GS GLOBAL CORP. AND ITS SUBSIDIARIES

Consolidated Financial Statements
as of and for the Years Ended
December 31, 2020 and 2019

ATTACHMENT: INDEPENDENT AUDITORS' REPORT

GS GLOBAL CORP.

Deloitte Anjin LLC
9F., One IFC,
10, Gukjegeumyung-ro,
Youngdeungpo-gu, Seoul
07326, Korea

Tel: +82 (2) 6676 1000
Fax: +82 (2) 6674 2114
www.deloitteanjin.co.kr

Independent Auditors' Report

English Translation of Independent Auditors' Report Originally Issued in Korean on March 18, 2021

To the Shareholders and the Board of Directors of
GS Global Corp.:

Report on the Audited Consolidated Financial Statements

Our Opinion

We have audited the accompanying consolidated financial statements of GS Global Corp. and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2020 and 2019, respectively, and the related consolidated statements of income, consolidated statements of comprehensive income, consolidated statements of changes in shareholders' equity and consolidated statements of cash flows, all expressed in Korean won, for the years then ended, and a summary of significant accounting policies and other explanatory information.

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group as of December 31, 2020 and 2019, respectively, and its financial performance and its cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("K-IFRSs").

Basis for Audit Opinion

We conducted our audits in accordance with the Korean Standards on Auditing ("KSAs"). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audits of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements, including those related to independence, that are relevant to our audits of the consolidated financial statements in the Republic of Korea as required by prevailing audit regulations. 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 as of and for the year ended December 31, 2020. These matters were addressed in the context of our audits 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.

Impairment Test of GS ENTEC Corp.'s Cash-Generating Unit

(1) The reason why the matter is determined to be a key audit matter

GS ENTEC Corp., which is the consolidated subsidiary, has a cash-generating unit that includes a goodwill (see Note 16) acquired through a business combination. Accordingly, the Group conducts an impairment test on the cash-generating unit by comparing the recoverable amount and its carrying amount at the same time each year, regardless of whether there is any indication of an impairment in accordance with K-IFRS 1036 Impairment of Assets.

The recoverable amount used for the impairment test conducted by the Group during the current reporting period is large amount of net fair value or value in use. In calculating net fair value, management of the Group divides business into a plant business and an energy business to estimate the amount of new orders, taking into account future market size, market share and market conditions. Based on this, the recoverable amount is calculated by applying the discount rate and the long-term growth rate to the forecasted future cash flows. Since there is considerable uncertainty in the estimation and forecast (when an error occurs, the error has a significant effect on the consolidated financial statements), the impairment test for GS ENTEC Corp.'s cash-generating unit was decided as a key audit matter.

Deloitte.

(2) Our audit approach

The primary procedures we performed to address this key audit matter included the following:

a. We assessed the qualification and objectivity of the external expert engaged by the Group.
b. We engaged our internal valuation specialists, who are qualified and objective for our audit purposes, to assist us in assessing the key assumptions used to determine recoverable amount.
c. In order to evaluate the adequacy of the net fair value calculated by the Group, we compared the indicators such as similar transaction cases.
d. We retrospectively reviewed the cash flows used in the previous estimates against actual performance to confirm whether there is any bias of estimation.
e. We confirmed the mathematical accuracy of the discounted cash flow model used to estimate the value in use.
f. In order to confirm the rationality of the input variables used, such as the execution rate of the basic order balance and the estimated amount of new orders, we have confirmed the business plan approved by the management, compared it with observable external market data and analyzed the future prospects of the project. We also compared it to our understanding.

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

Management is responsible for the preparation of the accompanying consolidated financial statements in accordance with K-IFRSs, and for such internal control as they determine 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 of the Group 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 intends either 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.

Auditors' Responsibilities for the Audits 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 auditors' 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 KSAs 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 KSAs, 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 audit 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 the 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 auditors' report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' 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's audit. We are solely responsible for our audit opinion.

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

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence and 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 year and are, therefore, the key audit matters. We describe these matters in our auditors' 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 auditors' report is Jong-Min Ahn.

Others

Our audits also comprehended the translation of Korean won amounts into U.S. dollar amounts, and, in our opinion, such translation has been made in conformity with the basis stated in Note 2. Such U.S. dollar amounts are presented solely for the convenience of readers of the consolidated financial statements.

Accounting principles and auditing standards and their application in practice vary among countries. The accompanying consolidated financial statements are not intended to present the financial position, results of operations, changes in shareholders' equity or cash flows in accordance with accounting principles and practices generally accepted in countries other than the Republic of Korea. In addition, the principles and practices utilized in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report and the accompanying consolidated financial statements are for use by those knowledgeable about Korean accounting principles and auditing standards and their application in practice.

Deloitte Anjin LLC

March 18, 2021

<u>Notice to Readers</u>

This report is effective as of March 18, 2021, the auditors' report date. Certain subsequent events or circumstances may have occurred between the auditors' report date and the time the auditors' report is read. Such events or circumstances could significantly affect the consolidated financial statements and may result in modifications to the auditors' report.

CONSOLIDATED FINANCIAL STATEMENTS
GS GLOBAL CORP. AND ITS SUBSIDIARIES

THE 70TH

FROM JANUARY 1, 2020,
TO DECEMBER 31, 2020

THE 69TH

FROM JANUARY 1, 2019,
TO DECEMBER 31, 2019

The accompanying consolidated financial statements, including all footnote disclosures, were prepared by, and are the responsibility of, GS Global Corp.

Tae-Hyung Kim
President and Chief Executive Officer
GS Global Corp.

GS GLOBAL CORP. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

AS OF DECEMBER 31, 2020 AND 2019

	Notes	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
		(In millions)		(In thousands)	
ASSETS					
Current assets:		₩ 560,81(	₩ 720,952	$ 515,456	$ 622,690
Cash and cash equivalents	6,38	92,488	82,631	85,007	71,369
Current financial assets	6,9,38	8,275	4,261	7,606	3,681
Trade receivables and other receivables	6,7,35,37	326,721	375,196	300,295	324,060
Contract assets	17	32,558	73,828	29,925	63,766
Current non-financial assets	10	9,987	20,017	9,179	17,286
Prepaid income tax payments		157	143	144	123
Inventories	11,36	90,630	164,876	83,300	142,405
Non-current assets:		396,006	484,293	363,976	418,288
Financial assets at FVPL	6,8,36,38	2,188	1,638	2,011	1,415
Financial assets at FVOCI	6,8,38	22,945	25,082	21,089	21,663
Other non-current financial assets	6,9,38	1,326	450	1,219	389
Investments in associates	12	7,802	5,032	7,171	4,346
Investment property	13	-	6,811	-	5,883
Property and equipment	14	327,025	348,180	300,574	300,725
Lease assets	15	11,313	8,057	10,398	6,959
Intangible assets	16	7,469	73,037	6,865	63,082
Long-term trade receivables and other receivables	6,7,38	6,433	4,593	5,913	3,967
Other non-current and non-financial assets	10	797	131	732	114
Deferred income tax assets	33	8,708	11,282	8,004	9,745
Total assets		₩ 956,82:	₩ 1,205,245	$ 879,432	$ 1,040,978
LIABILITIES					
Current liabilities:		₩ 540,318	₩ 672,609	$ 496,615	$ 580,938
Trade payables and other current payables	6,15,18, 35,38	176,485	266,214	162,210	229,931
Short-term borrowings	6,20,38	176,774	239,600	162,476	206,944
Current portion of long-term borrowings	6,20,38	63,100	98,911	57,996	85,430
Current portion of corporate bond	6,21,38	79,935	29,484	73,470	25,466
Other current financial liabilities	6,22,38	6,104	2,429	5,610	2,098
Contract liabilities	17	9,603	15,275	8,826	13,193
Current non-financial liabilities	23	12,109	8,175	11,130	7,062
Accrued income taxes	33	3,316	3,416	3,048	2,950
Current provisions	19	12,892	9,105	11,849	7,864
Non-current liabilities:		117,488	152,712	107,985	131,898
Long-term trade payables and other current payables	6,15,18, 35,38	6,513	3,602	5,986	3,111
Long-term borrowings	6,20,38	7,000	12,108	6,434	10,458
Corporate bond	6,21,38	94,778	129,662	87,112	111,990
Other non-current financial liabilities	6,22,38	100	95	92	82
Deferred income tax liabilities	33	3,480	800	3,198	691
Defined benefit obligations	24	3,163	4,135	2,907	3,571
Provisions	19	2,454	2,310	2,256	1,995
Total liabilities		657,80(	825,321	604,600	712,836
SHAREHOLDERS' EQUITY					
Shareholders' equity attributable to the owners of the parent company:		285,967	359,107	262,838	310,162
Capital stock	25	206,334	206,334	189,646	178,212
Other shareholders' equity	25	109,471	103,363	100,617	89,275
Components of other capital	26	(12,860)	(13,876)	(11,820)	(11,985)
Retained earnings	27	(16,978)	63,286	(15,605)	54,660
Non-controlling interests		13,04(	20,817	11,994	17,980
Total shareholders' equity		299,01(	379,924	274,832	328,142
Total liabilities and shareholders' equity		₩ 956,82:	₩ 1,205,245	$ 879,432	$ 1,040,978

See accompanying notes to consolidated financial statements.

GS GLOBAL CORP. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME

FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

		Korean won		Translation into U.S. dollars	
	Notes	2020	2019	2020	2019
		(In millions except earnings per share)		(In thousands except earnings per share)	
SALES	4,17,35	₩ 2,815,021	₩ 3,889,400	$ 2,587,335	$ 3,359,302
COST OF SALES	28,35	2,692,773	3,741,420	2,474,975	3,231,490
GROSS PROFIT		122,248	147,980	112,360	127,812
Selling expenses	28,29,35	24,656	21,124	22,662	18,245
Administrative expenses	28,29,35	65,292	68,579	60,011	59,232
OPERATING INCOME	4,5	32,300	58,277	29,687	50,335
Other non-operating income	30,35	132,802	117,216	122,061	101,240
Other non-operating expenses	30,35	218,696	160,258	201,008	138,416
Financial income	6,31,35	1,375	1,386	1,264	1,197
Financial expenses	6,31,35	16,430	22,305	15,101	19,265
Loss on valuation/disposal of investments in associates/subsidiaries	12,32	(927)	(470)	(852)	(406)
LOSS BEFORE INCOME TAX EXPENSE		(69,576)	(6,154)	(63,949)	(5,315)
INCOME TAX EXPENSE	33	12,563	10,507	11,547	9,076
NET LOSS		₩ (82,139)	₩ (16,661)	$ (75,496)	$ (14,391)
NET LOSS ATTRIBUTABLE TO:					
Owners of the parent company		₩ (80,354)	₩ (17,095)	$ (73,855)	$ (14,766)
Non-controlling interests		₩ (1,785)	₩ 434	$ (1,641)	$ 375
LOSSES PER SHARE ATTRIBUTABLE TO OWNERS OF THE PARENT COMPANY:					
LOSSES PER SHARE	34	₩ (974)	₩ (207)	$ (0.90)	$ (0.18)

See accompanying notes to consolidated financial statements.

GS GLOBAL CORP. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
NET LOSS	₩ (82,139)	₩ (16,661)	$ (75,496)	$ (14,391)
OTHER COMPREHENSIVE INCOME (LOSS):	1,273	(4,418)	1,170	(3,815)
Subsequently reclassified to profit or loss:	3,661	(29)	3,366	(24)
Changes in valuation of equity-accounted investees, net	(165)	116	(152)	100
Overseas operations translation gain	5,995	853	5,511	738
Loss on hedging instruments entered into for cash flow hedge, net	(2,169)	(998)	(1,993)	(862)
Subsequently not reclassified to profit or loss:	(2,388)	(4,389)	(2,196)	(3,791)
Loss on financial assets measured at FVOCI, net	(2,480)	(2,793)	(2,280)	(2,413)
Actuarial losses	92	(1,596)	84	(1,378)
TOTAL COMPREHENSIVE LOSS	₩ (80,866)	₩ (21,079)	$ (74,326)	$ (18,206)
COMPREHENSIVE LOSS ATTRIBUTABLE TO:				
Owners of the parent company	₩ (79,248)	₩ (21,450)	$ (72,838)	$ (18,526)
Non-controlling interests	₩ (1,618)	₩ 371	$ (1,488)	$ 320

See accompanying notes to consolidated financial statements.

GS GLOBAL CORP. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

	Korean won						Translation into U.S. dollars
	Capital stock	Other shareholders' equity	Components of other capital	Retained earnings	Non-controlling interests	Total	Total
	(In millions)						(In thousands)
January 1, 2019, as reported	₩ 206,334	₩ 103,363	₩ (11,037)	₩ 83,959	₩ 20,476	₩ 403,095	$ 360,517
Changes in accounting standards	-	-	-	-	-	-	-
Balances after adjustments	₩ 206,334	₩ 103,363	₩ (11,037)	₩ 83,959	₩ 20,476	₩ 403,095	$ 360,517
Dividend	-	-	-	(2,062)	(30)	(2,092)	(1,807)
Net income (loss)	-	-	-	(17,095)	434	(16,661)	(14,390)
Gain (loss) on valuation of FVOCI financial assets	-	-	(2,787)	-	(6)	(2,793)	(2,412)
Changes in valuation of equity-accounted investees, net	-	-	116	-	-	116	100
Gain (loss) on valuation of derivatives	-	-	(1,022)	-	24	(998)	(862)
Loss on translation from investment in foreign operations, net	-	-	854	-	-	854	738
Actuarial losses	-	-	-	(1,516)	(81)	(1,597)	(1,379)
As of December 31, 2019	₩ 206,334	₩ 103,363	₩ (13,876)	₩ 63,286	₩ 20,817	₩ 379,924	$ 340,505
January 1, 2020, as reported	₩ 206,334	₩ 103,363	₩ (13,876)	₩ 63,286	₩ 20,817	₩ 379,924	$ 340,505
Changes in accounting standards	-	-	-	-	-	-	-
Balances after adjustments	₩ 206,334	₩ 103,363	₩ (13,876)	₩ 63,286	₩ 20,817	₩ 379,924	$ 340,505
Dividend	-	-	-		(30)	(30)	(28)
Net income (loss)	-	-	-	(80,354)	(1,785)	(82,139)	(75,496)
Gain (loss) on valuation of FVOCI financial assets	-	-	(2,479)	-	(1)	(2,480)	(2,280)
Changes in valuation of equity-accounted investees, net	-	-	(165)	-	-	(165)	(152)
Gain (loss) on valuation of derivatives	-	-	(2,334)	-	166	(2,168)	(1,993)
Loss on translation from investment in foreign operations, net	-	-	5,994	-	-	5,994	5,510
Changes in controlling interests	-	6,108			(6,120)	(12)	(10)
Actuarial losses	-	-	-	90	2	92	84
As of December 31, 2020	₩ 206,334	₩ 109,471	₩ (12,860)	₩ (16,978)	₩ 13,049	₩ 299,016	$ 266,140

See accompanying notes to consolidated financial statements.

GS GLOBAL CORP. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

	Notes	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
		(In millions)		(In thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES:		₩ 120,172	₩ 33,214	$ 110,451	$ 28,687
Net loss		(82,139)	(16,661)	(75,496)	(14,391)
Additions of expenses not involving cash outflows	39	180,112	130,365	165,544	112,597
Deduction of items not involving cash inflows	39	(27,563)	(26,734)	(25,334)	(23,090)
Changes in working capital:		69,284	(30,118)	63,679	(26,012)
Increase in current financial assets		2,429	3,359	2,233	2,902
Decrease in trade receivables (current)		30,352	121,550	27,897	104,984
Decrease (increase) in other receivables (current)		(50)	520	(47)	449
Decrease (increase) in current non-financial assets		47,166	(46,978)	43,351	(40,575)
Increase in inventories		73,468	19,218	67,526	16,598
Decrease (increase) in other receivables (non-current)		(455)	168	(419)	145
Decrease (increase) in non-financial assets (non- current)		(521)	5	(479)	5
Decrease in trade payables		(95,271)	(117,299)	(87,565)	(101,312)
Decrease in other current liabilities		14,772	8,424	13,577	7,276
Decrease (increase) in other current financial liabilities		498	(1,506)	457	(1,301)
Increase in current non-financial liabilities		(1,483)	(4,916)	(1,363)	(4,246)
Increase (decrease) in provisions		4,137	(7,753)	3,803	(6,696)
Decrease (increase) in other non-current liabilities		144	(61)	132	(53)
Changes in defined benefit obligation		(5,902)	(4,849)	(5,424)	(4,188)
Direct cash flow from operating activities:		(19,522)	(23,638)	(17,942)	(20,417)
Interest received		700	602	644	520
Interest paid		(15,463)	(19,013)	(14,212)	(16,422)
Dividend received		608	593	559	512
Income tax paid		(5,367)	(5,820)	(4,933)	(5,027)
CASH FLOWS FROM INVESTING ACTIVITIES:		(6,527)	(7,902)	(5,998)	(6,825)
Cash inflows from investing activities:		3,927	13,602	3,610	11,748
Proceeds from disposal of short-term loans		1,599	-	1,470	-
Proceeds from disposal of current portion of long-term loans		459	530	422	458
Decrease in short-term financial institution deposits		130	-	119	-
Proceeds from disposal of other current financial assets		182	17	168	15
Proceeds from disposal of long-term loans		113	98	103	84
Decrease in long-term financial institution deposits		-	3,000	-	2,591
Proceeds from disposal of other long-term financial assets		187	-	172	-
Proceeds from disposal of property and equipment		171	5,819	157	5,026
Proceeds from disposal of intangible assets		1,086	782	999	675
Proceeds from disposal of investments in associates		-	-	-	-
Decrease in investment property		-	3,321	-	2,868
Decrease in long-term deposits		-	35	-	31

(Continued)

GS GLOBAL CORP. AND ITS SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

	Notes	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
		(In millions)		(In thousands)	
Cash outflows for investing activities:		₩ (10,454)	₩ (21,504)	$ (9,608)	$ (18,573)
Acquisition of short-term financial deposits		4	53	3	46
Acquisition of other current financial assets		67	215	61	185
Acquisition of short-term loans		3	1,575	3	1,360
Acquisition of long-term financial deposits		-	3,000	-	2,591
Acquisition of financial assets at FVPL		600	-	552	-
Acquisition of financial assets at FVOCI		1,000	-	919	-
Acquisition of long-term loans		103	-	95	-
Acquisition of other long-term financial assets		117	-	108	-
Acquisition of property and equipment		3,128	14,927	2,875	12,893
Acquisition of intangible assets		1,460	966	1,342	835
Acquisition of investment property		14	-	13	-
Acquisition of long-term deposits		-	8	-	7
Acquisition of investments in associates		3,958	760	3,637	656
CASH FLOWS FROM FINANCING ACTIVITIES:		(97,845)	(16,318)	(89,932)	(14,093)
Cash inflows from financing activities:		1,252,146	1,482,437	1,150,870	1,280,392
Proceeds from short-term borrowings		1,207,249	1,425,623	1,109,604	1,231,321
Proceeds from long-term borrowings		-	7,000	-	6,046
Proceeds from corporate bonds		44,897	49,814	41,266	43,025
Cash outflows for financing activities:		(1,349,991)	(1,498,755)	(1,240,802)	(1,294,485)
Repayment of short-term borrowings		(1,269,301)	(1,427,495)	(1,166,637)	(1,232,937)
Repayment of current portion of long-term borrowings		(35,811)	(24,477)	(32,914)	(21,141)
Repayment of current portion of corporate bonds		(20,000)	-	(18,382)	-
Repayment of long-term borrowings		(5,108)	(34,342)	(4,695)	(29,661)
Repayment of corporate bonds		(9,500)	-	(8,732)	-
Decrease in lease liabilities		(9,970)	(10,349)	(9,164)	(8,939)
Dividends paid		(30)	(2,092)	(28)	(1,807)
Decrease in payment guarantee liabilities		(271)	-	(250)	-
NET INCREASE IN CASH AND CASH EQUIVALENTS		15,800	8,994	14,521	7,768
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR		82,631	68,017	75,948	58,747
CHANGES IN CASH AND CASH EQUIVALENTS IN FOREIGN CURRENCIES		(5,943)	5,620	(5,462)	4,854
CASH AND CASH EQUIVALENTS, END OF YEAR		₩ 92,488	₩ 82,631	$ 85,007	$ 71,369

(Concluded)

See accompanying notes to consolidated financial statements.

1. GENERAL:

Organization and Description of Business

The parent company, in accordance with Korean International Financial Reporting Standard (“K-IFRS”) 1110, *Consolidated Financial Statements*, GS Global Corp. (the “Company”), was incorporated on July 31, 1954, under the Commercial Code of the Republic of Korea for the purpose of trading in various goods internationally. On June 26, 1976, the Company became publicly owned, with the common stock of the Company listed on the Korea Exchange (formerly, the Korea Stock Exchange). The Company changed its name from Ssang Yong Corporation to GS Global Corp. on July 21, 2009.

As of December 31, 2020, the Company’s number of shares authorized is 400,000,000 (par value: ₩2,500), and after the incorporation through several times of paid-in capital, reduction of capital stock and stock split, the number of shares issued is 82,533,764 and the capital stock amounted to ₩206,334,410,000 ($178,212,481).

As of December 31, 2020, the major shareholders of the Company are as follows:

Shareholders	Number of shares	Ownership (%)
GS Holdings Corp.	41,845,884	50.7%
Others	40,687,880	49.3%
	82,533,764	100.0%

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

(1) Basis of Preparation

The Company and its subsidiaries (the “Group”) have prepared the consolidated financial statements in accordance with K-IFRSs.

The accompanying consolidated financial statements are stated in Korean won, the currency of the country in which the Company is incorporated and operates. The translation of Korean won amounts into U.S. dollar amounts is included solely for the convenience of readers of the consolidated financial statements and has been made at the rate of ₩1,088.0 and ₩1,157.8 to USD 1.00, the basic exchange rate in the Seoul Money Brokerage Service for cable transfers in Korean won on the last business day of the years ended December 31, 2020 and 2019, respectively. Such translations into U.S. dollars should not be construed as representations that the Korean won amounts could be converted into U.S. dollars at that or any other rate.

The principal accounting policies are set out below. Except for the effect of the amendments to K-IFRSs and new interpretations set out below, the principal accounting policies used to prepare the consolidated financial statements as of and for the year ended December 31, 2020, are consistent with the accounting policies used to prepare the consolidated financial statements as of and for the year ended December 31, 2019.

The accompanying consolidated financial statements have been prepared on the historical cost basis, except for certain non-current assets and financial instruments that are measured at fair values, as explained in the accounting policies below. Historical cost is based on the fair values of the consideration given.

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, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of K-IFRS 1102 "*Share-Based Payment*;" leasing transactions that are within the scope of K-IFRS 1116 "*Leases*;" and measurements that have some similarities to fair value, but are not fair value, such as net realizable value in K-IFRS 1002 "*Inventories*" or value in use in K-IFRS 1036 "*Impairment of Assets*."

1) New and amended K-IFRSs and new interpretations that are effective for the current year

- K-IFRS 1109 and K-IFRS 1107 – Impact of the initial application of Interest Rate Benchmark Reform (Amendments)

The amendments mainly deal with the addition of temporary exceptions from applying specific hedge accounting requirements while the uncertainty arises from interest rate benchmark reform. The amendments require that for the purpose of determining whether a forecast transaction (or a component thereof) is highly probable, an entity shall assume that the interest rate benchmark on which the hedged cash flows (contractually or non-contractually specified) are based is not altered as a result of interest rate benchmark reform. When applying the prospective assessment, the amendments further require that an entity shall assume that the hedged risk or the interest rate benchmark on which the hedged item or the hedging instrument is based is not altered as a result of the reform.

Additionally, for a hedge of a non-contractually specified benchmark component of interest rate risk, an entity shall apply the requirement that the risk component shall be separately identifiable only at the inception of the hedging relationship. Meanwhile, an entity shall prospectively cease applying the temporary exceptions to a hedged item at the earlier of (a) when the uncertainty arising from interest rate benchmark reform is no longer present with respect to the timing and the amount of the interest rate benchmark-based cash flows of the hedged item or (b) when the hedging relationship that the hedged item is part of is discontinued.

