HYUNDAI AUSTRALIA PTY., LTD. | 1,853 | 3,617 | (1,764) | 5,418 | (251) | (290) |
| HYUNDAI JAPAN CO., LTD. | 57,645 | 36,444 | 21,201 | 170,760 | 1,601 | 1,126 |
| HYUNDAI CANADA INC. | 131,816 | 119,285 | 12,531 | 149,266 | 1,971 | 2,882 |
| HYUNDAI CORP. EUROPE GMBH | 42,675 | 34,883 | 7,792 | 97,115 | (72) | (48) |
| HYUNDAI CORPORATION SINGAPORE PTE. LTD. | 59,091 | 50,949 | 8,142 | 116,248 | 1,217 | 1,826 |
| HYUNDAI CORPORATION (SHANGHAI) CO., LTD. | 23,755 | 18,690 | 5,065 | 86,985 | 1,062 | 1,524 |
| POS-HYUNDAI STEEL MFG. (I) PVT. LTD. | 46,935 | 23,899 | 23,036 | 56,706 | 3,270 | 4,686 |
| HYUNDAI RENEWABLE LAB | 10,682 | 1,339 | 9,343 | 953 | 228 | 228 |
| Hangang Domestic Specialized Private Equity in Real Estate Investment Trust No.13 | 353,984 | 319,962 | 34,022 | 16,606 | 1,533 | 1,533 |
| HYUNDAI PLATFORM CORP | 2,659 | 971 | 1,688 | 7,887 | 72 | 208 |
| HYUNDAI RENEWABLE LAB JAPAN | 2,468 | 1,893 | 575 | 303 | 64 | 51 |
| HYUNDAI ONE EUROPE GMBH | 4,778 | 483 | 4,295 | 17,568 | 1,583 | 1,579 |
| HYUNDAI FUELS PTE. LTD. | 93,957 | 82,812 | 11,145 | 675,970 | 3,177 | 4,177 |
| HYUNDAI ONE ASIA PTE. LTD. | 8,085 | 4,674 | 3,411 | 17,695 | 1,294 | 1,511 |
| HYUNDAI CORPORATION (CAMBODIA) CO., LTD. HYUNDAI CORPORATION PHNOM PENH | 22 | 22 | - | - | 109 | 103 |
| INVESTMENT CO., LTD. | 8 | - | 8 | - | - | 1 |
| SHANGHAI ONE ASIA LOGISTICS CO., LTD | 4,212 | 2,460 | 1,752 | 12,844 | 455 | 610 |
| HANOI ONE ASIA LOGISTICS | 2,102 | 410 | 1,692 | 5,536 | 190 | 342 |
| HYUNDAI RENEWABLE LAB MIMASAKA | 1,015 | 698 | 317 | 136 | 17 | 10 |
| HYUNDAI NAVIS CO., LTD. | 38,917 | 20,903 | 18,014 | 140,886 | 667 | 667 |
| HYUNDAI RENEWABLE LAB YUMESAKI | 2,053 | 1,528 | 525 | 70 | 10 | 13 |
| HYUNDAI RENEWABLE LAB EHIME | 2,680 | 2,220 | 460 | - | (4) | (20) |
| PROLOGUE VENTURES INC. | 108 | - | 108 | - | (2) | (2) |

**2. Basis of preparation and summary of significant accounting policies**

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

**2.1 Basis of preparation**

The Group prepares statutory financial statements in Korean in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (“KIFRS”) enacted by the Act on External Audit of Stock Companies. The accompanying consolidated financial statements have been translated into English from Korean financial statements. In the event of any differences in interpreting the financial statements or the independent auditor’s report thereon, 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 investment properties and derivative financial instruments that have been measured 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 (KRW or ~~W~~) and all values are rounded to the nearest millions, except when otherwise indicated.

The Group has prepared the consolidated financial statements on the basis that it will continue to operate as a going concern.

**2.2 Changes in accounting policies and disclosures**

**2.2.1 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 other standard, interpretation or amendment that has been issued but is not yet effective.

**Onerous Contracts - Costs of Fulfilling a Contract - Amendments to KIFRS 1037**

The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labor and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). 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 Group applied the amendments to the contracts for which it had not fulfilled all of its obligations at the beginning of the reporting period. These amendments had no impact on the consolidated financial statements of the Group as there were no provisions recognized additionally after the allocation of incremental costs and costs directly related to contract activities during the period.

**Reference to the Conceptual Framework - Amendments to KIFRS 1103**

The amendments replace a reference to a previous version of the International Accounting Standards Board (IASB)’s Conceptual Framework with a reference to the current version issued in March 2018 without significantly changing its requirements. The amendments add an exception to the recognition principle of KIFRS 1103 Business Combinations 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 Provisions, Contingent Liabilities and Contingent Assets or KIFRS Interpretation 2121 Levies, if incurred separately. The exception requires entities to apply the criteria in KIFRS 1037 or KIFRS Interpretation 2121, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date. The amendments also add a new paragraph to KIFRS 1103 to clarify that contingent assets do not qualify for recognition at the acquisition date. In accordance with the transitional provisions, the Group applies the amendments prospectively, i.e., to business combinations occurring after the beginning of the annual reporting period in which it first applies the amendments (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.

**Property, Plant and Equipment: Proceeds before Intended Use - Amendments to KIFRS 1016**

The amendment prohibits entities from deducting from the cost of an item of property, plant and equipment, any proceeds of the sale of 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. In accordance with the transitional provisions, the Group applies the amendments retrospectively only to items of PP&E made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment (the date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no sales of such items produced by property, plant and equipment made available for use on or after the beginning of the earliest period presented.

**2.2.1 New and amended standards and interpretations (cont’d)**

**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(a) of KIFRS 1101 to measure cumulative translation differences using the amounts reported in the parent’s consolidated financial statements, based on the parent’s date of transition to KIFRS, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(a) of KIFRS 1101. These amendments had no impact on the consolidated financial statements of the Group as its subsidiary is not a first¬time adopter.

**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. There is no similar amendment proposed for KIFRS 1039 Financial Instruments: Recognition and Measurement. In accordance with the transitional provisions, 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 date of initial application). These amendments had no impact on the consolidated financial statements of the Group as there were no modifications of the Group’s financial instruments during the period.

**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. These amendments had no impact on the consolidated financial statements of the Group as it did not have assets in scope of KIFRS 1041 as of the reporting date.

**2.2.2 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.

**KIFRS 1117 Insurance Contracts**

In 2021, KIFRS 1117 Insurance Contracts, a comprehensive new accounting standard for insurance contracts covering recognition and measurement, presentation and disclosure was issued. Once effective, KIFRS 1117 will replace KIFRS 1104 Insurance Contracts that was issued in 2007. 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 scope 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.

