

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD.
AND SUBSIDIARIES

Consolidated Interim Financial Statements

June 30, 2020 and 2019

(Unaudited)

(With Independent Auditors' Review Report Thereon)

Contents

	Page
Independent Auditors' Review Report	1
Consolidated Interim Financial Statements	
Consolidated Interim Statements of Financial Position	3
Consolidated Interim Statements of Income (Loss)	6
Consolidated Interim Statements of Comprehensive Income (Loss)	7
Consolidated Interim Statements of Changes in Equity	8
Consolidated Interim Statements of Cash Flows	10
Notes to the Consolidated Interim Financial Statements	12

Independent Auditors' Review Report

Based on a report originally issued in Korean

The Board of Directors and Shareholders
Doosan Heavy Industries & Construction Co., Ltd.:

Reviewed financial statements

We have reviewed the accompanying consolidated interim financial statements of Doosan Heavy Industries & Construction Co., Ltd. and its subsidiaries (the "Group"), which comprise the consolidated interim statement of financial position as of June 30, 2020, the consolidated interim statements of income (loss) and comprehensive income (loss) for the three-month and six-month periods ended June 30, 2020 and 2019, and the consolidated interim statements of changes in equity and cash flows for the six-month periods ended June 30, 2020 and 2019, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated interim financial statements

Management is responsible for the preparation and fair presentation of these consolidated interim financial statements in accordance with Korean International Financial Reporting Standard ("K-IFRS") No. 1034 'Interim Financial Reporting' and for such internal control as management determines is necessary to enable the preparation of consolidated interim financial statements that are free from material misstatements due to fraud or error.

Auditors' review responsibility

Our responsibility is to issue a report on these consolidated interim financial statements based on our reviews.

We conducted our reviews in accordance with the Review Standards for Quarterly and Semiannual Financial Statements established by the Securities and Futures Commission of the Republic of Korea. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Korean Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our reviews, nothing has come to our attention that causes us to believe that the accompanying consolidated interim financial statements referred to above are not prepared, in all material respects, in accordance with K-IFRS No. 1034 'Interim Financial Reporting'.

Material uncertainty on the ability to continue as a going concern

We draw attention to Note 31 of the consolidated interim financial statements. As discussed in Note 31 to the consolidated interim financial statements, the Group has incurred a net loss of ₩623,117 million for the six-month period ended June 30, 2020 and, as of that date, the Group's total current borrowings were ₩8,154,922 million and total current liabilities exceeded its total current assets by ₩4,272,864 million. These conditions, along with other matters as set forth in Note 31 to the consolidated interim financial statements indicate the existence of a material uncertainty which may cast significant doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

**Other matters**

The procedures and practices utilized in the Republic of Korea to review such consolidated interim financial statements may differ from those generally accepted and applied in other countries.

The consolidated statement of financial position of the Group as of December 31, 2019 and the related consolidated statements of loss, comprehensive loss, changes in equity and cash flows for the year then ended, which are not accompanying this report, were audited by us in accordance with the Korean Standards on Auditing, and our report thereon dated March 20, 2020, expressed an unqualified opinion. The accompanying consolidated statement of financial position of the Group as of December 31, 2019, presented for comparative purposes, is not different from that audited by us in all material respects.

KPMG Samjony Accounting Corp.

Seoul, Korea
August 13, 2020

This report is effective as of August 13, 2020, the review report date. Certain subsequent events or circumstances, which may occur between the review report date and the time of reading this report, could have a material impact on the accompanying consolidated interim financial statements and notes thereto. Accordingly, the readers of the review report should understand that the above review report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Consolidated Interim Statements of Financial Position

As of June 30, 2020 and December 31, 2019

(Unaudited)

<i>(In won)</i>	Note	June 30, 2020	December 31, 2019
Assets			
Cash and cash equivalents	5,9	₩ 1,634,315,080,590	1,441,280,687,215
Short-term financial instruments	5,9	390,617,903,816	268,320,160,761
Short-term investments in securities	9	283,634,597,444	79,279,692,390
Trade receivables, net	6,9,18,27	2,386,662,243,912	2,092,822,360,607
Due from customers for contract work, net	18	1,832,741,106,921	1,761,026,139,486
Other receivables, net	6,9,27	306,798,254,928	470,874,496,975
Prepayments, net		555,852,390,278	466,574,020,089
Prepaid expenses		136,084,639,302	121,764,332,600
Short-term loans, net	6,9,27	252,205,707,421	85,498,883,370
Derivative financial assets	8,9	48,917,637,723	35,066,050,494
Firm commitment assets	8	26,311,934,788	25,785,207,028
Inventories, net	7,26	2,238,747,547,882	2,201,708,429,106
Other current assets, net	6,9,27	257,685,130,131	301,607,276,508
Total current assets		10,350,574,175,136	9,351,607,736,629
Long-term financial instruments	5,9	47,355,051,398	2,548,786,446
Long-term investments in securities	9,26	206,243,256,641	201,487,575,568
Investments in associates	10,26,27	165,799,179,975	155,757,265,633
Due from customers for contract work, net	18	102,739,503,644	102,739,503,644
Long-term loans, net	6,9,27	267,923,892,884	706,816,256,036
Property, plant and equipment, net	11,13,26,27	6,392,223,710,693	5,921,531,734,148
Intangible assets, net	12,26,27	7,263,561,626,584	7,031,885,767,946
Investment properties, net		62,274,567,523	498,211,016,067
Derivative financial assets	8,9	36,230,091,251	17,011,219,245
Firm commitment assets	8	24,982,978,961	18,149,165,186
Guarantee deposits, net	9,18,27	460,128,724,265	348,345,632,651
Deferred tax assets		404,073,127,454	401,285,168,759
Other non-current assets, net	6,9	51,669,741,546	51,872,353,221
Total non-current assets		15,485,205,452,819	15,457,641,444,550
Total assets		₩ 25,835,779,627,955	24,809,249,181,179

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Consolidated Interim Statements of Financial Position, Continued

As of June 30, 2020 and December 31, 2019

(Unaudited)

<i>(In won)</i>	<u>Note</u>	<u>June 30, 2020</u>	<u>December 31, 2019</u>
Liabilities			
Trade payables	9,27	₩ 2,439,455,050,517	2,532,417,863,903
Short-term borrowings	9,14,25,26,27,28	6,075,612,770,528	3,767,270,248,235
Asset-backed borrowings	9,14,25,26,28	120,390,160,401	381,573,986,887
Other payables	9,27	592,592,466,701	537,794,374,950
Advance received	18	110,660,885,476	87,362,541,801
Due to customers for contract work	18	1,667,404,276,388	1,461,856,470,698
Withholdings		45,543,741,206	40,505,367,389
Accrued expenses	9	650,954,135,012	664,011,536,281
Income tax payable		63,118,371,320	30,974,465,576
Dividends payable		720,000,000	-
Current portion of long-term debt	9,14,25,26,28	1,958,919,096,783	3,265,484,739,353
Derivative financial liabilities	8,9	147,703,134,592	73,076,096,327
Firm commitment liabilities	8	6,656,510,564	11,024,583,351
Provisions	18	445,016,236,798	390,543,375,151
Current lease liabilities	9,13,27,28	74,314,620,637	80,788,294,005
Other current liabilities	9,27	<u>224,376,329,762</u>	<u>448,538,017,113</u>
Total current liabilities		<u>14,623,437,786,685</u>	<u>13,773,221,961,020</u>
Bonds	9,14,25,26,28	1,098,248,570,205	846,834,779,773
Long-term borrowings	9,14,25,26,28	1,847,300,292,115	1,697,982,898,672
Long-term asset-backed borrowings	9,14,25,26,28	73,328,672,149	292,290,321,272
Long-term other payables	9	15,833,145,760	14,995,488,666
Defined benefit liabilities, net	15	768,995,319,422	674,264,222,128
Deposits received	9	303,917,621,862	270,661,690,028
Derivative financial liabilities	8,9	67,692,895,181	57,061,984,079
Firm commitment liabilities	8	5,789,763,691	13,228,719,317
Deferred tax liabilities		379,116,418,888	331,502,786,410
Provisions	18	435,943,133,718	322,995,953,618
Non-current lease liabilities	9,13,27,28	179,576,827,705	175,749,643,381
Other non-current liabilities	9	<u>148,939,293,761</u>	<u>136,465,747,992</u>
Total non-current liabilities		<u>5,324,681,954,457</u>	<u>4,834,034,235,336</u>
Total liabilities		<u>₩ 19,948,119,741,142</u>	<u>18,607,256,196,356</u>

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Consolidated Interim Statements of Financial Position, Continued
As of June 30, 2020 and December 31, 2019
(Unaudited)

<i>(In won)</i>	<u>Note</u>	<u>June 30, 2020</u>	<u>December 31, 2019</u>
Equity			
Capital stock	16	₩ 1,330,224,940,000	1,075,255,425,000
Capital surplus		1,657,008,340,112	1,762,628,456,797
Other components of equity		48,066,596,883	48,935,313,897
Accumulated other comprehensive income	8,9,11	709,359,884,260	649,530,462,196
Accumulated deficit		<u>(1,755,824,235,472)</u>	<u>(974,213,089,079)</u>
Equity attributable to owners of the controlling company		<u>1,988,835,525,783</u>	<u>2,562,136,568,811</u>
Non-controlling interests		<u>3,898,824,361,030</u>	<u>3,639,856,416,012</u>
Total equity		<u>5,887,659,886,813</u>	<u>6,201,992,984,823</u>
Total liabilities and equity		<u>₩ 25,835,779,627,955</u>	<u>24,809,249,181,179</u>

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Consolidated Interim Statements of Income (Loss)

For the three-month and six-month periods ended June 30, 2020 and 2019

(Unaudited)

(In won)

	Note	June 30, 2020		June 30, 2019	
		Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Continuing operations					
Sales	17,18,27	₩ 3,604,748,415,449	7,441,784,364,943	3,977,644,842,690	7,806,377,792,303
Cost of sales	7,18,19,27	3,217,204,128,327	6,444,940,449,820	3,205,762,887,555	6,305,048,362,331
Gross profit		387,544,287,122	996,843,915,123	771,881,955,135	1,501,329,429,972
Selling and administrative expenses	9,19,20,27	437,854,789,468	990,668,112,612	386,571,684,735	793,633,641,258
Operating profit (loss)	17	(50,310,502,346)	6,175,802,511	385,310,270,400	707,695,788,714
Finance income and expenses					
		(51,533,019,596)	(315,049,193,422)	(107,888,930,678)	(292,802,761,690)
Finance income	9,21	(22,550,650,472)	402,781,609,658	253,330,277,561	442,933,417,407
Finance expenses	9,21	28,982,369,124	717,830,803,080	361,219,208,239	735,736,179,097
Other non-operating income and expenses					
		(84,831,160,803)	(185,173,983,451)	(40,376,479,063)	(62,452,162,372)
Other non-operating income	9,22	7,290,060,956	12,972,971,981	7,099,340,624	15,195,991,785
Other non-operating expenses	9,22	92,121,221,759	198,146,955,432	47,475,819,687	77,648,154,157
Share of profit (loss) of equity accounted investees					
	10	(2,870,083,947)	(7,997,266,020)	382,054,475	(1,065,578,535)
Profit (loss) before income tax					
		(189,544,766,692)	(502,044,640,382)	237,426,915,134	351,375,286,117
Income tax expense	23	62,137,033,236	121,072,149,081	74,682,956,393	133,439,542,128
Profit (loss) from continuing operations					
		(251,681,799,928)	(623,116,789,463)	162,743,958,741	217,935,743,989
Discontinued operations profit from discontinued operations					
	29	-	-	24,730,989,421	22,365,049,451
Profit (loss) for the period					
	17	₩ (251,681,799,928)	(623,116,789,463)	187,474,948,162	240,300,793,440
Attributable to:					
Owners of the Company		₩ (312,865,839,125)	(740,244,221,851)	57,726,243,225	19,281,401,302
Non-controlling interests		61,184,039,197	117,127,432,388	129,748,704,937	221,019,392,138
Earnings (loss) per share					
Basic earnings (loss) per share					
	24	₩ (1,236)	(3,065)	335	76
Continuing operations		(1,236)	(3,065)	179	(92)
Discontinued operations		-	-	156	168
Diluted earnings (loss) per share					
	24	(1,236)	(3,065)	335	76
Continuing operations		(1,236)	(3,065)	179	(92)
Discontinued operations		-	-	156	168

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
 Consolidated Interim Statements of Comprehensive Income (Loss)

For the three-month and six-month periods ended June 30, 2020 and 2019

(Unaudited)

(In won)

	Note	June 30, 2020		June 30, 2019	
		Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Profit (loss) for the period	₩	(251,681,799,928)	(623,116,789,463)	187,474,948,162	240,300,793,440
Other comprehensive income (loss)		(64,051,544,170)	140,777,726,982	140,081,158,950	198,296,196,040
Items that will not be reclassified subsequently to profit or loss		(46,101,440,698)	(23,882,683,786)	11,402,197,013	22,640,259,380
Remeasurement factor of net defined benefit liability		(46,101,440,698)	(42,070,413,330)	11,402,197,013	12,240,858,431
Loss on change in fair value of fair value through other comprehensive income ("FVOCI") financial assets	9	-	(3,397,942)	-	-
Gain on revaluation of assets	11	-	18,191,127,486	-	10,399,400,949
Items that are or may be reclassified subsequently to profit or loss		(17,950,103,472)	164,660,410,768	128,678,961,937	175,655,936,660
Effective portion of changes in fair value of cash flow hedges	8,9	4,667,262,949	7,004,511,385	(471,625,981)	844,189,222
Equity adjustments in equity method investees	10	(47,788,329)	1,005,689,902	2,804,016	2,804,016
Gain (loss) on translation of foreign operations		<u>(22,569,578,092)</u>	<u>156,650,209,481</u>	<u>129,147,783,902</u>	<u>174,808,943,422</u>
Total comprehensive income (loss)	₩	<u>(315,733,344,098)</u>	<u>(482,339,062,481)</u>	<u>327,556,107,112</u>	<u>438,596,989,480</u>
Attributable to:					
Owners of the Company	₩	(344,993,737,160)	(721,781,724,329)	133,464,787,677	106,819,356,736
Non-controlling interests		29,260,393,062	239,442,661,848	194,091,319,435	331,777,632,744