The Group does not anticipate that the application of the enactment and amendments will have a significant impact on its consolidated financial statements.

-Amendments to References to the Conceptual Framework in K-IFRSs

The amendments let revised K-IFRSs refer to revised Conceptual Framework (2018). Not all amendments, however, update those pronouncements with regard to references to and quotes from the framework so that they refer to the revised Conceptual Framework (2018). Some pronouncements are only updated to indicate which version of the framework they are referencing to (the Framework (2007), the International Accounting Standards Board ("IASB") Framework of 2010 or the new revised Framework of 2018) or to indicate that definitions in the standard have not been updated with the new definitions developed in the revised Conceptual Framework. The document contains amendments to K-IFRSs 1102, 1103, 1106, 1114, 1001, 1008, 1034, 1037, 1038, 2112, 2119, 2120, 2122 and 2032.

The Group does not anticipate that the application of the enactment and amendments will have any significant impact on its consolidated financial statements.

- K-IFRS 1103 Definition of a Business (Amendments)

The amendments clarify that while businesses usually have outputs, the outputs are not required for an integrated set of activities and assets to qualify as a business. To be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs.

The amendments remove the assessment of whether market participants are capable of replacing any missing inputs or processes and continuing to produce outputs. The amendments also introduce additional guidance that helps to determine whether a substantive process has been acquired.

The amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. Under the optional concentration test, the acquired set of activities and assets is not a business if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets.

The Group does not anticipate that the application of the enactment and amendments will have a significant impact on its consolidated financial statements.

- K-IFRS 1001 and K-IFRS 1008 Definition of Material (Amendments)

The amendments make the definition of material in K-IFRS 1001 easier to understand and are not intended to alter the underlying concept of materiality in K-IFRSs. The concept of 'obscuring' material information with immaterial information has been included as part of the new definition. The threshold for materiality influencing users has been changed from 'could influence' to 'could reasonably be expected to influence.'
The definition of material in K-IFRS 1008 has been replaced by a reference to the definition of material in K-IFRS 1001. In addition, the IASB amended other standards and the Conceptual Framework that contain a definition of 'material' or refer to the term ‘material’ to ensure consistency.

The Group does not anticipate that the application of the enactment and amendments will have a significant impact on its consolidated financial statements.

2) New and revised K-IFRSs in issue but not yet effective

The Group has not applied the following new and revised K-IFRSs that have been issued but are not yet effective:

- K-IFRS 1001 Classification of Liabilities as Current or Non-Current (Amendments)

The amendments to K-IFRS 1001 affect only the presentation of liabilities as current or non-current in the statement of financial position and not the amount or timing of recognition of any asset, liability, income or expenses, or the information disclosed about those items.

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period, specify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability, explain that rights are in existence if covenants are complied with at the end of the reporting period and introduce a definition of ‘settlement’ to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services.

The amendments are applied retrospectively for annual periods beginning on or after January 1, 2023, with early application permitted.

- K-IFRS 1103 Reference to the Conceptual Framework

The amendments update K-IFRS 1103 so that it refers to the Conceptual Framework (2018) instead of the Framework (2007). They also add to K-IFRS 1103 a requirement that, for obligations within the scope of K-IFRS 1037 “*Provisions, Contingent Liabilities and Contingent Assets*,” an acquirer applies K-IFRS 1037 to determine whether at the acquisition date a present obligation exists as a result of past events. For a levy that would be within the scope of K-IFRS 2121 “*Levies*,” the acquirer applies K-IFRS 2121 to determine whether the obligating event that gives rise to a liability to pay the levy has occurred by the acquisition date.

Finally, the amendments add an explicit statement that an acquirer does not recognize contingent assets acquired in a business combination.

The amendments are effective for business combinations for which the date of acquisition is on or after the beginning of the first annual period beginning on or after January 1, 2022. Early application is permitted if an entity also applies all other updated references (published together with the updated Conceptual Framework) at the same time or earlier.

- K-IFRS 1016 Property, Plant and Equipment (Amendments)

The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced before that asset is available for use, i.e., proceeds while bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Consequently, an entity recognizes such sales proceeds and related costs in profit or loss. The entity measures the cost of those items in accordance with K-IFRS 1002 "*Inventories*."

The amendments also clarify the meaning of 'testing whether an asset is functioning properly.' K-IFRS 1016 now specifies this as assessing whether the technical and physical performance of the asset is such that it is capable of being used in the production or supply of goods or services, for rental to others or for administrative purposes.

If not presented separately in the statement of comprehensive income, the financial statements shall disclose the amounts of proceeds and cost included in profit or loss that relate to items produced that are not an output of the entity's ordinary activities and which line item(s) in the statement of comprehensive income include(s) such proceeds and cost.

The amendments are applied retrospectively, but only to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments. The entity shall recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of that earliest period presented. The amendments are effective for annual periods beginning on or after January 1, 2022, with early application permitted.

- K-IFRS 1037 Onerous Contracts—Cost of Fulfilling a Contract (Amendments)

The amendments specify that the 'cost of fulfilling' a contract comprises the 'costs that relate directly to the contract.' Costs that relate directly to the contract consist of both the incremental costs of fulfilling that contract (an example would be direct labor or materials) and an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

The amendments apply to contracts for which the entity has not yet fulfilled all of its obligations at the beginning of the annual reporting period in which the entity first applies the amendments. Comparatives are not restated. Instead, the entity shall recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings or other components of equity, as appropriate, at the date of initial application.

The amendments are effective for annual periods beginning on or after January 1, 2022, with early application permitted.

- Annual Improvements to K-IFRSs 2018–2020

The annual improvements include amendments to four standards, such as K-IFRS 1101 "*First-Time Adoption of K-IFRSs*," K-IFRS 1109 "*Financial Instruments*," K-IFRS 1116 "*Leases*" and K-IFRS 1041 "*Agriculture*."

1. K-IFRS 1101 *First-Time Adoption of K-IFRSs* (Amendment)

   The amendment provides additional relief to a subsidiary which becomes a first-time adopter later than its parent in respect of accounting for cumulative translation differences. As a result of the amendment, a subsidiary that uses the exemption in K-IFRS 1101 paragraph D16(1) can now also elect to measure cumulative translation differences for all foreign operations at the carrying amount that would be included in the parent's consolidated financial statements, based on the parent's date of transition to IFRSs, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. A similar election is available to an associate or a joint venture that uses the exemption in K-IFRS 1101 paragraph D16(1).

   The amendment is effective for annual periods beginning on or after January 1, 2022, with early application permitted.

2. K-IFRS 1109 *Financial Instruments* (Amendment)

The amendment clarifies that in applying the ‘10 per cent’ test to assess whether to derecognize a financial liability, an entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other’s behalf.

The amendment is applied prospectively to modifications and exchanges that occur on or after the date the entity first applies the amendment.

The amendment is effective for annual periods beginning on or after January 1, 2022, with early application permitted.

3. K-IFRS 1116 *Leases* (Amendment)

The amendment removes the requirement in K-IFRS 1116 for the illustration of the reimbursement of leasehold improvements.

As the amendment to K-IFRS 1116 only regards an illustrative example, no effective date is stated.

4. K-IFRS 1041 *Agriculture* (Amendment)

The amendment removes the requirement for entities to exclude cash flows for taxation when measuring fair value. This aligns the fair value measurement in K-IFRS 1041 with the requirements of K-IFRS 1113 “*Fair Value Measurement*” to use internally consistent cash flows and discount rates and enables preparers to determine whether to use pretax or posttax cash flows and discount rates for the most appropriate fair value measurement.

The amendment is applied prospectively, i.e., for fair value measurements on or after the date an entity initially applies the amendment.

The amendment is effective for annual periods beginning on or after January 1, 2022, with early application permitted.

The Group does not anticipate that the application of the enactment and amendments will have a significant impact on its consolidated financial statements.

(2) Basis of Consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company (and its subsidiaries) made up to December 31 each year. Control is achieved when the Company 1) has the power over the investee; 2) is exposed, or has rights, to variable returns from its involvement with the investee; and 3) has the ability to use its power to affect its returns. The Company reassesses 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 listed above.

When the Company has less than a majority of the voting rights of an investee, it considers that it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the activities of the investee unilaterally. The Company considers all relevant facts and circumstances in assessing whether or not its voting rights in an investee are sufficient to give it power over the investee, including:

- The size of the Company’s holding of voting rights relative to the size and dispersion of holdings of other vote holders;
- Potential voting rights held by the Company, other vote holders or other parties;
- Rights arising from other contractual arrangements; and
- Any additional facts and circumstances that indicate that the Company has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders’ meetings.

Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary. Specifically, the results of subsidiaries acquired or disposed of during the year are included in profit or loss from the date the Company gains control until the date when the Company ceases to control the subsidiary. Profit or loss and each component of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of the subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring the accounting policies used in line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows related to transactions between the members of the Group are eliminated on consolidation.

Non-controlling interests in subsidiaries are identified separately from the Group's equity therein. Those interests of non-controlling shareholders that are present ownership interests entitling their holders to a proportionate share of net assets upon liquidation may initially be measured at 1) fair value or 2) at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. The choice of measurement is made on an acquisition-by-acquisition basis. Other non-controlling interests are initially measured at fair value. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, a gain or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), less liabilities of the subsidiary and any non-controlling interests. All amounts previously recognized in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e., reclassified to profit or loss or transferred to another category of equity as required/permitted by applicable K-IFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under K-IFRS 1109 *"Financial Instruments"* when applicable or the cost on initial recognition of an investment in an associate or a joint venture.

(3) Business Combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interest issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognized in profit or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:

- Deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with K-IFRS 1012 "*Income Taxes*" and K-IFRS 1019 "*Employee Benefits*," respectively;
- Liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with K-IFRS 1102 "*Share-Based Payment*;" and
- Assets (or disposal groups) that are classified as held for sale in accordance with K-IFRS 1105 "*Non-Current Assets Held for Sale and Discontinued Operations*" are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

When the consideration transferred by the Group in a business combination includes contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in fair value of the contingent consideration that qualify as measurement-period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement-period adjustments are adjustments that arise from additional information obtained during the 'measurement period' (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement-period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is accounted for within equity when it is not remeasured at subsequent reporting dates. Other contingent consideration is remeasured to fair value at subsequent reporting dates with changes in fair value recognized in profit or loss.
When a business combination is achieved in stages, the Group's previously held interests in the acquired entity are remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognized in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that had previously been recognized in other comprehensive income are reclassified to profit or loss, where such treatment would be appropriate if those interests were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. If any new information is obtained during the measurement period (see above) and is about facts and circumstances that existed as of the acquisition date that, if known, would have affected the amounts recognized as of that date, those provisional amounts are adjusted or additional assets or liabilities are recognized.

(4) Investments in Associates and Joint Ventures

An associate is an entity over which the Group has significant influence and that is neither a subsidiary nor an interest in a joint venture. 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 joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and the assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with K-IFRS 1105. Under the equity method, investment in an associate or a joint venture is stated in the consolidated financial statements at acquisition cost and adjusted thereafter to recognize 1) the changes in net assets as the Group's interests in an associate or a joint venture change and 2) the impairment loss of the investment. The Group's share of losses of an associate or a joint venture that exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture) is recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. Any excess amount of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognized as goodwill and is included within the carrying amount of the investment. Any excess amount of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognized in profit or loss in the period in which the investment is acquired.

The Group is applying the requirements of K-IFRS 1028 to determine the necessity of any impairment loss with respect to its investment in an associate or a joint venture. When necessary, the entire investment (including goodwill) is tested for impairment in accordance with K-IFRS 1036 by comparing its recoverable amount (higher of value in use or fair value, less costs of disposal) with its carrying amount. Impairment loss recognized is not allocated to any asset, including goodwill that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with K-IFRS 1036 to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date when the investment ceases to be an associate or a joint venture. When the Group retains an interest in the former associate or a joint venture after the discontinuation, the Group measures the retained interest on the related financial assets (investment) at fair value and regards it, as it is the fair value on initial recognition in accordance with K-IFRS 1109. The differences between the carrying amount and the fair value of the financial assets (investment), regarding the former associate or a joint venture, are included in the gain or loss on disposal of the associate or joint venture.

In addition, the Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had disposed of the related assets or liabilities. Therefore, the Group reclassifies the gain or loss, which was previously recognized in other comprehensive income by that associate or joint venture and is reclassified thereafter to profit or loss on the disposal of the related assets or liabilities, from equity to profit or loss (as a reclassification adjustment).

If the Group continues to use the equity method despite the reduction of its ownership interest in an associate or a joint venture, the Group reclassifies the gain or loss of the related proportion (regarding the reduction), that had previously been recognized in other comprehensive income, to profit or loss, as that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities. Also, when the investment is classified as held for sale, it is accounted for in accordance with K-IFRS 1105.

When an associate is turned into a joint venture or a joint venture is turned into an associate, the Group continues to use the equity method and does not reassess the remaining ownership interest.

When a Group entity transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognized in the Group’s consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

If the long-term investments regarding an associate or a joint venture are only a part of net investment and are not accounted by the equity method, the Group accounts such investments in accordance with K-IFRS 1109 “*Financial Instruments*,” which includes the impairment requirements on long-term investments. Also, the Group does not consider K-IFRS 1028, regarding adjustments on carrying amount, while applying K-IFRS 1109. Such examples are impairment assessment or adjustments on carrying amount of long-term investments by the allocation of loss of the investee.

(5) Goodwill

Goodwill resulting from acquisition of a business is carried at cost at the date of acquisition of the business, less accumulated impairment losses, if any.

For the purpose of impairment testing, goodwill is allocated to each of the Group’s cash-generating units (or groups of cash-generating units) that is expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually or more frequently when there is indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to other assets of the unit on a pro rata basis based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

On disposal of the relevant cash-generating unit, the attributable amount of goodwill is included in the determination of the profit or loss on disposal. The Group’s policy for goodwill resulting from the acquisition of an associate is described in Note 2. (4).

(6) Non-Current Assets Held for Sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition. The sale must be committed by the management and should be expected to qualify for complete sales requirements within one year from the date of classification.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after the sale.

When the Group is committed to a sale plan involving disposal of an investment in an associate or a joint venture, or a portion of an investment in an associate or a joint venture, the related amount of investment is classified as held for sale when the criteria described above are met, and the Group ceases to apply the equity method in relation to the portion that is classified as held for sale.

Any retained portion of an investment in an associate that has not been classified as held for sale continues to be accounted for using the equity method. If the Group ceases to have significant influence over the associate or joint venture due to disposal, the application of the equity method ceases at the time of sale.

Unless the Group continues to apply the equity method to its residual interests in associates or joint ventures after the sale of investments in associates or joint ventures, the Group accounts for the residual interests in investments in associates or joint ventures in accordance with K-IFRS 1039 “*Financial Instruments: Recognition and Measurement*.”

Non-current assets (or disposal groups) classified as held for sale are measured at the lower of carrying amount or fair value, less costs to sell.

(7) Revenue Recognition

The Group recognizes revenue from the following major sources.

Description	Business
Trading	Ferrous and non-ferrous metals, petrochemistry goods, coal, biomass, mechanical plant, cement, cross–trade, machineries (engines) imports, etc.
Logistics	Maintenance and checkup of imported vehicles, unloading and transportation, port development and operation
Manufacturing	Manufacture of equipment for refinery oil, gas and chemicals industry or materials of combined cycle, grater process, etc.
Investment	Mining and sales of oil and gas, and new business development

Revenue is measured at the consideration set in the contract with the customer and excludes the amount collected on behalf of the third party. In addition, the Group recognizes revenue as below.

1) Trading and logistics

The Group sells or provides ferrous and non-ferrous metals, petrochemistry goods, coal, biomass, mechanical plant, cement, cross–trade, machineries (engines) imports, maintenance and checkup of imported vehicles, unloading and transportation, and port development and operation to its customers. Sales-related warranties associated with goods cannot be purchased separately and they serve as an assurance that the products sold comply with agreed-upon specifications.

Accordingly, the Group accounts for warranties in accordance with K-IFRS 1037 “*Provisions, Contingent Liabilities and Contingent Assets*.”

For sales of goods in trading and operation, revenue is recognized when control of the goods has transferred. As the goods are sold, customers have the primary responsibility of the goods sold and bear the risks of obsolescence and loss in relation to the goods. The Group recognizes related receivables when the goods are delivered to customers.

If the Group is responsible for delivering the freight to the customer's designated location during the direct export of the consolidation entity and the sale of transactions between three countries, the performance obligation is divided into delivery and transport services of the goods. The delivery of goods recognizes revenue on the transfer of control. The transport service recognizes revenue over time during the transport period within the entire service period. This is because the consolidation entity determines that a performance obligation is satisfied over time by providing benefits to the customer as the transport services are performed.

The uncertainty due to quality defects among the promised price of selling the goods of trading and logistics can be solved at the point of sale afterwards, and the variable price resulting from this is adjusted to the revenues and sales. The Group utilizes the expected value method and its accumulated historical experience to estimate the variable price at a portfolio level. It is considered highly probable that a significant reversal in the cumulative revenue recognized will not occur considering the consistent level of uncertainties regarding claims (e.g., quality defects) over previous years.

2) Manufacturing

The Group's manufacturing division manufactures and sells chemical devices and energy supply materials. Sales-related warranties associated with goods cannot be purchased separately, and they serve as an assurance that the products sold comply with agreed-upon specifications. Accordingly, the Group accounts for warranties in accordance with K-IFRS 1037 "*Provisions, Contingent Liabilities and Contingent Assets*."

For sales in the manufacturing division, revenue is recognized over time by the entity satisfies its manufacturing performance obligations. The assets manufactured and produced by the Group have no alternative use in the Group itself, and enforceable right to payment is regarded as given as the performance is completed or is determined to be controlled by customers as soon as it is manufactured or becomes more valuable.

Uncertainty due to compensation obligations for claims under warranty of defect repair performance and for the delay due to failure to deliver on time may be resolved at the time of sale, and the variable price will be adjusted for revenue recognition. When estimating variable consideration, the Group reasonably estimates the most likely amount for each of the contract separately because the nature of the contract varies from contract to contract.

3) Investment

The Group's investment division obtains and sells outputs through resource investments, such as oil and gas development and sales. There is no significant change in the existing accounting for investment division.

4) Dividend and interest income

Dividend income from investments is recognized when the shareholders' right to receive dividends has been established.

Interest income is accrued on a timely basis at the effective interest rate applicable. The effective rate applicable is the rate that equals estimated present value of cash flows through the expected life of the financial asset and the asset's net carrying amount.

(8) Leases

1) The Group as lessee

The Group assesses whether a contract is or contains a lease at inception of the contract. The Group recognizes a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low-value assets (such as tablets and personal computers, small items of office furniture and telephones). For these leases, the Group recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease, unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date and discounted using the rate implicit in the lease. If this rate cannot be readily determined, the Group uses its incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise:

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

The lease liability is presented as a separate line in the consolidated statements of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Group remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option, in which case the lease liability is remeasured by discounting the revised lease payments using a revised discount rate;
- The lease payments change due to changes in an index or a rate or a change in expected payment under a guaranteed residual value, in which case the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate (unless the lease payments' change is due to a change in the floating interest rate, in which case a revised discount rate is used); and
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case the lease liability is remeasured, based on the lease term of the modified lease, by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The right-of-use assets comprise the initial measurement of the corresponding lease liability and lease payments made at or before the commencement day, less any lease incentives received and any initial direct costs. They are subsequently measured at cost, less accumulated depreciation and impairment losses.

Whenever the Group incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognized and measured under International Accounting Standard 37. To the extent that the costs relate to a right-of-use asset, the costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of lease term or useful life of the underlying asset. If a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the Group expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are presented as a separate line in the consolidated statements of financial position.

The Group applies K-IFRS 1036 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in the 'Property, Plant and Equipment' policy in Note 2. (4).

Variable rents that do not depend on an index or a rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognized as an expense in the period in which the event or condition that triggers those payments occurs and are included in profit or loss.

As a practical expedient, K-IFRS 1116 permits a lessee not to separate non-lease components and allowed to choose to account for each lease element and its associated non-leasing element as a single lease element by type of underlying asset. The Group has used this practical expedient.

2) The Group as lessor

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

When the Group is an intermediate lessor, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance or operating lease by reference to the right-of-use asset arising from the head lease.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

When a contract includes both lease and non-lease components, the Group applies IFRS 15 to allocate the consideration under the contract to each component.

(9) Foreign Currencies

The individual financial statements of each Group entity are presented in the currency of the primary economic environment in which the entity operates (its functional currency). For the consolidated financial statements, the results and financial position of each Group entity are expressed in Korean won, which is the functional currency and the presentation currency for the consolidated financial statements.

In preparing the consolidated financial statements of the Group entities, transactions in foreign currencies other than the entity's functional currency are recognized at the rates of exchange at the transaction dates. At the end of each reporting period, monetary items in foreign currencies are retranslated into Korean won at the rates of the reporting date. Non-monetary items, in foreign currencies, carried at fair value are retranslated at the exchange rates of the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences are recognized in profit or loss in the period in which they arise, except for:

- Exchange differences on borrowings related to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;

- Exchange differences on transactions in order to hedge certain foreign currency risks; and

- Exchange differences on monetary items, such as receivables or payables, regarding foreign operations for which settlement is neither to be planned nor likely to be occurred (therefore, forming part of the net investment in the foreign operation); such differences are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal or partial disposal of the net investment.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Company's foreign operations are expressed in Korean won using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e., a disposal of the Group's entire interest in a foreign operation, a disposal involving loss of control over a subsidiary that includes a foreign operation or partial disposal of an interest in a joint arrangement or an associate that includes a foreign operation whose retained interest becomes a financial asset), all of the accumulated exchange differences in respect of that operation attributable to the owners of the Company are reclassified to profit or loss. Any exchange differences that have previously been attributed to non-controlling interests are derecognized, but are not reclassified to profit or loss.

In the case of a partial disposal (i.e., no loss of control) of a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences is reattributed to non-controlling interests in equity and is not recognized in profit or loss. For all other partial disposals (i.e., partial disposals of associates or joint arrangements that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate. Exchange differences arising are recognized in other comprehensive income.

(10) Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets until such time as the assets are substantially ready for their intended use or sale.

To the extent that variable-rate borrowings are used to finance a qualifying asset and are hedged in an effective cash flow hedge of interest rate risk, the effective portion of the derivative is recognized in other comprehensive income and reclassified to profit or loss when the qualifying asset impacts profit or loss. To the extent that fixed-rate borrowings are used to finance a qualifying asset and are hedged in an effective fair value hedge of interest rate risk, the capitalized borrowing costs reflect the hedged interest rate.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

(11)Retirement Benefit Costs and Termination Benefits

Contributions to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

For defined retirement benefit plans, the cost of providing benefits is determined by the independent actuary firm using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurements, comprising actuarial gains and losses, the effect of the asset ceiling (if applicable) and the return on plan assets (excluding interest), are recognized immediately in the consolidated statements of financial position with a charge or credit to the consolidated statements of comprehensive income in the period in which they occur. Remeasurements recognized in the consolidated statements of comprehensive income are not reclassified. Past service cost is recognized in profit or loss when the plan amendment or curtailment occurs or when the Group recognizes related restructuring costs or termination benefits, if earlier. Gains or losses on settlement of a defined benefit plan are recognized when the settlement occurs.

Net interest is calculated by applying a discount rate to the net defined benefit liability or asset. Defined benefit costs are split into three categories:

- Service costs, which include current service cost, past service cost and gains and losses on curtailments and settlements
- Net interest expense or income
- Remeasurements

Service cost is recognized in sales cost and expenses, net; interest expense or income is recognized within finance costs; and the remeasurement component is in other comprehensive income. Curtailment gains and losses are accounted for as past service costs.
The retirement benefit obligation recognized in the consolidated statements of financial position represents the actual deficit or surplus in the Group’s defined benefit plans. Asset recognized regarding the surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

A liability for a termination benefit is recognized at the earlier of when the entity can no longer withdraw the offer of the termination benefit or when the entity recognizes any related restructuring costs.