**2.2.2 Standards issued but not yet effective (cont’d)**

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; and

• 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.

**Definition of Accounting Estimates - Amendments to KIFRS 1008**

The amendments clarify the distinction between changes in accounting estimates and changes in 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 as long as this fact is disclosed. The amendments are not expected to have a material impact on the Group.

**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 are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted. The Group is currently revisiting their accounting policy information disclosures to ensure consistency with the amended requirements.

**Deferred Tax related to Assets and Liabilities arising from a Single Transaction - Amendments to KIFRS 1012**

The amendments narrow the scope of the initial recognition exception under KIFRS 1012, so that it no longer applies to transactions that give rise to equal taxable and deductible temporary differences. The amendments should be applied to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period presented, a deferred tax asset (provided that sufficient taxable profit is available) and a deferred tax liability should also be recognized for all deductible and taxable temporary differences associated with leases and decommissioning obligations. The Group is currently assessing the impact of the amendments.

**2.3 Basis of consolidation**

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries for each fiscal year ended December 31,2021. Control is achieved when the Company 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 Company 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

**2.3 Basis of consolidation (cont’d)**

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

**2.4 Investment in associates and joint ventures**

An associate is an entity over which the Group 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 associates and joint ventures are accounted for using the equity method. Under the equity method, the investments in associates and joint ventures are 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 consolidated statement of 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 associates or joint ventures 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 consolidated statement of 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.

**2.4 Investment in associates and joint ventures (cont’d)**

The financial statements of the associate or joint venture are prepared for the same reporting period as the Group. 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 consolidated statement of comprehensive income.

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.

**2.5 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.

**2.6 Foreign currency translation**

The Group’s consolidated financial statements are presented in Korean won, which is also the parent company’s functional currency. For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency. The Group uses the direct method of consolidation and on disposal of a foreign operation, the gain or loss that is reclassified to profit or loss reflects the amount that arises from using this method.

**(1) Transactions and balances**

Transactions in foreign currencies are initially recorded by the Group’s 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 rates of exchange at the reporting date.

**2.6 Foreign currency translation (cont’d)**

Differences arising on settlement or translation of monetary items are recognized in profit or loss with the exception of monetary items that are designated as part of the hedge of the Group’s net investment of a foreign operation. These are recognized in OCI until the net investment is disposed of, at which time, the cumulative amount is reclassified to profit or loss. Tax charges and credits attributable to exchange differences on those monetary items are also recorded in OCI.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at 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 date when the fair value is determined. The gain or loss arising on translation of non-monetary items measured at fair value is treated in line with the recognition of the gain or loss on the change in fair value of the item (i.e., translation differences on items whose fair value gain or loss is recognized in OCI or profit or loss is also recognized in OCI or profit or loss, respectively).

In determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which the Group initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of advance consideration.

Foreign exchange differences arising from monetary items that are part of the Group's net investment in overseas operations are recognized in OCI and reclassified from equity to profit or loss at the time of disposal of the net investment.

**(2) Translation of overseas operation**

The assets and liabilities of overseas operations are translated into Korean won at the rate of exchange prevailing at the reporting date and their statements of income are translated at exchange rates prevailing at the dates of the transactions. The exchange differences arising on translation for consolidation are recognized in OCI. On disposal of a foreign operation, the component of OCI relating to that particular foreign operation is recognized in profit or loss.

**2.7 Cash and cash equivalents**

Cash and cash equivalents in the statement of financial position comprise cash at banks and on hand and short¬term deposits with a maturity of three months or less, which are subject to an insignificant risk of changes in value.

**2.8 Financial instruments**

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.

**2.8.1 Financial assets**

**(1) Initial recognition and measurement**

Financial assets are classified, at initial recognition, as subsequently measured at amortized cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

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 are measured at the transaction price determined under KIFRS 1115.

**2.8.1 Financial assets (cont’d)**

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

The 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) 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)**

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, and
* 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.

**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.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other 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.

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

**2.8.1 Financial assets (cont’d)**

**Financial assets at fair value through profit or loss**

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortized cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

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

This category includes derivatives and listed equity instruments that do not make an irrevocable choice to treat changes in fair value in other comprehensive income. Dividends for 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.

**(3) Derecognition**

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized (i.e., removed from the Group’s consolidated statement of financial position) 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 Group continues to recognize the transferred asset to the extent of its continuing involvement. 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.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

**2.8.1 Financial assets (cont’d)**

**(4) Impairment of financial assets**

Further disclosures relating to impairment of financial assets are also provided in the following notes:

|  |  |
| --- | --- |
|  | Notes |
| * Disclosures for significant assumptions
 | 3 |
| * Trade receivables, including contract assets
 | 10 |

The Group recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the 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.

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 recognizes 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.

**2.8.2 Financial liabilities**

**(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 and payables, net of directly attributable transaction costs.

The Group’s financial liabilities include trade and other payables, loans and borrowings including bank overdrafts and derivative financial liabilities.

**(2) Subsequent measurement**

The 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 include 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 incurred for the purpose of repurchasing in the near term. This category also 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.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in KIFRS 1109 are satisfied. The Group has not designated any financial liability as of fair value through profit or loss.

**Loans and borrowings**

This is the category most relevant to the Group. After initial recognition, interest-bearing loans and 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.

**2.8.2 Financial liabilities (cont’d)**

This category generally applies to interest-bearing loans and borrowings.

**(3) Derecognition**

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 the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the consolidated statement of profit or loss.

**2.8.3 Offsetting of financial instruments**

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

**2.9 Derivative financial instruments and hedge accounting**

**2.9.1 Initial recognition and subsequent measurement**

The Group uses derivative financial instruments, such as forward currency contracts, interest rate swaps and forward commodity contracts, to hedge its foreign currency risks, interest rate risks and commodity price risks, respectively. 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 the 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.

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 that meet the strict criteria for hedge accounting are accounted for, as described below:

**Fair value hedges**

The change in the fair value of a hedging derivative is recognized in the statement of profit or loss. 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 consolidated statement of profit or loss.

**2.9.1 Initial recognition and subsequent measurement (cont’d)**

For fair value hedges relating to items carried at amortized cost, any adjustment to carrying value is amortized through profit or loss over the remaining term of the hedge using the EIR method. 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 hedged item is derecognized, the unamortized fair value is recognized immediately in 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 or loss recognized in profit and loss.

**Cash flow hedges**

The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the consolidated 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 income or expenses.

**2.10 Inventories**

The Group evaluates the inventory at the lower of the acquisition cost or net realizable value. Meanwhile, acquisition costs for each inventory include purchase costs, conversion costs, and other costs incurred in bringing the inventory to its current place. The unit cost of inventories is determined using the specific identification method.