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
 Consolidated Interim Statements of Changes in Equity
 For the six-month periods ended June 30, 2020 and 2019
 (Unaudited)

(In won)

	Capital stock	Capital surplus	Other components of equity	Accumulated other comprehensive income	Accumulated deficit	Non-controlling interests	Total
Balance at January 1, 2019	₩ 650,255,065,000	1,678,913,750,186	(55,947,752,410)	680,535,131,925	(148,908,617,065)	3,413,581,982,804	6,218,429,560,440
Adjustment on initial application of K-IFRS No. 1116	-	-	-	-	(9,343,741,613)	(4,861,547,915)	(14,205,289,528)
Adjustment balance at January 1, 2019	650,255,065,000	1,678,913,750,186	(55,947,752,410)	680,535,131,925	(158,252,358,678)	3,408,720,434,889	6,204,224,270,912
Total comprehensive income (loss):							
Profit for the period	-	-	-	-	19,281,401,302	221,019,392,138	240,300,793,440
Remeasurement factor of the net defined benefit liabilities	-	-	-	-	12,240,858,431	-	12,240,858,431
Effective portion of changes in fair value of cash flow hedges	-	-	-	12,442,660,937	-	(11,598,471,715)	844,189,222
Equity adjustments in equity method investees	-	-	-	2,804,016	-	-	2,804,016
Gain on translation of foreign operations	-	-	-	56,189,524,184	-	118,619,419,238	174,808,943,422
Gain (loss) on revaluation of assets	-	-	-	(45,933,947,571)	52,596,055,437	3,737,293,083	10,399,400,949
Subtotal	-	-	-	22,701,041,566	84,118,315,170	331,777,632,744	438,596,989,480
Issuance of common shares	425,000,000,000	37,362,955,728	-	-	-	-	462,362,955,728
Dividends	-	-	-	-	(14,390,062,723)	-	(14,390,062,723)
Stock option	-	1,847,132,376	(1,847,132,376)	-	-	-	-
Exercise of stock warrants	360,000	965,042	-	-	-	-	1,325,042
Issuance of shares of subsidiaries	-	60,059,530,061	-	-	-	(45,857,677,290)	14,201,852,771
Dividends of subsidiaries	-	-	-	-	-	(29,222,297,710)	(29,222,297,710)
Stock option of subsidiaries	-	88,330,514	(88,330,514)	-	-	-	-
Exercise of stock warrants of subsidiaries	-	(3,019,735)	-	-	-	22,351,235	19,331,500
Redemption of bonds with warrants of subsidiaries	-	(2,673,012,312)	-	-	-	(1,352,911,797)	(4,025,924,109)
Changes in scope of consolidation	-	-	-	-	-	(38,349,841,679)	(38,349,841,679)
Others	-	(21,367,491,813)	21,367,491,813	-	-	-	-
Balance at June 30, 2019	₩ 1,075,255,425,000	1,754,229,140,047	(36,515,723,487)	703,236,173,491	(88,524,106,231)	3,625,737,690,392	7,033,418,599,212

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Consolidated Interim Statements of Changes in Equity, Continued
For the six-month periods ended June 30, 2020 and 2019
(Unaudited)

(In won)

	Capital stock	Capital surplus	Other components of equity	Accumulated other comprehensive income	Accumulated deficit	Non-controlling interests	Total
Balance at January 1, 2020	₩ 1,075,255,425,000	1,762,628,456,797	48,935,313,897	649,530,462,196	(974,213,089,079)	3,639,856,416,012	6,201,992,984,823
Total comprehensive income:							
Profit (loss) for the period	-	-	-	-	(740,244,221,851)	117,127,432,388	(623,116,789,463)
Remeasurement factor of the net defined benefit liabilities	-	-	-	-	(42,070,413,330)	-	(42,070,413,330)
Loss on change in FVOCI financial assets	-	-	-	(3,397,942)	-	-	(3,397,942)
Effective portion of changes in fair value of cash flow hedges	-	-	-	4,956,779,267	-	2,047,732,118	7,004,511,385
Equity adjustments in equity method investees	-	-	-	1,005,689,902	-	-	1,005,689,902
Gain on translation of foreign operations	-	-	-	36,382,712,139	-	120,267,497,342	156,650,209,481
Gain on revaluation of assets	-	-	-	17,487,638,698	703,488,788	-	18,191,127,486
Subtotal	-	-	-	59,829,422,064	(781,611,146,393)	239,442,661,848	(482,339,062,481)
Issuance of common shares	220,514,225,000	16,471,619,565	-	-	-	-	236,985,844,565
Stock option	-	757,646,293	(757,646,293)	-	-	-	-
Stock exchange	34,455,290,000	(93,884,498,934)	(16,409,250)	-	-	52,122,897,356	(7,322,720,828)
Issuance of shares of subsidiaries	-	(23,042,598,867)	-	-	-	66,921,673,367	43,879,074,500
Dividends of subsidiaries	-	-	-	-	-	(30,163,749,600)	(30,163,749,600)
Stock option of subsidiaries	-	94,661,471	(94,661,471)	-	-	-	-
Exercise of stock warrants of subsidiaries	-	(2,208,380,635)	-	-	-	9,796,212,709	7,587,832,074
Issuance of convertible bonds by subsidiaries	-	-	-	-	-	92,616,637	92,616,637
Changes in scope of consolidation	-	(3,808,565,578)	-	-	-	(79,244,367,299)	(83,052,932,877)
Balance at June 30, 2020	₩ 1,330,224,940,000	1,657,008,340,112	48,066,596,883	709,359,884,260	(1,755,824,235,472)	3,898,824,361,030	5,887,659,886,813

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Consolidated Interim Statements of Cash Flows
For the six-month periods ended June 30, 2020 and 2019
(Unaudited)

<i>(In won)</i>	Note	June 30, 2020	June 30, 2019
Cash flows from operating activities			
Cash generated from operations:	27	₩	
Cash generated from operations:		38,650,084,737	(343,773,763,507)
Profit (loss) for the period		(623,116,789,463)	240,300,793,440
Adjustments		1,137,631,304,053	743,941,252,882
Changes in operating assets and liabilities		(475,864,429,853)	(1,328,015,809,829)
Interest received		19,922,968,286	17,534,158,841
Interest paid		(198,632,123,798)	(194,956,065,893)
Dividends received		1,115,333,225	1,273,432,433
Income tax paid		(14,036,061,010)	(75,865,054,083)
Net cash used in operating activities		<u>(152,979,798,560)</u>	<u>(595,787,292,209)</u>
Cash flows from investing activities			
Cash inflows from investing activities:			
Decrease in short-term financial instruments		191,335,779,454	73,491,295,640
Proceeds from disposal of short-term investments in securities		13,963,208,151	19,247,900,000
Collection of short-term loans		77,159,984,093	11,825,253,265
Decrease in long-term financial instruments		29,415,509,589	249,702,211
Proceeds from disposal of long-term investments in securities		44,234,549	2,642,755,705
Collection of long-term loans		522,685,026,549	190,078,029,047
Proceeds from disposal of investments in subsidiaries		-	24,286,125,331
Proceeds from disposal of property, plant and equipment		8,768,683,953	6,937,303,960
Proceeds from disposal of intangible assets		1,819,176,483	3,030,324,679
Collection of lease receivables		1,109,277,757	2,173,801,119
Cash inflow due to changes in scope of consolidation		60,687,143,427	-
Subtotal		<u>906,988,024,005</u>	<u>333,962,490,957</u>
Cash outflows for investing activities:			
Increase in short-term financial instruments		(314,289,448,341)	(37,890,495,854)
Acquisition of short-term investment securities		(222,734,648,791)	(160,995,084,203)
Increase in short-term loans		(258,901,378,679)	(6,582,498,737)
Increase in long-term financial instruments		(75,327,542,490)	(12,346,045,570)
Acquisition of long-term investments in securities		(5,311,333,144)	(4,040,787,672)
Increase in long-term loans		(125,642,980,612)	(85,522,534,833)
Acquisition of investments in associates and joint ventures		(5,403,150,002)	-
Acquisition of property, plant and equipment		(144,354,669,135)	(191,461,897,720)
Acquisition of intangible assets		(121,116,313,927)	(148,709,013,282)
Acquisition of investment property		-	(1,928,700,646)
Others		(7,941,768,258)	(7,761,336,966)
Subtotal		<u>(1,281,023,233,379)</u>	<u>(657,238,395,483)</u>
Net cash used in investing activities		<u>(374,035,209,374)</u>	<u>(323,275,904,526)</u>

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
 Consolidated Interim Statements of Cash Flows, Continued

For the six-month periods ended June 30, 2020 and 2019

(Unaudited)

<i>(In won)</i>	<u>Note</u>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Cash flows from financing activities			
Cash inflows from financing activities			
Increase in short-term borrowings, net	₩	2,250,713,983,884	516,455,595,865
Proceeds from asset-backed borrowings		628,700,000,000	1,067,500,000,000
Proceeds from long-term asset-backed borrowings		-	80,000,000,000
Issuance of bonds		516,333,872,056	412,470,762,000
Proceeds from long-term borrowings		546,759,033,226	473,600,000,000
Issuance of common shares		-	471,750,000,000
Exercise of stock warrants		-	923,157
Issuance of shares of subsidiaries		43,879,074,500	14,201,852,771
Exercise of stock warrants of subsidiaries		7,597,597,960	8,763,410
Subtotal		<u>3,993,983,561,626</u>	<u>3,035,987,897,203</u>
Cash outflows for financing activities			
Repayment of current portion of long-term debt		(1,942,272,426,577)	(1,031,965,107,394)
Repayment of asset-backed borrowings		(889,575,000,000)	(1,055,000,000,000)
Repayment of long-term borrowings		(373,003,847,580)	(494,097,570,620)
Payment of lease liabilities		(47,054,254,306)	(26,391,779,104)
Acquisition of treasury stock		(16,409,250)	-
Expense of stock issuance		(1,697,206,670)	(9,387,044,272)
Additional acquisition of investments in subsidiaries		(11,085,770,690)	-
Payment of dividends		-	(14,390,062,723)
Payment of dividends of subsidiaries		(29,443,749,600)	(27,686,458,000)
Subtotal		<u>(3,294,148,664,673)</u>	<u>(2,658,918,022,113)</u>
Net cash provided by financing activities		<u>699,834,896,953</u>	<u>377,069,875,090</u>
Effect of exchange rate fluctuations on cash held		20,214,504,356	41,443,703,891
Net increase (decrease) in cash and cash equivalents		193,034,393,375	(500,549,617,754)
Cash and cash equivalents at January 1		<u>1,441,280,687,215</u>	<u>2,075,328,693,318</u>
Cash and cash equivalents at June 30	₩	<u>1,634,315,080,590</u>	<u>1,574,779,075,564</u>

See accompanying notes to the consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

1. Reporting entity

(1) The controlling company

Doosan Heavy Industries & Construction Co., Ltd. (the "Company") was incorporated on September 20, 1962, with its headquarters in Changwon, Korea. Since its incorporation, the Company has grown to become one of the leading global manufacturers of advanced power generation equipment. The Company engages in manufacturing of a range of power generation equipment including boilers, turbines and generators. It also engages in engineering, procurement and construction of thermal power plants. And the Company engages in general construction, seawater desalination and etc.

The Company was listed on the Korea Exchange on October 25, 2000 and its major stockholder as of June 30, 2020 is Doosan Corp. (holding 44.86% equity ownership).

(2) Consolidated subsidiaries

Details of consolidated subsidiaries as of June 30, 2020 and December 31, 2019 are as follows:

Company	Key operating activities	Location	Ownership(%)(*1)		Closing date(*2)
			June 30, 2020	December 31, 2019	
Doosan Heavy Industries Vietnam Co., Ltd.	Manufacturing of machinery & equipment	Vietnam	100.00	100.00	December 31
Doosan HF Controls Corp.	Manufacturing	USA	100.00	100.00	"
Doosan HF Controls Asia Co., Ltd.	Manufacturing	Korea	100.00	100.00	"
PT. Doosan Heavy Industries Indonesia	Manufacturing	Indonesia	55.00	55.00	"
Doosan Heavy Industries Malaysia Sdn. Bhd.	Dormant	Malaysia	100.00	100.00	"
Doosan Heavy Industries Japan Corp.	Sales	Japan	100.00	100.00	"
S.C. Doosan IMGB S.A.	Manufacturing	Romania	99.92	99.92	"
Doosan Enpure Ltd.	Engineering & Services	UK	100.00	100.00	"
Doosan Power Systems India Private Ltd.(*8)	Engineering & Services	India	100.00	100.00	March 31
Doosan Heavy Industries Muscat LLC	Manufacturing	Oman	70.00	70.00	December 31
Doosan Power Systems Arabia Company Limited	Manufacturing & Services	Saudi Arabia	51.00	51.00	"
Azul Torre Construction Corporation(*3)	Manufacturing	Philippines	40.00	40.00	"
Doosan Heavy Industries America Holdings Inc.	Holdings Company	USA	100.00	100.00	"
Doosan Heavy Industries America LLC	Sales	USA	100.00	100.00	"
Doosan ATS America, LLC	Engineering & Services	USA	100.00	100.00	"
Doosan Power Service America, LLC	Engineering & Services	USA	100.00	100.00	"
Doosan Turbomachinery Services Holding, Inc.	Holdings Company	USA	95.90	95.90	"
Doosan Turbomachinery Services Inc.	Manufacturing	USA	100.00	100.00	"
Doosan GridTech Inc.	Software & System engineering	USA	100.00	100.00	"
Doosan GridTech LLC	Software & System engineering	USA	100.00	100.00	"
Doosan GridTech CA LLC	Software & System engineering	USA	100.00	100.00	"
Doosan GridTech EPC LLC	Software & System engineering	USA	100.00	100.00	"
Doosan GridTech C&I LLC	Software & System engineering	USA	100.00	100.00	"
Continuity Energy LLC	Software & System engineering	USA	100.00	100.00	"