Discretionary contributions made by employees or third parties reduce service cost upon payment of these contributions to the plan. When the formal terms of the plans specify that there will be contributions from employees or third parties, the accounting depends on whether the contributions are linked to service as follows:

- If the contributions are not linked to services (e.g., contributions are required to reduce a deficit arising from losses on plan assets or from actuarial losses), they are reflected in the remeasurement of the net defined benefit liability (asset).

- If contributions are linked to services, they reduce service costs. For the amount of contribution that is dependent on the number of years of service, the entity reduces service cost by attributing the contributions to periods of service using the attribution method required by K-IFRS 1019 paragraph 70 for the gross benefits. For the amount of contribution that is independent of the number of years of service, the entity reduces service cost in the period in which the related service is rendered/reduces service cost by attributing contributions to the employees' periods of service.

(12) Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from net profit as reported in the consolidated statements of income and comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are not taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

A provision is recognized for those matters for which the tax determination is uncertain, but it is considered probable that there will be a future outflow of cash to a tax authority. The provisions are measured at the best estimate of the amount expected to become payable. The assessment is based on the judgement of tax professionals within the Company supported by previous experience in respect of such activities and in certain cases based on specialist independent tax advisory.

2) Deferred tax

Deferred tax is the tax expected to be payable or recoverable on differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit and is accounted for using the liability method. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the assets to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects at the end of the reporting period to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset if, and only if, the Group has a legally enforceable right to set off current tax assets against current tax liabilities, and the deferred tax assets and 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.

For the purpose of measuring deferred tax liabilities and deferred tax assets for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted. Therefore, if there is no rebut of the presumption, the measurement of deferred income tax liabilities or deferred income tax assets reflects the tax effect that the carrying amount of all investment property is recovered through the sale.

The presumption is rebutted when the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment properties over time, rather than through sale.

3) Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case the current and deferred taxes are also recognized in other comprehensive income or directly in equity. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

4) Uncertainties in corporate tax

There are no uncertainties regarding the corporate tax of the Group.

(13) Property, Plant and Equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to its purchase or construction, which includes any costs directly attributable to bringing the asset to the location and the condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of an asset or as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of the asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The Group does not depreciate land. Depreciation expense is computed using the straight-line method based on the estimated useful lives of the assets as follows:

Account	Estimated useful lives (years)	Account	Estimated useful lives (years)
Buildings	20–40	Vehicles	4–10
Structures	20–40	Equipment	4–10
Machinery	4–20	Tools	3–20

If each part of an item of property, plant and equipment has a cost that is significant in relation to the total cost of the item, it is depreciated separately.

The Group reviews the depreciation method, estimated useful lives and residual values of property, plant and equipment at the end of each annual reporting period. If expectations differ from previous estimates, the changes are accounted for as a change in an accounting estimate.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognized.

(14) Investment Properties

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are measured initially at cost, including transaction costs. After initial recognition, investment properties are reported at cost, less accumulated depreciation and accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of an asset or as a separate asset if it is probable that future economic benefits associated with the asset will flow into the Group and the cost of the asset can be measured reliably. Routine maintenance and repairs are expensed as incurred. On the other hand, costs incurred in relation to routine repairs and maintenance are recognized in profit or loss when incurred.

While land is not depreciated, all other investment property is depreciated based on the respective assets' estimated useful lives ranging from 20 to 40 years using the straight-line method.

(15) Intangible Assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over its estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost, less accumulated impairment losses.

Goodwill and membership with an indefinite useful life are not amortized. Land use rights are amortized using the proportionality method of production. The other intangible assets are depreciated on a straight-line basis over the estimated useful life of each intangible asset listed below.

- Property rights – 5
- Development cost – 5–10
- Software – 5–10

2) Internally generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following conditions have been demonstrated:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- The intention to complete the intangible asset and use or sell it
- The ability to use or sell the intangible asset
- How the intangible asset will generate probable future economic benefits
- The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset
- The ability to measure reliably the expenditure attributable to the intangible asset during its development

Expenditure arising from development (or from the development phase of an internal project) is recognized as an intangible asset if, only if, the development project is designed to produce new or substantially improved products and the Group can demonstrate the technical and economic feasibility and measure reliably the resources attributable to the intangible asset during its development.

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria. Where no internally generated intangible asset can be recognized, development expenditure is recognized in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost, less accumulated amortization and accumulated impairment losses on the same basis as intangible assets that are acquired separately.

3) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition. After initial recognition, intangible assets acquired in a business combination are reported at cost, less accumulated amortization and accumulated impairment losses on the same basis as intangible assets that are acquired separately.

4) Derecognition of intangible assets

An intangible asset is derecognized on disposal or when no future economic benefits are expected from its use. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

(16) Impairment of Tangible and Intangible Assets Other Than Goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units; otherwise, they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually and whenever there is an indication that the assets may be impaired.

Recoverable amount is the higher amount of net fair value or value in use. If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount and the reduced amount is recognized in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or the cash-generating unit) is increased to the revised estimate of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

(17) Inventories

Inventories are stated at the lower of cost or net realizable value. Cost of inventories, except for those in transit, is measured using the weighted-average method on a first-in, first-out basis and consists of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognized as a cost of sales in the period in which the related revenue is recognized. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, is recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

(18) 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 the Group will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, considering the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material). The discount rate used is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage is recognized in profit or loss as borrowing cost.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

(19) Financial Instruments

Financial assets and financial liabilities are recognized in the Group's consolidated statements of financial position when it becomes a party to the contractual provisions of the instrument. Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss ("FVPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVPL are recognized immediately in profit or loss.

(20) Financial Assets

All regular way purchases or sales of financial assets are recognized and derecognized on a trade-date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

All recognized financial assets are measured subsequently in their entirety at either amortized cost or fair value depending on the classification of the financial assets.

1) Classification of financial assets

Debt instruments that meet the following conditions are measured subsequently at amortized cost:

- A financial asset is held within a business model whose objective is to hold financial assets to collect cash flows by the certain contract.
- Cash flows that are solely payments of principal and interest ("SPPI") on the principal amount outstanding are generated by specified dates by the terms of the contract of the financial asset.

Debt instruments that meet the following conditions are measured subsequently at fair value through other comprehensive income ("FVOCI"):

- A financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets.
- Cash flows that are SPPI on the principal amount outstanding are generated by specified dates by the terms of the contract of the financial asset.

By default, all other financial assets are measured subsequently at FVPL.

Despite the foregoing, the Group may make the following irrevocable election/designation at initial recognition of a financial asset:

- The Group may irrevocably elect to present subsequent changes in the fair value of an equity investment in other comprehensive income if certain criteria are met (see "1-3)" below).
- The Group may irrevocably designate a debt investment that meets the amortized cost or FVOCI criteria as measured at FVPL if doing so eliminates or significantly reduces an accounting mismatch (see "1-4)" below).

1-1) Amortized cost and effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and allocating interest income over the relevant period. For financial assets other than credit-impaired financial assets on initial recognition, the effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts), excluding expected credit losses (“ECLs”), through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition. For the credit-impaired financial assets on initial recognition, a credit-adjusted effective interest rate is calculated by discounting the estimated future cash flows, including ECLs, to the amortized cost of the debt instrument on initial recognition.

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortized cost of the financial asset before adjusting for any loss allowance.

Interest income is recognized using the effective interest method for debt instruments measured subsequently at amortized cost and at FVOCI. For financial assets other than the credit-impaired financial assets on initial recognition, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired. For financial assets that have subsequently become credit-impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial assets. If, in the subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset.

For the credit-impaired financial assets on initial recognition, the Group recognizes interest income by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition. The calculation does not revert to the gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit-impaired.

Interest income is recognized in profit or loss and is included in the “finance income - interest income” line item.

1-2) Debt instruments classified as at FVOCI

Fair value is determined in the manner described in Note 37. The corporate bonds are initially measured at fair value plus transaction costs. Subsequently, changes in the carrying amount of these corporate bonds as a result of foreign exchange gains and losses, impairment gains or losses, and interest income, calculated using the effective interest method, are recognized in profit or loss. The amounts that are recognized in profit or loss are the same as the amounts that would have been recognized in profit or loss if these corporate bonds had been measured at amortized cost. All other changes in the carrying amount of these corporate bonds are recognized in other comprehensive income and accumulated as the investment revaluation. When these corporate bonds are derecognized, the cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss.

1-3) Equity instruments designated as at FVOCI

On initial recognition, the Group may make an irrevocable election (on an instrument-by-instrument basis) to designate investments in equity instruments as at FVOCI. Designation at FVOCI is not permitted if the equity investment is held for trading or if it is a contingent consideration recognized by an acquirer in a business combination.

A financial asset is held for trading if:

- It has been acquired principally for the purpose of selling in the near term;
- On initial recognition, it is part of a portfolio of identified financial instruments that the Group manages together and has evidence of short-term profit-taking; or
- It is a derivative (except for a derivative that is a financial guarantee contract or an effective hedging instrument).

- Investments in equity instruments at FVOCI are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value, with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in the investment revaluation. The cumulative gain or loss is not reclassified to profit or loss on disposal of the equity investments, but is transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss in accordance with K-IFRS 1109, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the 'finance income' line item in profit or loss.

1-4) Financial assets at FVPL

Financial assets that do not meet the criteria for being measured at amortized cost or FVOCI are measured at FVPL. Specifically:

- Investments in equity instruments are classified as at FVPL, unless the Group designates an equity investment that is neither held for trading nor a contingent consideration arising from a business combination as at FVOCI on initial recognition (see "1-3)" above).
- Debt instruments that do not meet the amortized cost criteria or the FVOCI criteria (see "1-1)" and "1-2)" above) are classified as at FVPL. In addition, debt instruments that meet either the amortized cost criteria or the FVOCI criteria may be designated as at FVPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency (so called 'accounting mismatch') that would arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases.

Financial assets at FVPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss to the extent they are not part of a designated hedging relationship. The net gain or loss recognized in profit or loss includes any dividend or interest earned on the financial asset and is included in the 'other gains and losses' line item. Fair value is determined in the manner described in Note 38.

2) Foreign exchange gains and losses

The carrying amount of financial assets that are denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. Specifically:

- For financial assets measured at amortized cost that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'other gains and losses' line item.
- For debt instruments measured at FVOCI that are not part of a designated hedging relationship, exchange differences on the amortized cost of the debt instrument are recognized in profit or loss in the 'other gains and losses' line item. Other exchange differences are recognized in other comprehensive income in the investment revaluation.
- For financial assets measured at FVPL that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'other gains and losses' line item.
- For equity instruments measured at FVOCI, exchange differences are recognized in other comprehensive income in the investment revaluation.

3) Impairment of financial assets

The Group recognizes a loss allowance for ECLs on investments in debt instruments that are measured at amortized cost or at FVOCI, lease receivables, trade receivables and contract assets, as well as on financial guarantee contracts. The amount of ECLs is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognizes lifetime ECL for trade receivables, contract assets and lease receivables. The ECLs on these financial assets are estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money, where appropriate.

For all other financial instruments, the Group recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the ECLs that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

3-1) Significant increase in credit risk

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument at the reporting date with the risk of a default occurring on the financial instrument at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forecast information that is available without undue cost or effort. Forecast information considered includes the future prospects of the industries in which the Group's debtors operate, obtained from economic expert reports, financial analysts, governmental bodies, relevant think tanks and other similar organizations, as well as consideration of various external sources of actual and forecast economic information that relate to the Group's core operations.

In particular, the following information is considered when assessing whether the credit risk has increased significantly since initial recognition:

- An actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating
- Significant deterioration in external market indicators of credit risk for a particular financial instrument, e.g., a significant increase in the credit spread, the credit default swap price for the debtor or the length of time or the extent to which the fair value of a financial asset has been less than its amortized cost
- An actual or expected significant deterioration in the operating results of the debtor
- Existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations
- Significant increases in credit risk on other financial instruments of the same debtor
- An actual or expected significant adverse change in the regulatory, economic or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date if:

(1) The financial instrument has a low risk of default;
(2) The debtor has a strong capacity to meet its contractual cash flow obligations in the near term; and
(3) Adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

The Group considers a financial asset to have low credit risk when the asset has external credit rating of 'investment grade' in accordance with the globally understood definition or, if an external rating is not available, the asset has an internal rating of 'performing.' Performing means that the counterparty has a strong financial position and there are no past due amounts.

For financial guarantee contracts, the date that the Group becomes a party to the irrevocable commitment is considered to be the date of initial recognition for the purposes of assessing the financial instrument for impairment. In assessing whether there has been a significant increase in the credit risk since initial recognition of a financial guarantee contract, the Group considers the changes in the risk that the specified debtor will default on the contract.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

3-2) Definition of default

The Group considers the following as constituting an event of default for internal credit risk management purposes as historical experience indicates that the financial assets that meet the following criterion are generally not recoverable:

- When there is a breach of financial covenants by the debtor

Irrespective of the above analysis, the Group considers that default has occurred when a financial asset is more than 90 days past due, unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

3-3) Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

(a) Financial difficulty of the issuer or the borrower.
(b) A breach of contract, such as a default or past due event (see “3-2)” above).
(c) Inevitable contractual concession(s) due to the economic or contractual reasons related to the borrower’s financial difficulty.
(d) It is becoming probable that the borrower will enter into bankruptcy or other financial reorganization.
(e) The disappearance of an active market for that financial asset because of financial difficulties.

3-4) Write-off policy

The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery. Financial assets written off may still be subject to enforcement activities under the Group’s recovery procedures, taking into account legal advice where appropriate.

3-5) Measurement and recognition of ECLs

The measurement of ECLs is determined by the probability of default, loss given default (i.e., the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forecast information as described above. The exposure at default on financial assets is represented by the assets’ gross carrying amount at the reporting date; for financial guarantee contracts, the exposure includes the amount drawn down as at the reporting date, together with any additional amounts expected to be drawn down in the future by default date determined based on historical trend, the Group’s understanding of the specific future financing needs of the debtors and other relevant forecast information.

For financial assets, the ECL is estimated as the difference between all cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate. For a lease receivable, the cash flows used for determining the ECLs are consistent with the cash flows used in measuring the lease receivable in accordance with K-IFRS 1116 “*Leases*.”

For a financial guarantee contract, the Group is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed. The expected loss allowance is the expected payments to reimburse the holder for a credit loss that it incurs less any amounts that the Group expects to receive from the holder, the debtor or any other party.

If the Group has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the Group measures the loss allowance at an amount equal to 12-month ECL at the current reporting date, except for assets for which simplified approach was used.

The Group recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVOCI for which the loss allowance is recognized in other comprehensive income and accumulated in the investment revaluation, and does not reduce the carrying amount of the financial asset in the consolidated statements of financial position.

4) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, it continues to recognize the financial asset and recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset measured at amortized cost, the difference between the asset’s carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. In addition, on derecognition of an investment in a debt instrument classified as at FVOCI, the cumulative gain or loss previously accumulated in the investment revaluation is reclassified to profit or loss. In contrast, on derecognition of an investment in an equity instrument that the Group has elected on initial recognition to measure at FVOCI, the cumulative gain or loss previously accumulated in the investment revaluation is not reclassified to profit or loss, but is transferred to retained earnings.

(21) Financial Liabilities and Equity Instruments

1) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or equity in accordance with the substance of the contractual arrangement and the definitions of a financial liability and an equity instrument.

2) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company’s own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Company’s own equity instruments.

3) Compound instruments

The component parts of compound instruments (convertible bonds) issued by the Group are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of financial liability and equity instrument. Conversion option that will be settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Company’s own equity instruments is an equity instrument.

At the date of issue, the fair value of the liability component is estimated using the prevailing market interest rate for a similar non-convertible instrument. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion or at the instrument’s maturity date.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised, in which case the balance recognized in equity will be transferred to share premium. Where the conversion option remains unexercised at the maturity date of the convertible loan note, the balance recognized in equity will be transferred to other equity. No gain or loss is recognized in profit or loss upon conversion or expiration of the conversion option.

Transaction costs that relate to the issue of the convertible notes are allocated to liability and equity components in proportion to the allocation of the gross proceeds. Transaction costs relating to equity component are recognized directly in equity. Transaction costs relating to the liability component are included in the carrying amount of the liability component and are amortized over the lives of the convertible notes using the effective interest method.

4) Financial liabilities

All financial liabilities are measured subsequently at amortized cost using the effective interest method or at FVPL. However, financial liabilities and financial guarantee contracts issued by the Group that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies are measured in accordance with the specific accounting policies set out below.

5) Financial liabilities at FVPL

Financial liabilities are classified as at FVPL when a financial liability is (i) a contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) designated as at FVPL.

A financial liability is classified as held for trading if:

- It has been acquired principally for the purpose of repurchasing in the near term;
- On initial recognition, it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual evidence of short-term profit-taking; or
- It is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or a contingent consideration of an acquirer in a business combination may be designated as at FVPL upon initial recognition if:

- Such designation eliminates or significantly reduces inconsistency regarding a measurement or recognition that would otherwise arise;
- The financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and is evaluated by its performance on a fair value basis in accordance with the Group's documented risk management or investment strategy, and the related information is provided internally on that basis; or
- It forms part of a contract containing one or more embedded derivatives, and K-IFRS 1109 permits the entire combined contract to be designated as at FVPL.

Financial liabilities at FVPL, except for the part of a designated hedging relationship, are measured at fair value, with any gains or losses arising on changes in fair value recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest paid on the financial liability and is included in the 'other gains and losses' line item in profit or loss.

However, for financial liabilities that are designated as at FVPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of liability is recognized in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognized in other comprehensive income are not subsequently reclassified to profit or loss; instead, they are transferred to retained earnings upon derecognition of the financial liability.

Gains or losses on financial guarantee contracts issued by the Group that are designated by the Group as at FVPL are recognized in profit or loss.

Fair value is determined in the manner described in Note 38.

6) Financial liabilities measured subsequently at amortized cost

Financial liabilities that are not (i) contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) designated as at FVPL are measured subsequently at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial liability and allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortized cost of the financial liability.

7) Financial guarantee contracts

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contract liabilities are measured initially at their fair values and, if not designated as at FVPL and do not arise from a transfer of an asset, are measured subsequently at the higher of:

- The amount of the loss allowance determined in accordance with K-IFRS 1109 (see financial assets above) or
- The amount recognized initially, less, where appropriate, cumulative amortization recognized in accordance with K-IFRS 1115.

8) Foreign exchange gains and losses

For financial liabilities in a foreign currency that are measured at amortized cost at the end of each reporting period, the foreign exchange gains and losses are determined based on the amortized cost of the instruments. These foreign exchange gains and losses are recognized in the 'other gains and losses' line item in profit or loss for financial liabilities, except for any gains and losses from a designated hedging relationship. For those that are designated as a hedging instrument for a hedge of foreign currency risk, foreign exchange gains and losses are recognized in other comprehensive income and accumulated in a separate component of equity.

The fair value of financial liabilities in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period. For financial liabilities that are measured at FVPL, the foreign exchange amount forms part of the fair value gains or losses and is recognized in profit or loss for financial liabilities, except for any gains and losses from a designated hedging relationship.

9) Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, its obligations are discharged, canceled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

When the Group exchanges with the existing lender one debt instrument for another one with the substantially different terms, such exchange is accounted as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, the Group accounts for substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective rate, is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability. If the modification is not substantial, the difference between (1) the carrying amount of the liability before the modification and (2) the present value of the cash flows after modification should be recognized in profit or loss as the modification gain or loss within other gains and losses.

(22) Derivative Financial Instruments

The Group enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risks. Such derivatives are including foreign exchange forward contracts, options and interest rate swaps.

Derivatives are recognized initially at fair value at the date a derivative contract is entered into and are subsequently remeasured to their fair value at each reporting date. The resulting gain or loss is recognized in profit or loss immediately, unless the derivative is designated and effective as a hedging instrument. The timing of the recognition in profit or loss of the derivatives depends on the nature of the hedge relationship.

A derivative with a positive fair value is recognized as a financial asset whereas a derivative with a negative fair value is recognized as a financial liability. Derivatives are not offset in the consolidated financial statements, unless the Group has both legally enforceable right and intention to offset. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not due to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

1) Embedded derivatives

An embedded derivative is a component of a hybrid contract that includes non-derivatives – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

Derivatives embedded in hybrid contracts with a financial asset host within the scope of K-IFRS 1109 are not separated. The entire hybrid contract is classified and subsequently measured at either amortized cost or fair value as appropriate.

Derivatives embedded in hybrid contracts with hosts that are not financial assets within the scope of K-IFRS 1109 (e.g., financial liabilities) are treated as separate derivatives when 1) they meet the definition of a derivative, 2) their risks and characteristics are not closely related to those of the host contracts and 3) the host contracts are not measured at FVPL.

An embedded derivative is presented as a non-current asset or non-current liability if the remaining maturity of the hybrid instrument to which the embedded derivative relates is more than 12 months and is not expected to be realized or settled within 12 months.

2) Hedge accounting

The Group designates certain derivatives as hedging instruments in respect of foreign currency risk and interest rate risk in fair value hedges, cash flow hedges or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the beginning of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the beginning of the hedge and on its ongoing basis, the Group documents whether the hedging instrument is effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk. The hedging relationship is effective when it meets all of the following 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.

If a hedging relationship ceases to meet the hedge effectiveness requirement related to the hedge ratio, but the risk management objective for that designated hedging relationship remains the same, the Group adjusts the hedge ratio of the hedging relationship (i.e., rebalances the hedge) so that it meets the qualifying criteria again.

The Group designates the entire change in the fair value of a forward contract (i.e., including the forward elements) as the hedging instrument for all of its hedging relationships involving forward contracts.

The Group has designated only the spot element of the forward contract as a hedge item, i.e., excluding the forward element of the contract. The forward element of the corresponding forward contract is recognized in other comprehensive income and is accumulated in the hedging cost reserve. If the hedged item is transaction related, the forward element is reclassified to profit or loss when the hedged item affects profit or loss. If the hedged item is related to the period, the amount accumulated in the hedging cost reserve is reclassified to profit or loss on a reasonable basis and the Group applies straight-forward amortization. The reclassified amount is recognized in profit or loss as the item similar to the hedged item. If the hedged item is a non-financial item, the amount accumulated in the hedging cost reserve is directly removed from the capital and included in the recognized carrying amount of the recognized non-financial item. In addition, if there are losses in hedging cost reserve and all or part of the loss is expected to not recover in the future, the amount is immediately reclassified to profit or loss.

The Group designates only the intrinsic value of option contracts as a hedged item, i.e., excluding the time value of the option. The changes in the fair value of the aligned time value of the option are recognized in other comprehensive income and accumulated in the cost of hedging reserve. If the hedged item is transaction related, the time value is reclassified to profit or loss when the hedged item affects profit or loss. If the hedged item is time period related, then the amount accumulated in the cost of hedging reserve is reclassified to profit or loss on a rational basis and the Group applies straight-line amortization. Those reclassified amounts are recognized in profit or loss in the same line as the hedged item.

If the hedged item is a non-financial item, the amount accumulated in the cost of hedging reserve is removed directly from equity and included in the initial carrying amount of the recognized non-financial item. In addition, if there are losses in hedging cost reserve and all or part of the loss is expected to not recover in the future, the amount is immediately reclassified to profit or loss.

Note 38 sets out details of the fair values of the derivative instruments used for hedging purposes.

3) Fair value hedges

The fair value change on qualifying hedging instruments is recognized in profit or loss, except when the hedging instrument hedges an equity instrument designated at FVOCI, in which case it is recognized in other comprehensive income.

The carrying amount of a hedged item not measured at fair value is adjusted corresponding to the fair value change attributable to the hedged risk with a corresponding entry in profit or loss. For debt instruments measured at FVOCI, the hedging gain or loss is recognized in profit or loss instead of other comprehensive income as the carrying amount is already at the fair value. When the hedged item is an equity instrument designated at FVOCI, the hedging gain or loss remains in other comprehensive income to match that of the hedging instrument.