In addition, the net realizable value is calculated as the expected selling price in the ordinary course of business minus the expected cost to complete and related selling expenses.

**2.11 Property, plant and equipment**

Construction-in-progress is stated at cost, net of accumulated impairment losses, and property, plant and equipment are stated at cost, net of accumulated depreciation and accumulated impairment losses, if any.

Depreciation of property, plant and equipment, excluding land, is calculated on a straight-line basis over the estimated useful life of the assets, as follows:

|  |  |
| --- | --- |
|  | Useful life |
| Buildings | 30 years |
| Machinery and equipment | 15 years |
| Others | 2 to 13 years |

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end and adjusted prospectively, if appropriate. In particular, the Group considers the impact of health, safety, and environmental laws when reviewing estimates of useful life and residual value. 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 (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statement of profit or loss when the asset is derecognized.

**2.12 Investment properties**

Investment properties are measured initially at cost, including transaction costs and includes alternative costs that meet the recognition requirements of the asset at the time of occurrence. However, the costs incurred in daily management activities are recognized as expenses when they occur. Since initial recognition, investment property has been accounted for at fair value reflecting current market conditions at the end of the reporting period, and gains or losses from changes in fair value are reflected in profit or loss at the time of occurrence.

**2.13 Leases**

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

**2.13.1 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.

**(1) Right-of-use assets**

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

• Real estate: 1 to 20 years

• Vehicles and other assets: 1 to 10 years

The Group reviews the estimated residual values and expected useful lives of assets at least 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.

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. Refer to the accounting policies in section 3.6 Impairment of non-financial assets.

**(2) Lease liabilities**

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

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.

**2.13.1 Group as a lessee (cont’d)**

**(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 real estate and vehicles (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 supplies 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.

**2.13.2 Group as a lessor**

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in other income in the statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as other income in the period in which they are earned.

**2.14 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 asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

**2.15 Intangible assets**

Intangible assets are measured on initial recognition at cost. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Intangible assets consist of software, membership and others.

Others included software and membership rights. Software is amortized using the straight-line method over their useful lives of five years. Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the asset is expected to be utilized.

**2.16 Financial guarantee contracts**

Financial guarantee contracts provided by Group are measured at fair value at initial recognition and are subsequently recognized as provisions by measuring at a greater of:

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

**2.17 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. When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the consolidated statement of comprehensive income net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

**2.17 Provisions (cont’d)**

The impact of climate-related matters on environmental damage recovery is taken into account when determining provisions related to the restoration of overseas mines disclosed in Note 24.

**2.18 Taxes**

**(1) Current income tax**

Current income tax assets and liabilities 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 at 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 consolidated statement of comprehensive income. 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) Deferred tax**

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

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

* When the deferred tax liability arises from the initial recognition of goodwill
* 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 arrangements, when 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, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

* When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
* In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, 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 re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

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

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

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.

**2.18 Taxes (cont’d)**

The Group offsets deferred tax assets and deferred tax liabilities if and only if it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

**2.19 Employee benefits**

**(1) Defined benefit plans**

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

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

**(2) Other long-term employee benefits**

The Group provides long-term employee benefits, which are entitled to employees with service period for ten years and above. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. The Group recognizes service cost, net interest on other long-term employee benefits and remeasurements as profit or loss for the year.

**2.20 Revenue from contracts with customers**

**(1) Sales of goods**

The Group recognizes sales at the time of delivery taking the terms and conditions of trade into account, when control of assets is transferred to the customer. Receivables are recognized when the goods are delivered, because from the point of delivery of the goods, the price will be paid as time passes, and there will be an unconditional right to receive the payments.

**(2) Principal versus agent consideration**

When another party is involved in providing goods or services to a customer, the Group shall determine whether the nature of its promise is a performance obligation to provide the specified goods or services itself (i.e. the entity is a principal) or to arrange for those goods or services to be provided by the other party (i.e. the entity is an agent). The Group is a principal (recognized the gross amount as revenue) if it controls the specified good or service before that good or service is transferred to a customer. However, the Group is an agent (recognizes commission revenue as the net amount) if the entity’s performance obligation is to arrange for the provision of the specified good or service by another party.

**2.21 Other income**

**(1) Interest income**

Interest income is recognized using the EIR method over time. When an impairment of receivables occur, the carrying amount is decreased to the recoverable amount and the portion of the amount increasing over time is recognized as interest income. Meanwhile, interest income regarding impairment receivables is recognized using the initial effective interest.

2.21 **Other income (cont’d)**

**(2) Dividend income**

Dividends are recognized as other income in the statement of profit or loss when the right of payment has been established

**2.22 Treasury shares**

Own equity instruments that are reacquired (treasury shares) are recognized at cost and deducted from equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Group’s own equity instruments. Any difference between the carrying amount and the consideration, if reissued, is recognized in the share premium. Share options exercised during the reporting period are satisfied with treasury shares.

**2.23 Segment reporting**

Information of each operating segment is reported in a manner consistent with the business segment reporting provided to the chief operating decision-maker (Note 6). The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, makes strategic decisions.

**2.24 Earnings per share (EPS)**

Basic EPS is calculated by dividing the profit for the year attributable to ordinary owners of the parent by the weighted average number of common shares outstanding during the year.

**2.25 Fair value measurement**

The Group measures financial instruments such as derivatives, and non-financial assets such as investment properties, at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

* In the principal market for the asset or liability, or
* In the absence of a principal market, in the most advantageous market for the asset or liability The principal or the most advantageous market must be accessible by the Group.

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

For assets and liabilities that are recognized in the financial statements at fair value on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy, as explained above.

**2.25** **Fair value measurement (cont’d)**

Fair-value related disclosures for financial instruments and non-financial assets that are measured at fair value or where fair values are disclosed, are summarized in the following notes:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  | Notes |
|   Disclosures for valuation methods, significant estimates and assumptions | 3, 5 |
|   Quantitative disclosures of fair value measurement hierarchy | 5 |
|   Financial instruments (including those carried at amortized cost) | 7 |

**2.26 Cash dividend**

The Group recognizes a liability to pay a dividend when the distribution is authorized and the distribution is no longer at the discretion of the Group. A distribution is authorized when it is approved by the shareholders. A corresponding amount is recognized directly in equity.

**2.27 Approval of issuance of the consolidated financial statements**

The consolidated financial statements of the Group for the year ended December 31,2022 were approved By the Board of Directors on February 9, 2023 and will be submitted at the annual shareholders’ meeting for revision and final approval, if any.