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

Company	Key operating activities	Location	Ownership(%)(*1)		Closing date(*2)
			June 30, 2020	December 31, 2019	
Doosan Skoda Power s.r.o	Manufacturing	Czech	100.00	100.00	"
Skoda Power Private Ltd.	Engineering	India	100.00	100.00	March 31
Doosan Power Systems Pension Trustee Company Ltd.	Professional services	UK	100.00	100.00	December 31
Doosan Power Systems Overseas Investments Ltd.	Holdings Company	UK	100.00	100.00	"
Doosan Babcock Ltd.	Engineering & Services	UK	100.00	100.00	"
Doosan Power Systems Europe Limited GmbH	Engineering & Services	Germany	100.00	100.00	December 31
Doosan Power Systems Americas LLC	Engineering & Services, Sales	USA	100.00	100.00	"
Doosan Lentjes UK Limited(*9)	Dormant	UK	-	100.00	"
Doosan Lentjes GmbH	Engineering & Services	Germany	100.00	100.00	"
Doosan Power Systems S.A. ("DPS S.A.")	Holdings Company	Luxem-bourg	100.00	100.00	"
Doosan Babcock Energy Technologies (Shanghai) Ltd.(*9)	Engineering & Services	China	-	100.00	"
Doosan Babcock Energy Services (Overseas) Ltd.	Engineering & Services	UK	100.00	100.00	"
Doosan Babcock Energy Polska Sp z.o.o.	Engineering & Services	Poland	98.91	98.91	"
Doosan Babcock Energy Germany GmbH	Engineering & Services	Germany	100.00	100.00	"
Doosan Lentjes Czech s.r.o	Professional services	Czech	100.00	100.00	"
Doosan Power Systems (Scotland) Ltd. Partnership	Real estate	UK	100.00	100.00	"
Doosan Babcock General Maintenance Services LLC(*3)	Professional services	UAE	49.00	49.00	"
Osung Power O&M Co., Ltd.	Engineering & Services	Korea	100.00	100.00	"
Doosan Mecatec Co., Ltd.(*7)	Manufacturing	Korea	100.00	-	"
KDPP 3 rd Co., Ltd.(*4, 6)	Asset Securitization	Korea	-	-	"
KDPP 5 th Co., Ltd.(*4)	Asset Securitization	Korea	-	-	"
U-best 5 th Co., Ltd.(*4)	Asset Securitization	Korea	-	-	"
Doosan Cuvex Co., Ltd. ("Cuvex")	Operation of resort and golf club	Korea	56.60	64.97	"
Doosan Infracore Co., Ltd. ("DI") and subsidiaries(*5)	Manufacturing of machinery & equipment	Korea, etc.	36.07	36.27	"
Doosan Engineering & Construction Co., Ltd. ("DEC") and subsidiaries(*8)	Construction and manufacturing	Korea, etc.	100.00	89.03	"

(*1) The ownership percentage represents the equity interest held by the Company (the parent) in each respective subsidiary, except Cuvex of which 30.56%, 4.93% of equity interest are owned by DI and Doosan Bobcat Korea Co., Ltd. respectively, Doosan Turbomachinery Services Inc. of which 100% of equity interest is owned by Doosan Turbomachinery Services Holding, Inc.. Overall, the Company and its subsidiaries (the "Group") has an effective ownership interest of 33.04% of Cuvex and 95.90% of Doosan Turbomachinery Services Inc..

(*2) Where the reporting date of subsidiaries is not consistent with that of the Company based on local laws, adjustments have been made to conform to the Company's reporting date for preparation of consolidated financial statements.

(*3) Although the Company's ownership does not exceed 50%, it is classified as a consolidated subsidiary since the Group is considered to have the majority voting rights in the equity's board of directors, and others.

(*4) The Group assessed that it has control over the special purpose entity as the entity's activities are substantively governed by the Group.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(*5) Although the Company's ownership interest in the investee is less than majority, the Company assessed that it has control over the investee based on its holdings relative to the size and dispersion of ownership interests held by other equity holders and the voting patterns in previous shareholders' meetings.

(*6) Control was lost due to borrowings repayment in 2020.

(*7) Newly acquired in 2020.

(*8) Additionally acquired in 2020.

(*9) Liquidated in 2020.

(3) Summary financial information of major subsidiaries

Summarized financial information of subsidiaries as of and for the six-month period ended June 30, 2020 is as follows:

(In millions of won)

Company	Assets	Liabilities	Sales	Net profit (loss)	Total comprehensive income (loss)
Doosan Heavy Industries Vietnam Co., Ltd.	₩ 484,237	311,594	260,243	47,136	47,136
Doosan HF Controls Corp.	26,907	5,395	2,415	(1,158)	(1,158)
PT. Doosan Heavy Industries Indonesia	14,540	86,678	-	51	51
Doosan Heavy Industries Japan Corp.	14,762	11,108	1,057	23	23
S.C. Doosan IMGB S.A.	58,445	18,343	10,041	(1,844)	(1,844)
Doosan Enpure Ltd.	37,618	35,518	26,327	(1,204)	(1,204)
Doosan Power Systems India Private Ltd.	797,123	868,599	97,273	(279,721)	(274,855)
Doosan Heavy Industries Muscat LLC	35,338	40,947	27,539	(653)	(653)
Doosan Power Systems Arabia Company Limited	27,848	21,292	6,843	(335)	(335)
Doosan Heavy Industries America Holdings Inc.	196,497	86,706	-	682	682
Doosan Turbomachinery Services Inc.	53,772	34,421	24,147	273	273
Doosan Heavy Industries America LLC	17,941	10,096	1,344	428	428
Doosan GridTech EPC LLC	12,223	9,867	1,489	9	9
Doosan Skoda Power s.r.o	422,707	78,746	79,227	3,983	2,147
Doosan Power Systems Overseas Investments Ltd.	74,666	96,930	-	(1,577)	(1,577)
Doosan Babcock Ltd.	1,143,956	483,110	174,928	8,779	(9,897)
Doosan Power Systems Europe Limited GmbH	39,355	192,483	-	(30,363)	(30,363)
Doosan Lentjes GmbH	82,891	85,345	14,693	(6,518)	(48,779)
DPS S.A.	1,292,652	777,677	-	82,709	40,639
Doosan Babcock Energy Polska Sp z.o.o.	27,868	19,623	15,885	(34)	(34)
Doosan Power Systems (Scotland) Ltd. Partnership	33,479	2,205	-	917	917
Doosan Babcock General Maintenance Services LLC.	28,119	74,221	14,174	(1,355)	(4,058)
Doosan Mecatec Co., Ltd.	459,974	244,344	191,504	12,036	12,036
Cuvex	303,873	104,950	34,231	2,275	2,275
DI and subsidiaries	12,335,015	7,782,369	3,984,932	152,693	306,857
DEC and subsidiaries	2,019,544	1,613,176	872,693	(168,468)	(166,195)

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(4) Changes in the scope of consolidation

Changes in the scope of consolidation for the six-month period ended June 30, 2020 are as follows:

Company	Description	Reason
DS Munsuro 1 st Co., Ltd.	Newly included in consolidation	New borrowing
Doosan Mecatec Co., Ltd.	Newly included in consolidation	Acquisition
Valuegrowth Co., Ltd.	Newly included in consolidation	Establishment of new corporation
Build Up 1 st Co., Ltd.	Newly included in consolidation	New borrowing
KJDS 1 st Co., Ltd.	Newly included in consolidation	New borrowing
Doosan Infracore Europe B.V.	Excluded from consolidation	Merger
KDPP 3 rd Co., Ltd.	Excluded from consolidation	Repayment of borrowings
Doosan Lentjes UK Limited	Excluded from consolidation	Liquidation
Doosan Babcock Energy Technologies (Shanghai) Ltd.	Excluded from consolidation	Liquidation

2. Significant accounting policies and basis of preparation

The Group's consolidated interim financial statements are prepared in accordance with K-IFRS No. 1034 'Interim Financial Reporting'. In order to understand these consolidated interim financial statements, users should read annual consolidated financial statements prepared in accordance with K-IFRS as of and for the year ended December 31, 2019.

The Group's accounting policies applied for the accompanying consolidated interim financial statements are consistent with the policies used to prepare the consolidated financial statements for the year ended December 31, 2019, except for the effects from the introduction of revised accounting standards as described below:

The Group has applied the amendments to the following standards with January 1, 2020 as the date of initial application.

- K-IFRS No. 1103 'Business Combinations' : Definition of a business
- K-IFRS No. 1001 'Presentation of Financial Statements' : Definition of a materiality
- K-IFRS No. 1109 'Financial Instruments' : Hedge accounting interest rate index reformation
- A review of the Conceptual Framework for Financial Reporting : The principles of the definition, recognition and derecognition of assets and liabilities

There are no significant effect of the above amendments to the standards on the Group's consolidated interim financial statements.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

3. Significant accounting estimates and assumptions

In the application of the Group's accounting policies, 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. Actual results may differ from those estimates.

In preparing these consolidated interim financial statements, the key sources of estimation uncertainty and assumptions were the same as those that applied to the consolidated financial statements as of and for the year ended December 31, 2019.

4. Financial risk management

The Group is exposed to various financial risks, such as market (foreign currency risk, interest rate risk and price risk), credit and liquidity, relating to the operations of the Group. The purpose of risk management policy is to minimize potential risks, which could have adverse effect on financial performance.

Financial risk management activities are performed by the treasury department in accordance with the risk management policies. In addition, the Group enters into derivative contracts to hedge against certain risks. The Group is trying to minimize the effect of financial risks by updating financial risk management policy and monitoring financial risks regularly.

(1) Market risk

1) Foreign currency risk

The Group's exposure to the risk of changes in foreign currency exchange rates relates primarily to the Group's operating activities and net investments in foreign subsidiaries. The Group's objective of foreign currency risk management is to minimize uncertainty and volatility arising from fluctuations in foreign currency exchange rates. Foreign currency risk is managed in accordance to the Group's policy on foreign currencies, and currency trading for speculative purposes is prohibited.

The Group's basis for foreign currency management is to reduce income/loss volatility. The Group reduces exposure to foreign currency risk by matching the inflow and the outflow of foreign currencies (natural hedge) and manages foreign currency risk by using currency derivatives, such as currency forwards, for the remaining exposure.

As of June 30, 2020, an increase in the exchange rate of a functional currency for each foreign currency may result in an increase in profit before income tax and a decrease may result in a decrease in profit before income tax as some of the monetary assets and liabilities denominated in foreign currencies other than functional currencies are exposed to foreign exchange risk.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

2) Interest rate risk

Interest rate risk is related to borrowings and bank deposits with floating interest rates, and related interest income and expense are exposed to interest rate risk. The Group is exposed to interest rate risk mainly due to its borrowing or deposit with floating interest rates. The purpose of interest rate risk management is to minimize uncertainty and financial expense arising from interest rate fluctuation.

To manage its interest rate risk, the Group minimizes external borrowings using internal funds and reduces borrowings with high interest rates and maintains an appropriate balance between borrowings with floating interest rate and fixed-interest rate and short-term and long-term borrowings. The Group manages its interest rate risk preemptively through regular monitoring and adjustments to the changing domestic and overseas markets conditions and nature of its interest rates.

As of June 30, 2020, some of the financial assets and liabilities are floating rate financial assets and liabilities which are exposed to interest rate fluctuations risk. If interest rates of floating rate financial assets and liabilities increase, profit before income tax may decrease. On the other hand, if interest rates of floating rate financial assets and liabilities decrease, profit or loss before income tax may increase.

3) Price risk

The Group is exposed to equity price risks arising from its listed equity investments among financial instruments. The Group periodically measures the risk as the fair value or future cash flows of equity investments may fluctuate due to the changes in market prices. Significant investments in the Group's portfolio are individually managed, and acquisition and disposal are approved by the Board of Directors.

(2) Credit risk

The Group is exposed to credit risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. Credit risk arises from trade and other receivables, debt instruments, equity investments, beneficiary certificates, deposits in financial institutions, derivative financial instruments and financial guarantee contracts.

The Group enters into transactions with customers having met a certain level of credit quality and maintains policies and procedures on financial assets to manage such risks. The credit quality of a new customer is assessed based on publicly announced financial information and the information provided by credit rating agencies. Such assessment is used as a basis for determining a customer's credit limit. Furthermore, collaterals and credit guarantees are obtained as security, if necessary. In addition, the Group periodically reassesses the credit quality of customers by auditing credit limits and adjusts the amount covered by collaterals when deemed necessary. The Group also monitors whether the collection of financial assets have been impaired to take relevant actions.

The amounts of the Group's financial assets as measured at amortized cost, financial assets (debt instruments) as measured at fair value through profit or loss ("FVTPL"), financial assets (debt instruments) as measured at FVOCI, and derivative financial instruments that are exposed to credit risk are similar to the carrying amounts and the maximum amount to be paid for the principal debtor related to financial guarantee contract is described in Note 25.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(3) Liquidity risk

The Group is exposed to liquidity risk, which is the risk that it will encounter difficulties in fulfilling the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset.

The Group manages liquidity risk by matching the duration of financial assets and liabilities through estimating future cash flows from its operating, investing and financing activities, and securing moderate levels of liquidity in advance.

The contractual amounts of financial liabilities in the above tables are calculated based on non-discounted cash flows (including estimated interest expense) and differ from book values. Besides the above non-derivative liabilities, the maximum guarantee amounts based on financial guarantee contracts provided by the Group as of June 30, 2020 are described in Note 25.

(4) Capital risk

The objective of the Group's capital risk management is to secure its ability to provide earnings to its shareholders and interested parties and sustain optimal capital structure to reduce the cost of capital. In order to sustain optimal capital structure, the Group uses a debt-to-equity ratio similar to other entities in the industry. Debt-to-equity ratio is calculated by dividing total liabilities by total equity.