Where hedging gains or losses are recognized in profit or loss, they are recognized in the line regarding the hedged item.

The Group discontinues hedge accounting only when the hedging relationship (or a part thereof) ceases to meet the qualifying criteria. This includes instances when the hedging instrument expires or is sold, terminated or exercised. The discontinuation is accounted for prospectively. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to profit or loss from that date.

4) Cash flow hedges

The effective portion of changes in the fair value of derivatives and other qualifying hedging instruments that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of cash flow hedging reserve, limited to the cumulative change in fair value of the hedged item from inception of the hedge. The gain or loss related to the ineffective portion is recognized immediately in profit or loss and is included in the ‘other gains and losses’ line item.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item affects profit or loss, in the same line as the recognized hedged item. However, when the hedged forecast transaction results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously recognized in other comprehensive income and accumulated in equity are removed from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability. This transfer does not affect other comprehensive income. Furthermore, if the Group expects that some or all of the loss accumulated in the cash flow hedging reserve will not be recovered in the future, that amount is immediately reclassified to profit or loss.

The Group discontinues hedge accounting only when the hedging relationship (or a part thereof) ceases to meet the qualifying criteria. This includes instances when the hedging instrument expires or is sold, terminated or exercised. The discontinuation is accounted for prospectively. Any gain or loss recognized in other comprehensive income and accumulated in cash flow hedge reserve at that time remains in equity and is reclassified to profit or loss when the forecast transaction occurs. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in cash flow hedge reserve is reclassified immediately to profit or loss.

5) Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the foreign currency forward contracts related to the effective portion of the hedge is recognized in other comprehensive income and accumulated in the foreign currency translation reserve. The gain or loss related to the ineffective portion is recognized immediately in profit or loss and is included in the ‘other gains and losses’ line item.

Gains and losses on the hedging instrument accumulated in the foreign currency translation reserve are reclassified to profit or loss on the disposal or partial disposal of the foreign operation.

3. CRITICAL ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY:

In the application of the Group's accounting policies, which are described in Note 2, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both the current and the future periods.

(1) Key sources of estimation uncertainty

1. COVID-19 Effects

The COVID-19 pandemic is affecting major economies and financial markets, and virtually every industry faces challenges related to this economic situation. Uncertainty in key assumptions and other assumptions about the future is inherent, with no anticipation of the end of COVID-19 and its impact

2. Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating unit to which goodwill has been allocated. The value-in-use calculation requires the management to estimate the future cash flows expected to arise from the cash-generating unit and a suitable discount rate in order to calculate present value.

3. Impairment of asset - Nemaha

In order to perform an impairment test for cash-generating units for GS GLOBAL (NEMAHA) LLC, a subsidiary engaged in resource development business, the Group is required to estimate the recoverable amount. Estimation uncertainties are caused as the Group's management estimates the value of usage based on the reserves of related mines measured by external experts and estimates of future sales prices.

4. Valuation of financial instruments

As described in Note 38, the Group uses valuation techniques that include inputs that are not based on observable market data to estimate the fair value of certain type of financial instruments. Note 38 provides detailed information about key assumptions used in the determination of the fair value of financial instruments as well as the detailed sensitivity analysis for these assumptions. The directors believe that the chosen valuation techniques and assumptions used are appropriate in determining the fair value of financial instruments.

5. Probability on the realization of unused deferred tax assets

The Group did not recognize some amount of deferred tax assets of ₩8,708 million ($8,004 thousand) because it determined that it is not probable to recover (see Note 33).

4. SEGMENT INFORMATION:

(1) The Group's management recognizes its operating segments based on the information in the internal report to the chief executive officer in order to allocate resources and evaluate the performance of each unit.

(2) The Group's segments in accordance with K-IFRS 1108 *"Segment Information"* are as follows:

Description	Business
Trading	Ferrous and non-ferrous metals, petrochemistry goods, coal, biomass, mechanical plant, cement, cross-trade, machineries (engines) imports, etc.
Logistics	Maintenance and checkup of imported vehicles, unloading and transportation, port development and operation
Manufacturing	Manufacture of equipment for refinery oil, gas and chemicals industry, materials of combined cycle, grater process, etc.
Investment and others	Mining and sales of oil and gas and new business development

(3) Sales and income before income tax by operating segment for the years ended December 31, 2020 and 2019, are as follows:

	December 31, 2020			
	Korean won		Translation into U.S. dollars	
Description	Sales	Operating profit	Sales	Operating profit
	(In millions)		(In thousands)	
Trading	₩ 2,566,797	₩ 41,439	$ 2,359,189	$ 38,087
Logistics	69,865	10,725	64,214	9,858
Manufacturing	175,045	(17,674)	160,887	(16,245)
Investment and others	3,314	(2,190)	3,046	(2,013)
Total	₩ 2,815,021	₩ 32,300	$ 2,587,336	$ 29,687

	December 31, 2019			
	Korean won		Translation into U.S. dollars	
Description	Sales	Operating profit	Sales	Operating profit
	(In millions)		(In thousands)	
Trading	₩ 3,694,908	₩ 46,112	$ 3,191,318	$ 39,827
Logistics	65,758	9,690	56,796	8,370
Manufacturing	123,245	8,288	106,447	7,159
Investment and others	5,489	(5,813)	4,741	(5,021)
Total	₩ 3,889,400	₩ 58,277	$ 3,359,302	$ 50,335

(4) Adjustments to income before income tax (from continuing operations) by operating segment for the years ended December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
Description	2020	2019	2020	2019
	(In millions)		(In thousands)	
Operating profit	₩ 32,300	₩ 58,277	$ 29,687	$ 50,335
Other non-operating income	132,802	117,216	122,061	101,240
Other non-operating expenses	(218,696)	(160,258)	(201,008)	(138,416)
Financial income	1,375	1,386	1,264	1,197
Financial expenses	(16,430)	(22,305)	(15,101)	(19,265)
Loss on investments in associates	(927)	(470)	(852)	(406)
Income before income tax	₩ (69,576)	₩ (6,154)	$ (63,949)	$ (5,315)

(5) Assets and liabilities by operating segment as of December 31, 2020 and 2019, are as follows:

	December 31, 2020						
	Korean won						Translation into U.S. dollars
Description	Trading	Logistics	Manufacturing (*)	Investment	Consolidation adjustment (*)	Total	Total
	(In millions)						(In thousands)
Current assets	₩ 580,013	₩ 53,530	₩ 108,874	₩ 3,307	₩ (184,908)	₩560,816	$ 515,456
Non-current assets	271,963	22,771	299,141	110,184	(308,054)	396,005	363,975
Current liabilities	506,931	52,540	166,526	23,537	(209,216)	540,318	496,616
Non-current liabilities	56,851	8,786	78,754	171,958	(198,861)	117,488	107,985

(*) It displays the adjustments of fair value and goodwill arising from business combination and policy difference with the controlling company.

	December 31, 2019						
	Korean won						Translation into U.S. dollars
Description	Trading (*1)	Logistics	Manufacturing (*2)	Investment	Consolidation adjustment (*2)	Total	Total
	(In millions)						(In thousands)
Current assets	₩ 767,718	₩ 58,603	₩ 168,217	₩ 3,487	₩ (277,073)	₩ 720,952	$ 622,690
Non-current assets	357,050	22,383	310,338	138,641	(344,119)	484,293	418,288
Current liabilities	657,043	51,991	237,648	22,841	(296,914)	672,609	580,938
Non-current liabilities	117,954	7,704	51,888	183,049	(207,883)	152,712	131,898

(*1) Some segment assets and liabilities that are not reported to the chief executive officer of the Group are omitted in the presentation.
(*2) It displays the adjustments of fair value and goodwill arising from business combination and policy difference with the controlling company.

(6) Sales by region where the Group's entities are located are as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Korea	₩ 587,267	₩ 653,876	$ 539,767	$ 564,757
Asia	2,319,495	3,398,823	2,131,889	2,935,587
Other	751,500	1,050,245	690,717	907,104
Subtotal	3,658,262	5,102,944	3,362,373	4,407,448
Consolidation adjustments	(843,241)	(1,213,544)	(775,038)	(1,048,146)
Total	₩ 2,815,021	₩ 3,889,400	$ 2,587,335	$ 3,359,302

(7) There is no single customer which occupies more than 10% of the Group's sales in the years 2020 and 2019.

5. SUBSIDIARIES:

(1) Details of subsidiaries as of December 31, 2020, are as follows:

Subsidiaries	Operating activity	Location	Financial date	Ownership share	Voting rights share
GS Global Japan Co., Ltd.	Trading	Japan	December	100.00%	100.00%
GS Global Australia Pty Ltd.	Trading	Australia	December	100.00%	100.00%
GS Global Hong Kong Ltd.	Trading	Hong Kong	December	100.00%	100.00%
GS Global Europe GMBH	Trading	Germany	December	100.00%	100.00%
Ssangyong Resources Pty Ltd.	Mine investment	Australia	December	100.00%	100.00%
PLS CO., LTD(*1)	PDI and logistics	Republic of Korea	December	90.00%	90.00%
GS Global Guangzhou Co., Ltd.	Trading	China	December	100.00%	100.00%
GS Global Shanghai Co., Ltd.	Agency of import clearance	China	December	100.00%	100.00%
GS Global USA., Inc.	Trading	USA	December	100.00%	100.00%
GS Global Singapore Pte Ltd.	Trading	Singapore	December	100.00%	100.00%
PT GS Global Resource	Trading	Indonesia	December	100.00%	100.00%
GS Global (Suzhou) Steel Service Center Co., Ltd.	Manufacturing	China	December	100.00%	100.00%
GS GLOBAL E&P (AMERICA) CORPORATION	Oil and gas mining	USA	December	100.00%	100.00%
GS GLOBAL (NEMAHA) LLC	Oil and gas mining	USA	December	100.00%	100.00%
GS ENTEC Corp. (*2)	Facility ordering business	Republic of Korea	December	93.11%	93.11%

(*1) PDI: Predelivery inspection

(*2) The Group transferred 1.15% of a shareholder’s name that was pledged as collateral according to the agreement of acquisition of shares. In this case, the opposite party filed a lawsuit, and the Group won the case in 2020. As the result of winning, the Group recognized those shares as assets.

(2) Details of consolidated statement of financial position of subsidiaries and their non-controlling interests as of December 31, 2020, are as follows:

Subsidiaries	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Equity attributable to the owners of the parent company	Non-controlling interests
	(In millions of Korean won)					
GS Global Japan Co., Ltd.	₩ 55,018	₩ 3,872	₩ 43,336	₩ 4,366	₩ 11,188	₩ -
GS Global Australia Pty Ltd.	46,089	766	38,627	177	8,050	-
GS Global Hong Kong Ltd.	284	260	4	-	539	-
GS Global Europe GMBH	32,445	39	30,084	11	2,389	-
Ssangyong Resources Pty Ltd.	1,082	-	1,830	27,792	(28,541)	-
PLS CO., LTD.	13,647	22,764	9,191	8,803	16,576	1,842
GS Global Guangzhou Co., Ltd.	320	-	-	-	320	-
GS Global Shanghai Co., Ltd.	853	46	608	24	268	-
GS Global USA, Inc.	20,934	89	18,204	-	2,819	-
GS Global Singapore Pte Ltd.	36,142	145	33,687	19	2,582	-
PT GS Global Resource	1,845	17,720	8,933	530	10,102	-
GS Global (Suzhou) Steel Service Center Co., Ltd.	4,909	4,683	5,325	-	4,267	-
GS GLOBAL E&P (AMERICA) CORPORATION	1	97,425	23,443	73,071	912	-
GS GLOBAL (NEMAHA) LLC	3,144	8,531	522	98,887	(87,734)	-
GS ENTEC Corp.	108,874	299,470	166,526	79,083	151,527	11,207

(3) Details of the consolidated statement of income of subsidiaries and their non-controlling interests for the year ended December 31, 2020, are as follows:

Subsidiaries	Sales	Operating income	Net income (loss) attributable to the owners of the parent company	Net income attributable to non-controlling Interests
	(In millions of Korean won)			
GS Global Japan Co., Ltd.	₩ 298,686	₩ 3,598	₩ 2,053	₩ -
GS Global Australia Pty Ltd.	99,431	773	471	-
GS Global Hong Kong Ltd.	-	(61)	(89)	-
GS Global Europe GMBH	72,169	87	612	-
Ssangyong Resources Pty Ltd.	-	-	-	-
PLS CO., LTD.	58,334	3,231	2,041	244
GS Global Guangzhou Co., Ltd.	-	(6)	(21)	-
GS Global Shanghai Co., Ltd.	7,358	200	200	-
GS Global USA, Inc.	132,593	837	343	-
GS Global Singapore Pte Ltd.	473,085	634	673	-
PT GS Global Resource	3,475	432	280	-
GS Global (Suzhou) Steel Service Center Co., Ltd.	11,038	(1,591)	(1,393)	-
GS GLOBAL E&P (AMERICA) CORPORATION	-	-	(3,015)	-
GS GLOBAL (NEMAHA) LLC	3,314	(960)	(21,337)	-
GS ENTEC Corp.	175,045	(17,674)	(23,617)	(2,029)

(4) Details of the consolidated statement of cash flows of subsidiaries for the year ended December 31, 2020, are as follows:

Subsidiaries	From operating activities	From investing activities	From financing activities	Net increase (decrease) in cash	Cash, beginning of year	Changes in cash in foreign currencies	Cash, end of year
	(In millions of Korean won)						
GS Global Japan Co., Ltd.	₩ 579	₩ (148)	₩ (1,546)	₩ (1,115)	₩ 2,247	₩ 31	₩ 1,163
GS Global Australia Pty Ltd.	4,967	(8)	(2,670)	2,289	1,441	112	3,842
GS Global Hong Kong Ltd.	(52)	61	-	9	291	(17)	283
GS Global Europe GMBH	1,226	(4)	(128)	1,094	1,404	38	2,536
Ssangyong Resources Pty Ltd.	-	-	-	-	1	-	1
PLS CO., LTD.	9,556	(221)	(6,149)	3,186	2,194	(93)	5,287
GS Global Guangzhou Co., Ltd.	(2)	-	(2)	(4)	321	3	320
GS Global Shanghai Co., Ltd.	195	(2)	(87)	106	195	(1)	300
GS Global USA, Inc.	12	(12)	(143)	(143)	831	(39)	649
GS Global Singapore Pte Ltd.	(4,872)	(3)	(1,028)	(5,903)	11,372	(225)	5,244
PT GS Global Resource	797	-	(671)	126	213	(21)	318
GS Global (Suzhou) Steel Service Center Co., Ltd.	136	64	(18)	182	412	(1)	593
GS GLOBAL E&P (AMERICA) CORPORATION	-	-	-	-	2	-	2
GS GLOBAL (NEMAHA) LLC	601	(440)	-	161	2,976	(192)	2,945
GS ENTEC Corp.	(3,425)	(1,303)	(9,479)	(14,207)	47,702	(8)	33,487

6. FINANCIAL ASSETS AND FINANCIAL LIABILITIES:

(1) Financial assets and financial liabilities as of December 31, 2020, consist of the following:

Financial assets	Korean won					Translation into U.S. dollars
Description	Financial assets carried at amortized cost	Financial assets measured at FVPL	Financial assets measured at FVOCI	Derivative assets that are effective hedging instruments	Total	Total
			(In millions)			
Cash and cash equivalents	₩ 92,488	₩ -	₩ -	₩ -	₩ 92,488	$ 85,007
Current financial assets	-	-	-	8,275	8,275	7,606
Trade receivables and other receivables	326,721	-	-	-	326,721	300,295
Non-current financial assets	-	2,188	22,945	1,326	26,459	24,319
Long-term trade receivables and other receivables	6,433	-	-	-	6,433	5,913
Total	₩ 425,642	₩ 2,188	₩ 22,945	₩ 9,601	₩ 460,376	$ 423,140

Financial liabilities	Korean won			Translation into U.S. dollars
Description	Financial liabilities carried at amortized cost	Derivative liabilities that are effective hedging instruments	Total	Total
		(In millions)		(In thousands)
Trade payables and other current payables (*)	₩ 176,485	₩ -	₩ 176,485	$ 162,210
Short-term borrowings	176,774	-	176,774	162,476
Current portion of long-term borrowings	63,100	-	63,100	57,996
Current portion of bonds	79,935	-	79,935	73,470
Other current financial liabilities	-	6,104	6,104	5,610
Other non-current financial liabilities	-	100	100	92
Long-term trade payables and other payables (*)	6,513	-	6,513	5,986
Long-term borrowings	7,000	-	7,000	6,434
Bonds	94,778	-	94,778	87,112
Total	₩ 604,585	₩ 6,204	₩ 610,789	$ 561,386

(*) It includes lease liabilities (see Note 15).

(2) Financial assets and financial liabilities as of December 31, 2019, consist of the following:

Financial assets	Korean won					Translation into U.S. dollars
Description	Loans and receivables	Financial assets measured at FVPL	Financial assets measured at FVOCI	Derivative assets that are effective hedging instruments	Total	Total
			(In millions)			
Cash and cash equivalents	₩ 82,631	₩ -	₩ -	₩ -	₩ 82,631	$ 71,369
Current financial assets	-	-	-	4,261	4,261	3,681
Trade receivables and other receivables	375,196	-	-	-	375,196	324,060
Non-current financial assets	-	1,638	25,082	450	27,170	23,467
Long-term trade receivables and other receivables	4,593	-	-	-	4,593	3,967
Total	₩ 462,420	₩ 1,638	₩ 25,082	₩ 4,711	₩ 493,851	$ 426,544

Financial liabilities	Korean won			Translation into U.S. dollars
Description	Financial liabilities carried at amortized cost	Derivative liabilities that are effective hedging instruments	Total	Total
		(In millions)		(In thousands)
Trade payables and other current payables (*)	₩ 266,214	₩ -	₩ 266,214	$ 229,931
Short-term borrowings	239,600	-	239,600	206,944
Current portion of long-term borrowings	98,910	-	98,910	85,430
Current portion of bonds	29,484	-	29,484	25,466
Other current financial liabilities	-	2,429	2,429	2,098
Other non-current financial liabilities	95	-	95	82
Long-term trade payables and other payables (*)	3,602	-	3,602	3,111
Long-term borrowings	12,108	-	12,108	10,458
Bonds	129,661	-	129,661	111,990
Total	₩ 779,674	₩ 2,429	₩ 782,103	$ 675,510

(*) It includes lease liabilities (see Note 15).

(3) Income and expense by category of financial instruments for the years ended December 31, 2020 and 2019, consist of the following:

Financial assets	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Derivative assets that are effective hedging instruments:				
Gain on valuation of derivatives	₩ 6,924	₩ 6,715	$ 6,364	$ 5,800
Loss on derivative transactions (*)	(1,953)	(11,218)	(1,795)	(9,689)
Loans and receivables:				
Interest income	727	771	668	666
Gain on foreign exchange transaction	31,535	38,124	28,984	32,928
Gain on foreign currency translation	8,594	6,488	7,899	5,604
Loss on foreign exchange transaction	(30,702)	(17,320)	(28,219)	(14,959)
Loss on foreign currency translation	(18,355)	(9,273)	(16,871)	(8,010)
Loss on disposal of trade receivables	(839)	(3,605)	(771)	(3,114)
Financial assets measured at FVPL:				
Gain on valuation	22	22	21	19
Loss on valuation	(123)	-	(113)	-
Financial assets measured at FVOCI:				
Dividend income	618	593	568	512
Gain on valuation	-	10	-	9
Loss on valuation	(3,137)	(3,725)	(2,883)	(3,217)
Total	₩ (6,689)	₩ 7,582	$ (6,148)	$ 6,549

(*) Gain (loss) on derivative liabilities is included.

Financial liabilities	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Derivative liabilities that are effective hedging instruments:				
Loss on valuation of derivatives	₩ (2,873)	₩ (3,063)	$ (2,641)	$ (2,645)
Financial liabilities carried at amortized cost:				
Interest expense	(15,467)	(18,699)	(14,216)	(16,151)
Gain on foreign exchange transaction	33,493	22,086	30,784	19,076
Gain on foreign currency translation	10,368	8,707	9,529	7,521
Loss on foreign exchange transaction	(29,773)	(42,084)	(27,365)	(36,349)
Loss on foreign currency translation	(12,051)	(4,775)	(11,076)	(4,125)
Total	₩ (16,303)	₩ (37,828)	$ (14,985)	$ (32,673)

(4) Fair value of financial instruments

The fair value of financial assets and financial liabilities was determined under the standard trading conditions and the market price at which the normal trading market exists.

The fair values of financial assets and financial liabilities other than derivatives are measured by a generally accepted pricing model based on observable prices from current market transactions and the analysis of discounted cash flows using the dealer’s quote for similar products. The fair value of derivatives was determined using market prices.

The management regards that the book values of financial assets (liabilities) recognized in amortized cost as of December 31, 2020 and 2019, are similar to the fair values.

7. LOANS AND RECEIVABLES:

(1) Loans and receivables as of December 31, 2020 and 2019, are as follows:

Account	Description	Korean won December 31, 2020	Korean won December 31, 2019	Translation into U.S. dollars December 31 2020	Translation into U.S. dollars December 31 2019
		(In millions)		(In thousands)	
Trade receivables (*1)	Trade receivables	₩ 335,269	₩ 380,876	$ 308,152	$ 328,966
	- Allowance	(12,306)	(11,823)	(11,311)	(10,211)
	Subtotal	322,963	369,053	296,841	318,755
Long-term trade receivables	Long-term trade receivables	2,193	2,194	2,015	1,895
	- Allowance	(2,193)	(2,194)	(2,015)	(1,895)
	Subtotal	-	-	-	-
Current loans and other receivables	Other receivable	2,261	2,884	2,078	2,491
	- Allowance	(389)	(90)	(357)	(78)
	Accrued income	193	186	178	161
	- Allowance	(154)	(154)	(142)	(133)
	Short-term loans	113	1,650	104	1,425
	- Allowance	(111)	(111)	(102)	(96)
	Current portion of long-term loans	395	515	363	445
	Guarantee deposits	801	840	736	726
	Short-term deposits (2*)	649	422	596	364
	Subtotal	3,758	6,142	3,454	5,305
Non-current loans and other receivables	Long-term loans	1,482	1,810	1,362	1,563
	- Allowance	(621)	(621)	(571)	(537)
	Guarantee deposits	5,572	2,926	5,121	2,527
	Long-term deposits (2*)	-	478	-	413
	Subtotal	6,433	4,593	5,912	3,966
Total		₩ 333,154	₩ 379,788	$ 306,207	$ 328,026

(*1) As of December 31, 2020 and 2019, ₩90,760 million ($83,419 thousand) and ₩146,807 million ($126,798 thousand) of trade receivables have been transferred; however, the equivalent book value continues to be recognized as trade receivables, as the Group has guaranteed the expected loss, and the cash received through transfer was recognized as collateral loans (see Note 20).

(*2) As of December 31, 2020 and 2019, deposits are provided to financial institutions as collateral for performance guarantees.

(2) Changes in the allowance for doubtful accounts for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Beginning balance	Impairment	Reversal	Write-off or replacement	Other (*)	Ending balance
	(In millions of Korean won)					
Trade receivables	₩ 11,823	₩ 675	₩ (272)	₩ -	₩ 81	₩ 12,307
Other receivables	90	389	(90)	-	-	389
Accrued income	154	-	-	-	-	154
Short-term loans	111	-	-	-	-	111
Long-term trade receivables	2,195	4	-	-	(6)	2,193
Long-term loans	621	-	-	-	-	621
Total	₩ 14,994	₩ 1,068	₩ (362)	₩ -	₩ 75	₩ 15,775
Translation into U.S. dollars (In thousands)	$ 13,780	$ 982	$ (333)	$ -	$ 69	$ 14,498

(*) Others include the effect of exchange-rate changes.