**3. Significant accounting judgments estimates and assumptions**

The preparation of consolidated financial statements requires the Group to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Group’s accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. As the resulting accounting estimates will, by definition, seldom equal the related actual results, it can contain a significant risk of causing a material adjustment.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Additional information of significant judgement and assumptions of certain items are included in relevant notes.

**3.1 Income taxes**

The Group is operating in numerous countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain (see Note 25).

If certain portion of the taxable income is not used for investments, increase in wages, or dividends in accordance with the Tax System for Recirculation of Corporate Income, the Group is liable to pay additional income tax calculated based on the tax laws. Accordingly, the measurement of current and deferred tax is affected by the tax effects from the new system. As the Group’s income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects.

**3.2 Fair value of financial instruments**

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period. The valuation of fair value through other comprehensive income arising from resources development project, which is subject to fair value measurement, is determined based on the project’s long-term business plan, unit price of major products, expected production term, discount rate, and the political and economic environment of the country (see Note 5).

**3.3 Net defined benefit liability**

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (see Note 23).

**3.4 Provisions**

The Group recognizes provisions for restoration related to overseas explorations as of the reporting date. The amounts are estimated based on historical data (see Note 24).

**3.5 Provision for expected credit losses of trade and other receivables**

The Group estimates the amount of allowance for doubtful considering that ages, historical default events and other economic and industry environment factors of receivables in order to calculate provision for credit losses regarding trade and other receivables, loan receivables (see Note 10).

**3.6 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. Goodwill and intangible assets with indefinite useful lives are tested for impairment annually and when circumstances indicate that the carrying value may be impaired. For non-financial assets excluding goodwill and intangible assets with indefinite useful lives, an assessment is made when there is any indication that the carrying amount of such assets cannot be recovered. In assessing value in use, management estimates future cash flows generated from the asset or cash-generating unit and discounts the cash flows to their present value using a proper discount rate.

**4.** **Financial instruments risk management objectives and policies**

**4.1 Financial risk factors**

The Group’s activities expose it to a variety of financial risks: market risk (including foreign exchange risk and interest rate risk), credit risk and liquidity risk. The Group’s overall risk management program focuses on the unpredictability of financial markets and seeks to minimize any adverse effects on the financial performance of the Group. The Group uses derivative financial instruments to hedge certain risk exposures.

**4.1.1 Market risk**

**(1) Foreign exchange risk**

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

The Group operates hedging policies (reduction of exposure through matching) for each operating segment within the Group, considering the nature of business and the existence of instruments to cope with the risks of exchange rate fluctuation. Additionally, the Group periodically evaluates and handles such risks exposed through managing system for receivables and payables denominated in foreign currencies, and reports the results to the management. In order to hedge the risk of foreign currency exchanges in foreign currency - denominated assets and liabilities, the Group entered into the contracts of foreign exchange forwards with KEB Hana Bank and others, and accounts for short-term trading purposes.

**4.1.1 Market risk (cont’d)**

Financial assets and liabilities denominated in foreign currency as of December 31, 2022 and 2021 are as follows (Korean won in millions and USD in thousands):

|  |  |  |
| --- | --- | --- |
|  | 2022 | 2021 |
| Financial assets | Equivalent in USD | Converted to KRW | Equivalent in USD | Converted to KRW |
| Cash and cash equivalents | $ 142,415 | ~~W~~ 180,482 |  $ 42,820 | ~~W~~ 50,763 |
| Trade receivables | 389,243 | 493,288 | 492,900 | 584,333 |
| Other current receivables | 627 | 794 | 8,256 | 9,787 |
| Long-term loan receivables  | 14,022 | 17,770 | 21,078 | 24,988 |
| Investments in development projects | 16,217 | 20,552 | 21,052 | 24,957 |
| Other non-current assets | 224 | 284 | 220 | 260 |
| Total | $ 562,748 |  ~~W~~ 713,170 | $ 586,326 | ~~W~~ 695,088 |

|  |  |  |
| --- | --- | --- |
|   | 2022 | 2021 |
| Financial liabilities | Equivalent in USD | Converted to KRW | Equivalent in USD | Converted to KRW |
| Trade payables | $ 247,755 | ~~W~~ 313,980 | $ 140,815 | ~~W~~ 166,936 |
| Short-term borrowings | 219,553 | 278,239 | 352,948 | 418,420 |
| Other payables | 9,702 | 12,295 | 22,280 | 26,413 |
| Long-term borrowings | 4,782 | 6,060 | 4,782 | 5,669 |
| Total | $ 481,792 | ~~W~~ 610,574 | $ 520,825 | ~~W~~ 617,438 |

The analysis is based on the assumption that the interest rate has increased/decreased by 10% with all other variables held constant (Korean won in millions).

|  |  |  |
| --- | --- | --- |
|   | 2022 | 2021 |
|   | 10% increase | 10% decrease | 10% increase | 10% decrease |
| Income effect before tax | ~~W~~ 10,260 | ~~W~~ 10,260 | ~~W~~ 7,765 | ~~W~~ 7,765 |

**(2) Price risk**

The Group’s equity investments, which are classifies as FVPL and FVOCI, are susceptible to price risk.

The Group has determined that an increase/(decrease) of 10% on price of FVPL and FVOCI that the Group is holding, could have an impact of approximately W 5,432 million increase/(decrease) on equity before tax of the Group resulted from changes of gain(loss) on valuation of financial instruments.

**(3) Interest risk**

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate because of changes in future market interest rate. The interest rate risk mainly arises through floating-rate deposits and borrowings. Part of the interest rate risk is offset by the variable interest rate risk from the underlying cashable assets and short-term financial instruments.

**4.1.2 Credit risk**

Credit risk is managed on a Group basis. Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to wholesale and retail customers, including outstanding receivables and committed transactions. For banks and financial institutions, only highly-rated financial institutions from independent rating agency are accepted. For the general customers, the Group hedges credit risks by assessing level of credit ratings and entering into an export credit insurance contracts with Korea Trade Insurance Corporation.

As of the end of the reporting date, the maximum exposure to credit risk of each of financial assets is the carrying amount of each of financial assets.

**4.1.3 Liquidity risk**

In order to maintain appropriate amount of liquidity, the Group manages liquidity risk by making cyclical expectations and adjustments of capital inflows and outflows. The Group management team monitors rolling forecasts of the Group’s liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Group’s debt financing plans, covenant compliance, compliance with internal statement of financial position ratio targets and, if applicable, external regulatory or legal requirements.