Debt-to-equity ratios as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

	June 30, 2020	December 31, 2019
Total liabilities	₩ 19,948,120	18,607,256
Total equity	5,887,660	6,201,993
Debt-to-equity ratio	<u>338.81%</u>	<u>300.02%</u>

5. Restricted financial assets

Details of restricted financial assets as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

	June 30, 2020	December 31, 2019	Restrictions
Cash and cash equivalents	₩ 19,191	4,412	Collateral for advanced received and others
Short-term financial instruments	258,264	195,243	Government R&D projects(*1), Shared growth fund, Establishment of a pledge right, Price return swap ("PRS") deposit(*2) and others
Long-term financial instruments	50	50	Deposits for maintenance of checking accounts and others
Total	<u>₩ 277,505</u>	<u>199,705</u>	

(*1) The amounts are restricted in use and may only be used for specific national R&D projects.

(*2) This is deposit amount for the PRS contract that had been signed coincidentally with disposal of Doosan Bobcat Inc. shares.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

6. Trade and other receivables

Trade and other receivables as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

	June 30, 2020			December 31, 2019		
	Gross	Allowance for doubtful accounts	Book value	Gross	Allowance for doubtful accounts	Book value
Current assets:						
Trade receivables	₩ 3,637,106	(1,250,444)	2,386,662	3,334,135	(1,241,313)	2,092,822
Lease receivables	2,142	-	2,142	1,622	-	1,622
Other receivables	507,911	(201,113)	306,798	698,997	(228,123)	470,874
Accrued income	126,934	(73,691)	53,243	110,529	(32,020)	78,509
Short-term loans	410,325	(158,119)	252,206	228,575	(143,076)	85,499
Subtotal	4,684,418	(1,683,367)	3,001,051	4,373,858	(1,644,532)	2,729,326
Non-current assets:						
Long-term trade receivables	7,140	(56)	7,084	4,543	(56)	4,487
Lease receivables	6,644	-	6,644	8,583	-	8,583
Long-term other receivables	14,185	(4,400)	9,785	16,179	(5,703)	10,476
Long-term loans	1,312,880	(1,044,956)	267,924	1,798,974	(1,092,158)	706,816
Subtotal	1,340,849	(1,049,412)	291,437	1,828,279	(1,097,917)	730,362
Total	₩ 6,025,267	(2,732,779)	3,292,488	6,202,137	(2,742,449)	3,459,688

7. Inventories

Inventories as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

	June 30, 2020			December 31, 2019		
	Acquisition cost	Valuation allowance	Book value	Acquisition cost	Valuation allowance	Book value
Finished goods	₩ 607,619	(37,724)	569,895	659,701	(33,707)	625,994
Merchandise	320,768	(24,722)	296,046	321,464	(21,754)	299,710
Semi-finished goods	135,885	(350)	135,535	145,155	(281)	144,874
Work-in-process	350,162	(8,737)	341,425	344,717	(14,016)	330,701
Raw materials	716,790	(44,733)	672,057	586,156	(36,415)	549,741
Supplies	22,484	(2,642)	19,842	21,104	(2,631)	18,473
Materials-in-transit	193,845	-	193,845	223,787	-	223,787
Unfinished houses	10,103	-	10,103	8,428	-	8,428
Total	₩ 2,357,656	(118,908)	2,238,748	2,310,512	(108,804)	2,201,708

As of June 30, 2020, certain inventories have been pledged as collateral for the Group's debts (See Note 26).

Losses on inventory valuation recognized within the cost of sales amounted to ₩8,482 million and ₩15,596 million for the six-month periods ended June 30, 2020 and 2019, respectively.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

8. Derivatives

(1) Details of valuation of derivatives as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won, in thousands of foreign currency)

				June 30, 2020			
Buy		Sell		Derivative financial assets (liabilities)	Gain (loss) on valuation of derivative financial instruments	Accumulated other comprehensive income (loss) (*1)	Firm commitment assets (liabilities) (*2)
Currency	Amounts	Currency	Amounts				
Foreign currency forwards:							
KRW	1,643,658	USD	1,444,677 ₩	(81,751)	(53,877)	1,974	41,714
KRW	348,034	EUR	258,638	(2,211)	(2,716)	(2,083)	784
KRW	173,390	JPY	15,356,120	486	(3,575)	(387)	(142)
KRW	37,986	Others		(1,295)	(689)	(295)	491
USD	610,167	KRW	700,913	27,765	13,761	5,889	(3,683)
EUR	178,988	KRW	243,434	(1,040)	(988)	5,647	30
JPY	15,986,220	KRW	196,952	(16,205)	(1,562)	1,367	(74)
Others		KRW	18,104	(102)	(94)	129	10
GBP and others		EUR and others		(8,921)	30,775	(1,791)	(448)
Long-term (short-term) borrowings denominated in foreign currencies(*3)							
KRW	-	USD	-	-	-	-	167
Currency Rate Swap ("CRS")				43,782	-	4,042	-
Interest Rate Swap ("IRS")				(1,356)	-	(1,356)	-
PRS(*4)				(89,400)	(75,243)	-	-
Sub total				(130,248)	(94,208)	13,136	38,849
Tax effect				-	-	(2,556)	-
Adjustments for consolidation				-	-	11,613	-
Total				₩ (130,248)	(94,208)	22,193	38,849

(*1) In consideration of the amounts adjusted in sales and cost of sales, the effective portion of changes in fair value of cash flow hedges of ₩22,193 million, net of tax, was recognized in accumulated other comprehensive income or loss.

(*2) In consideration of the amounts adjusted in revenue, firm commitment assets of ₩51,295 million and firm commitment liabilities of ₩12,446 million were recognized in the consolidated interim statement of financial position by applying a fair value hedge accounting.

(*3) The Group designated its long-term and short-term borrowings denominated in foreign currencies as hedging instruments to hedge the fair value change of firm commitments.

(*4) The Group has entered into PRS contract to exchange profits due to changes in stock prices at the same time as the disposal of Doosan Bobcat Inc. stocks.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(In millions of won, in thousands of foreign currency)

December 31, 2019							
Buy		Sell		Derivative financial assets (liabilities)	Gain (loss) on valuation of derivative financial instruments	Accumulated other comprehensive income (loss)(*1)	Firm commitment assets (liabilities)(*2)
Currency	Amount	Currency	Amount				
Foreign currency forwards:							
KRW	2,098,162	USD	1,866,910 ₩	(43,279)	(34,440)	4,179	25,605
KRW	300,123	EUR	225,276	5,039	1,524	1,310	(720)
KRW	199,713	JPY	18,082,201	3,449	(2,622)	(1,112)	(1,895)
KRW	70,902	Others		(862)	(978)	(64)	424
USD	1,450,610	KRW	1,674,689	11,410	38,493	3,178	(3,497)
EUR	269,516	KRW	364,052	(10,462)	(3,907)	(1,085)	129
JPY	16,838,081	KRW	208,006	(24,110)	(1,527)	(132)	73
Others		KRW	21,007	284	(88)	527	-
GBP and others		EUR and others		(16,922)	(11,345)	570	(618)
Long-term (short-term) borrowings denominated in foreign currencies(*3)							
KRW	-	USD	-	-	-	-	180
CRS				12,753	1,588	(1,036)	-
IRS				(1,204)	-	(1,204)	-
PRS(*4)				(14,157)	(14,157)	-	-
		Subtotal		(78,061)	(27,459)	5,131	19,681
Tax effect							
				-	-	(1,300)	-
Adjustments for consolidation							
				-	-	13,406	-
		Total		₩ (78,061)	(27,459)	17,237	19,681

(*1) In consideration of the amounts adjusted in sales and cost of sales, the effective portion of changes in fair value of cash flow hedges of ₩17,237 million, net of tax, was recognized in accumulated other comprehensive income or loss.

(*2) In consideration of the amounts adjusted in revenue, firm commitment assets of ₩43,934 million and firm commitment liabilities of ₩24,253 million were recognized in the consolidated interim statement of financial position by applying a fair value hedge accounting.

(*3) The Group designated its long-term and short-term borrowings denominated in foreign currencies as hedging instruments to hedge the fair value change of firm commitments.

(*4) The Group has entered into PRS contract to exchange profits due to changes in stock prices at the same time as the disposal of Doosan Bobcat Inc. stocks.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(2) Put option granted for financial investors

DEC, a subsidiary company, participated in SOC projects and development-type projects such as Masan Sewer Pipeline BTL, Sangju Yeongcheon Expressway, Suwon Gwangmyeong Road, and Seoul Munsan Expressway as a member of the construction investment company, and signed a put option contract of ₩12.6 billion in relation to stocks acquired by the financial investors to recruit financial investors.

In addition, during 2019, the Company and financial investors, Nuscale Korea and others, acquired preferred shares of Nuscale Power LLC. The Company entered into a put option contract that could only be exercised under the conditions of non-compliance, including failure to obtain design certification in relation to the preferred shares (USD 39.8 million) acquired by Nuscale Korea and others.

9. Financial instruments

(1) Financial assets as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

		June 30, 2020					
		Financial assets as measured at amortized cost	Financial assets as measured at FVOCI	Financial assets as measured at FVTPL	Other financial assets(*1)	Carrying amounts	Fair value
Cash and cash equivalents	₩	1,634,315	-	-	-	1,634,315	1,634,315
Short and long-term financial instruments		401,107	-	36,866	-	437,973	437,973
Short and long-term investment in securities		118,154	162,351	209,373	-	489,878	489,878
Derivative financial assets		-	-	10,809	74,339	85,148	85,148
Trade and other receivables		3,257,813	34,675	-	-	3,292,488	3,292,488
Deposits		460,129	-	-	-	460,129	460,129
Total	₩	5,871,518	197,026	257,048	74,339	6,399,931	6,399,931

(*1) Other financial assets included derivatives as hedged item.

(In millions of won)

		December 31, 2019					
		Financial assets as measured at amortized cost	Financial assets as measured at FVOCI	Financial assets as measured at FVTPL	Other financial assets(*1)	Carrying amounts	Fair value
Cash and cash equivalents	₩	1,441,281	-	-	-	1,441,281	1,441,281
Short and long-term financial instruments		270,869	-	-	-	270,869	270,869
Short and long-term investment in securities		3,323	74,787	202,658	-	280,768	280,768
Derivative financial assets		-	-	9,547	42,530	52,077	52,077
Trade and other receivables		3,447,438	12,250	-	-	3,459,688	3,459,688
Deposits		348,346	-	-	-	348,346	348,346
Total	₩	5,511,257	87,037	212,205	42,530	5,853,029	5,853,029

(*1) Other financial assets include derivatives as hedged item.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(2) Financial liabilities as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

		June 30, 2020				
		Financial liabilities as measured at amortized cost	Financial liabilities as measured at FVTPL	Other financial liabilities(*1)	Carrying amounts	Fair value
Trade and other payables	₩	3,047,881	-	-	3,047,881	3,047,881
Borrowings and bonds		11,173,800	-	-	11,173,800	11,173,800
Derivative financial liabilities		-	106,109	109,287	215,396	215,396
Financial guarantee liabilities		-	-	12,467	12,467	12,467
Lease liabilities		253,892	-	-	253,892	253,892
Others		956,454	-	-	956,454	956,454
Total	₩	<u>15,432,027</u>	<u>106,109</u>	<u>121,754</u>	<u>15,659,890</u>	<u>15,659,890</u>

(*1) Other financial liabilities include derivatives as hedged item and others.

(In millions of won)

		December 31, 2019				
		Financial liabilities as measured at amortized cost	Financial liabilities as measured at FVTPL	Other financial liabilities(*1)	Carrying amounts	Fair value
Trade and other payables	₩	3,085,208	-	-	3,085,208	3,085,208
Borrowings and bonds		10,251,437	-	-	10,251,437	10,251,437
Derivative financial liabilities		-	45,863	84,275	130,138	130,138
Financial guarantee liabilities		-	-	13,900	13,900	13,900
Lease liabilities		256,538	-	-	256,538	256,538
Others(*2)		892,870	-	220,000	1,112,870	1,112,870
Total	₩	<u>14,486,053</u>	<u>45,863</u>	<u>318,175</u>	<u>14,850,091</u>	<u>14,850,091</u>

(*1) Other financial liabilities include derivatives as hedged item and others.

(*2) Others include PF payment guarantees for Club Mow in the amount of ₩220,000 million.

(3) As of June 30, 2020, the Group uses the following hierarchy for determining and disclosing the fair value of financial instruments:

Level 1: Quoted (unadjusted) prices in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly.

Level 3: Inputs that are not based on observable market data (unobservable inputs).

The fair value of financial instruments traded in active markets is based on quoted market prices at the dates of the consolidated statements of financial position. These instruments are included in level 1. Instruments included in level 1 primarily comprise listed equity investments classified as trading securities.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs are not based on observable market data, the instrument is included in level 3.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

Specific valuation techniques used to value financial instruments include:

- Quoted or dealer price of similar instruments.
- The fair value of forward foreign exchange contracts determined by using forward exchange rates at the reporting date, with the resulting value discounted to present value.
- Other financial techniques such as discounted cash flow analysis.

The level of fair value measurements of financial instruments as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

		June 30, 2020			
		Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:					
Measured at FVOCI	₩	-	191,988	5,038	197,026
Measured at FVTPL		7,249	48,875	200,924	257,048
Others		-	74,339	-	74,339
Total	₩	<u>7,249</u>	<u>315,202</u>	<u>205,962</u>	<u>528,413</u>
Financial liabilities measured at fair value:					
Measured at FVTPL	₩	-	106,109	-	106,109
Others		-	109,287	-	109,287
Total	₩	<u>-</u>	<u>215,396</u>	<u>-</u>	<u>215,396</u>

(In millions of won)

		December 31, 2019			
		Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:					
Measured at FVOCI	₩	-	82,210	4,827	87,037
Measured at FVTPL		9,590	9,547	193,068	212,205
Others		-	42,530	-	42,530
Total	₩	<u>9,590</u>	<u>134,287</u>	<u>197,895</u>	<u>341,772</u>
Financial liabilities measured at fair value:					
Measured at FVTPL	₩	-	45,863	-	45,863
Others		-	84,275	-	84,275
Total	₩	<u>-</u>	<u>130,138</u>	<u>-</u>	<u>130,138</u>

Changes in financial assets included in level 3 of the fair value hierarchy for the six-month periods ended June 30, 2020 and 2019 are summarized as follows and there is no transfer between levels of the fair value.