2019

Description	Beginning balance	Impairment	Reversal	Write-off or replacement	Other (*)	Ending balance
	(In millions of Korean won)					
Trade receivables	₩ 10,186	₩ 1,673	₩ (29)	₩ -	₩ (7)	₩ 11,823
Other receivables	39	51	-	-	-	90
Accrued income	154	-	-	-	-	154
Short-term loans	111	-	-	-	-	111
Long-term trade receivables	2,187	5	-	-	3	2,195
Long-term loans	621	-	-	-	-	621
Total	₩ 13,298	₩ 1,729	₩ (29)	₩ -	₩ (4)	₩ 14,994
Translation into U.S. dollars (In thousands)	$ 11,486	$ 1,492	$ (25)	$ -	$ (3)	$ 12,950

In determining the recoverability of a trade receivable, the Group considers any change in the credit quality of the trade receivable from the date credit was initially granted up to the end of the reporting period. The concentration of credit risk is limited due to the fact that the customer base is large and unrelated.

(3) Credit risk and allowance

The average credit period on sales of goods is 90 to 120 days. Allowances for doubtful debts are recognized against trade receivables based on estimated irrecoverable amounts determined by reference to past default experience of the counterparty and an analysis of the counterparty's current financial position. If irrecoverable receivables are identified by reference to individual analysis, allowances for doubtful debts are recognized.

Before accepting any new customer, the Group uses an external credit scoring system to assess the potential customer's credit quality and defines credit limits by customer. Limits and scoring attributed to customers are reviewed continuously.

Trade receivables disclosed above include amounts (see below for aged analysis) that are past due at the end of the reporting period for which the Group has not recognized an allowance for doubtful debts because there has not been a significant change in credit quality and the amounts are still considered recoverable.

1) Aging analysis of the balances of receivables as of December 31, 2020, is as follows:

	Korean won					
		Overdue but not impaired receivables				
Description	Not overdue	Less than 90 days	More than 90 days, but less than 180 days	More than 180 days, but less than one year	More than one year	Total
	(In millions)					
Receivables	₩ 272,829	₩ 19,203	₩ 14,486	₩ 10,583	₩ 7,717	₩ 51,989
Translation into U.S. dollars (in thousands)	$ 250,762	$ 17,649	$ 13,314	$ 9,728	$ 7,093	$ 47,784

2) Aging analysis of the balances of receivables as of December 31, 2019, is as follows:

	Korean won					
		Overdue but not impaired receivables				
Description	Not overdue	Less than 90 days	More than 90 days, but less than 180 days	More than 180 days, but less than one year	More than one year	Total
	(In millions)					
Receivables	₩ 270,414	₩ 73,905	₩ 19,416	₩ 8,646	₩ 4,935	₩ 106,902
Translation into U.S. dollars (in thousands)	$ 233,558	$ 63,832	$ 16,770	$ 7,468	$ 4,262	$ 92,332

3) Aging analysis of the balances of receivables that are impaired as of December 31, 2020, is as follows:

Description	Korean won					
		Overdue impaired receivables				
	Not overdue	Less than 90 days	More than 90 days, but less than 180 days	More than 180 days, but less than one year	More than one year	Total
	(In millions)					
Receivables	₩ -	₩ -	₩ 5,802	₩ 2,666	₩ 15,663	₩ 24,131
Translation into U.S. dollars (in thousands)	$ -	$ -	$ 5,332	$ 2,450	$ 14,396	$ 22,178

4) Aging analysis of the balances of receivables that are impaired as of December 31, 2019, is as follows:

Description	Korean won					
		Overdue impaired receivable				
	Not overdue	Less than 90 days	More than 90 days, but less than 180 days	More than 180 days, but less than one year	More than one year	Total
	(In millions)					
Receivables	₩ -	₩ 2,784	₩ 884	₩ 118	₩ 13,724	₩ 17,510
Translation into U.S. dollars (in thousands)	$ -	$ 2,405	$ 764	$ 102	$ 11,854	$ 15,125

8. FINANCIAL ASSETS MEASURED AT FAIR VALUE AND AVAILABLE-FOR-SALE (AFS) FINANCIAL ASSETS:

Financial assets measured at fair value as of December 31, 2020, are as follows:

Description	Korean won		
	December 31, 2020		December 31, 2019
	Acquisition cost	Book value	Book value
	(In millions)		
Financial assets measured at FVPL:			
Yongyeon 4 Tools Water Management Cooperative	₩ 18	₩ 18	₩ 18
Machinery Financial Cooperative (*2)	1,350	1,499	1,478
Plant & Mechanical Contractions Financial Cooperative of Korea (*2)	50	53	52
Yongjam Water Management Cooperative	90	90	90
Dalian Billong Shan Corporation	414	-	-
Bharat SSY Salt	320	-	-
AEC Ssangyong Ltd.	831	-	-
Chemcross, Inc.	222	-	-
GS Collective Fund 1 LLC (*3)	600	489	
Heungkuk Dream Saving Insurance (*3)	50	39	
Subtotal	3,945	2,188	1,638
Financial assets measured at FVOCI:			
Daegu MBC	3,930	3,418	3,930
The Korea Economic Daily	73	23	23
Ferrum Infra Co., Ltd.	1,000	1,130	1,130
POSCO Japan PC (*1)	200	211	213
PT Baramulti Suksessarana Tbk.	17,042	17,163	19,786
YLP (*3)	999	999	-
Subtotal	23,244	22,944	25,082
Total	₩ 27,189	₩ 25,132	₩ 26,720
Translation into U.S. dollars (in thousands)	$ 24,990	$ 23,100	$ 23,078

(*1) The difference from the book value of December 31, 2019, is due to foreign currency translation.

(*2) The securities are deposited as collateral regarding performance guarantee of consolidated entity (see Note 36).
(*3) Acquired in 2020.

9. OTHER FINANCIAL ASSETS:

Details of other financial assets as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Derivatives effective as a hedging instrument:				
Contracts on currency forwards	₩ 9,602	₩ 4,712	$ 8,825	$ 4,070
Contracts on commodity forwards	-	-	-	-
Total	₩ 9,602	₩ 4,712	$ 8,825	$ 4,070

10. NON-FINANCIAL ASSETS:

Current non-financial assets as of December 31, 2020 and 2019, consist of the following:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Prepaid value-added tax	₩ 345	₩ 3,238	$ 317	$ 2,797
Advance payments	12,279	15,903	11,286	13,736
Advance payments allowances	(4,510)	(1,727)	(4,146)	(1,492)
Prepaid expenses	2,288	2,335	2,103	2,017
Other non-financial assets	382	398	351	344
Total	₩ 10,784	₩ 20,147	$ 9,911	$ 17,402

11. INVENTORIES:

Inventories as of December 31, 2020 and 2019, consist of the following:

	Korean won					
	December 31, 2020			December 31, 2019		
Description	Amounts before evaluation	Valuation allowance	Book value	Amounts before evaluation	Valuation allowance	Book value
	(In millions)					
Merchandise	₩ 79,532	₩ (449)	₩ 79,083	₩ 123,475	₩ (1,442)	₩ 122,033
Finished goods	545	-	545	712	-	712
Goods in process	-	-	-	-	-	-
Raw materials	6,175	(808)	5,367	27,669	(871)	26,798
Materials in transit	5,619	-	5,619	15,243	-	15,243
Other	17	-	17	89	-	89
Total	₩ 91,888	₩ (1,257)	₩ 90,631	₩ 167,188	₩ (2,313)	₩ 164,875
Translation into U.S. dollars (in thousands)	$ 84,456	$ (1,155)	$ 83,301	$ 144,401	$ (1,998)	$ 142,403

In addition, certain of the above inventories are pledged as collateral for the Group’s borrowings (see Note 36).

12. INVESTMENTS IN ASSOCIATES AND JOINT VENTURES:

(1) Investments in associates and joint ventures as of December 31, 2020 and 2019, consist of the following:

		Korean won			
		December 31, 2020			December 31, 2019
Description	Business (location)	Ownership (%)	Acquisition cost	Book value	Book value
				(In millions)	
Associates:					
SP-Tech Co., Ltd. (*2)	Manufacturing(Korea)	29	₩ 400	₩ -	₩ -
Haenambok Institute Development Co., Ltd.	Manufacturing(China)	30	1,007	-	-
Dongkuk Steel India Private Limited	Manufacturing(India)	25	5,072	1,933	2,121
G&C Interactive Co., Ltd.	Software(Korea)	23	198	-	-
GS Lubricants (Tianjin) Co., Ltd. (*1)	Manufacturing(China)	18	3,077	1,289	2,089
Gyeonggi Pyeongtaek Global Co., Ltd. (*4)	SOC(Korea)	45	1,958	1,924	
Joint ventures:					
Dong-Hae Global Resource Terminal (*3)	Development and operation of SOC(Korea)	40	3,105	2,656	822
Total			₩ 14,817	₩ 7,802	₩ 5,032
Translation into U.S. dollars (In thousands)			$ 13,619	$ 7,171	$ 4,346

(*1) Although the ownership of GS Lubricants (Tianjin) Co., Ltd is less than 20%, the Group concluded that it has significant influence, given that the Group can participate in operating policy decisions (i.e., board of directors).
(*2) The total amount of equity investment in subsidiaries was recognized as impairment loss in previous year.
(*3) As a result of Fair Trade Act revision, the Group removed ₩95 million, which had recognized in a previous year.
(*4) The Group has acquired shares newly in 2020.

(2) Changes in values of investments in associates and joint ventures for the years ended December 31, 2020 and 2019, are as follows:

2020

	Korean won							
Description	Beginning value	Acquisition	Disposal	Valuation gain (loss)	Changes in equity method	Impairment	Others	Book value
				(In millions)				
Associates:								
SP-Tech Co., Ltd. (*1)	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -
Haenambok Institute Development Co., Ltd. (*1)	-	-	-	-	-	-	-	-
Dongkuk Steel India Private Limited	2,120	-	-	(7)	(180)	-	-	1,933
G&C Interactive Co., Ltd. (*1)	-	-	-	-	-	-	-	-
GS Lubricants (Tianjin) Co., Ltd.	2,088	-	-	(834)	34	-		1,288
Gyeonggi Pyeongtaek Global Co., Ltd.	-	1,958	-	(22)	(12)	-	-	1,924
Joint ventures:								
Dong-Hae Global Resources Terminal	822	2,000	-	(64)	(7)	-	(95)	2,656
Total	₩ 5,032	₩ 3,958	₩	₩ (927)	₩ (165)	₩ -	₩ (95)	₩ 7,803
Translation into U.S. dollars (in thousands)	$ 4,625	$ 3,637	$ -	$ (852)	$ (152)	$ -	$ (87)	$ 7,171

(*1) Equity method has been suspended due to the cumulative loss.

2019

	Korean won							
Description	Beginning value	Acquisition	Disposal	Valuation gain (loss)	Changes in equity method	Impairment	Others	Book value
				(In millions)				
Associates:								
SP-Tech Co., Ltd. (*1)	₩ -	₩	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -
Haenambok Institute Development Co., Ltd. (*1)	-	-	-	-	-	-	-	-
Dongkuk Steel India Private Limited	2,081	-	-	19	20	-	-	2,120
G&C Interactive Co., Ltd. (*1)	-	-	-	-	-	-	-	-
GS Lubricants (Tianjin) Co., Ltd.	2,449	-	-	(463)	102	-		2,088
Meiryu Cement Corporation (*1)(*2)	-	-	-	-	-	-	-	-
Joint ventures:								
Dong-Hae Global Resources Terminal	-	855	-	(27)	(6)	-	-	822
Total	₩ 4,530	₩ 855	₩	₩ (471)	₩ 116	₩ -	₩ -	₩ 5,030
Translation into U.S. dollars (in thousands)	$ 3,913	$ 738	$ -	$ (407)	$ 100	$ -	$ -	$ 4,344

(*1) Equity method has been suspended due to the cumulative loss.
(*2) During the year ended December 31, 2019, all shares were sold.

(3) The details adjusted to book value from net assets as of December 31, 2020 and 2019, are as follows :

	December 31,2020			
	Associates:			Joint ventures:
Description	Dongkuk Steel India Private Limited	GS Lubricants (Tianjin) Co. Ltd.	Gyeonggi Pyeongtaek Global Co., Ltd.	Dong-Hae Global Resources Terminal
	(In millions of Korean won)			
Ending net assets (A)	₩ 7,732	₩ 7,302	₩ 4,275	₩ 6,641
Ownership (B)(%)	25.00	17.65	45.00	40.00
Share amount (A*B)	1,933	1,289	1,924	2,656
(+)Good will	-	-	-	-
(-)Intercompany transaction	-	-	-	-
Book value	₩ 1,933	₩ 1,289	₩ 1,924	₩ 2,656
Translation into U.S. dollars (in thousands)	$ 1,777	$ 1,184	$ 1,768	$ 2,442

	December 31, 2019		
	Associates:		Joint ventures:
Description	Dongkuk Steel India Private Limited	GS Lubricants (Tianjin) Co. Ltd.	Dong-Hae Global Resources Terminal
	(In millions of Korean won)		
Ending net assets (A)	₩ 8,550	₩ 11,835	₩ 1,826
Ownership (B)(%)	25.00	17.65	45.00
Share amount (AXB)	2,121	2,088	822
(+)Good will	-	-	-
(-)Intercompany transaction	-	-	-
Book value	₩ 2,121	₩ 2,088	₩ 822
Translation into U.S. dollars (in thousands)	$ 1,832	$ 1,803	$ 710

(4) The amounts not reflected in equity-method loss of associates due to stopping of the equity method for the years ended December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
Description	2020	2019	2020	2019
	(In millions)		(In thousands)	
Haenambok Institute Development Co., Ltd.	₩ -	₩ 94	$ -	$ 81
G&C Interactive Co., Ltd.	₩ -	₩ -	$ -	$ -

(5) The cumulative amounts not reflected in equity-method loss of associates due to stopping of the equity method for the years ended December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
Description	2020	2019	2020	2019
	(In millions)		(In thousands)	
SP-Tech Co., Ltd.	₩ 230	₩ 230	$ 211	$ 199
Haenambok Institute Development Co., Ltd.	250	250	230	216
G&C Interactive Co., Ltd.	₩ 138	₩ 138	$ 127	$ 119

(6) Financial information of the associates and the joint ventures as of December 31, 2020, is summarized as follows:

Associated company	Korean won				
	Assets	Liabilities	Equity	Sales	Net income (loss)
	(In millions)				
Associates:					
SP-Tech Co., Ltd.	₩ 6,901	₩ 8,235	₩ (1,334)	₩ -	₩ -
Haenambok Institute Development Co., Ltd.	5,004	5,844	(841)	-	-
Dongkuk Steel India Private Limited (formerly, USI SERVICE CENTER PRIVATE LIMITED)	31,139	23,406	7,733	64,192	(16)
G&C Interactive Co., Ltd.	1,579	2,174	(595)	-	-
GS Lubricants (Tianjin) Co., Ltd.	44,561	37,259	7,302	25,930	(4,728)
Gyeonggi Pyeongtaek Global Co., Ltd.	4,275	-	4,275	-	(48)
Joint ventures:					
Dong-Hae Global Resource Terminal	6,648	7	6,641	-	(159)

13. INVESTMENT PROPERTIES:

(1) Property and equipment as of December 31, 2020 and 2019, are summarized as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Acquisition cost:				
Land	₩ -	₩ 6,025	$ -	$ 5,204
Buildings	-	4,549	-	3,929
Subtotal	-	10,574	-	9,133
Less accumulated depreciation :				
Land	-	-	-	-
Buildings	-	(1,310)	-	(1,131)
Subtotal	-	(1,310)	-	(1,131)
Less accumulated impairments :				
Land	-	(1,144)	-	(988)
Buildings	-	(1,309)	-	(1,131)
Subtotal	-	(2,453)	-	(2,119)
Total	₩ -	₩ 6,811	$ -	$ 5,883

(2) Changes in investment properties for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Beginning balance	Acquisition	Depreciation	Disposal	Replacement	Ending balance
			(In millions of Korean won)			
Land	₩ 4,880	₩ -	₩ -	₩ -	₩ (4,880)	₩ -
Buildings	1,930	₩ 14	(15)	-	(1,929)	-
	₩ 6,810	₩ 14	₩ (15)	₩ -	₩ (6,809)	₩ -
Translation into U.S. dollars (In thousands)	$ 6,260	$ 13	$ (14)	$ -	$ (6,259)	$ -

2019

Description	Beginning balance	Depreciation	Disposal	Replacement	Ending balance
		(In millions of Korean won)			
Land	₩ 8,161	₩ -	₩ (3,281)	₩ -	₩ 4,880
Buildings	2,038	(65)	(43)	-	1,930
	₩ 10,199	₩ (65)	₩ (3,324)	₩ -	₩ 6,810
Translation into U.S. dollars (In thousands)	$ 8,809	$ (57)	$ (2,871)	$ -	$ 5,881

(3) As of the reporting date, the fair value of the investment property is not significantly different from the carrying amount.

(4) Details of the amounts reflected in the consolidated statement of income for investment property during the current and previous years are as follows:

Operating Expense

2020	₩ 15 million	$ 14 thousand	
2019	₩ 65 million	$ 56 thousand	

14. PROPERTY AND EQUIPMENT:

(1) Property and equipment as of December 31, 2020 and 2019, are summarized as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Acquisition cost:				
Land	₩ 171,466	₩ 165,441	$ 157,597	$ 142,893
Buildings	119,228	114,390	109,584	98,799
Structures	173,116	180,070	159,114	155,528
Machinery and equipment	71,867	73,099	66,054	63,136
Vehicles	1,969	1,944	1,810	1,679
Tools	6,002	5,801	5,516	5,010
Equipment	6,862	6,181	6,307	5,339
Others	2,869	2,783	2,637	2,404
Construction in progress	1,692	1,861	1,555	1,607
Subtotal	555,071	551,570	510,174	476,395
Less accumulated depreciation:				
Buildings	(30,323)	(25,737)	(27,871)	(22,229)
Structures	(83,894)	(83,232)	(77,108)	(71,888)
Machinery and equipment	(44,270)	(41,288)	(40,690)	(35,661)
Vehicles	(1,658)	(1,714)	(1,524)	(1,480)
Tools	(5,475)	(5,304)	(5,032)	(4,581)
Equipment	(4,933)	(4,441)	(4,534)	(3,836)
Others	(1,795)	(1,492)	(1,649)	(1,289)
Subtotal	(172,348)	(163,208)	(158,408)	(140,964)
Less accumulated impairment:				
Land	(1,145)	-	(1,052)	-
Building	(3,716)	-	(3,415)	-
Structures	(50,706)	(40,035)	(46,604)	(34,579)
Machinery and equipment	(132)	(147)	(122)	(127)
Subtotal	(55,699)	(40,182)	(51,193)	(34,706)
Total	₩ 327,024	₩ 348,180	$ 300,573	$ 300,725

(2) Changes in property and equipment for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Beginning balance	Acquisition	Disposal	Depreciation	Replacement (*3)	Impairment	Other (*2)	Ending balance
					(In millions of Korean won)			
Land	₩ 165,4	₩	₩	₩	₩ 4,880	₩	₩	₩ 170,32
Buildings	88,654	143	-	(3,271)	2,042	(2,407)	28	85,189
Structures (*1)	56,802	810	-	(4,832)	-	(14,190)	(73)	38,517
Machinery and equipment	31,663	91	(111)	(4,595)	399	-	17	27,464
Vehicles	230	229	(4)	(144)	-	-	(1)	310
Tools	497	285	(1)	(231)	(24)	-	1	527
Equipment	1,740	812	(3)	(696)	73	-	3	1,929
Others	1,291	42	-	(303)	44	-	-	1,074
Construction in progress	1,8	54			(604		(10	1,69
	₩ 348,1	₩ 2,95	₩ (11	₩ (14,07	₩ 6,810	₩ (16,59	₩ (13	₩ 327,02
Translation into U.S. dollars (In thousands)	$ 320,0	$ 2,71	$ (10	$ (12,93	$ 6,259	$ (15,25	$ (12	$ 300,57

(*1) During the current period, impairments were recognized for ₩14,189 million ($13,042 thousand) of oil drilling facilities owned by GS Global (Nemaha) LLC (see Note 16- (4)).
(*2) Others includes the effect of replacement and changes in exchange rates and impairment loss.
(*3) Replacement is reclassification from investment properties and construction in progress.

2019

Description	Beginning balance	Acquisition	Disposal	Depreciation	Replacement	Other (*2)	Ending balance
			(In millions of Korean won)				
Land	₩ 165,441	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 165,441
Buildings	91,691	19	(559)	(3,190)	624	69	88,654
Structures (*1)	79,712	12,800	(2,384)	(7,952)	1,312	(26,686)	56,802
Machinery and equipment	36,198	86	(96)	(4,558)	-	33	31,663
Vehicles	377	59	(20)	(187)	-	1	230
Tools	925	177	(211)	(399)	-	5	497
Equipment	1,250	1,062	(34)	(547)	-	9	1,740
Others	1,082	223	-	(293)	269	-	1,291
Construction in progress	3,787	166	-	-	(2,206)	115	1,862
	₩ 380,463	₩ 14,592	₩ (3,304)	₩ (17,126)	₩ (1)	₩ (26,454)	₩ 348,180
Translation into U.S. dollars (In thousands)	$ 340,276	$ 12,603	$ (2,854)	$ (14,783)	$ (1)	$ (22,849)	$ 312,392

(*1) During the current period, impairments were recognized for ₩28,545 million ($24,655 thousand) of oil drilling facilities owned by GS Global (Nemaha) LLC (see Note 16- (4)).
(*2) Others includes the effect of replacement and changes in exchange rates and impairment loss.

In addition, some of the above property and equipment are provided as collateral for borrowings of the Group (see Note 36).

15. LEASE:

(1) Right-of-use assets as of December 31, 2020 and 2019, are summarized as follows:

2020

Description	Acquisition	Depreciation	Ending balance
	(In millions of Korean Won)		
Land	₩ 7,114	₩ (4,386)	₩ 2,728
Buildings	10,770	(3,613)	7,157
Others	2,492	(1,064)	1,428
	₩ 20,376	₩ (9,063)	₩ 11,313
Translation into U.S. dollars (In thousands)	$ 18,728	$ (8,330)	$ 10,398

2019

Description	Acquisition	Depreciation	Ending balance
	(In millions of Korean Won)		
Land	₩ 4,913	₩ (3,352)	₩ 1,561
Buildings	9,526	(4,453)	5,073
Others	2,167	(744)	1,423
	₩ 16,606	₩ (8,549)	₩ 8,057
Translation into U.S. dollars (In thousands)	$ 14,343	$ (7,384)	$ 6,959

(2) Changes in right-of-use assets for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Beginning balance	Effects of changes in accounting policies	Acquisition	Disposal	Depreciation	Ending balance
			(In millions of Korean Won)			
Right-of-use assets	₩ 8,057	₩ -	₩ 13,550	₩ (409)	₩ (9,885)	₩ 11,313
Translation into U.S. dollars (In thousands)	$ 7,405	$ -	$ 12,454	$ (375)	$ (9,086)	$ 10,398

2019

Description	Beginning balance	Effects of changes in accounting policies	Acquisition	Disposal	Depreciation	Ending balance
Right-of-use assets	₩ -	₩ 17,789	₩ 7,542	₩ (6,781)	₩ (10,493)	₩ 8,057
Translation into U.S. dollars (In thousands)	$ -	$ 15,364	$ 6,515	$ (5,857)	$ (9,063)	$ 6,959

(3) Changes in lease liabilities for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Beginning balance	Effects of changes in accounting policies	Acquisition	Disposal	Interest expense	Payment	Ending balance
Lease liabilities	₩ 8,098	₩ -	₩ 13,420	₩ (441)	₩ 391	₩ (9,970)	₩ 11,498
Translation into U.S. dollars (In thousands)	$ 7,442	$ -	$ 12,335	$ (405)	$ 359	$ (9,164)	$ 10,567

2019

Description	Beginning balance	Effects of changes in accounting policies	Acquisition	Disposal	Interest expense	Payment	Ending balance
Lease liabilities	₩ -	₩ 17,661	₩ 7,016	₩ (6,661)	₩ 430	₩ (10,348)	₩ 8,098
Translation into U.S. dollars (In thousands)	$ -	$ 15,254	$ 6,060	$ (5,753)	$ 371	$ (8,938)	$ 6,994

(4) Maturity analysis of lease liabilities for the years ended December 31, 2020 and 2019, is as follows:

2020

Description	Less than one year	More than one year, but less than 2 years	More than 2 years, but less than 5 years	More than 5 years	Total
Lease liabilities	₩ 6,249	₩ 3,824	₩ 1,714	₩ 827	₩ 12,614
Translation into U.S. dollars (in thousands)	$ 5,744	$ 3,515	$ 1,576	$ 760	$ 11,595

(*) It is value before discount.