The table below summarizes the maturity profile of the Group’s financial liabilities based on contractual undiscounted payments as of December 31, 2022 and 2021 (Korean won in millions):

|  |
| --- |
| 2022 |
|   | Less than 1 year | 1~2 years | 2~3 years | Over 3 years | Total | Carrying amount |
| Trade payables | ~~W~~ 444,427 | ~~W~~ - | ~~W~~ - | ~~W~~ - | ~~W~~ 444,427 | ~~W~~ 444,427 |
| Other payables  | 45,188 | 6 | - | 3 | 45,197 | 45,197 |
| Derivative financial liabilities | 5,679 | - | - | - | 5,679 | 5,679 |
| Borrowings (\*1) | 305,016 | 14,048 | 308,196 | 13,988 | 641,248 | 613,899 |
| Debentures (\*1) | 52,575 | 51,194 | - | - | 103,769 | 99,850 |
| Lease liabilities  | 3,619 | 2,222 | 916 | 1,733 | 8,490 | 8,125 |
| Financial guarantee contracts (\*2) | - | - | - | 2,040 | 2,040 | 200 |
|   | ~~W~~ 856,504 | ~~W~~ 67,470 | ~~W~~ 309,112 | ~~W~~ 17,764 | ~~W~~1,250,850 | ~~W~~1,217,377 |

(\*1) Borrowings and debentures include nominal interests.

(\*2) Represents the maximum amount that can be claimed at the earliest period.

|  |
| --- |
| 2021 |
|   | Less than 1 year | 1~2 years | 2~3 years | Over 3 years | Total | Carrying amount |
| Trade payables | ~~W~~ 255,964 | ~~W~~ - | ~~W~~ - | ~~W~~ - | ~~W~~ 255,964 | ~~W~~ 255,964 |
| Other payables  | 64,184 | - | - | - | 64,184 | 64,184 |
| Derivative financial liabilities | 1,436 | - | - | - | 1,436 | 1,436 |
| Borrowings (\*1) | 480,656 | 14,052 | 308,204 | 14,458 | 817,370 | 789,364 |
| Debentures (\*1) | 33,377 | 52,575 | 51,194 | - | 137,146 | 129,676 |
| Lease liabilities  |  |  |  |  |  |  |
| Financial guarantee contracts (\*2) | - | - | - | 2,040 | 2,040 | 48 |
|   | ~~W~~ 839,777 | ~~W~~ 70,218 | ~~W~~ 360,511 | ~~W~~ 18,812 | ~~W~~1,289,318 | ~~W~~1,250,476 |

(\*1) Borrowings and debentures include nominal interests.

(\*2) Represents the maximum amount that can be claimed at the earliest period.

**4.2 Capital risk management**

The Group’s objectives when managing capital are to safeguard the Group’s ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Group uses debt-to-equity ratio for capital management. This ratio is calculated as total debts divided by total equity as shown in the consolidated statement of financial position.

Debt-to-equity ratios as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|   | 2022 | 2021 |
| Liabilities |  ~~W~~ 1,394,708  |  ~~W~~ 1,344,553  |
| Equity |  436,594  |  362,830  |
| Debt-to-equity ratios (%) |  319.5  |  370.6  |

**5. Fair value**

**5. 1 Fair value of financial instruments by category**

There are no significant differences between carrying value and fair value of financial instruments except for financial assets at fair value measured at cost, which do not have a quoted price in an active market and their fair value cannot be measured reliably and thus excluded from the fair value disclosures.

**5.2 Fair Value Hierarchy**

Financial instruments measured at fair value or for which the fair value is disclosed are categorized within the fair value hierarchy, and the defined levels are as follows:

* Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities
* Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
* Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

The Group’s financial assets and financial liabilities that are measured at fair value as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |
| --- | --- |
|  | 2022 |
|   | Level 1 | Level 2 | Level 3 | Level 4 |
| Recurring fair value measurements |   |   |   |   |
| Derivative financial assets | ~~W~~ - | ~~W~~ 5,775 | ~~W~~ - | ~~W~~ 5,775 |
| Financial assets at FVPL | - | - | 51,965 | 51,965 |
| Financial assets at FVOCI | - | 5,679 | - | 5,679 |
| Derivative financial liabilities |   |   |   |   |

|  |  |
| --- | --- |
|  | 2021 |
|   | Level 1 | Level 2 | Level 3 | Level 4 |
| Recurring fair value measurements |   |   |   |  |
| Derivative financial assets | ~~W~~ - | ~~W~~ 2,277 | ~~W~~ - | ~~W~~ 2,277 |
| Financial assets at FVPL | - | - | 48,497 | 48,497 |
| Financial assets at FVOCI | - | 1,436 | - | 1,436 |
| Derivative financial liabilities |   |   |   |   |

Fair value of cash and cash equivalents, trade receivable, long and short-term financial instruments, finance lease receivable, other financial assets, long-term loan receivables, trade payable, other payable, long and short-term borrowings and etc. is excluded from disclosure of fair value since fair value is similar to the carrying amounts that the effects discounted are not material.

There were no transfers between Level 1 and Level 2, to Level 3 and from Level 3 for the years ended December 31, 2022 and 2021.

When calculating fair value measures, the impact of potential climate-related issues, including laws and regulations that may affect the fair value measurement of assets and liabilities in financial statements, was considered. Climate-related risks are included in major assumptions if they have a significant impact on the measurement of recoverable amounts. This assumption was included in the cash flow estimation when evaluating the value of use.

Currently, the impact of climate-related issues is not material to the Group's consolidated financial statements.

**5.3 Valuation technique and the inputs**

Valuation techniques and inputs used in the fair values categorized within Level 3 of the fair value hierarchy as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |
| --- | --- |
|  | 2022 |
|   | Fair value | Level | Valuation techniques | Inputs | Range of inputs |
| Financial assets at FVOCI  |  |  |  |  |   |
| KOREA Ras Laffan LNG Ltd. | 40,670 | 3 | Discounted cash flow (DCF) model | Discount rate Main product unit price ($/mmbtu) Estimated period of cash flow | 12.25% |
| 8.28 ~ 13.75 |
| By 2029 |
| Hyundai Miraero Co., Ltd. | 11,295 | 3 | Net asset method | - | - |

|  |  |
| --- | --- |
|  | 2021 |
|  | Fair value | Level | Valuation techniques | Inputs | Range of inputs |
| Financial assets at FVPL |   |   |   |   |   |
| Almac Co., Ltd. | 2,191 | 3 | Discounted cash flow (DCF) model | Discount rate Perpetuity growth rates | 12.15% |
| 0% |
| Comparable company valuation multiples | Comparable company peer | Manufactures of aluminum with rolled, extrusion, stretching |
| Financial assets at FVOCI |   |   |   |   |   |
| KOREA Ras Laffan LNG Ltd. | 39,791 | 3 | Discounted cash flow (DCF) model | Discount rate Main product unit price ($/mmbtu) Estimated period of cash flow | 7.59% |
| 7.08 ~ 11.76 |
| By 2029 |
| Hyundai Miraero Co., Ltd. | 8,706 | 3 | Net asset method | - | - |

The fair value measurement for the purpose of financial reporting is annually performed by the external independent valuation institution.