(In millions of won)

		June 30, 2020						
		January 1	Acquisition	Disposal	Profit (loss) for the year	Other comprehensive income (loss)	Others(*1)	June 30
Financial assets as measured at FVOCI	₩	4,827	3,161	(2,946)	-	(4)	-	5,038
Financial assets as measured at FVTPL		193,068	5,076	(43)	676	-	2,147	200,924
Total	₩	<u>197,895</u>	<u>8,237</u>	<u>(2,989)</u>	<u>676</u>	<u>(4)</u>	<u>2,147</u>	<u>205,962</u>

(*1) It includes ₩1,929 million due to consolidation scope changes.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(In millions of won)

		June 30, 2019						
		January 1	Acquisition	Disposal	Profit (loss) for the year	Other comprehensive income (loss)	Others	June 30
Financial assets as measured at FVOCI		₩ 17,986	722	-	-	-	(1,836)	16,872
Financial assets as measured at FVTPL		176,877	3,295	(18,725)	218	-	-	161,665
Total		₩ 194,863	4,017	(18,725)	218	-	(1,836)	178,537

(4) Gain or loss by categories of financial instruments

- 1) Gain or loss by categories of financial instruments for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

		June 30, 2020						
		Gain or loss						
		Interest income (expense)	Dividend income	Gain or loss on valuation (*1)	Impairment loss on financial instruments	Gain or loss on disposal	Gain or loss on financial guarantee	Other comprehensive income(loss)(*2)
Financial assets:								
Measured at amortized cost		₩ 19,446	-	-	(151,242)	(10,920)	-	-
Measured at FVOCI		1,825	-	-	-	15	-	(4)
Measured at FVTPL		318	1,115	(2,240)	-	(15)	-	-
Total		₩ 21,589	1,115	(2,240)	(151,242)	(10,920)	-	(4)
Financial liabilities:								
Measured at amortized cost		₩ (229,381)	-	-	-	(32,548)	-	-
Others		-	-	-	-	-	(5,796)	-

(*1) The amounts in gain or loss on valuation exclude the gain or loss related with foreign exchange and derivatives.

(*2) The amounts in other comprehensive income or loss exclude deferred tax effect.

(In millions of won)

		June 30, 2019					
		Gain or loss					
		Interest income (expense)	Dividend income	Gain or loss on valuation (*1)	Impairment loss on financial instruments	Gain or loss on disposal	Gain or loss on financial guarantee
Financial assets:							
Measured at amortized cost		₩ 20,039	-	-	(5,230)	(8,618)	-
Measured at FVOCI		856	-	5	-	-	-
Measured at FVTPL		-	1,336	(11)	-	1,733	-
Total		₩ 20,895	1,341	(11)	(5,230)	(6,885)	-
Financial liabilities:							
Measured at amortized cost		₩ (256,730)	-	-	-	(2,753)	-
Others		-	-	-	-	-	(5,389)

(*1) The amounts in gain or loss on valuation exclude the gain or loss related with derivatives.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

Gains or losses on translation or transaction of foreign currencies arising from foreign currency transactions except for derivative financial instruments have been mostly incurred from financial assets and liabilities measured at amortized cost.

2) Details of gains and losses on valuation and settlement of derivative financial instruments for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

		June 30, 2020		
		Gain or loss on valuation	Gain or loss on settlement	Other comprehensive income (loss) (*1)
Derivatives measured at				
FVTPL	₩	(68,022)	54,692	-
Derivatives for fair value hedge		(46,832)	(3,764)	-
Derivatives for cash flow hedge		20,646	(1,758)	8,005
Total	₩	<u>(94,208)</u>	<u>49,170</u>	<u>8,005</u>

(*1) The amounts in other comprehensive income or loss exclude deferred tax effect.

(In millions of won)

		June 30, 2019		
		Gain or loss on valuation	Gain or loss on settlement	Other comprehensive income (loss) (*1)
Derivatives measured at				
FVTPL	₩	26,626	1,963	-
Derivatives for fair value hedge		(83,115)	284	-
Derivatives for cash flow hedge		(1,911)	233	9,378
Total	₩	<u>(58,400)</u>	<u>2,480</u>	<u>9,378</u>

(*1) The amounts in other comprehensive income or loss exclude deferred tax effect.

Above gains or losses on financial instruments for the six-month periods ended June 30, 2020 and 2019 include selling and administrative expenses, finance income and expenses and other non-operating income and expenses and other comprehensive income or loss from each financial instrument.

(5) Financial assets and financial liabilities subject to an enforceable master netting arrangement or similar agreement as of June 30, 2020 are as follows:

(In millions of won)

		Eligible for legal right to offset		
		Total assets (liabilities)	Offset amounts	Amounts after offset
Derivative financial assets	₩	46,944	(17,358)	29,586
Derivative financial liabilities		(121,769)	17,358	(104,411)

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

10. Investments in associates and joint ventures

(1) Details of share of investment in associates and joint ventures as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

	Countries	Percentage of ownership (%)	Acquisition cost		Book value		
			June 30, 2020	December 31, 2019	June 30, 2020	December 31, 2019	
Associates:							
The HS-City Expressway(*1)	Korea	27.29	₩ 9,578	9,578	3,280	3,806	
Samcheok Blue Power Co., Ltd.(*1,2,6)	Korea	9.00	43,568	43,568	40,356	42,961	
Daejung Offshore Wind Power Co., Ltd.	Korea	25.00	2,827	2,827	2,565	2,617	
ReCarbon, Inc.(*2,5)	USA	16.09	8,151	-	8,387	-	
DBC Co., Ltd.("DBC")	Korea	49.90	53,216	53,216	52,775	52,830	
Shinbundang Railroad Co., Ltd.(*3)	Korea	29.03	62,552	62,552	-	-	
Kyunggi Railroad Co., Ltd.(*2,3)	Korea	6.99	7,067	7,067	-	-	
Neo Trans Co., Ltd.	Korea	42.86	43	43	22,480	21,810	
New Seoul Railroad Co., Ltd.(*2,3)	Korea	13.76	8,794	8,794	7,046	7,219	
KIAMCO Kyunggi Railway Investment Private property investment trust(*3)	Korea	35.70	28,072	28,072	-	-	
Incheon fuel cell Co., Ltd.	Korea	20.00	4,700	4,700	4,329	4,439	
Others	USA and others	-	10,736	5,333	5,403	-	
Subtotal			239,304	225,750	146,621	135,682	
Joint ventures:							
Doosan Babcock Blackcat W.L.L	Qatar	49.00	243	243	-	-	
Haman Industrial Complex Company(*4)	Korea	-	-	3,600	-	-	
Tianjin Lovol Doosan Engine Co., Ltd.	China	50.00	25,640	25,640	16,817	17,787	
Others	USA and others	-	1,826	1,826	2,361	2,288	
Subtotal			27,709	31,309	19,178	20,075	
Total			₩ 267,013	257,059	165,799	155,757	

(*1) The Group's investments in the investee have been pledged as collateral for the company's project financing and contract of completion guarantee (See Note 26).

(*2) Although the Group's equity interest in the investee is less than 20%, the investee is classified as an associate considering the exercise of voting rights in the board of directors.

(*3) Investments in the investee have been pledged as collateral in connection with project financing (See Note 26).

(*4) Liquidated in 2020.

(*5) The investee was incorporated into an investments in associate due to changes in the scope of consolidation in 2020.

(*6) The company name was changed from POSPOWER Co., Ltd. to Samcheok Blue Power Co., Ltd. in 2020.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(2) Changes in investment in associates and joint ventures for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020					
	January 1, 2020	Acquisition (disposal)	Share of profit (loss)	Increase (decrease) in equity of associates	Others	June 30, 2020
Associates:						
The HS-City Expressway	₩ 3,806	-	(526)	-	-	3,280
POSPOWER Co., Ltd.	42,961	-	(2,603)	(2)	-	40,356
Daejung Offshore Wind Power Co., Ltd.	2,617	-	(52)	-	-	2,565
ReCarbon, Inc.(*1)	-	-	(772)	1,008	8,151	8,387
DBC	52,830	-	(55)	-	-	52,775
Shinbundang Railroad Co., Ltd.(*2)	-	-	-	-	-	-
Kyunggi Railroad Co., Ltd.(*2)	-	-	-	-	-	-
Neo Trans Co., Ltd.	21,810	-	670	-	-	22,480
New Seoul Railroad Co., Ltd.	7,219	-	(173)	-	-	7,046
KIAMCO Kyunggi Railway Investment Private property investment trust	-	-	-	-	-	-
Incheon fuel cell Co., Ltd.	4,439	-	(110)	-	-	4,329
Others	-	5,403	-	-	-	5,403
Subtotal	135,682	5,403	(3,621)	1,006	8,151	146,621
Joint ventures:						
Doosan Babcock Blackcat W.L.L	-	-	-	-	-	-
Haman Industrial Complex Company	-	-	-	-	-	-
Tianjin Lovol Doosan Engine Co., Ltd.	17,787	-	(1,466)	-	496	16,817
Others	2,288	-	(11)	-	84	2,361
Subtotal	20,075	-	(1,477)	-	580	19,178
Total	₩ 155,757	5,403	(5,098)	1,006	8,731	165,799

(*1) The amounts of others are due to changes in the scope of consolidation.

(*2) An additional ₩2,899 million was recognized for share of loss on long-term investment.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(In millions of won)

	June 30, 2019					
	January 1, 2019	Acquisition (disposal)	Share of profit (loss)	Increase (decrease) in equity of associates	Others	June 30, 2019
Associates:						
The HS-City Expressway	₩ 4,920	-	(531)	-	-	4,389
POSPOWER Co., Ltd.	43,448	-	(193)	3	-	43,258
Daejung Offshore Wind Power Co., Ltd.	2,772	-	(77)	-	-	2,695
DBC	-	-	(22)	-	53,216	53,194
Potenit Co., Ltd.	4,779	-	(241)	-	-	4,538
Shinbundang Railroad Co., Ltd.	-	-	-	-	-	-
Kyunggi Railroad Co., Ltd.	-	-	-	-	-	-
Neo Trans Co., Ltd.	21,645	-	1,221	-	-	22,866
New Seoul Railroad Co., Ltd.	7,144	-	(171)	-	-	6,973
KIAMCO Kyunggi Railway Investment Private property investment trust	-	-	-	-	-	-
Incheon Fuel Cell Co., Ltd.	4,662	-	(79)	-	-	4,583
Dongbuk LRT	1,693	-	(28)	-	-	1,665
Subtotal	<u>91,063</u>	<u>-</u>	<u>(121)</u>	<u>3</u>	<u>53,216</u>	<u>144,161</u>
Joint ventures:						
Doosan Babcock BlackCat W.L.L	-	-	-	-	-	-
Haman Industrial Complex Company	-	-	-	-	-	-
Doosan PSI LLC	1,337	-	487	-	51	1,875
Doosan Infracore Liaoning Machinery Sales Co., Ltd.	292	-	(132)	-	10	170
Tianjin Lovol Doosan Engine Co., Ltd.	8,235	-	(1,300)	-	366	7,301
Subtotal	<u>9,864</u>	<u>-</u>	<u>(945)</u>	<u>-</u>	<u>427</u>	<u>9,346</u>
Total	<u>₩ 100,927</u>	<u>-</u>	<u>(1,066)</u>	<u>3</u>	<u>53,643</u>	<u>153,507</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

11. Property, plant and equipment

Changes in property, plant and equipment for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020						
	Land	Buildings and structures	Machinery	Others	Construction in progress	Right-of-use assets	Total
As of January 1, 2020	₩ 3,605,567	962,399	745,750	145,616	232,631	229,569	5,921,532
Acquisition/ capital expenditure	-	3,271	13,986	14,938	85,027	50,538	167,760
Transfer(*1)	385,581	53,474	50,592	7,245	(65,112)	-	431,780
Disposals(*2)	-	(5,328)	(808)	(393)	(881)	(7,424)	(14,834)
Depreciation	-	(34,869)	(87,385)	(25,039)	-	(48,478)	(195,771)
Impairment	-	-	-	-	(16)	-	(16)
Revaluation	23,640	-	-	-	-	-	23,640
Changes in the scope of consolidation	1,440	15,965	12,343	907	66	210	30,931
Changes in foreign currency translation and others	(2,308)	9,797	10,132	2,025	3,615	3,941	27,202
As of June 30, 2020	₩ 4,013,920	1,004,709	744,610	145,299	255,330	228,356	6,392,224
- Acquisition cost	₩ 2,438,674	2,089,376	2,936,439	721,043	255,365	327,969	8,768,866
- Accumulated depreciation and impairment	(11,778)	(1,084,667)	(2,191,829)	(575,744)	(35)	(99,613)	(3,963,666)
- Revaluation surplus	1,587,024	-	-	-	-	-	1,587,024

(*1) Portion of land and buildings of investment property are reclassified to property, plant and equipment.

(*2) The amount due to the contract cancelation of the right of use assets is included (See Note 13).

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(In millions of won)

	June 30, 2019						
	Land	Buildings and structures	Machinery	Others	Construction in progress	Right-of-use assets	Total
As of January 1, 2019	₩ 4,223,399	1,042,510	731,014	138,695	278,869	-	6,414,487
Transition(*1)	-	-	-	-	-	207,437	207,437
Acquisition/ capital expenditure	40,291	13,200	21,384	14,430	75,204	18,061	182,570
Transfer(*2)	(146,897)	7,635	35,217	2,408	(55,738)	18,339	(139,036)
Disposals	-	(2,649)	(1,538)	(758)	(1,950)	(195)	(7,090)
Depreciation	-	(33,424)	(80,840)	(24,601)	-	(25,540)	(164,405)
Reversal of impairment	-	-	9	-	-	-	9
Revaluation	5,540	-	-	-	-	-	5,540
Changes in scope of consolidation	(177,529)	-	-	-	(58,036)	-	(235,565)
Changes in foreign currency translation and others	4,915	15,376	9,045	1,739	3,132	3,908	38,115
As of June 30, 2019	₩ <u>3,949,719</u>	<u>1,042,648</u>	<u>714,291</u>	<u>131,913</u>	<u>241,481</u>	<u>222,010</u>	<u>6,302,062</u>
- Acquisition cost	₩ 2,327,069	2,002,532	2,726,237	673,573	241,481	247,648	8,218,540
- Accumulated depreciation and impairment	(13,860)	(959,884)	(2,011,946)	(541,660)	-	(25,638)	(3,552,988)
- Revaluation surplus	1,636,510	-	-	-	-	-	1,636,510

(*1) Under K-IFRS No. 1116, right-of-use assets are recognized as property, plant and equipment.