2019

Description	Less than one year	More than one year, but less than 2 years	More than 2 years, but less than 5 years	More than 5 years	Total
Lease liabilities	₩ 5,502	₩ 1,201	₩ 1,285	₩ 387	₩ 8,375
Translation into U.S. dollars (in thousands)	$ 4,752	$ 1,037	$ 1,110	$ 334	$ 7,233

(*) It is value before discount.

(5) Profits and losses regarding the lease for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	In millions of Korean won	In thousands of U.S. dollars
Depreciation of right-of-use assets	₩ 9,885	$ 9,085
Interest expense of lease liabilities	391	359
Expenses regarding leases of low-value assets	110	101

2019

Description	In millions of Korean won	In thousands of U.S. dollars
Depreciation of right-of-use assets	₩ 10,493	$ 9,063
Interest expense of lease liabilities	430	371
Expenses regarding leases of low-value assets	71	61

16. INTANGIBLE ASSETS:

(1) Intangible assets as of December 31, 2020 and 2019, are summarized as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Goodwill	₩ -	₩ 57,387	$ -	$ 49,566
Development costs	143	241	132	208
Software	105	167	97	144
Membership	4,485	4,123	4,122	3,561
Other intangible assets (*)	2,736	11,119	2,515	9,603
Total	₩ 7,469	₩ 73,037	$ 6,866	$ 63,082

(*) Other intangible assets consist of the land mining rights held by GS Global (Nemaha) LLC (₩2,315 million, which is $2,128 thousand) and other intangible assets identified in the business combination.

(2) Changes in intangible assets for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Beginning balance	Acquisition	Disposal	Amortization	Impairment (*2)	Replacement	Other (*1)	Ending balance
	(In millions of Korean won)							
Goodwill	₩ 57,387	₩ -	₩ -	₩ -	₩ (57,387)	₩ -	₩ -	₩ -
Development costs	242	105	-	(204)	-	-	-	143
Software	167	29	-	(96)	-	-	5	105
Membership	4,123	1,317	(916)	-	(31)	-	(8)	4,485
Other intangible assets	11,119	3	-	(1,904)	(6,470)	-	(12)	2,736
	₩ 73,038	₩ 1,454	₩ (916)	₩ (2,204)	₩ (63,888)	₩ -	₩ (15)	₩ 7,469
Translation into U.S. dollars (In thousands)	$ 67,129	$ 1,337	$ (842)	$ (2,025)	$ (58,721)	$ -	$ (14)	$ 6,864

(*1) Others reflect the effect of replacement and changes in exchange rates.
(*2) In year of 2020, the Group recognized impairment of ₩57,387 million ($52,745 thousand) in goodwill, related in GS ENTEC Corp., and ₩6,017 million ($5,530 thousand) in land mining rights held by GS Global (Nemaha) LLC. (See Note 16-(4)).

2019

Description	Beginning balance	Acquisition	Disposal	Amortization	Impairment	Replacement	Other (*)	Ending balance
				(In millions of Korean won)				
Goodwill	₩ 57,387	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 57,387
Development costs	415	52	-	(225)	-	-	-	242
Software	243	58	-	(134)	-	-	-	167
Membership	3,944	786	(614)	-	(8)	-	15	4,123
Other intangible assets	24,225	97	-	(2,168)	(11,834)	-	799	11,119
	₩ 86,214	₩ 993	₩ (614)	₩ (2,527)	₩ (11,842)	₩ -	₩ 814	₩ 73,038
Translation into U.S. dollars (In thousands)	$ 77,107	$ 858	$ (530)	$ (2,183)	$ (10,228)	$ -	$ 703	$ 65,727

(*) Others reflect the effect of replacement and changes in exchange rates.

(3) Goodwill

Goodwill was generated when the Group acquired GS ENTEC Corp. prior to the previous year 2018. The recoverable amount of GS ENTEC Corp. was measured using value in use calculated by applying an annual discount rate of 9.67% to estimated cash flows based on management's approved financial budget for the next five years. The cash flows expected to occur in each cash-generating unit during the financial budget period are divided into plant and energy businesses and estimates the amount of new orders taking into account future market size, market share and market conditions. The recoverable amount is calculated by applying the discount rate and long-term growth rate to the cash flow. The expected cash flows over the five-year period were estimated under the assumption of a prevailing growth rate of 1.00%. Management determined that the total carrying amount of the cash-generating units will not exceed the total recoverable amount due to possible changes in key assumptions used to estimate the recoverable amount.

(4) Asset impairments recognized by the Group during the current period are as follows.

Description	Business	Types of assets	Causes of impairments	Valuation method	Impairment (In millions)
Tangible asset	Developments	Oil drilling facility	Poor business potential	Value evaluation	₩ 14,190
Tangible asset	Manufacturing	PPA (building)	Poor business potential	Value evaluation	2,407
Intangible asset	Developments	Land mining rights	Poor business potential	Value evaluation	6,017
Intangible asset	Manufacturing	Goodwill	Poor business potential	Value evaluation	57,387
Intangible asset	Manufacturing	PPA	Poor business potential	Value evaluation	419
Intangible asset	Developments	Membership	Market Price Depression	Value evaluation	65
Total					₩ 80,485
Translation into U.S. dollars (In thousands)					$ 73,975

17. CONTRACT ASSET, CONTRACT LIABILITY AND CONTRACT COSTS:

(1) Details of contract asset for the years ended December 31, 2020 and 2019, are as follows:

Description	December 31, 2020	December 31, 2019
	(In millions of Korean won)	
Construction contract	₩ 32,893	₩ 74,163
Allowance	(335)	(335)
Total	₩ 32,558	₩ 73,828
Translation into U.S. dollars (in thousands)	$ 29,925	$ 63,766

(2) Change in ECLs of contract asset for the year ended December 31, 2020, does not exist:

(3) Details of contract liability for the years ended December 31, 2020 and 2019, are as follows:

Description	December 31, 2020	December 31, 2019
	(In millions of Korean won)	
Construction contract	₩ 9,603	₩ 15,275
Total	₩ 9,603	₩ 15,275
Translation into U.S. dollars (in thousands)	$ 8,826	$ 13,193

(4) Revenue recognized as contract liability carried forward for the year ended December 31, 2020, is as follows. There is no revenue recognized due to performance obligations carried forward for the year ended December 31, 2019.

Description	December 31, 2020
	(In millions of Korean won)
Construction contract	₩ 11,099
Translation into U.S. dollars (in thousands)	$ 10.201

(5) The changes in the estimated total contract revenue and costs during the current period from contracts in progress at the end of prior period bear to the estimated total contract costs and effects of these changes on income in current and subsequent periods and on amount due from (to) customers for contract work are as follows:

Description	Changes in estimated total contract revenue	Changes in estimated total contract costs	Impact on gain (loss) of current period	Impact on gain (loss) of subsequent period	Change in amount due construction asset	Change in amount due construction liability
			(In millions of Korean won)			
Manufacturing	₩ (2,156)	₩ 4,825	₩ (6,326)	₩ (656)	₩ 5,056	₩ (11,382)
Translation into U.S. dollars (in thousands)	$ (1,982)	$ 4,435	$ (5,814)	$ (603)	$ 4,647	$ (10,461)

(6) For the years ended December 31, 2020 and 2019, there are no construction contracts in progress, which amount to more than 5% of the revenue in the year ended December 31, 2019.

18. TRADE PAYABLES AND OTHER LIABILITIES:

Trade payables and other liabilities as of December 31, 2020 and 2019, are as follows:

Account	Description	Korean won December 31, 2020	Korean won December 31, 2019	Translation into U.S. dollars December 31, 2020	Translation into U.S. dollars December 31, 2019
		(In millions)		(In thousands)	
Trade payables and other current liabilities	Trade payables	₩ 119,726	₩ 209,525	$ 110,042	$ 180,968
	Accounts payable	25,741	22,691	23,659	19,598
	Accrued expenses	24,946	28,633	22,929	24,731
	Lease liabilities	6,021	5,359	5,534	4,629
	Deposits received	50	6	46	5
	Subtotal	176,484	266,214	162,210	229,931
Long-term trade receivables and other liabilities	Lease liabilities	5,477	2,738	5,034	2,365
	Long-term deposits received	1,036	864	953	746
	Subtotal	6,513	3,602	5,987	3,111
Total		₩ 182,997	₩ 269,816	$ 168,197	$ 233,042

19. PROVISIONS:

(1) Details of provisions as of December 31, 2020 and 2019, are as follows:

	Current/ Non-current	Korean won December 31, 2020	Korean won December 31, 2019	Translation into U.S. dollars December 31, 2020	Translation into U.S. dollars December 31, 2019
		(In millions)		(In thousands)	
Provisions for construction warranty (*1)	Current	₩ 1,429	₩ 1,487	$ 1,313	$ 1,284
	Non-current	397	696	365	601
Provisions for product warranty (*2)	Current	393	409	362	353
	Non-current	468	-	430	
Provisions for PDI	Current	116	100	106	86
Provisions for employee reward (*3)	Current	1,255	1,384	1,153	1,195
Provisions for expected loss Contract (*4)	Current	251	-	230	-
Provisions for restoration (*5)(*6)	Current	181	106	167	92
	Non-current	1,589	1,614	1,461	1,394
Provisions for construction loss (*7)	Current	9,267	5,619	8,517	4,854
Total		₩ 15,346	₩ 11,415	$ 14,104	$ 9,859

(*1) The Group estimates the expected cost of defect repair by applying the actual rate of defect repair cost incurred compared to the past average sales to the sales of the construction in progress in the manufacturing sector and the sales of the work for which the defect repair obligation remains after completion of construction.

(*2) Provision for product warranties was evaluated at present value using the best estimate of future outflows of economic benefits in accordance with warranty obligations of the Group regarding industrial resources. Although this estimate was based on historical warranty experience, it is subject to change due to other events that may affect the type or quality of products.

(*3) The Company estimated the rewards to be paid to employees and reflected it in the financial statements.

(*4) The Group estimates the expected cost of sales for the PET Contracts of Petrochemical sector, and the result expects loss; The Group reflected it in the consolidated financial statements.

(*5) The provision for restoration represents estimated cost of the Group's restoration obligation in relation to the oil development of GS GLOBAL (NEMAHA) LLC.

(*6) The provision for restoration represents estimated cost of the Group's restoration obligation related to the cement storage silo development of GS GLOBAL JAPAN CO., LTD.

(*7) The Group recognizes the provision for construction loss by comparing the future sales of the project in progress in the manufacturing sector, which includes management estimates, and the target cost of sales (including direct and unsettled indirect costs by construction).

(2) Changes in provisions for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Beginning balance	Net increase	Use of provision	Others (*)	Ending balance
	(In millions of Korean won)				
Provisions for construction warranties	₩ 2,183	₩ (291)	₩ (66)	₩ -	₩ 1,826
Provisions for product warranty	409	3,070	(2,618)	-	861
Provisions for PDI	100	46	(30)	-	116
Provisions for employee reward	1,384	823	(952)	-	1,255
Provisions for expected loss contract	-	251	-	-	251
Provisions for restoration	1,720	275	(122)	(103)	1,770
Provisions for construction loss	5,619	3,648	-	-	9,267
Total	₩ 11,415	₩ 7,822	₩ (3,788)	₩ (103)	₩ 15,346
Translation into U.S. dollars (In thousands)	$ 10,492	$ 7,190	$ (3,483)	$ (95)	$ 14,104

(*) Others reflect the effect of replacement and changes in exchange rates.

2019

Description	Beginning balance	Net increase	Use of provision	Others (*)	Ending balance
	(In millions of Korean won)				
Provisions for construction warranties	₩ 3,056	₩ (544)	₩ (329)	₩ -	₩ 2,183
Provisions for product warranty	458	894	(943)	-	409
Provisions for PDI	411	32	(343)	-	100
Provisions for employee reward	-	1,384	-	-	1,384
Provisions for restoration	1,909	66	(404)	149	1,720
Provisions for construction loss	12,736	4,748	(11,865)	-	5,619
Total	₩ 18,570	₩ 6,580	₩ (13,884)	₩ 149	₩ 11,415
Translation into U.S. dollars (In thousands)	$ 16,609	$ 5,682	$ (11,990)	$ 129	$ 10,430

(*) Others reflect the effect of replacement and changes in exchange rates.

20. BORROWINGS:

(1) Short-term borrowings as of December 31, 2020 and 2019, are summarized as follows:

			Korean won		Translation into U.S. dollars	
Description	Lender	Annual interest rate (%)	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
			(In millions)		(In thousands)	
Banker's USANCE	Shinhan Bank and others	0.54 – 3.29	₩ 31,473	₩ 34,918	$ 28,928	$ 30,159
Loans secured by trade receivables	Industrial Bank of Korea and others	0.54 – 2.89	90,760	146,808	83,419	126,799
General loan	Shinhan Bank and others	1.74 – 7.66	54,541	55,374	50,129	47,827
Facility loan	Industrial Bank of Korea	-	-	2,500	-	2,159
	Total		₩ 176,774	₩ 239,600	$ 162,476	$ 206,944

(2) Long-term borrowings as of December 31, 2020 and 2019, are summarized as follows:

			Korean won		Translation into U.S. dollars	
Description	Lender	Annual interest rate (%)	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
			(In millions)		(In thousands)	
Project loan	MUFG Bank (*)	-	₩ -	₩ 11,919	$ -	$ 10,294
General loan	SBI Savings Bank	-	-	10,000	-	8,637
	Su Hyup Bank	-	-	5,000	-	4,319
Facility loan	Su Hyup Bank	4.37	1,100	1,100	1,011	950
	Industrial Bank	2.65–3.05	7,000	7,000	6,434	6,046
	Industrial Bank	2.67–2.70	62,000	76,000	56,985	65,642
	Subtotal		70,100	111,019	64,430	95,888
Less: Current portion of long-term borrowings			(63,100)	(98,911)	(57,996)	(85,430)
	Total		₩ 7,000	₩ 12,108	$ 6,434	$ 10,458

(*) The Group repaid it in year of 2020, which is prior to its maturity.

21. CORPORATE BONDS:

(1) Bonds as of December 31, 2020 and 2019, are summarized as follows:

Description	Issuance date	Maturity date	Interest rate(%)	Method of interest paid and repayment	Korean won December 31, 2020	Korean won December 31, 2019	Translation into U.S. dollars December 31, 2020	Translation into U.S. dollars December 31, 2019
					(In millions)		(In thousands)	
Publicly placed bond, 18-2nd	2015.09.10	2020.09.10	3.94	Interest paid for every three months/bullet payment	₩ -	₩ 20,000	$ -	$ 17,274
Publicly placed bond, 20th	2018.09.17	2021.09.17	3.16	Interest paid for every three months/bullet payment	80,000	80,000	73,529	69,097
Private placed bond, 4-1st	2018.10.18	2020.04.18	4.50	Interest paid for every three months/bullet payment	-	5,000	-	4,319
Private placed bond, 4-2nd	2018.10.18	2020.10.18	4.80	Interest paid for every three months/bullet payment	-	4,500	-	3,887
Publicly placed bond, 5-1st	2019.11.27	2022.11.27	2.68	Interest paid for every three months/bullet payment	20,000	20,000	18,382	17,274
Publicly placed bond, 5-2nd	2019.11.27	2024.11.27	2.90	Interest paid for every three months/bullet payment	30,000	30,000	27,574	25,911
Private placed bond, 21st	2020.07.30	2023.07.30	3.25		20,000	-	18,382	-
Private placed bond, 6th	2020.07.30	2022.07.29	4.50		25,000	-	22,978	-
Subtotal					175,000	159,500	160,845	137,762
Less: Present value discount					(287)	(354)	(263)	(306)
Total					₩ 174,713	₩ 159,146	$ 160,582	$ 137,456

22. OTHER FINANCIAL LIABILITIES:

Details of other financial liabilities as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Derivatives designated and effective as a hedging instrument:				
Contracts on currency forwards	₩ 6,204	₩ 2,429	$ 5,702	$ 2,098
Others:				
Others (*)	-	95	-	82
Total	₩ 6,204	₩ 2,524	$ 5,702	$ 2,180

(*) As a result of Fair Trade Act revision, the Group removed ₩95 million, which had been recognized in the previous year (see Note 12).

The Group concluded a currency forward contract to hedge the exposure to variability in cash flows from expected volume of export and import of commodities as of December 31, 2020. The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized in other comprehensive income, and the ineffective portion of the gain or loss on the hedging instrument is recognized in profit or loss.

23. CURRENT NON-FINANCIAL LIABILITIES:

Details of current non-financial liabilities as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Advance received	₩ 5,324	₩ 3,888	$ 4,893	$ 3,359
Withholdings	4,719	1,903	4,337	1,644
Value-added tax withholdings	2,066	2,384	1,899	2,059
Total	₩ 12,109	₩ 8,175	$ 11,129	$ 7,062

24. RETIREMENT BENEFIT PLAN:

(1) Actuarial assumptions used as of December 31, 2020 and 2019, are as follows:

Description	December 31, 2020	December 31, 2019
Discount rate	0.67%–8.00%	1.64%–2.75%
Expected rate of salary increase	2.10%–8.00%	2.90%–4.56%

(2) The amounts recognized in the consolidated statements of financial position related to retirement benefit obligation as of December 31, 2020 and 2019, are as follows:

Description	December 31, 2020	December 31, 2019
	(In millions of Korean won)	
Present value of defined benefit obligations	₩ 31,143	₩ 28,918
Fair value of plan assets	(27,979)	(24,783)
Net retirement benefit obligations	₩ 3,164	₩ 4,135
Translation into U.S. dollars (in thousands)	$ 2,907	$ 3,571

(3) The changes in defined benefit obligation for the years ended December 31, 2020 and 2019, are as follows:

2020

Description	Retirement benefit obligations Present Value	Plan assets	Total	Translation into U.S. dollars
	(In millions of Korean won)			(In thousands)
Beginning balance	₩ 28,918	₩ (24,783)	₩ 4,135	$ 3,801
Current service cost	5,117	-	5,117	4,703
Interest expense (income)	600	(588)	12	11
Subtotal	34,635	(25,371)	9,264	8,515
Remeasurement recognized in other comprehensive income:				
Return on plan assets (except for interest income above)	-	189	189	174
Actuarial gains and losses arising from changes in financial adjustments	(355)	-	(355)	(327)
Actuarial gains and losses arising from changes in other assumptions	-	-	-	-
Subtotal	(355)	189	(166)	(153)
Effect of changes in exchange rates	(11)	-	(11)	(10)
Contributions	-	(5,031)	(5,031)	(4,624)
Payment of postemployment benefit	(3,948)	3,054	(894)	(821)
Other	822	(821)	1	-
Ending balance	₩ 31,143	₩ (27,980)	₩ 3,163	$ 2,907

2019

Description	Retirement benefit obligations Present Value	Plan assets	Total	Translation into U.S. dollars
	(In millions of Korean won)			(In thousands)
Beginning balance	₩ 25,473	₩ (22,791)	₩ 2,682	$ 2,316
Current service cost	4,045	-	4,045	3,494
Interest expense (income)	620	(565)	55	48
Subtotal	30,138	(23,356)	6,782	5,858
Remeasurement recognized in other comprehensive income:				
Return on plan assets (except for interest income above)	-	184	184	159
Actuarial gains and losses arising from changes in financial adjustments	1,882	-	1,882	1,625
Actuarial gains and losses arising from changes in other assumptions	-	-	-	-
Subtotal	1,882	184	2,066	1,784
Effect of changes in exchange rates	136	-	136	117
Contributions	-	(4,417)	(4,417)	(3,815)
Payment of postemployment benefit	(3,618)	3,218	(400)	(346)
Other	380	(412)	(32)	(27)
Ending balance	₩ 28,918	₩ (24,783)	₩ 4,135	$ 3,571

(4) The fair values of plan assets include the components for the years ended December 31, 2020 and 2019, as follows:

Description	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Cash	₩ 10,807	₩ 9,050	$ 9,933	$ 7,817
Bond	17,172	15,733	15,783	13,589
Total	₩ 27,979	₩ 24,783	$ 25,716	$ 21,406

(5) When all the other assumptions are maintained for the year ended December 31, 2020, and significant actuarial assumptions are within the range of reasonable possible changes in this case, the impact of defined benefit obligations is as follows:

Description	Korean won		Translation into U.S. dollars	
	Increase	Decrease	Increase	Decrease
	(In millions)		(In thousands)	
Discount rate at 100-basis-point change	₩ (2,318)	₩ 2,063	$ (2,130)	$ 1,896
Expected rate of salary increase at 100-basis-point change	₩ 2,153	₩ (2,348)	$ 1,979	$ (2,158)

Since there is a correlation between actuarial assumptions, fluctuations in assumptions will not occur independently, so the sensitivity analysis above will not represent actual changes in defined benefit obligations. In addition, in the sensitivity analysis above, the present value of the defined benefit obligation, applied to measure the defined benefit obligation in the consolidated financial statements, was measured using the projected unit credit method.

(6) The Group recognized cost of ₩11 million, which is $10 thousand, for DC plan in year of 2020.

(7) The Group recognized cost of ₩648 million, which is $595 thousand, for retirement bonus in year of 2020.

25. SHAREHOLDERS' EQUITY:

(1) Capital stock as of December 31, 2020 and 2019, consists of the following:

Description	December 31, 2020	December 31, 2019
	(In millions of Korean won, except par value)	
Authorized	400,000,000 shares	400,000,000 shares
Issued	82,533,764 shares	82,533,764 shares
Par value	₩ 2,500	₩ 2,500
Capital stock (in million)	₩ 206,334	₩ 206,334
Translation into U.S. dollars (in thousands)	$ 189,646	$ 178,212

(2) Details of other shareholders' equity as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Paid-in capital in excess of par value	₩ 125,592	₩ 125,592	$ 115,434	$ 108,474
Other capital surplus	(15,412)	(21,520)	(14,166)	(18,587)
Treasury stock (*)	(709)	(709)	(652)	(612)
	₩ 109,471	₩ 103,363	$ 100,616	$ 89,275

(*) The Group has purchased 38,562 shares of treasury stock for ₩708 million ($612 thousand) for the purpose of stock price stability. Treasury shares will be liquidated, if necessary, depending on future market trends.

26. COMPONENTS OF OTHER CAPITAL:

Details of components of other capital as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Changes in valuation of equity-accounted investees	₩ (1,269)	₩ (1,104)	$ (1,166)	$ (954)
(Loss) gain on valuation of financial assets measured at FVOCI	(421)	2,058	(387)	1,778
Overseas operations' translation loss	(11,468)	(17,462)	(10,540)	(15,082)
Loss on valuation of cash flow hedge derivatives	(4,102)	(1,768)	(3,770)	(1,527)
Gain on translation from investment in foreign operation, net	4,400	4,400	4,044	3,800
Total	₩ (12,860)	₩ (13,876)	$ (11,819)	$ (11,985)

27. RETAINED EARNINGS:

(1) Details of retained earnings as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Statutory reserves:				
Earned surplus reserve (*)	₩ 4,389	₩ 4,389	$ 4,034	$ 3,791
Legal reserve - others	7	7	6	6
Unappropriated retained earnings	(21,374)	58,890	(19,645)	50,863
Total	₩ (16,978)	₩ 63,286	$ (15,605)	$ 54,660

(*) The Korean Commercial Code requires the parent company to appropriate an earned surplus reserve of an amount equal to at least 10% of the cash dividends paid until it equals 50% of stated capital. The legal reserve may be used to reduce a deficit or transferred to capital.