**5.4 Sensitivity analysis for recurring fair value measurements categorized within Level 3**

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments which are affected by the unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the amounts represent the most favorable or most unfavorable. The equity securities of Korea Ras Laffan LNG Ltd., which is classified as Level 3, is subject to sensitivity analysis. The results of the sensitivity analysis from changes of 1% in discounted rate, which is unobservable input, for financial assets at fair value through other comprehensive income, which is categorized within Level 3 and subject to sensitivity analysis, are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|   | Favorable change | Unfavorable change |
| Gain (loss) on valuation of financial assets at FVOCI  | ~~W~~ 912 | ~~W~~ (872) |

**6. Operating segment and regional information.**

**6.1 Operating segment**

Management who makes strategic decisions determines the Group’s operating segments. Management makes decisions about allocation of resources and reviews to assess performance of the operating segments based on their sales. Based on product type, operating segments are categorized as steel division, auto & parts division, smart mobility & energy convergence division, infra & machinery division, petroleum & chemical products division, and others.

The Group’s financial information by operating segments for the years ended December 31,2022 and 2021 is as follows (Korean won in millions):

|  |  |
| --- | --- |
|  | 2022 |
|   | Sales | Operating profit | Depreciation | Amortization |
| Steel | ~~W~~ 2,106,900 | ~~W~~ 36,444 | ~~W~~ 2,091 | ~~W~~ 168 |
| Auto & Parts | 1,133,779 | 13,580 | 896 | 91 |
| Smart mobility & Energy convergence | 167,434 | (5,410) | 1,000 | 72 |
| Infra & Machinery | 320,774 | 4,045 | 253 | 26 |
| Petroleum & Chemical products | 2,233,957 | 17,291 | 1,765 | 179 |
| Others | 164,125 | 878 | 131 | 12 |
|   | ~~W~~ 6,126,969 | ~~W~~ 66,828 | ~~W~~ 6,136 | ~~W~~ 548 |

|  |  |
| --- | --- |
|  | 2021 |
|   | Sales | Operating profit | Depreciation | Amortization |
| Steel | ~~W~~ 1,342,286 | ~~W~~ 23,439 | ~~W~~ 2,009 | ~~W~~ 132 |
| Auto & Parts | 550,485 | 2,435 | 658 | 54 |
| Smart mobility & Energy convergence | 205,220 | 926 | 1,000 | 63 |
| Infra & Machinery | 223,400 | 1,332 | 267 | 22 |
| Petroleum & Chemical products | 1,357,961 | 5,468 | 1,622 | 134 |
| Others | 103,146 | 1,470 | 123 | 10 |
|   | ~~W~~ 3,782,498 | ~~W~~ 35,070 | ~~W~~ 5,679 | ~~W~~ 415 |

Share of profit and other income (dividend income) of resource development business division, which are not included in operating income amount to W 34,860 million and W 15,832 million for the years ended December 31, 2022 and 2021, respectively.

Assets, liabilities, other income and expenses, and finance income and costs of operating segments are not reported to the chief operating decision-maker. Accordingly, the information is not presented in the tables above.

6.2 Regional Information.

As of December 31, 2022 and 2021, the details of non-current assets by region (based on location) are as follows (Korean won in millions):

|  |
| --- |
| 2022 |
| Korea | America | Asia | Europe | Others | Total |
| ~~W~~ 367,266 | ~~W~~ 1,703 | ~~W~~ 29,016 | ~~W~~ 71 | ~~W~~ 133 | ~~W~~ 398,189 |

|  |
| --- |
| 2021 |
| Korea | America | Asia | Europe | Others | Total |
| ~~W~~ 365,608 | ~~W~~ 1,726 | ~~W~~ 23,868 | ~~W~~ 57 | ~~W~~ 166 | ~~W~~ 391,425 |

The amount of non-current assets by region excludes financial instruments, deferred tax assets, and investments in joint ventures and associates.

7. Financial instruments by category

Details of financial assets by category as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |
| --- | --- |
|  | 2022 |
|   | At amortized cost | At FVPL | At FVOCI | Total |
| Current assets: |   |   |   |   |
| Cash and cash equivalents |  ~~W~~ 356,938 | ~~W~~ - | ~~W~~ - | ~~W~~ 356,938 |
| Short-term financial instruments | 5,000 | - | - | 5,000 |
| Trade receivables | 525,741 | - | - | 525,741 |
| Derivatives financial assets | - | 5,074 | 701 | 5,775 |
| Finance lease receivables | 344 | - | - | 344 |
| Other current receivables | 16,204 | - | - | 16,204 |
|   | 904,227 | 5,074 | 701 | 910,002 |
| Non-current assets: |   |   |   |   |
| Long-term financial instruments | 19 | - | - | 19 |
| Financial assets at FVPL | - | 1,669 | - | 1,669 |
| Financial assets at FVOCI | - | - | 52,647 | 52,647 |
| Other financial assets | 319 | - | - | 319 |
| Long-term loan receivables | 20,111 | - | - | 20,111 |
| Investments in resource |   |   |   |   |
| development projects | 20,552 | - | - | 20,552 |
| Finance lease receivables | 159 | - | - | 159 |
| Other non-current receivables | 9,134 | - | - | 9,134 |
| Other non-current assets (\*1) | 3,556 | - | - | 3,556 |
|   | 53,850 | 1,669 | 52,647 | 108,166 |
|   | ~~W~~ 958,077 | ~~W~~ 6,743 | ~~W~~ 53,348 | ~~W~~ 1,018,168 |

(\*1) Long-term prepaid expenses are excluded.

|  |  |
| --- | --- |
|   | 2021 |
|   | At amortized cost | At FVPL | At FVOCI | Total |
| Current assets: |   |   |   |   |
| Cash and cash equivalent | ~~W~~ 195,080 | ~~W~~ - | ~~W~~ - | ~~W~~ 195,080 |
| Short-term financial instruments | 2,000 | - | - | 2,000 |
| Trade receivables | 649,741 | - | - | 649,741 |
| Derivatives financial assets | - | 2,022 | 255 | 2,277 |
| Finance lease receivables | 373 | - | - | 373 |
| Other current receivables | 23,409 | - | - | 23,409 |
|   | 870,603 | 2,022 | 255 | 872,880 |
| Non-current assets: |   |   |   |   |
| Long-term financial instruments | 19 | - | - | 19 |
| Financial assets at FVPL | - | 2,560 | - | 2,560 |
| Financial assets at FVOCI | - | - | 49,358 | 49,358 |
| Other financial assets | 350 | - | - | 350 |
| Long-term loan receivables | 28,387 | - | - | 28,387 |
| Investments in resource |   |   |   |   |
| development projects | 24,957 | - | - | 24,957 |
| Finance lease receivables | 563 | - | - | 563 |
| Other non-current receivables | 473 | - | - | 473 |
| Other non-current assets (\*1) | 3,328 | - | - | 3,328 |
|  | 58,077 | 2,560 | 49,358 | 109,995 |
|  | ~~W~~ 928,680 | ~~W~~ 4,582 | ~~W~~ 49,613 | ~~W~~ 982,875 |

(\*1) Long-term prepaid expenses are excluded.