(*2) Portion of land and construction in progress are reclassified to disposal group held for sale in 2019.

As of June 30, 2020, certain property, plant and equipment have been pledged as collateral for debts (See Note 26).

The Group accounts for land using revaluation model; and if the land were accounted for using cost model, the carry amount of land would have been ₩2,426,896 million and ₩2,041,823 million as of June 30, 2020 and December 31, 2019, respectively. As of June 30, 2020, there is no significant difference compared to the fair value of land measured as of December 31, 2019.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

12. Intangible assets

(1) Changes in intangible assets for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020				
	Goodwill	Industrial property rights	Development costs	Other intangible assets	Total
As of January 1, 2020	₩ 4,482,002	1,154,687	1,191,602	203,595	7,031,886
Increase	-	-	123,197	11,441	134,638
Internal development	-	-	123,197	-	123,197
Individual acquisition	-	-	-	11,441	11,441
Decrease	-	(586)	(60,209)	(31,436)	(92,231)
Amortization	-	(586)	(60,209)	(29,499)	(90,294)
Disposal	-	-	-	(1,937)	(1,937)
Transfer	-	426	(16,418)	10,665	(5,327)
Changes in scope of consolidation	21,096	-	-	16,029	37,125
Changes in foreign currency translation	107,172	44,106	3,911	2,282	157,471
As of June 30, 2020	₩ 4,610,270	1,198,633	1,242,083	212,576	7,263,562

(In millions of won)

	June 30, 2019				
	Goodwill	Industrial property rights	Development costs	Other intangible assets	Total
As of January 1, 2019	₩ 4,354,753	1,092,402	1,036,129	199,832	6,683,116
Increase	-	400	153,515	4,819	158,734
Internal development	-	400	153,515	-	153,915
Individual acquisition	-	-	-	4,819	4,819
Decrease	(4,030)	(549)	(63,321)	(26,558)	(94,458)
Amortization	-	(549)	(63,264)	(25,836)	(89,649)
Disposal	(4,030)	-	(57)	(722)	(4,809)
Transfer	-	251	(1,933)	3,735	2,053
Changes in foreign currency translation	124,085	35,123	4,600	1,566	165,374
Impairment loss	-	-	(263)	-	(263)
As of June 30, 2019	₩ 4,474,808	1,127,627	1,128,727	183,394	6,914,556

The carrying amounts of intangible assets with indefinite useful lives including goodwill and others as of June 30, 2020 and December 31, 2019 amounted to ₩5,850,262 million and ₩5,680,978 million, respectively.

(2) Research and development costs expensed as incurred for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020	June 30, 2019
Research and development costs	₩ 113,751	108,186

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

13. Lease

(1) Changes in the right-of-use assets for the six-month period ended June 30, 2020 are as follows:

(In millions of won)

		Land	Building & structures	Machinery	Other tangible asset	Total
As of January 1, 2020	₩	18,503	174,438	4,149	32,479	229,569
Acquisition		1,297	37,305	2,673	9,263	50,538
Contract cancelation		-	(5,606)	-	(1,818)	(7,424)
Depreciation		(588)	(29,631)	(3,031)	(15,228)	(48,478)
Changes in scope of consolidation		-	6	-	204	210
Foreign currency differences and others		425	3,673	39	(196)	3,941
As of June 30, 2020	₩	<u>19,637</u>	<u>180,185</u>	<u>3,830</u>	<u>24,704</u>	<u>228,356</u>
- Acquisition cost	₩	20,811	250,753	7,866	48,539	327,969
- Accumulated depreciation		(1,174)	(70,568)	(4,036)	(23,835)	(99,613)

(2) Changes in the lease liabilities for the six-month period ended June 30, 2020 are as follows:

(In millions of won)

		Lease liabilities
As of January 1, 2020	₩	256,538
Payment of lease		(54,661)
Acquisition of leased assets		50,491
Contract cancelation		(7,179)
Interest expense		7,607
Changes in scope of consolidation		213
Foreign currency differences and others		883
As of June 30, 2020	₩	<u>253,892</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

14. Bonds and borrowings

(1) Borrowings

1) Short-term borrowings as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

Type of borrowings	Borrower(*1)	Lender	Annual interest rate (%)		June 30, 2020(*3)	December 31, 2019
			as of June 30, 2020			
Denominated in KRW	DHI	Korea Development Bank ("KDB") and others	1.14~4.94	₩	4,131,504	2,239,206
		Kookmin Bank	7.80		43,080	-
	DI	Korea EXIM Bank and others	2.14~3.62		526,810	329,082
	DEC	Construction guarantee cooperation and others	1.43~7.50		28,289	49,039
Denominated in foreign currencies	DHI	HSBC and others	0.02~10.15		810,500	871,686
		DI	KDB and others	2.24~8.50		504,311
	DEC	Disposal of receivables in foreign currency(*2)	-		7,070	10,013
		Asia Commercial Bank and others	3.00~7.50		24,049	16,256
		Total		₩	<u>6,075,613</u>	<u>3,767,270</u>

(*1) Includes the Company's overseas subsidiaries and their consolidated subsidiaries.

(*2) As discounting of commercial papers with recourse do not qualify for the derecognition of a financial asset, the Group continues to recognize the related receivables and accounted for the related amounts received as short-term borrowings.

(*3) The Group's PP&E and others have been pledged as collateral for the above borrowings (See Note 26 and 31).

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

2) Long-term borrowings as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

Type of Borrowings	Borrower(*1)	Lender	Annual interest rate (%) as of		June 30, 2020(*2)	December 31, 2019
			June 30, 2020			
Denominated in KRW	DHI	Korea EXIM Bank and others	2.34~4.81	₩	514,621	538,097
	DI	KDB and others	3.35~4.20		220,000	380,000
	DEC	KDB and others	7.50, CD+2.50		85,000	95,000
	Cuvex	SBI Savings Bank and others	-		-	1,000
Denominated in foreign currencies	DHI	Mashreq Bank and others	0.94~4.81		508,050	634,722
	DI	Institutional investors and banks in the United States and others	2.30~8.00		923,992	1,002,720
	Subtotal				2,251,663	2,651,539
	Less: Current portion of long-term borrowings				(392,316)	(940,844)
	Less: Discount on long-term borrowings				(12,047)	(12,712)
	Total			₩	1,847,300	1,697,983

(*1) Includes the Company's overseas subsidiaries and their consolidated subsidiaries.

(*2) The Group's PP&E and others have been pledged as collateral for the above borrowings (See Note 26).

(2) Bonds

1) Details of bonds as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

	Annual interest rate (%) as of		June 30, 2020	December 31, 2019
	June 30, 2020			
Public subscription bonds	1.77~5.88	₩	1,578,630	1,727,580
Private subscription bonds(*1)	3.03~5.17		339,600	356,080
Convertible bonds	2.87		2,400	-
Bonds with stock warrants	1.00~4.00		516,842	1,057,185
Subtotal			2,437,472	3,140,845
Add: Redemption premium			77,914	108,674
Less: Exchange rights adjustment			(71,348)	(130,447)
Less: Conversion rights adjustment			(238)	-
Less: Current portion of long-term bonds			(1,327,264)	(2,251,796)
Less: Discount on bonds			(18,287)	(20,441)
Long-term bonds		₩	1,098,249	846,835

(*1) The Group's PP&E and others have been pledged as collateral for the above bonds (See Note 26).

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

2) Convertible bonds

Changes in the carrying amount of convertible bonds for the six-month period ended June 30, 2020 are as follows:

(In millions of won)

	January 1, 2020	Issuance /Redemption	Exercise / Amortization	June 30, 2020
Convertible bonds	₩ -	2,400	-	2,400
Redemption premium	-	150	-	150
Discount on bond	-	(20)	1	(19)
Conversion rights adjustment	-	(242)	4	(238)
Book value	₩ -	2,288	5	2,293
Consideration for conversion rights (other capital surplus)	₩ -	93	-	93

3) Bond with stock warrants

Changes in the carrying amount of bonds with stock warrants for the six-month period ended June 30, 2020 are as follows:

(In millions of won)

	January 1, 2020	Issuance /Redemption	Exercise / Amortization	June 30, 2020
Bond with stock warrants	₩ 1,057,185	(540,330)	(13)	516,842
Redemption premium	108,674	(30,908)	(2)	77,764
Discount on bond	(9,967)	4,255	1,711	(4,001)
Exchange rights adjustment	(130,447)	40,397	18,702	(71,348)
Book value	₩ 1,025,445	(526,586)	20,398	519,257
Consideration for stock warrants rights (other capital surplus)	₩ 98,638	-	(868)	97,770

(3) Asset-backed borrowings

The Group transferred revenue from construction contracts to a special purpose vehicle, and the special purpose vehicle issued asset-backed securities backed by transferred assets. As of June 30, 2020 and December 31, 2019, the special purpose vehicle is liable on the following asset-backed borrowings:

1) Short-term asset-backed borrowings

(In millions of won)

Company	Lender	Discount rate (%)	June 30, 2020(*1)	December 31, 2019
DEC	Shinyoung Securities and others	6.00~8.00	₩ 121,225	382,100
	Less: Discount on short-term borrowings		(835)	(526)
	Total		₩ 120,390	381,574

(*1) The Group's PP&E and others have been pledged as collateral for the above asset-backed borrowings (See Note 26).

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

2) Long-term asset-backed borrowings

<i>(In millions of won)</i>				June 30,	December 31,
Company	Lender	Discount rate (%)		2020(*1)	2019
The Company	KDB and others	4.69~6.00	₩	315,000	369,000
	Less: Current portion of long-term borrowings			(239,339)	(72,845)
	Less: Discount on long-term borrowings			(2,332)	(3,865)
	Total		₩	<u>73,329</u>	<u>292,290</u>

(*1) The Group's equity investments and others have been pledged as collateral for the above asset-backed borrowings (See Note 26).

15. Defined benefit liabilities

The Group operates defined benefit plans, and the cost of providing benefit under the defined benefit plans is determined using the projected unit credit method on actuarial valuation of the present value of its defined benefit obligations.

(1) Details of defined benefit liabilities as of June 30, 2020 and December 31, 2019 are as follows:

<i>(In millions of won)</i>		June 30, 2020	December 31, 2019
Present value of defined benefit obligations	₩	2,395,790	2,345,826
Fair value of plan assets(*1)		(1,626,795)	(1,671,562)
Defined benefit liabilities	₩	<u>768,995</u>	<u>674,264</u>

(*1) Include employer contributions of ₩ 934 million and ₩ 1,271 million to the National Pension Service as of June 30, 2020 and December 31, 2019, respectively.

(2) Expenses recognized in consolidated interim statements of income (loss) for the six-month periods ended June 30, 2020 and 2019 are as follows:

<i>(In millions of won)</i>		June 30, 2020	June 30, 2019
Current service cost	₩	47,904	43,686
Net interest cost		6,984	8,671
Past service cost(*1)		5,894	-
Total	₩	<u>60,782</u>	<u>52,357</u>

(*1) Changes in retirement benefit obligations due to the Company's voluntary retirement ₩6,241 million were recognized as past service costs in 2020.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

16. Capital stock

The Company is authorized to issue 2,000,000,000 shares, with a par value of ₩5,000 per share and the number of common stock issued as of June 30, 2020 and December 31, 2019 is 253,140,778 shares and 202,146,875 shares, respectively. The number of shares with limited voting rights under Korean Commercial Code as of June 30, 2020 and December 31, 2019 are 14,329 treasury shares and 8,479 treasury shares, respectively. The Company issued 44,102,845 new shares in exchange for Doosan Mecatec Co., Ltd.'s common stock acquired through in-kind investment from Doosan Corp., and the Company issued 6,891,058 new shares in exchange for acquisition of DEC's common stock and treasury stock in 2020.

17. Segment information

(1) The reportable segments of the Group and major products and services by segments are as follows:

Business segment	Main products and services
DHI	NSSS, BOP, Turbine, Seawater desalination plants and water treatment systems, Plants, Road constructing and others
DI	Internal combustion engines, various construction machinery, transport equipment and others
DEC	Apartment building and others
Cuvex	Operation of resort and golf club

(2) Summarized financial information by reportable segments for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

		June 30, 2020				
		Sales	Intercompany	External sales	Operating income (loss)	Profit (loss)
DHI	₩	2,713,938	(137,343)	2,576,595	(346,510)	(871,671)
DI		3,984,932	(984)	3,983,948	335,280	152,693
DEC		872,693	(12,584)	860,109	8,455	(168,468)
Cuvex		34,231	(13,099)	21,132	3,216	2,275
Subtotal		7,605,794	(164,010)	7,441,784	441	(885,171)
Consolidation adjustments		(164,010)	164,010	-	5,735	262,054
Total	₩	7,441,784	-	7,441,784	6,176	(623,117)

(In millions of won)

		June 30, 2019				
		Sales	Intercompany	External sales	Operating income (loss)	Profit (loss)
DHI	₩	2,771,303	(122,330)	2,648,973	129,774	(72,022)
DI		4,382,534	(626)	4,381,908	547,216	303,523
DEC		767,321	(13,397)	753,924	28,421	(11,506)
Cuvex		34,820	(13,247)	21,573	2,031	609
DBC		-	-	-	(54)	(40)
Subtotal		7,955,978	(149,600)	7,806,378	707,388	220,564
Attributed to:						
Discontinued operations		-	-	-	54	40
Consolidation adjustments		(149,600)	149,600	-	254	19,697
Total	₩	7,806,378	-	7,806,378	707,696	240,301

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(3) Summarized financial information on assets and liabilities by business segments as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

	June 30, 2020		December 31, 2019	
	Assets	Liabilities	Assets	Liabilities
DHI	₩ 14,873,947	10,998,401	14,374,611	10,023,084
DI	12,335,015	7,782,369	11,338,593	7,071,041
DEC	2,019,544	1,613,176	2,329,566	1,763,226
Cuvex	303,873	104,950	220,792	103,295
Subtotal	29,532,379	20,498,896	28,263,562	18,960,646
Consolidation adjustments	(3,696,599)	(550,776)	(3,454,313)	(353,390)
Total	₩ 25,835,780	19,948,120	24,809,249	18,607,256

18. Revenue

(1) Revenue for the three-month and six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020	
	Three-month period ended	Six-month period ended
Revenue from contracts with customers		
Sales of goods	₩ 1,989,162	4,005,517
Construction contracts	1,548,894	3,370,928
Others	62,968	111,087
Subtotal	3,601,024	7,487,532
Others		
Rental and others	12,764	31,378
Hedging gains (losses)	(9,040)	(77,126)
Subtotal	3,724	(45,748)
Total	₩ 3,604,748	7,441,784

(In millions of won)

	June 30, 2019	
	Three-month period ended	Six-month period ended
Revenue from contracts with customers		
Sales of goods	₩ 2,277,666	4,461,863
Construction contracts	1,671,125	3,251,325
Others	51,156	122,516
Subtotal	3,999,947	7,835,704
Others		
Rental and others	15,276	30,939
Hedging gains (losses)	(37,578)	(60,265)
Subtotal	(22,302)	(29,326)
Total	₩ 3,977,645	7,806,378

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(2) In the following table, revenue for the six-month periods ended June 30, 2020 and 2019 are disaggregated by primary geographical market and timing of revenue recognition. The table also includes a reconciliation of the disaggregated revenue with the Group's reportable segments.