(2) Changes in retained earnings for the years ended December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Beginning balance	₩ 63,286	₩ 83,958	$ 58,168	$ 72,515
Net income attributable to the owners of the Company	(80,354)	(17,095)	(73,855)	(14,765)
Payment of dividends	-	(2,062)	-	(1,781)
Actuarial gains or losses	90	(1,515)	82	(1,309)
Ending balance	₩ (16,978)	₩ 63,286	$ (15,605)	$ 54,660

28. CLASSIFICATION OF EXPENSES BY NATURE:

The classification of expenses by nature for the years ended December 31, 2020 and 2019, is as follows:

	Korean won		Translation into U.S. dollars	
Description	2020	2019	2020	2019
	(In millions)		(In thousands)	
Changes in inventory	₩ 2,480,004	₩ 3,569,434	$ 2,279,415	$ 3,082,945
Employee benefits	61,463	58,431	56,492	50,467
Depreciation and amortization	16,290	19,709	14,972	17,023
Depreciation for right-of-use assets	9,885	10,493	9,086	9,063
Bad debt expenses	493	1,649	453	1,424
Transportation	18,581	10,992	17,078	9,494
Advertising	357	488	328	421
Outside service and rent	80,415	56,954	73,911	49,191
Commission	65,376	59,023	60,089	50,979
Taxes and dues	2,621	2,790	2,409	2,410
Others	47,236	41,160	43,415	35,550
Total (*)	₩ 2,782,721	₩ 3,831,123	$ 2,557,648	$ 3,308,967

(*) Total expenses are the sum of cost of sales and selling and administrative expenses in the consolidated statements of income.

29. SELLING AND ADMINISTRATIVE EXPENSES:

The details of selling and administrative expenses for the years ended December 31, 2020 and 2019, are as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Selling:				
Transportation expenses	₩ 9,473	₩ 4,573	$ 8,706	$ 3,949
Commissions and fees	9,577	9,175	8,803	7,925
Export incidental expenses	3,982	5,018	3,660	4,334
Other	1,624	2,358	1,492	2,037
Subtotal	24,656	21,124	22,661	18,245
Administrative expenses:				
Salaries	32,383	31,253	29,763	26,992
Bonuses	3,398	4,804	3,123	4,149
Provision for severance benefits	4,285	2,820	3,938	2,436
Other employee benefits	6,487	6,309	5,962	5,449
Travel	994	2,960	913	2,557
Training	343	758	316	655
Communication expenses	872	961	802	830
Rent	1,516	994	1,393	859
Depreciation	805	872	740	753
Depreciation for right-of-use assets	6,404	6,658	5,886	5,751
Amortization	2,018	2,077	1,855	1,794
Insurance	3,300	4,304	3,034	3,717
Auto maintenance	333	726	306	627
Bad debt expenses	493	1,649	453	1,424
Other	1,661	3,083	1,527	1,238
Subtotal	65,292	68,579	60,011	59,221
Total	₩ 89,948	₩ 89,703	$ 82,673	$ 77,463

30. OTHER OPERATING INCOME AND EXPENSES:

(1) The details of other operating income for the years ended December 31, 2020 and 2019, are as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Gain on foreign exchange transaction	₩ 65,029	₩ 60,210	$ 59,769	$ 52,002
Gain on foreign currency translation	18,962	15,196	17,428	13,125
Gain on disposal of property and equipment	116	2,598	107	2,244
Gain on disposal of intangible assets	174	172	160	149
Gain on disposal of right-of-use assets	12	10	11	9
Gain on valuation of derivatives	6,924	6,715	6,364	5,800
Gain on derivatives transactions	37,357	27,935	34,335	24,128
Miscellaneous income	4,228	4,380	3,887	3,783
Total	₩ 132,802	₩ 117,216	$ 122,061	$ 101,240

(2) The details of other operating expenses for the years ended December 31, 2020 and 2019, are as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Loss on foreign exchange transaction	₩ 60,475	₩ 59,403	$ 55,584	$ 51,305
Loss on foreign currency translation	30,406	14,049	27,947	12,134
Loss on disposal of investment	-	3	-	3
Loss on disposal of property and equipment	65	83	59	72
Loss on disposal of intangible assets	4	4	3	3
Loss on disposal of right-of-use assets	18		16	
Loss on impairment of property and equipment	16,597	28,545	15,254	24,655
Loss on impairment of intangible assets	63,888	11,842	58,721	10,228
Loss on valuation of derivatives	2,873	3,063	2,641	2,646
Loss on derivative transactions	39,310	39,153	36,130	33,817
Other bad debt expenses	3,082	281	2,833	243
Donations	205	103	189	89
Transfer to provisions for restoration	141	66	130	57
Loss on disposal of inventories	629	1,763	578	1,523
Miscellaneous expense	1,003	1,900	923	1,641
Total	₩ 218,696	₩ 160,258	$ 201,008	$ 138,416

31. FINANCIAL INCOME AND EXPENSES:

(1) The details of financial income for the years ended December 31, 2020 and 2019, are as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Interest income	₩ 727	₩ 771	$ 668	$ 666
Dividend income	618	593	568	512
Gain on valuation of financial assets measured at FVPL	23	22	21	19
Gain on guarantee fee	7	-	7	-
Total	₩ 1,375	₩ 1,386	$ 1,264	$ 1,197

(2) The details of financial expenses for the years ended December 31, 2020 and 2019, are as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Interest expense	₩ 15,467	₩ 18,700	$ 14,216	$ 16,151
Loss on disposal of trade receivables	839	3,605	771	3,114
Loss on valuation of financial assets measured at FVPL	123	-	114	-
Total	₩ 16,429	₩ 22,305	$ 15,101	$ 19,265

32. GAIN (LOSS) ON VALUATION/DISPOSAL OF INVESTMENTS IN ASSOCIATES/SUBSIDIARIES:

The details of gain (loss) on valuation/disposal of investments in associates/subsidiaries for the years ended December 31, 2020 and 2019, are as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Gain on disposal of investments in associates	₩ -	₩ -	$ -	$ -
Loss on disposal of investments in associates	-	-	-	-
Loss on disposal of investments in subsidiaries	-	-	-	-
Gain on valuation of investments in associates	-	19	-	16
Loss on valuation of investments in associates	(927)	(489)	(852)	(422)
Loss on impairment of investments in associates	-	-	-	-
Total	₩ (927)	₩ (470)	$ (852)	$ (406)

33. INCOME TAX EXPENSE:

(1) Income tax expense for the years ended December 31, 2020 and 2019, consists of the following:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Income tax currently payable	₩ 6,795	₩ 5,502	$ 6,245	$ 4,753
Changes in deferred income taxes	5,253	3,846	4,828	3,322
Deferred tax directly charged to equity	515	1,159	474	1,001
Changes in deferred tax assets-others	-	-	-	-
Income tax	₩ 12,563	₩ 10,507	$ 11,547	$ 9,076

(2) The relationship between the net income before income tax expense and the components of income tax expense for the years ended December 31, 2020 and 2019, is summarized as follows:

Description	Korean won 2020	Korean won 2019	Translation into U.S. dollars 2020	Translation into U.S. dollars 2019
	(In millions)		(In thousands)	
Net income before income tax expense	₩ (69,576)	₩ (6,154)	$ (63,949)	$ (5,315)
Income tax	(15,067)	(1,161)	(13,848)	(1,003)
Adjustments:				
Tax effect of non-deductible expenses	(357)	109	(328)	94
Effect due to the recognition of the tax loss that was not recognized in the past	3,037	-	2,791	-
Unrecognized deferred income taxes from temporary differences	24,029	11,991	22,085	10,358
Others	921	(432)	847	(373)
Income tax expense	₩ 12,563	₩ 10,507	$ 11,547	$ 9,076

(3) Changes in temporary differences and deferred income tax for the year ended December 31, 2020, are as follows:

Description	Changes in temporary differences			Deferred income tax assets (liabilities)		Translation into U.S. dollars
	Beginning	Change	Ending	Beginning	Ending	Ending
	(In millions of Korean won)					(In thousands)
Allowance for doubtful accounts	₩ 103,215	₩ 24,305	₩ 127,520	₩ 1,741	₩ 2,814	$ 2,587
Subsidiaries and investments in associates	197,733	66,330	264,063	611	612	563
Accrued revenues/prepaid expenses	(38)	(3)	(41)	(8)	(8)	(8)
Gain on valuation of AFS financial assets	-	615	615	-	113	104
Defined benefit obligations	3,415	(411)	3,004	1,097	83	76
Inventories	2,293	(1,153)	1,140	534	225	207
Property, plant and equipment	(17,503)	1,782	(15,721)	(4,723)	(3,363)	(3,091)
Intangible assets	67	(34)	33	15	15	14
Accrued expenses	1,404	(939)	465	148	473	435
Loss on valuation of derivatives	(1,003)	(5,705)	(6,708)	(218)	(1,480)	(1,360)
Others	10,913	9,842	20,755	1,803	2,350	2,160
Subtotal	300,496	94,629	395,125	1,000	1,834	1,687
Deficit carried over	222,352	(9,691)	212,661	52,791	31,556	29,003
Donations in excess of tax limit	848	198	1,046	195	230	212
Tax credit carried over	-	-	-	102	20	18
Total	₩ 523,696	₩ 85,136	₩ 608,832	₩ 54,088	₩ 33,640	$ 30,920
Unforeseeable realization of deferred tax assets				(43,606)	(28,411)	(26,113)
Net deferred tax assets				₩ 10,482	₩ 5,229	$ 4,807

(4) The components of items charged to equity for the years ended December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Income tax charged or credited to:				
Loss on valuation of financial assets measured at FVOCI, etc.	₩ 608	₩ (1,338)	$ 559	$ (1,156)
Actuarial gains or losses	(93)	413	(85)	357
Total	₩ 515	₩ (925)	$ 474	$ (799)

(5) Changes in significant temporary differences and deferred tax assets (liabilities) for the year ended of December 31, 2019, are as follows:

Description	Changes in temporary differences			Deferred income tax assets(liabilities)		Translation into U.S. dollars
	Beginning	Change	Ending	Beginning	Ending	Ending
	(In millions of Korean won)					(In thousands)
Allowance for doubtful Accounts	₩ 54,698	₩ 48,517	₩ 103,215	₩ 1,552	₩ 1,741	$ 1,504
Subsidiaries and investments in associates	196,224	1,509	197,733	449	611	528
Accrued revenues/prepaid expenses	(22)	(16)	(38)	(5)	(8)	(7)
Gain (loss) on valuation of AFS financial assets	(108)	108	-	(24)	-	-
Defined benefit obligations	236	3,179	3,415	83	1,097	947
Inventories	3,034	(741)	2,293	680	534	461
Property, plant and equipment	(18,399)	896	(17,503)	(4,048)	(4,723)	(4,079)
Intangible assets	627	(560)	67	147	15	13
Accrued expenses	1,388	16	1,404	320	148	128
Loss on valuation of derivatives	189	(1,192)	(1,003)	41	(218)	(188)
Others	14,870	(3,957)	10,913	2,170	1,803	1,557
Subtotal	252,737	47,759	300,496	1,365	1,000	864
Deficit carried over	221,580	772	222,352	53,036	52,791	45,596
Donations in excess of tax limit	748	99	847	173	195	168
Tax credit carried over	401	(401)	-	401	102	88
Total	₩ 475,466	₩ 48,229	₩ 523,695	₩ 54,975	₩ 54,088	$ 46,716
Unforeseeable realization of deferred tax assets				(40,648)	(43,606)	(37,663)
Net deferred tax assets				₩ 14,327	₩ 10,482	$ 9,053

(6) The unrecognized deductible temporary differences, deficit carried over and tax credit as deferred tax assets as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Deductible temporary differences	₩ 383,964	₩ 292,736	$ 352,908	$ 252,838
Deficit carried over	205,246	188,107	188,645	162,469
Tax credit carried over	20	102	18	88
Donations in excess of tax limit	₩ 1,285	₩ 1,086	$ 1,181	$ 938

(7) The expiration date of deficit carried over and tax credit as of December 31, 2020 and 2019, is as follows:

	December 31, 2020		December 31, 2019	
	Deficit carried Over	Tax credit	Deficit carried Over	Tax credit
	(In millions of Korean won)			
Less than one year	₩ 44,200	₩ 8	₩ 8,532	₩ 83
One year–two years	11,845	8	44,200	9
Two–three years	15,790	1	11,845	8
More than three years	133,411	1,287	123,530	2
Total	₩ 205,246	₩ 1,304	₩ 188,107	₩ 102
Translation into U.S. dollars (In thousands)	$ 188,645	$ 1,199	$ 162,469	$ 88

34. EARNINGS PER SHARE:

(1) The details of earnings per share for the years ended December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions, except earnings per share)		(In thousands, except earnings per share)	
Net income	₩ (80,354)	₩ (17,095)	$ (73,855)	$ (14,765)
Weighted-average number of shares of common stock outstanding	82,495,202	82,495,202	82,495,202	82,495,202
Earnings (losses) per share in Korean won and	₩ (974)	₩ (207)	$ (0.90)	$ 0.18

(2) There are no potential common shares of the Group; therefore, diluted earnings per share are equal to basic earnings per share.

35. TRANSACTIONS AND BALANCES WITH RELATED COMPANIES:

(1) Status of the Group's related parties for the year ended December 31, 2020, is as follows:

Description		Company	Location
Holding company		GS Holdings Corp.	Korea
Associates	Shareholding company	SP-Tech Co., Ltd.	Korea
		G&C Interactive Co., Ltd.	Korea
		Haenambok Institute Development Co., Ltd.	China
		Dongkuk Steel India Private Limited	India
		GS Lubricants (Tianjin) Co., Ltd.	China
		Gyeonggi Pyeongtaek Global Co., Ltd. (*4)	Korea
Joint venture	Joint venture	Dong-Hae Global Resources Terminal (*3)	Korea
Others (*1)		GS-Caltex Corporation	Korea
		GS Ecometal Co., Ltd.	Korea
		GS Park 24 Co., Ltd.	Korea
		GS E & R Corp.	Korea
		GS EPS Co., Ltd.	Korea
		GS BIO Co., Ltd.	Korea
		GS Donghae Electric Power Co., Ltd.	Korea
		GS Sports Co. Ltd.	Korea
		GS Pocheon Green Energy Corp.	Korea
		PT Baramulti Suksessarana Tbk	Indonesia
		PT Antang Gunung Meratus	Indonesia
A large-scale business group affiliate (*2)		GS E & C Corp., etc.	Korea
		GCS Plus Corp.	Korea
		Seung-San Co., Ltd.	Korea
		Farwest Steel Corporation	USA

(*1) Among the subsidiaries, associates and joint ventures of the parent company, only those that have a transaction history with the Group are listed.
(*2) A large-scale business group affiliation (other related parties) does not correspond to the related parties defined in paragraph 9 of K-IFRS 1024. However, a large-scale business group affiliation designated by the Fair Trade Commission is a company classified as a related party in accordance with the resolution of the Securities and Futures Commission as a related party in accordance with the substantive relationship stipulated in paragraph 10 of K-IFRS 1024.
(*3) It was newly incorporated into a related party due to investment in 2019.
(*4) It was newly incorporated into a related party due to investment in 2020.

The transactions between the Company and its subsidiaries have been removed in the consolidated financial statements and will not be disclosed.

(2) Significant transactions between the Group and related parties for the years ended December 31, 2020 and 2019, are as follows:

Company	Korean won 2020 Sales/ proceeds	Korean won 2020 Purchases/ expenses (*3)	Korean won 2019 Sales/ proceeds	Korean won 2019 Purchases/ expenses
	(In millions)			
Holding company:				
GS Holdings Corp.	₩ -	₩ 5,099	₩ -	₩ 5,485
Associates and joint venture:				
Dongkuk Steel India Private Limited	4,870	-	8,511	-
GS Lubricants (Tianjin) Co., Ltd.	-	-	14	-
Meiryu Cement Corporation	-	-	8	1
Gyeonggi Pyeongtaek Global Co., Ltd.	-	-	-	-
Dong-Hae Global Resources Terminal	73	-	2	-
Other:				
GS-Caltex Corporation (*1)	88,753	292,134	130,883	1,018,098
GS Ecometal Co., Ltd.	-	263		
GS Park 24 Co., Ltd.	-	16	-	15
GS E & R Corp.	44,361	-	61,738	175
GS EPS Co., Ltd.	64,051	10	61,985	-
GS Danghae Electric Power Co., Ltd.	20,777	-	63,122	-
GS Sports Co. Ltd.	-	210	-	251
GS Pocheon Green Energy Corp	39,144	-	13,712	-
PT Baramulti Suksessarana Tbk	-	1,723	-	-
PT Antang Gunung Meratus	562	13,553	864	47,966
A large-scale business group affiliate:				
GS E & C Co., Ltd.	5,360	10	17,949	21
GCS Plus Corp.	-	30	-	1
Farwest Steel Corporation	892	-	-	1
Total	₩ 268,843	₩ 313,048	₩ 358,788	₩ 1,072,014
Translation into U.S. dollars (in thousands)	$ 247,099	$ 287,727	$ 309,886	$ 925,904

(*1) The transaction details of the GS CALTEX's headquarters and subordinate subsidiaries are aggregated.
(*2) Meiryu Cement Corporation was liquidated on June 28, 2020, and the transaction details up to the liquidation date are listed.
(*3) It includes rent fee, and principal and interest of lease liabilities, which occurred in year 2020.

(3) Significant balances related to the transactions between the Group and related parties as of December 31, 2020 and 2019, are as follows:

Company	Korean won			
	2020		2019	
	Accounts receivable and others	Accounts payable and others	Accounts receivable and others	Accounts payable and others
	(In millions)			
Holding company:				
GS Holdings Corp.	₩ 1,933	₩ 4,117	₩ 1,896	₩ 3,015
Associates and joint venture:				
Dongkuk Steel India Private Limited	-	-	4,288	-
GS Lubricants (Tianjin) Co., Ltd.	-	-	14	-
Gyeonggi Pyeongtaek Global Co., Ltd.	296	-	-	-
Dong-Hae Global Resources Terminal	2	-	2	-
Other:				
GS-Caltex Corporation(*)	2,239	13,918	13,915	41,216
GS Park 24 Co., Ltd.	-	2	-	1
GS E & R Corp.	4,342	-	6,497	-
GS EPS CO., LTD.	7,186	-	8,255	199
GS Danghae Electric Power Co., Ltd.	5,287	-	3,667	-
GS Pocheon Green Energy Corp	3,621	-	6,387	-
GS Sports Co. Ltd.	-	-	4	-
PT Baramulti Suksessarana Tbk	-	1,726	-	-
PT Antang Gunung Meratus	-	2,380	58	3,960
A large-scale business group affiliate:				
GS E & C Co., Ltd.	4,128	-	6,269	41
GCS Plus Corp.	-	11	-	-
Seung-San Co., Ltd.	318	-	-	-
Total	₩ 29,352	₩ 22,154	₩ 51,252	₩ 48,432
Translation into U.S. dollars (in thousands)	$ 26,978	$ 20,362	$ 44,267	$ 41,832

(*) The transaction details of the Company’s headquarters and subordinate subsidiaries are aggregated.

(4) Significant financing transactions with the Group and related parties as of December 31, 2020 and 2019, are as follows:

2020

Description	Account	Korean won				
		Beginning balance	Increase	Decrease	Other (*1)	Ending balance
		(In millions)				
Others:						
Shareholders, executives and employees	Short-term loan (*2)	₩ 91	₩ 9	₩ (7)	₩ -	₩ 93
	Current portion of long-term loan	519	-	(572)	451	398
	Long-term loan	1,229	100	-	(451)	878
	Total	₩ 1,839	₩ 109	₩ (579)	₩ -	₩ 1,369
Translation into U.S. dollars (in thousands)		$ 1,689	$ 101	$ (532)	$ -	$ 1,258

(*1) Other reflects the effect of replacement and changes in exchange rates.
(*2) The allowance for the loan loss related to the related party is set at ₩91 million, which is $84 thousand.

2019

Description	Account	Korean won Beginning balance	Increase	Decrease	Other (*1)	Ending balance
				(In millions)		
Others:						
Shareholders, executives and employees	Short-term loan(*2)	₩ 91	₩ -	₩ -	₩ -	₩ 91
	Current portion of long-term loan	535	-	(583)	567	519
	Long-term loan	1,841	-	(45)	(567)	1,229
	Total	₩ 2,467	₩ -	₩ (628)	₩ -	₩ 1,839
Translation into U.S. dollars (in thousands)		$ 2,130	$ -	$ (542)	$ -	$ 1,588

(*1) Other reflects the effect of replacement and changes in exchange rates.
(*2) The allowance for the loan loss related to the related party is set in full.

(5) Compensation details for executive officers for the years ended December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Salaries for short-term employees	₩ 5,976	₩ 6,055	$ 5,493	$ 5,230
Provision for severance benefits	1,632	681	1,500	588
	₩ 7,608	₩ 6,736	$ 6,993	$ 5,818

(6) Details of share transactions with related parties as of December 31, 2020 and 2019, are as follows:

Description	Trading partner		Korean won 2020	 2019	Translation into U.S. dollars 2020	 2019
			(In millions)		(In thousands)	
Share acquisition	Gyeonggi Pyeongtaek Global Co., Ltd.	Cash	₩ 1,958	₩ -	$ 1,799	$ -
Share acquisition	Dong-Hae Global Resources Terminal	Cash	2,000	855	1,838	738

(7) Details of payment guarantees provided by the Group to related parties as of December 31, 2020, are as follows:

Provided for	For guarantee	Provided to	Guaranteed amount	
			(In thousands)	
GS Lubricants (Tianjin) Co., Ltd.	Borrowing guarantee	Kookmin Bank Beijing Branch	CNY	13,238

(8) The Group has a trademark license agreement with GS Holdings Corp. regarding the use of the GS brand.

36. ACCEPTANCES AND GUARANTEES:

(1) As of December 31, 2020, the debt guarantees provided by the Group to others are as follows:

Provided for	For guarantee	Provided to	Guaranteed amount	
			(In thousands)	
PT. Arthayasa	Conrad Project	Kingleigh	USD	14,000

In addition, the Group provides payment guarantees to related parties (see Note 35).

(2) Guarantees received by the Group from third parties as of December 31, 2020, are as follows:

Description	Guarantor	Guaranteed amount	
		(Korean won in millions and USD/EUR in thousands)	
Guarantee for contract	Seoul Guarantee Insurance Company and others	KRW	11,760
	Seoul Guarantee Insurance Company and others	USD	28,578
	Seoul Guarantee Insurance Company and others	EUR	390
Guarantee for tariff blanket	Seoul Guarantee Insurance Company	KRW	2,000
Guarantee for advance payments	MUFG Bank and others	KRW	5,764
		USD	2,247
Guarantee for trade payables	KEB Hana Bank	KRW	240
Lease contract and others	Shinhan Bank and others	KRW	857
Guarantee for defect	Seoul Guarantee Insurance Company and others	KRW	5,268
	Seoul Guarantee Insurance Company and others	USD	22,835
	Seoul Guarantee Insurance Company and others	EUR	74
		KRW	25,889
	Total	USD	53,660
		EUR	464

(3) Details of the Group's assets pledged as collateral as of December 31, 2020, are as follows:

Pledged assets	Book value	Pledged amount	Debtor	Details
	(Korean won in millions and USD in thousands)			
Property and equipment	₩ 234,913	₩ 281,470	Woori Bank and others	Collateral for borrowing
		$ 20,400	Woori Bank and others	Collateral for borrowing
Inventories	₩ 4,092	₩ 36,000	Korea Exim Bank	Collateral for borrowing and others
		$ 36,000	Korea Exim Bank	
Total		₩ 317,470		
		$ 56,400		
Translation into U.S. dollars (in thousands)		$ 348,192		

In addition, the Group's financial assets measured at FVPL of ₩1,553 million (equivalent to $1,427 thousand) are provided as collateral in relation to guarantees received of ₩1,484 million (equivalent to $1,364 thousand) by Seoul Guarantee Insurance Company. The Group provided current deposits of ₩478 million (equivalent to $440 thousand) as collateral in relation to guarantees received of ₩464 million (equivalent to $427 thousand) by Korea Exim Bank and long-term deposits of ₩90 million (equivalent to $83 thousand) as collateral in relation to guarantees for share acquisition of the employee stockholders association.