**7. Financial instruments by category (cont’d)**

Details of financial liabilities by category as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |
| --- | --- |
|  | 2022 |
|   | At amortized cost | At FVPL | Total |
| Current liabilities |   |   |   |
| Trade payables | ~~W~~ 444,427 | ~~W~~ - | ~~W~~ 444,427 |
| Other payables | 45,188 | - | 45,188 |
| Short-term borrowings | 290,967 | - | 290,967 |
| Current portion of debentures | 49,943 | - | 49,943 |
| Derivative financial liabilities | - | 5,679 | 5,679 |
| Lease liabilities | 3,344 | - | 3,344 |
| Other current liabilities | 9,347 | - | 9,347 |
|   | 843,216 | 5,679 | 848,895 |
| Non-current liabilities: |   |   |   |
| Long-term other payables | 10 | - | 10 |
| Debentures | 49,907 | - | 49,907 |
| Long-term borrowings | 322,932 | - | 322,932 |
| Lease liabilities | 4,781 | - | 4,781 |
| Other non-current liabilities | 3,948 | - | 3,948 |
| Provision for financial guarantee | - | 201 | 201 |
|   | 381,578 | 201 | 381,779 |
|   | ~~W~~ 1,224,794 | ~~W~~ 5,880 | ~~W~~ 1,230,674 |

|  |  |
| --- | --- |
|  | 2021 |
|   | At amortized cost | At FVPL | Total |
| Current liabilities |   |   |   |
| Trade payables | ~~W~~ 255,964 | ~~W~~ - | ~~W~~ 255,964 |
| Other payables | 64,184 | - | 64,184 |
| Short-term borrowings | 466,626 | - | 466,626 |
| Current portion of debentures | 29,962 | - | 29,962 |
| Derivative financial liabilities | - | 1,436 | 1,436 |
| Lease liabilities | 3,197 | - | 3,197 |
| Other current liabilities | 6,282 | - | 6,282 |
|   | 826,215 | 1,436 | 827,651 |
| Non-current liabilities: |   |   |   |
| Long-term other payables | 5 | - | 5 |
| Debentures | 99,713 | - | 99,713 |
| Long-term borrowings | 322,738 | - | 322,738 |
| Lease liabilities | 6,607 | - | 6,607 |
| Other non-current liabilities | 4,081 | - | 4,081 |
| Provision for financial guarantee | ~~W~~ - | ~~W~~ 48 | ~~W~~ 48 |
|  | 433,144 | 48 | 433,192 |
|  | ~~W~~ 1,259,359 | ~~W~~ 1,484 | ~~W~~ 1,260,843 |

**7. Financial instruments by category (cont’d)**

Net gains or losses on each category of financial instruments for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|   | 2022 | 2021 |
| Financial assets at FVPL: |   |   |
| Gain on disposal of financial assets at FVPL | ~~W~~ 1,896 | ~~W~~ - |
| Dividend income | 30 | 4 |
| Gain on valuation of financial assets at FVPL | - | 6 |
|   | 1,926 | 10 |
| Financial assets at FVOCI: |   |   |
| Dividend income | 13,733 | 7,989 |
| Gain on valuation of financial assets at FVOCI | 2,863 | 2,848 |
|   | 16,596 | 10,837 |
| Financial assets at amortized cost: |   |   |
| Interest income | 5,381 | 2,212 |
| Bad debt expenses | (24,887) | (2,733) |
| Foreign exchange gain | 7,573 | 16,596 |
| Loss on disposal of trade receivables | (10,226) | (1,768) |
|   | 22,159 | 14,307 |
| Derivative instruments: |   |   |
| Gain (loss) on valuation (through profit or loss) | (1,190) | 491 |
| Gain on valuation (through other comprehensive income) | 354 | 254 |
| Gain (loss) on transactions | 6,065 | (530) |
|   | 5,229 | 215 |
| Financial liabilities at amortized cost: |   |   |
| Interest expenses | (19,650) | (13,067) |
| Foreign exchange loss | (9,818) | (10,875) |
|   | (29,468) | (23,942) |
| Finance guarantee provision: |   |   |
| Reversal of provision for financial guarantee | 439 | 175 |
| Contribution to Provision for financial guarantee | (757) | (169) |
|   | (318) | 6 |
|   | ~~W~~ (28,194) | ~~W~~ 1,433 |

Details of restricted financial instruments as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |  |
| --- | --- | --- | --- |
|  | 2022 | 2021 | description |
| Long-term financial instruments and others | ~~W~~ 191 | ~~W~~ 202 | Bank overdrafts and etc. |

**8. Transfers of financial assets**

**(1) Transferred financial assets that are not derecognized in their entirety**

The D/A export receivables that have not matured have been discounted with banks and the receivables that the Group has a redemption appeal duty are not derecognized because the Group has risks and rewards.

Financial assets which were transferred but not derecognized as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |
| --- | --- |
|   | Financial assets at amortized cost |
|   | 2022 | 2021 |
| Book value of assets |  ~~W~~ 278,175  |  ~~W~~ 423,992  |
| Book value of related liabilities (\*1) |  278,175  |  423,992  |
| (\*1) Net of prepaid expenses. |   |   |

**2) Transferred financial assets that are derecognized in their entirety**

The Group derecognized the receivables, which were discounted with the financial institutions, from the consolidated financial statements on transfer date by transferring substantially all the risks and rewards. As of December 31, 2022, the carrying amount of receivables which have not matured amounts to ~~W~~ 79,291 million.