(In millions of won)

		June 30, 2020				
		DHI	DI	DEC	Cuvex	Total
Primary geographical market						
Domestic	₩	1,314,737	844,784	819,639	21,132	3,000,292
Americas		29,726	1,637,340	-	-	1,667,066
Asia		721,664	875,384	36,569	-	1,633,617
Middle East		159,925	-	-	-	159,925
Europe		345,526	623,215	3,901	-	972,642
Others		5,017	3,225	-	-	8,242
Total	₩	<u>2,576,595</u>	<u>3,983,948</u>	<u>860,109</u>	<u>21,132</u>	<u>7,441,784</u>
Timing of revenue recognition						
At a point in time	₩	117,261	3,852,014	10,297	21,132	4,000,704
Over time		2,459,334	131,934	849,812	-	3,441,080
Total	₩	<u>2,576,595</u>	<u>3,983,948</u>	<u>860,109</u>	<u>21,132</u>	<u>7,441,784</u>

(In millions of won)

		June 30, 2019				
		DHI	DI	DEC	Cuvex	Total
Primary geographical market						
Domestic	₩	1,086,303	939,835	732,318	21,573	2,780,029
Americas		60,156	1,831,302	-	-	1,891,458
Asia		698,612	851,898	18,383	-	1,568,893
Middle East		339,155	-	-	-	339,155
Europe		454,214	754,266	3,223	-	1,211,703
Others		10,533	4,607	-	-	15,140
Total	₩	<u>2,648,973</u>	<u>4,381,908</u>	<u>753,924</u>	<u>21,573</u>	<u>7,806,378</u>
Timing of revenue recognition						
At a point in time	₩	163,893	4,207,498	13,559	21,573	4,406,523
Over time		2,485,080	174,410	740,365	-	3,399,855
Total	₩	<u>2,648,973</u>	<u>4,381,908</u>	<u>753,924</u>	<u>21,573</u>	<u>7,806,378</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(3) Contract balances

The following table provides information about receivables, contract assets and contract liabilities from contracts with customers as of June 30, 2020 and December 31, 2019.

<i>(In millions of won)</i>		<u>June 30, 2020</u>	<u>December 31, 2019</u>
Receivables, which are included in 'trade and other receivables'	₩	2,700,764	2,310,963
Contract assets		1,935,481	1,866,283
Contract liabilities		2,095,975	1,892,365

The contract assets primarily relate to the Group's rights to consideration for work completed but not billed at the reporting date. The contract assets are transferred to receivables when the rights become unconditional. The contract liabilities primarily relate to the advance consideration received from customers for construction, for which revenue is recognized over time.

(4) Changes in transaction price for construction contract allocated to the performance obligations satisfied over time for the six-month periods ended June 30, 2020 and 2019 are as follows:

<i>(In millions of won)</i>		<u>June 30, 2020</u>			
<u>Project name</u>		<u>January 1</u>	<u>Increase (Decrease)</u>	<u>Revenue recognized</u>	<u>June 30</u>
DHI	Fadhili CHP and others	₩ 13,886,052	1,956,328	2,455,554	13,386,826
DEC	Gimhae Centum We've and others	7,614,475	(7,523)	854,850	6,752,102
DI	Extended warranty and others	310,869	125,555	131,934	304,490
	Subtotal	<u>21,811,396</u>	<u>2,074,360</u>	<u>3,442,338</u>	<u>20,443,418</u>
	Internal transaction	(73,879)	(6,460)	(1,258)	(79,081)
	Attributed to : Discontinued operations	(9,077)	9,077	-	-
	Total	<u>₩ 21,728,440</u>	<u>2,076,977</u>	<u>3,441,080</u>	<u>20,364,337</u>

<i>(In millions of won)</i>		<u>June 30, 2019</u>			
<u>Project name</u>		<u>January 1</u>	<u>Increase (Decrease)</u>	<u>Revenue recognized</u>	<u>June 30</u>
DHI	Fadhili CHP and others	₩ 15,381,173	911,102	2,485,165	13,807,110
DEC	Gimhae Centum We've and others	7,703,951	74,512	754,112	7,024,351
DI	Extended warranty and others	89,110	171,126	174,410	85,826
	Subtotal	<u>23,174,234</u>	<u>1,156,740</u>	<u>3,413,687</u>	<u>20,917,287</u>
	Internal transaction	(419,297)	206,493	(13,482)	(199,322)
	Attributed to : Discontinued operations	(9,240)	(189)	(350)	(9,079)
	Total	<u>₩ 22,745,697</u>	<u>1,363,044</u>	<u>3,399,855</u>	<u>20,708,886</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(5) Changes in profit or loss in current and future reporting periods and the book value of due from (to) customers for contracts work (excluding foreign currency translation effect) resulting from changes in total contract revenue and in total estimated contract costs for construction contracts in progress as of June 30, 2020 are as follows:

(In millions of won)

		Provision for	Changes in	Changes in	Effect on	Effect on	Changes in due
		construction loss	total contract	total contract	profit (loss)	profit (loss) for	from (to)
			revenue	cost	for the period	the future	customer for
							contract work
DHI	₩	129,545	134,922	364,493	(180,851)	(48,720)	(180,851)
DEC		231	45,803	51,166	(29,358)	23,995	(29,358)
Total	₩	129,776	180,725	415,659	(210,209)	(24,725)	(210,209)

Impacts on current and future profit (loss) were calculated based on total contract revenue and costs which were estimated based on the current circumstances as of June 30, 2020. Those estimations may change in the future.

(6) As of June 30, 2020, details of contracts that the revenue was recognized based on the percentage-of-completion measured by input method, and whose contract revenue is more than 5% of sales of the year ended December 31, 2019 are as follows. There is no contract that the Group decided not to disclose due to the prohibition by related regulations or contracts.

(In millions of won)

	Contract date	Due date / Delivery date in contract	Percentage-of-completion (%)	Due from customers for contract work		Trade receivables (receivables from construction contract)		
				Gross amounts	Accumulated impairment losses	Gross amounts	Allowance for doubtful accounts	
Shingori #3,4 NSSS(*1)	28-Aug-06	31-Aug-19	99.87	₩	-	-	4,629	46
Shinhanul #1,2 NSSS	31-Jul-09	31-Aug-21	97.78		-	-	-	-
UAE BNPP #1,2 NSSS(*1)	30-Jun-10	30-Aug-19	98.94		-	-	-	-
Shingori #5,6 NSSS	28-Aug-14	30-Jun-24	74.10		-	-	-	-
UAE BNPP #3,4 NSSS	30-Jun-10	31-Dec-20	98.22		14,925	-	1,710	-
Qurayyah Add-On(*1)	16-Sep-09	15-Oct-14	99.71		-	-	-	-
Vinh Tan 4 TPP(*2)	26-Feb-14	26-Jun-18	99.59		32,048	-	23,128	-
Song Hau 1(*1)	10-Apr-15	2-Oct-19	86.40		52,983	-	-	-
Fadhili CHP(*1)	12-Nov-16	30-Nov-19	98.77		9,013	-	1,217	5
Samcheok #1,2 TPP	24-Jul-18	30-Apr-24	15.26		68,883	-	-	-
Yanbu ph.3 MSF(*1)	4-Dec-12	30-Apr-19	98.46		-	-	-	-
Nghi Son #2	24-Dec-14	10-Jul-22	61.00		301,731	-	71,139	13
Jawaharpur	22-Dec-16	20-Sep-22	49.10		-	-	28,516	-
Obra C	22-Dec-16	21-Dec-21	44.18		-	-	24,185	-

(*1) The Group is negotiating to extend contract period with respective contract party.

(*2) The Group has completed the production process, but will demand for payment at the time of a trial run, commercial operation or etc. according to the contract.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

19. Expenses classified by nature

Expenses classified by nature for the three-month and six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Changes in inventories	₩ 182,028	(37,040)	(84,324)	(244,004)
Purchases of raw materials and goods	1,379,858	3,215,066	1,301,846	3,105,557
Salaries	492,410	1,127,782	474,637	1,000,344
Depreciation and amortization	142,337	287,863	123,634	254,138
Others	1,458,426	2,841,938	1,776,542	2,982,647
Total	₩ 3,655,059	7,435,609	3,592,335	7,098,682

20. Selling and administrative expenses

Selling and administrative expenses for the three-month and six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Salaries	₩ 109,264	234,840	117,205	240,810
Severance and retirement benefits	8,876	17,490	7,508	16,343
Termination benefits	45,997	184,201	-	17,383
Employee welfare benefits	21,357	48,494	21,161	47,457
Travel	2,527	10,945	12,329	22,473
Training	1,982	6,603	3,060	6,519
Taxes and dues	4,363	9,958	5,906	10,919
Commissions	50,804	100,900	53,177	98,131
Sales commission	26,284	53,065	18,606	44,743
Rents	5,569	7,060	4,503	9,800
Bad debt expenses (reversal)	16,585	21,058	(2,860)	(2,022)
Transportation	1,836	3,201	3,046	5,821
Depreciation	16,959	36,686	15,129	30,623
Amortization	14,598	29,017	13,064	25,639
Research	52,833	106,379	52,712	99,123
Marketing	2,181	5,704	4,174	7,450
Advertising	20,116	41,072	25,803	48,760
Warranty	2,308	7,935	5,189	9,179
Others	33,416	66,060	26,860	54,483
Total	₩ 437,855	990,668	386,572	793,634

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

21. Finance income and expenses

(1) Finance income for the three-month and six-month periods ended June 30, 2020 and 2019 are summarized as follows:

(In millions of won)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Interest income	₩ 13,647	21,589	11,751	20,895
Dividend income	549	1,115	71	1,341
Gain on foreign currency transaction	51,398	92,285	118,493	146,740
Gain on foreign currency translation	(24,280)	77,237	12,877	54,080
Gain on settlement of derivative financial instruments	50,208	80,383	14,216	30,863
Gain on valuation of derivative financial instruments	(77,534)	62,183	45,005	87,841
Gain on valuation of firm commitments	(36,589)	67,759	51,071	101,122
Gain (loss) on financial guarantee	50	231	(154)	51
Total	₩ (22,551)	402,782	253,330	442,933

(2) Finance expenses for the three-month and six-month periods ended June 30, 2020 and 2019 are summarized as follows:

(In millions of won)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Interest expenses	₩ 116,423	229,381	129,890	256,730
Loss on foreign currency transaction	96,821	131,777	113,793	143,644
Loss on foreign currency translation	(56,413)	97,639	46,772	101,744
Loss on settlement of derivative financial instruments	6,434	31,213	13,925	28,383
Loss on valuation of derivative financial instruments	(177,465)	156,391	29,768	146,241
Loss on valuation of firm commitments	(3,069)	8,218	7,574	16,541
Payment of guarantee fee	13,617	30,474	18,024	39,360
Loss on redemption of bonds	32,538	32,538	1,281	2,745
Others	97	200	192	348
Total	₩ 28,983	717,831	361,219	735,736

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

22. Other non-operating income and expenses

(1) Other non-operating income for the three-month and six-month periods ended June 30, 2020 and 2019 are summarized as follows:

(In millions of won)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Gain on disposal of property, plant and equipment	₩ 1,387	2,060	893	934
Gain on disposal of intangible assets	-	-	(12)	57
Gain on valuation of long-term financial assets	(189)	838	1,397	1,402
Commission income	(944)	418	240	2,960
Miscellaneous gain and others	7,036	9,657	4,581	9,843
Total	₩ 7,290	12,973	7,099	15,196

(2) Other non-operating expenses for the three-month and six-month periods ended June 30, 2020 and 2019 are summarized as follows:

(In millions of won)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Loss on disposal of trade receivables	₩ 3,074	10,920	4,117	8,618
Loss on disposal of property, plant and equipment	431	702	570	892
Other bad debt expenses	79,756	147,203	7,192	7,302
Impairment loss of intangible assets	-	-	-	263
Impairment loss of disposal group held-for-sale	-	-	24,589	24,589
Donations	729	9,688	494	10,285
Miscellaneous loss and others	8,131	29,634	10,514	25,699
Total	₩ 92,121	198,147	47,476	77,648

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

23. Income tax expense

Income tax expense is recognized based on the estimation of weighted-average annual effective income tax rate. Expected average tax rate for the six-month period ended June 30, 2020 is not provided due to loss for the period. Expected average tax rate for the six-month period ended June 30, 2019 is 37.98%.