Thus, the Group's inventories of ₩4,092 million (equivalent to $3,761 thousand) are provided as collateral in relation to guarantees for contracts by Korea Exim Bank, which is capped ₩36,000 million or $36,000 thousand.

(4) Details of the assets provided as collateral for receivables as of December 31, 2020, are as follows:

Pledged assets	Amount	Provided by	Details
	(JPY in thousands)		
Deposits to financial institutions	¥ 10,000	Sanwa Suksan Co., Ltd.	Collateral for bank deposit
Deposits	40,000	Honda	Collateral for receivables
Deposits	1,000	Tomizawa	Collateral for receivables
Deposits	40,000	Wadajari	Collateral for receivables
Total	¥ 91,000		
Translation into U.S. dollars (in thousands)	$ 882		

37. COMMITMENTS AND CONTINGENCIES:

(1) As of December 31, 2020, the commitments associated with financing are as follows:

Description	Currency	Limit	Financial institutions
	(Korean won in millions and USD, JPY, IDR and EUR in thousands)		
Overdraft commitments	JPY	450,000	SBJ Bank Tokyo branch
Comprehensive commitments	KRW	1,600	Woori Bank and others
	USD	655,700	Woori Bank and others
Local letter of credit ("L/C")	USD	29,300	Shinhan Bank and others
	KRW	20,000	Kookmin Bank and others
L/C	USD	85,160	Shinhan Bank and others
D/A, D/P	USD	130,800	MUFG Bank and others
Operational finance	KRW	152,771	Korea Development Bank and others
	JPY	300,000	Korea Development Bank and others
Facility loan	KRW	63,100	Korea Development Bank and others
B2B finance	KRW	10,000	Woori Bank and others
Payment guarantee	KRW	48,965	Seoul Guarantee Insurance Company
	USD	71,820	Korea Development Bank and others
Other finances	JPY	1,600,000	SBJ Bank Tokyo branch
	USD	82,495	Korea Development Bank and others
	IDR	64,340,000	Shinhan Bank Indonesia branch
	EUR	10,000	Deutsche Bank and others
	KRW	59,500	KEB Hana Bank and others

(2) As of December 31, 2020, pending litigations that the Group is involved in are summarized below:

	Plaintiff	Defendant	Currency	Amount
				(Korean won in millions and USD in thousands)
Plaintiff:				
Damage compensation	The Company	UNIMARINE	USD	1,530
Loss on monopoly	The Company	AL AKRAM		61
Total			USD	1,591
Defendant:				
Confirm absence of debt	ELDORADO	The Company	USD	2,663
Request for payment	Lee Gwandeok	GS ENTEC Corp.	KRW	986
Request for payment	Jinbo E&G	GS ENTEC Corp.	KRW	985
Other four litigations	UNIMARINE and others	The Company	USD	301
Total			KRW	1,971
			USD	2,964

(*) The result of the litigations above cannot be expected at the moment, and the board of directors of the Group forecasts that they do not affect significantly the consolidated financial statements.

(3) As of December 31, 2020, the Group has covenant agreement about long-term borrowings of ₩80,000 million (equivalent to $73,529 thousand).

(4) As of December 31, 2020, the Group reserves the right to sell a 5% stake in PT Baramulti Suksessarana Tbk to PT Wahana Sentosa Cemerlang, LLC, in April 2019, according to the shareholder agreement.

38. RISK MANAGEMENT:

(1) Capital risk management

The Group performs capital management to maintain its ability to continuously provide profits to shareholders and parties in interest and to maintain optimum capital structure. The overall capital risk management policy is consistent with that of the prior year.

Debt-to-equity ratio is calculated as total liabilities divided by equity and is used as an index to manage the Group's capital. Debt-to-equity ratios as of December 31, 2020 and 2019, are as follows:

	Korean won		Translation into U.S. dollars	
Description	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
	(In millions)		(In thousands)	
Total liabilities	₩ 657,806	₩ 825,321	$ 604,601	$ 712,836
Cash and cash equivalents	(92,488)	(82,631)	(85,007)	(71,369)
Liabilities, net	565,318	742,690	519,594	641,467
Total equity	₩ 299,016	₩ 379,924	$ 274,831	$ 328,142
Liabilities ratio	189.1%	195.5%	189.1%	195.5%

(2) Financial risk management

1) Purpose of financial risk management

The finance division of the Group manages operations, organizes access to financial markets at home and abroad and monitors and manages financial risks related to the operations of the Group through internal risk reports that analyze the scope and scale of each risk. The Group is exposed to various financial risks, such as market (foreign exchange, interest rate and price), credit and liquidity, related to financial instruments.

The purpose of risk management of the Group is to identify potential risks related to financial performance and reduce, eliminate and evade those risks to a degree acceptable to the Group. The use of derivative financial instruments is determined by the Group's policies approved by the board of directors under specified principles for foreign exchange risk, interest rate risk, credit risk, use of derivative and non-derivative financial instruments and investment in excess liquidity. Internal auditors are constantly reviewing policy compliance and risk exposure limits.

The Group does not conclude or trade financial product contracts, including derivative financial products, for speculative purposes.

2) Market risk

a. Foreign exchange risk management

The Group is exposed to various foreign currencies' risk in which it makes transactions. The Group is mainly exposed to USD and EUR risk.

Assets and liabilities denominated in foreign currencies as of December 31, 2020 and 2019, are summarized as follows:

		Foreign currencies		Korean won	
	Currency	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
		(In thousands)		(In millions)	
Assets	USD	191,731	349,735	₩ 208,604	₩ 404,923
	JPY	880,480	3,494,058	9,283	37,158
	EUR	14,158	34,624	18,946	44,923
	AUD	26,425	24,101	22,106	19,530
	CNY	38,867	38,280	6,489	6,345
	AED	77	323	23	101
	MYR	86	46	23	13
	THB	389	638	14	25
	INR	5,089	6,649	76	108
	VND	344,675	353,349	16	18
	TWD	12,897	1,900	499	73
	SAR	20	129	6	40
	IDR	39,679	60,228	3	5
	RUB	1,032	1,291	15	24
	GBP	50	483	75	734
	SEK	91,535	100,552	12,153	12,454
	CHF	-	200	-	239
	SGD	6	6	5	5
	TRY	123	60	18	12
				₩ 278,354	₩ 526,730
Liabilities	USD	159,159	244,999	₩ 173,165	₩ 283,660
	JPY	2,956,673	4,432,172	31,171	47,135
	EUR	24,999	35,178	33,455	45,563
	AUD	25,424	20,242	21,269	16,403
	CNY	111,255	65,255	18,575	10,815
	INR	252	1,827	4	30
	GBP	4	537	6	816
	SEK	123,338	129,804	16,375	16,077
	SAR	340	246	99	76
	CHF	-	300	-	359
	TWD	2,386	1,249	92	48
				₩ 294,211	₩ 420,982

Ten percent is the sensitivity rate applied when reporting foreign currency risk internally to major management and represents management's evaluation of the reasonable range of exchange rate fluctuations. The Group's sensitivity to a 10% change in exchange rate of the functional currency (Korean won) against each foreign currency on income before income tax as of December 31, 2020, is as follows:

Currency	Korean won		Translation into U.S. dollars	
	Increase by 10%	Decrease by 10%	Increase by 10%	Decrease by 10%
	(In millions)		(In thousands)	
USD	₩ 3,544	₩ (3,544)	$ 3,257	$ (3,257)
JPY	(2,189)	2,189	(2,012)	2,012
EUR	(1,451)	1,451	(1,333)	1,333
AUD	84	(84)	77	(77)
Other	(1,574)	1,574	(1,446)	1,446
Subtotal	(1,586)	1,586	(1,457)	1,457
Effect of derivatives held	350	(350)	322	(322)
Total	₩ (1,236)	₩ 1,236	$ (1,135)	$ 1,135

The sensitivity of the exchange rate fluctuation risk to which the Group is exposed decreases when it realizes the profits of inventory held by the Group.

b. Market interest rate risk

The Group's borrowings are at either fixed or variable interest rates, which causes a exposure to financial risks arising from the interest rates. The Group maintains an appropriate balance between fixed-rate and variable-rate borrowings to manage interest rate risk. Risk aversion activity is evaluated regularly, while adjusting conditions and the nature of interest rates.

Based on the sensitivity analysis, assuming all other variables to be the same, if interest rate is 1% higher or 1% lower than the current interest rate, the Group's income for the year ended December 31, 2020, would decrease or increase by ₩1,560 million ($1,434 thousand).

3) Credit risk

Credit risk refers to the risk that the other party will default to the contract and cause financial loss to the Group. The Group adopts a policy of dealing with customers with certain level of creditworthiness and receiving sufficient collateral to mitigate financial losses caused by default. The Group only deals with companies that have a credit rating equivalent to or higher than the investment rating. This credit information is provided by an independent credit rating agency, and if the information provided by the credit rating agency is not available, the Group decides for the purpose of determining the credit rating of the main customer and deals with other financial information available. The Group's credit risk exposure and credit ratings of clients are continuously reviewed and the total amount of these transactions is evenly distributed among the approved clients.

Trade receivables consist of multiple clients and are distributed across a variety of industries and regions. Credit evaluations are continuously conducted on trade receivables, and credit guarantee insurance contracts are signed if necessary. The Group is not exposed to significant credit risk to a single counterparty or a group of counterparties with similar characteristics. The Group defines a counterparty with similar characteristics when the counterparties are related companies.

Except for below, the book value of financial assets in the consolidated financial statements is the amount after the impairment loss, and it represents the maximum amount of exposure to credit risk without considering the value of the collateral acquired.

Description	December 31, 2020	December 31, 2019
	(In millions of Korean won)	
Total amount that the Group has guaranteed (*)	₩ 17,442	₩ 19,690
Translation into U.S. dollars (in thousands)	$ 16,031	$ 17,006

4) Liquidity risk

The Group establishes short-term and long-term fund management plans. The Group analyzes and reviews actual cash outflow and its budget to correspond the maturity of financial liabilities to that of financial assets. Management believes that with proper financial liabilities, it will be able to easily access cash when necessary for its operating activities and financial assets.

The Group's maturity analysis of its financial liabilities according to their remaining contract expiration as of December 31, 2020, is as follows:

Description	Less than one year	One year–five years	More than five years	Total
	(In millions of Korean won)			
Current financial liabilities:				
Trade payables and other current payables	₩ 176,485	₩ −	₩ −	₩ 176,485
Short-term borrowings (*)	177,693	-	-	177,693
Current portion of long-term borrowings (*)	64,573	-	-	64,573
Current portion of bonds (*)	81,960	-	-	81,960
Other current financial liabilities	6,104	-	-	6,104
Financial guarantee contracts	17,442	-	-	17,442
Non-current financial liabilities:				
Long-term trade payables and other payables	-	6,513	-	6,513
Long-term borrowings (*)	201	7,117	-	7,318
Bonds (*)	779	99,812	-	100,591
Other non-current financial liabilities	-	1	-	1
Total	₩ 525,237	₩ 113,542	₩ -	₩ 638,779
Translation into U.S. dollars (in thousands)	$ 482,755	$ 104,358	$ -	$ 587,113

(*) Includes the expected borrowing and private bond interest expenses as of December 31, 2020.

For financial guarantee contracts, the amount included above is the maximum amount that the Group is required to pay under the contract if the warrantee requests the full amount of the deposit. Based on the current forecast at the end of the reporting period, the Group believes that it is more likely not to pay the amount of the deposit in accordance with the financial guarantee contract. However, the above estimate may fluctuate because the probability that the warrantee may claim payments to the Group under the warranty contract may fluctuate due to the possibility of credit loss on the financial bond held by the warrantee.

(3) The fair value of financial instruments

The Group has determined the fair value of financial assets and financial liabilities as follows:

- The fair value of financial assets and financial liabilities if there is a standard trading condition and an active market is determined using the market price.
- The fair value of other financial assets and financial liabilities, except for derivative instruments, has been determined in accordance with the generally accepted pricing models based on discounted cash flow analysis using a call to the dealer for a similar price from observable current market transactions.
- The fair value of derivatives is determined by the market price.

The management of the Group considers that the carrying amounts of financial assets and financial liabilities recognized at amortized cost in the consolidated financial statements approximate their fair values.

The fair values of financial instruments traded on active markets are determined with reference to quoted market prices. If published prices are readily and regularly available through exchanges, sellers, brokers, industry groups, valuation agencies or supervisory authorities, those prices are considered active markets if they represent actual market transactions occurring regularly between independent parties.

The fair values of financial instruments not traded on an active market are determined using a valuation technique. These evaluation techniques use market information at maximum and company-specific information to a minimum. The Group uses various valuation techniques using assumptions based on current market conditions. If all significant input variables required to measure the fair value of a product are observable, the product is included in Level 2.

If one or more significant inputs are not based on observable market information, the product is included in Level 3.

1) As of December 31, 2020, book value and fair value of financial instruments that are not measured subsequent to fair value are as follows:

Description	Korean won		Translation into U.S. dollars	
	Book value	Fair value	Book value	Fair value
	(In millions)		(In thousands)	
Financial assets:				
Cash and cash equivalents	₩ 92,488	₩ 92,488	$ 85,007	$ 85,007
Current trade receivables and other receivables	326,721	326,721	300,295	300,295
Non-current trade receivables and other receivables	6,433	6,433	5,913	5,913
Financial liabilities:				
Trade payables and other payables:				
Current trade payables and other payables	176,485	176,485	162,210	162,210
Non-current trade payables and other payables	6,513	6,513	5,986	5,986
Borrowings:				
Short-term borrowings	176,774	176,774	162,476	162,476
Current portion of long-term borrowings	63,100	63,100	57,996	57,996
Current portion of corporate bonds	79,935	81,065	73,470	74,509
Long-term borrowings	7,000	7,162	6,434	6,583
Corporate bonds	94,778	97,857	87,112	89,942
Other financial liabilities:				
Other current financial liabilities	-	-	-	-

The Group estimates the fair value and the book value of financial assets and liabilities to be close.

2) Financial instruments that are measured subsequent to initial recognition at fair value, but for which fair value does not exist, are as follows:

Description	Korean won		Translation into US. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Financial assets measured at FVPL (unlisted stocks)	₩ 108	₩ 108	$ 99	$ 93
Financial assets measured at FVOCI (unlisted stocks)	1,364	1,153	1,254	996

3) Financial instruments that are measured subsequent to initial recognition at fair value are grouped into Level 1 to Level 3 based on the degree to which the fair value is observable as described below:

- Level 1: Fair value measurements are those that are derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Fair value measurements are those that are derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).
- Level 3: Fair value measurements are those that are derived from valuation techniques that include inputs for the asset or liability, which are not based on observable market data (unobservable inputs).

Fair value measurements of financial instruments by fair value hierarchy levels as of December 31, 2020, are as follows:

	Korean won				Translation into U.S. dollars
	December 31, 2020				December 31, 2020
Description	Level 1	Level 2	Level 3	Total	Total
	(In millions)				(In thousands)
Financial assets:					
FVOCI financial assets	₩ 17,163	₩ -	₩ 4,417	₩ 21,580	$ 19,835
FVPL financial assets	-	-	2,080	2,080	1,912
Derivative assets	-	9,601	-	9,601	8,825
Total	₩ 17,163	₩ 9,601	₩ 6,497	₩ 33,261	$ 30,572
Financial liabilities:					
Derivatives liabilities	₩ -	₩ 6,203	₩ -	₩ 6,203	$ 5,701

Fair value measurements of financial instruments by fair value hierarchy levels as of December 31, 2019, are as follows:

	Korean won				Translation into U.S. dollars
	December 31, 2019				December 31, 2019
Description	Level 1	Level 2	Level 3	Total	Total
	(In millions)				(In thousands)
Financial assets:					
FVOCI financial assets	₩ 19,786	₩ -	₩ 4,143	₩ 23,929	$ 20,668
FVPL financial assets			1,530	1,530	1,321
Derivative assets	-	4,712	-	4,712	4,070
Total	₩ 19,786	₩ 4,712	₩ 5,673	₩ 30,171	$ 26,059
Financial liabilities:					
Derivatives liabilities	₩ -	₩ 2,429	₩ -	₩ 2,429	$ 2,098

4) A description of the valuation techniques and the inputs used in the fair value measurement of financial instruments classified as Level 2 and Level 3 is as follows:

- Currency forward

In principle, the fair value of currency forward was measured based on forward currency rates, whose period is coincidental with the residual period of the currency forward, that are advertised on the market at the end of the reporting period. If forward currency rates whose period is coincident with the residual period are not advertised on the market, the fair value of currency forward was measured by estimating the forward currency rates whose period is similar to the residual period of the currency forward. The estimation of the forward currency was performed using interpolation to advertised periodical forward currency rates. Discount rates used to measure the fair value of currency forward were determined based on yield curve from yields advertised on the market.

Since the input variables that are used to measure the fair value of currency forward at the end of the reporting period are derived via the forward exchange rate and the yield curve in the market, the fair values of currency forward were classified as Level 2 fair value measurement.

- Unlisted shares and securities
The fair values of unlisted shares are measured using a discounted cash flow model that is not based on observable market prices or rates, and the model is used to estimate the future cash flows, such as sales growth, pretax operating profit margin and the weighted-average cost of capital. Capital asset pricing model was used to calculate the weighted-average cost of capital. The key assumptions of estimation listed above are determined to have a significant impact on the fair value of unlisted shares, and the Group has classified the fair value hierarchy system on Level 3 of the fair value measurement of unlisted shares.

The fair value of government bonds and unsecured corporate bonds is measured by discounting the future cash flows of debt securities by applying market interest rates applied to companies with similar credit ratings to the issuers of debt securities.

(4) In the current period, there are no changes in valuation techniques of financial instruments classified by Level 2 and Level 3.

(5) Valuation policy and process of financial instruments classified by Level 2 and Level 3 are as follows:

The Group performs assessment of the fair value of assets and liabilities for financial reporting purposes and reports the results to the CFO and the audit committee.

Quantitative information of fair value measurement (Level 3) using the significant unobservable inputs and interrelationship between unobservable inputs and fair value measurement is as follows:

-The long-term profitability growth rate and pretax operating profit rate used to measure the fair value of unlisted stocks are estimated based on the average of the profitability growth rate and pretax operating profit rate of comparable listed companies.

-The discount rates are used to measure the fair value of unlisted stocks and conditional considerations. The discount rate of insufficient marketability is estimated based on the stock beta of comparable listed companies and is estimated by weighted average of the cost of equity capital derived from the stock and the cost of debt capital of the issuing company.

	Korean won (in million)	Valuation method	Unobservable inputs	Range (Weighted average)
Unlisted securities	₩ 3,418	Discounted cash flow	Growth rate Discount rate	3.40% 8.09%
Unlisted securities	2,683	Discounted cash flow	Current assets Property and equipment Other non-current assets	Accept book value as market value

(6) The Group judges that changes in unobservable inputs for reflecting reasonably possible general assumptions do not bring significant changes of measured fair value.

(7) There are no significant changes in the economic environment or business circumstances that affect the measurement of the fair value of the financial assets and liabilities.

39. CONSOLIDATED STATEMENTS OF CASH FLOWS:

(1) The cash and cash equivalents in the consolidated statements of financial position are the same as the cash and cash equivalents in the consolidated statements of cash flows.

(2) Add-back of non-cash transactions for the years ended December 31, 2020 and 2019, is as follows:

Description	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Retirement benefits	₩ 5,777	₩ 4,100	$ 5,310	$ 3,541
Depreciation	14,071	17,116	12,933	14,783
Depreciation of right-of-use assets	9,885	10,493	9,086	9,063
Depreciation of investment property	15	65	14	56
Amortization of intangible assets	2,203	2,527	2,025	2,183
Bad debt expenses	493	1,648	453	1,423
Contribution to provisions	(104)	1,481	(96)	1,279
Loss on valuation of FVPL financial assets	123	-	113	-
Loss on foreign currency translation	30,406	14,049	27,947	12,134
Loss on disposal of investment	-	3	-	3
Loss on disposal of property and equipment	65	83	59	72
Loss on impairment of property and equipment	16,597	28,545	15,254	24,655
Loss on disposal of right-of-use assets	18	-	16	-
Loss on disposal of intangible assets	4	4	3	3
Impairment loss on intangible assets	63,888	11,842	58,721	10,228
Other long-term employee benefits	180	-	165	-
Loss on valuation of derivatives	2,873	3,063	2,641	2,646
Other bad debts	3,083	281	2,833	243
Interest expense	15,467	18,700	14,216	16,150
Loss on disposal of trade receivables	839	3,605	771	3,114
Loss on valuation of investments in associates	927	490	852	423
Loss on disposal of investments in associates	-	-	-	-
Loss on disposal of investments in subsidiaries	-	-	-	-
Income tax expense	12,564	10,507	11,547	9,075
Prior error adjustment	109	-	101	-
Loss on valuation of inventories	-	-	-	-
Loss on disposal of inventories	629	1,763	578	1,523
Total	₩ 180,112	₩ 130,365	$ 165,542	$ 112,597

(3) Deduction of non-cash transactions for the years ended December 31, 2020 and 2019, is as follows:

Description	Korean won		Translation into U.S. dollars	
	2020	2019	2020	2019
	(In millions)		(In thousands)	
Gain on foreign currency translation	₩ 18,962	₩ 15,196	$ 17,428	$ 13,124
Gain on disposal of right-of-use assets	-	10	-	9
Gain on disposal of inventories	12	-	11	-
Reversal of loss for inventory valuation	111	94	102	81
Gain on disposal of property and equipment	116	2,598	107	2,244
Gain on disposal of intangible assets	174	172	160	149
Gain on valuation of derivatives	6,924	6,715	6,364	5,800
Reversal of allowance for bad debts	-	-	-	-
Reversal of provision for construction warranty	-	544	-	470
Gain on valuation of investments in associates	-	19	-	16
Gain on disposal of investments in associates	-	-	-	-
Interest income	727	771	668	666
Gain on financial guarantee contracts	1,371	-	1,260	-
Dividend income	618	593	568	512
Gain on valuation of financial assets measured at FVPL	23	22	21	19
Total	₩ 29,038	₩ 26,734	$ 26,689	$ 23,090

(4) Investing and financing activities of non-cash transactions for the years ended December 31, 2020 and 2019, are as follows:

Description	2020 Korean won	2020 Translation into U.S. dollars
	(In millions)	(In thousands)
Reclassification of long-term loans to current portion of long-term loans	₩ 401	$ 368
Reclassification of long-term borrowings to current portion of long-term borrowings	-	-
Reclassification of long-term bonds to current portion of long-term bonds	79,945	73,479
Reclassification of long-term financial guarantee liabilities to current portion of long-term financial guarantee liabilities	400	367
Reclassification of long-term financial guarantee liabilities to prepaid expenses	244	224
Reclassification of other payables for the acquisition of property and equipment	163	149
Reclassification of other payables for the acquisition of intangible assets	-	-
Total	₩ 81,153	$ 74,587

Description	2019 Korean won	2019 Translation into U.S. dollars
	(In millions)	(In thousands)
Reclassification of long-term loans to current portion of long-term loans	₩ 557	$ 481
Reclassification of long-term borrowings to current portion of long-term borrowings	6,810	5,882
Reclassification of long-term bonds to current portion of long-term bonds	19,990	17,266
Reclassification of other payables for the acquisition of property and equipment	(335)	(289)
Reclassification of other payables for the acquisition of intangible assets	27	23
Total	₩ 27,049	$ 23,363

(5) Changes in liabilities arising from financial activities for the year ended December 31, 2020, are as follows:

Description	Beginning Balance	Changes arising from financial activities	Changes in lease liabilities	Other changes (*)	Ending balance	Translation into U.S. dollars
			(In million)			(in thousand)
Corporate bonds (Note 21)	₩ 159,145	₩ 15,397	₩ -	₩ 171	₩ 174,713	$ 160,582
Borrowings from financial institutions (Note 20)	350,618	(102,971)	-	(773)	246,874	226,907
Lease liabilities (Note 15)	8,098	(9,970)	12,980	390	11,498	10,568

(*) Other changes include the occurrence of interest expense, the amount of payments and the gain or loss resulting from foreign currency translation.