**9. Cash and cash equivalents**

Details of cash and cash equivalents as of December 31,2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|  | 2022 | 2021 |
| Cash at bank and on hand  |  ~~W~~ 356,938  | ~~W~~ 131,872  |
| Short-term deposits |  -  |  63,208  |
|  | ~~W~~ 356,938  |  ~~W~~ 195,080  |

**10. Trade and other receivables**

**10.1 Trade receivables**

Details of trade receivables as of December 31,2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|  | 2022 | 2021 |
| Trade receivables |  ~~W~~ 543,590  | ~~W~~ 679,879  |
| Allowance for expected credit losses |  (14,849)  |  (30,138)  |
|  | ~~W~~ 525,741  |  ~~W~~ 649,741  |

Details of the aging analysis and loss allowance for expected credit losses of trade receivables as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |
| --- | --- |
|  | 2022 |
|   | Current | < 3 months | Over 3 months | Total |
| General receivables: |   |   |   |   |
| Carrying amount | ~~W~~ 482,998 | ~~W~~ 28,796 | ~~W~~ 5,229 | ~~W~~ 517,023 |
| Expected loss rate (%) | 0.02% | 0.12% | 0.06% | - |
| Allowance for expected credit losses | (102) | (34) | (3) | (139) |
| Individual impaired receivables: Carrying amount |  - | 523 | 26,045 | 26,568 |
| Allowance for expected credit losses | - | (523) | (17,187) | (17,710) |
| Total of receivables | 482,998 | 29,319 | 31,273 | 543,590 |
|   | ~~W~~ (102) | ~~W~~ (557) | ~~W~~ (17,190) | ~~W~~ (17,849) |

10.1 **Trade receivables (cont’d)**

|  |  |
| --- | --- |
|  | 2021 |
|   | Current | < 3 months | Over 3 months | Total |
| General receivables: |   |   |   |   |
| Carrying amount | ~~W~~ 600,473 | ~~W~~ 41,714 | ~~W~~ 4,757 | ~~W~~ 646,944 |
| Expected loss rate (%) | 0.02% | 0.12% | 0.06% | - |
| Allowance for expected credit losses | (146) | (89) | (941) | (1,176) |
| Individual impaired receivables: Carrying amount |  - | - | 32,935 | 32,935 |
| Allowance for expected credit losses | - | - | (28,962) | (28,962) |
| Total of receivables | 600,473 | 41,714 | 37,692 | 679,879 |
|   | ~~W~~ (146) | ~~W~~ (89) | ~~W~~ (29,903) | ~~W~~ (30,138) |

Changes in the allowance for expected credit losses of trade receivables for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|   | 2022 | 2021 |
| As of January, 1 | ~~W~~ 30,138 | ~~W~~ 27,073 |
| Provision of allowance for expected credit loss | 872 | 2,948 |
| Others (\*) | (13,161) | 117 |
|   | ~~W~~ 17,849 | ~~W~~ 30,138 |

(\*) It includes W 13,180 million of loss allowance for receivables reclassified to long-term receivables for the year ended December 31, 2022.

**10.2 Other receivables**

Details of other receivables as of December 31,2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|   | 2022 | 2021 |
|   | Receivables | Allowance for doubtful accounts | Carrying amount | Receivables | Allowance for doubtful accounts | Carrying amount |
| Short-term loan receivables | ~~W~~ 49  | ~~W~~ -  |  ~~W~~ 49 | ~~W~~ -  | ~~W~~ -  | ~~W~~ -  |
| Other receivables | 132,850 | (118,513) | 14,337 | 114,579 | (104,669) | 9,910 |
| Accrued income | 14,905 | (4,782) | 10,123 | 13,521 | - | 13,521 |
| Guarantee deposits | 829 | - | 829 | 451 | - | 451 |
|   | ~~W~~ 148,633 | ~~W~~ (123,295) | ~~W~~ 25,338 | ~~W~~ 128,551 | ~~W~~ (104,669)  | ~~W~~ 23,882  |

**11. Financial assets at fair value**

**(1) Financial assets at fair value through profit or loss**

Details of financial assets at FVPL as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|   | 2022 | 2021 |
| Investment fund |  |  |
| Shinhan Gentium Startup Fund No.2  | ~~W~~ 350 | ~~W~~ 350 |
| Non-listed equity investments |   |   |
| EUROTEM DEMIRYOLU ARA-LARI SAN | 19 | 19 |
| Almac Co., Ltd. | - | 2,191 |
| Prologue Ventures New Technology  |   |   |
| Investment Association No.1 | 1,000 |  - |
| Aureum Gold Rush ESG General Private |   |   |
| Equity Investment Trust No.1 | 300 | - |
|   | ~~W~~ 1,669 | ~~W~~ 2,560 |

**11. Financial assets at fair value (cont’d)**

**(2) Financial assets at fair value through other comprehensive income**

Details of financial assets at FVOCI as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|  | 2020 | 2021 |
| Non-listed equity investments |   |   |
| KOREA RAS LAFFAN LNG LIMITED | ~~W~~ 40,670 | ~~W~~ 39,791 |
| Hyundai Miraero Co., Ltd. | 11,295 | 8,706 |
| SHWE DAEHAN MOTORS | - | 861 |
| STEELARIS PTE LTD | 682 | - |
|   | ~~W~~ 52,647 | ~~W~~ 49,358 |

Changes in financial assets at FVPL and FVOCI for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|   | Financial assets at FVPL | Financial assets at FVOCI | Financial assets at FVPL | Financial assets at FVOCI |
| As of January 1 | ~~W~~ | 2,560 | ~~W~~ | 49,358 | ~~W~~ | 2,204 | ~~W~~ | 45,530 |
| Additions |   | 1,300 |   | - |   | 350 |   | - |
| Disposals |   | (2,191) |   | - |   | - |   | - |
| Valuation |   | - |   | 3,230 |   | 6 |   | 3,757 |
| Effect of changes in foreign currency |   | - |   | 59 |   | - |   | 71 |
| As of December 31 | ~~W~~ | 1,669 | ~~W~~ | 52,647 | ~~W~~ | 2,560 | ~~W~~ | 49,358 |

**12. Derivative instruments**

Details of derivative instruments as of December 31, 2022 and 2021 are as follows (Korean won in millions):

|  |  |  |
| --- | --- | --- |
|  | 2022 | 2021 |
|   | Asset | Liability | Asset | Liability |
| Foreign exchange forward | ~~W~~ | 3,996 | ~~W~~ | 4,908 | ~~W~~ | 1,830 | ~~W~~ | 1,093 |
| Instruments futures - fair value risk hedge (\*1) |   | 1,078 |   | 771 |   | 192 |   | 343 |
| Instruments futures - cash flow hedge (\*2) |   | 701 |   | - |   | 255 |   | - |
|   | ~~W~~ | 5,775 | ~~W~~ | 5,679 | ~~W~~ | 2,277 | ~~W~~ | 1,436 |

(\*1) The Group conducts futures trading to avoid price fluctuation in connection with the asphalt supply contract.

(\*2) The Group applies cash flow hedge accounting to commodity futures regarding vessel fuel oil. The effective portion of hedge that was recognized in the equity amounts to ~~W~~ 541 million and W 187 million as of December 31, 2022 and 2021, respectively.