24. Earnings (loss) per share

(1) Basic earnings (loss) per share

Basic earnings (loss) per share for the three-month and six-month periods ended June 30, 2020 and 2019 are as follows:

(In won, except for share)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Income (loss) for the period attributable to equity holders of the Company	₩ (312,865,839,125)	(740,244,221,851)	57,726,243,225	19,281,401,302
Less: preferred stock dividend	-	-	4,374,527,190	8,749,054,380
Income (loss) for the period attributable to ordinary equity holders of the Company	₩ (312,865,839,125)	(740,244,221,851)	53,351,716,035	10,532,346,922
Income (loss) from continuing operations	₩ (312,865,839,125)	(740,244,221,851)	28,556,789,659	(12,695,459,580)
Income (loss) from discontinued operations	-	-	24,794,926,376	23,227,806,502
Weighted-average number of common shares outstanding	253,126,449 Shares	241,512,329 Shares	159,171,363 Shares	138,270,967 Shares
Earnings (loss) per share:				
Basic earnings (loss) per share	₩ (1,236)	(3,065)	335	76
Continuing operations	(1,236)	(3,065)	179	(92)
Discontinued operations	-	-	156	168

Weighted-average number of common shares outstanding for the three-month and six-month periods ended June 30, 2020 and 2019 are as follows:

(In shares)

	June 30, 2020		June 30, 2019	
	Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Issued common shares at the beginning of the period	253,126,449	202,138,396	117,138,396	117,138,324
Acquisition of treasury stock	-	(3,600)	-	-
Stocks issuance	-	39,377,533	42,032,967	21,132,596
Exercise of bonds with stock warrants	-	-	-	47
Weighted-average number of common shares outstanding at the end of the period	253,126,449	241,512,329	159,171,363	138,270,967

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(2) Diluted earnings (loss) per share

There is no potential common shares with dilutive effect for the six-month periods ended June 30, 2020 and 2019. Therefore, diluted earnings (loss) per share are the same as basic earnings (loss) per share. Details of potential common shares that are potentially dilutive but were not included in the calculation of loss per share, as there were no dilutive effects for the six-month periods ended June 30, 2020 and 2019 are as follows:

<i>(In shares)</i>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Stock option (2010.03.26)	-	2,900
Stock option (2011.03.25)	2,600	8,400
Stock option (2012.03.30)	8,400	21,300
Stock option (2013.03.29)	21,700	41,400
Stock option (2014.03.28)	50,900	77,900
Redeemable convertible preferred shares	-	12,904,210
Bonds with stock warrants	29,217,999	29,217,999
Total	<u>29,301,599</u>	<u>42,274,109</u>

25. Commitments and contingencies

- (1) As of June 30, 2020, 5 blank notes and 31 blank checks have been provided as collateral to relevant financial institutions and others for the Group's debt and guarantees.
- (2) As of June 30, 2020, the Group has credit lines for borrowings, bank overdraft and others from financial institutions up to ₩10,625,208 million and used ₩8,731,169 million, with unused credit lines amounting to ₩1,894,039 million.

As of June 30, 2020, the Company's borrowings (₩31,429 million) from SC Bank require that the credit ratings of the corporate bonds issued by the Company, respectively, evaluated by two or more credit rating agencies to be maintained at BBB or higher. In addition, borrowings (₩140,782 million) from Mashreq Bank require that the credit rating evaluated by the Korean credit rating agency to be maintained at BBB or higher during the borrowing agreement period, and if major financial indicators (the debt to equity ratio below 3 and interest coverage ratio above 2.2) cannot be maintained, additional investments are required within a certain period. Non-fulfillment of these debt covenants would trigger accelerated repayment of these borrowings. These borrowings contain an acceleration clause, but related financial institutions are delaying the application of the related clauses in consideration of changes in circumstances such as changes in the Company's business environment. Asset-backed borrowings of ₩155,000 million for the Group's KDPP 5th Co., Ltd. maintain a domestic effective credit rating of BB+ or higher, and failure to comply is a reason for early payment.

(3) Pending litigations and others

- 1) As of June 30, 2020, the Group is in the process of claiming damages amounting to ₩972.3 billion, and the result is currently unpredictable.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

2) In 2011, an external investor acquired 20% of interest in Doosan Infracore China Co., Ltd., a subsidiary of DI, for ₩380 billion. According to the shareholders' agreement entered into with DI, both parties have the right to request for the counterparty to jointly sell their respective shares to a third party. In case the external investor requests for such share, principally DI shall also jointly sell its share but also has a right to purchase the external investor's shares at the proposed purchase price.

In 2014, the external investor requested for due diligence information to initiate its sale of shares. However, as DI was not able to confirm the potential purchaser, DI was not able to provide such due diligence information which included confidential proprietary information. The external investor filed a claim with the Seoul District Court to obtain the due diligence information but on March 2, 2015 the claim was dismissed based on the ruling that DI was not liable to provide such information to the external investor.

In November 2015, the external investor claimed for payment of the share purchase price (share purchase price: ₩709.3 billion, claim amounts: ₩10 billion). The first ruling on January 12, 2017 dismissed the external investor's claim stating that DI did not breach its obligation to cooperate with the external investor's sale of its shares. However, on February 21, 2018 the court overturned the 1st ruling and recognized DI's obligation and ordered DI to pay the claim amounts of ₩10 billion.

On February 26, 2018 DI has appealed against the 2nd ruling to the Supreme Court. On February 28, 2018 the Seoul District Court has ruled that the DI application for court order suspension is valid and suspended the 2nd ruling's court order for payment.

In March 2018, the external investor made an additional claim for the payment of the share purchase price (claim amounts: ₩705.1 billion) and the case is in the process of first trial.

In accordance with the decision of reconciliation recommendation of the Seoul Central District issued in July 2018, DI has provided 8,288,196 shares in Doosan Bobcat Inc. as collateral and paid ₩10 billion as temporary payment to external investor. If DI prevails in the Supreme Court in the future, the external investor must cancel the pledge and return temporary payment to DI.

- (4) As of June 30, 2020, the Group has entered into 13 technical contracts with Mitsubishi Hitachi Power Systems, Ltd. and others. For the six-month periods ended June 30, 2020 and 2019, royalty payments amounted to ₩1,041 million and ₩639 million, respectively.
- (5) The Group continues to recognize factored financial assets in the consolidated statement of financial position since the Group holds virtually all the risks and rewards of ownership. The Group also recognizes the associated financial liabilities amounting to ₩7,070 million as of June 30, 2020.
- (6) As of June 30, 2020, the Group provides joint and several guarantees amounting to ₩362,304 million for the performance of construction contracts to other construction companies. In addition, the Group provides joint and several guarantees for construction performance to Korea Housing Finance Corporation related to the guarantee for housing sales, which was provided by Korea Housing Finance Corporation to the developers the company provides a conditional debt acquisition agreement (Limit: ₩1,214,100 million) to Gwangmyeong Medical Complex and two other projects if the project fails to fulfill its responsibilities. In addition, in relation to the SOC project, construction investors have an agreement to provide funds for the withdrawal when the agreement is terminated or a purchase is requested from the competent authority and if it is insufficient to repay the loan principal at the purchase price, there is a commitment to provide that funds.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(7) As of June 30, 2020, payment guarantees by financial institutions amounting to ₩12,264,334 million are provided for the Group in connection with domestic and overseas construction projects, issuance of foreign currency bonds and others.

(8) As of June 30, 2020, the Group provides payment guarantees amounting to ₩1,206,102 million to customers and purchasers of vacant lots for housing sales for the purpose of supporting reconstruction and redevelopment project unions and domestic and overseas sales.

(9) 1) As of June 30, 2020, the Company has provided a guarantee of payment of ₩14,910 million to Employee Stock Ownership Association for Union loan. Also, Doosan Mecatec Co., Ltd., a subsidiary as of June 30, 2020, is receiving a payment guarantee of ₩91,116 million from Doosan Corp. for construction guarantee purposes.

2) As of June 30, 2020, the Company is provided with shares and real estate trust beneficiary rights (Collateral amount: ₩3,600,000 million) of Doosan Corp., Doosan Heavy Industries & Construction, etc., held by 31 related parties other than Doosan Corp. and Park Jeong-won, for ₩3,000,000 million in borrowing commitments and ₩2,120,000 million related debts signed with KDB and Korea EXIM Bank, as collateral.

(10) As of June 30, 2020, details of guarantees provided by the Group for developers' project financing are as follows:

(In millions of won)

Type	Developer	Project name	Lender	Guarantee period	Guarantee limit	Loan balance	Guarantee type	
Loan	DEC	Pohang new port	Shinhan Bank and others	2010.03.26~ 2025.12.31	₩ 3,385	3,385	Joint surety	
		Daejeon Riverside	Hana Bank	2019.05.07~ 2022.05.06				1,300
			Subtotal		4,685	4,685		
AB short-term bond	DEC	Cheonan	BNK Securities	2020.06.19~ 2020.09.18	48,000	48,000	"	
		Cheonan Chengdangdong	BNK Securities	2020.06.30~ 2020.07.30	130,000	130,000	"	
		Yongin Samga	BNK Securities	2020.06.19~ 2020.09.15	30,000	14,900	"	
		Yongin Samga	BNK Securities	2020.06.30~ 2020.09.15				15,100
		Yongin Samga	BNK Securities	2020.06.26~ 2020.09.25	100,000	99,000	"	
		Yongin Samga	BNK Securities	2020.06.30~ 2020.07.30	40,000	40,000	"	
		Osong Complex	Shinyoung Securities	2020.06.30~ 2020.07.30	70,000	50,000	"	
				Subtotal		418,000	397,000	
				Total		₩ 422,685	401,685	

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(11) Details of consolidated structured entities as of June 30, 2020 are as follows:

(In millions of won)

Entity	Nature of interests in consolidated structured entities or provision of financial support	Liability amount of interests in consolidated structured entities	Maximum exposure to the loss of consolidated structured entities
DEC			
New start DM 7 th Co., Ltd.(*1)	Obligation for financial support including principle, interest, etc.	₩ 30,000	30,000
PINETREECITY 1 st Co., Ltd.(*2)	"	3,900	3,900
DM Best 3 rd Co., Ltd.(*3)	"	50,000	50,000
New start DM 8 th Co., Ltd.(*4)	"	30,000	30,000
Great GM 4 th Co., Ltd.(*5)	"	30,000	30,000
DS Munsuro 1 st Co., Ltd.(*6)	"	9,750	9,750
Buildup 1 st Co., Ltd.(*7)	"	15,000	15,000
KJDS 1 st Co., Ltd.(*8)	"	15,500	15,500
Doosan E&C 4 th Co., Ltd.(*9)	"	85,000	85,000
The Company			
KDPP 5 th Co., Ltd.(*10)	"	155,000	201,500
U-best 5 th Co., Ltd.(*11)	"	160,000	160,000

(*1) New start DM 7th Co., Ltd. was established for the purpose of liquidating future contract bonds of Goyanghyang-dong 4 zone and 4 subcontractors owned by DEC. As of June 30, 2020, the amount of the underlying assets is ₩30,000 million, based on their carrying amount in the financial statements.

(*2) PINETREECITY 1st Co., Ltd. was established for the purpose of borrowing by providing DEC's Changwon 2nd plant as subordinated collateral. The Group issued ABS bonds to financial institution for funding and the book value of underlying assets are amounting to ₩3,900 million based on its financial statement as of June 30, 2020. The Group has provided the certain portion of properties for obligation for financial supporting for the company (See Note 26).

(*3) DM Best 3rd Co., Ltd. was established for the purpose of securitizing future construction receivables from seven government-ordered construction project including Yeouido Sillim Light Rail project of DEC. It receives funds from issuing ABS bonds to financial institutions. Based on the book value presented in its financial statements, underlying assets amounted to ₩50,000 million as of June 30, 2020.

(*4) New start DM 8th Co., Ltd. was established for the purpose of securitizing future construction receivables from Seoul Moonsan road and other 2 government-ordered construction project. It receives funds from issuing ABS bonds to financial institutions. Based on the book value presented in its financial statements, underlying assets amounted to ₩30,000 million as of June 30, 2020.

(*5) Great GM 4th Co., Ltd. was established for the purpose of securitizing future construction receivables from Busan-Guseo and other 3 government-ordered construction projects of DEC. It receives funds from issuing ABS bonds to financial institutions. Based on the book value presented in its financial statements, underlying amounting to ₩30,000 million as of June 30, 2020.

(*6) DS Munsuro 1st Co., Ltd. was established for the purpose of securitizing future construction receivables from Ulsan Munsuro Doosan We've the Zenith government-ordered construction projects of DEC. It receives funds from issuing AB private bonds to financial institutions. Based on the book value presented in its financial statements, underlying amounting to ₩9,750 million as of June 30, 2020.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

- (*7) Buildup 1st Co., Ltd. was established for the purpose of securitizing future construction receivables from Korean Culture Theme Park and other 2 government-ordered construction projects of DEC. It receives funds from issuing ABS bonds to financial institutions. Based on the book value presented in its financial statements, underlying amounted to ₩15,000 million as of June 30, 2020.
- (*8) KJDS 1st Co., Ltd. was established for the purpose of securitizing future construction receivables from Jwacheon Beomil integrated district 3 Urban Environment Improvement Project (Doosan We've the Zenith Harbor City) government-ordered construction projects of DEC. It receives funds from issuing ABL to financial institutions. Based on the book value presented in its financial statements, underlying amounted to ₩15,500 million as of June 30, 2020.
- (*9) Doosan E&C 4th Co., Ltd. was established for the purpose of securitizing future construction receivables from Saemangeum-Jeonju 8 zone and other 3 government-ordered construction projects of DEC and of borrowing by providing DEC's Changwon 2nd plant as senior collateral the company issued ABCP and ABL to financial institution for funding and the book value of underlying assets are amounting to ₩85,000 million based on its financial statement as of June 30, 2020. The Group has provided the certain portion of properties for obligation for financial supporting for the company (See Note 26).
- (*10) KDPP 5th Co., Ltd. was established for the purpose of securitizing future construction receivables belongs to the Company. It is mainly financed by issuing ABSTBs from financial institutions. The carrying amount is ₩155,000 million as of June 30, 2020.
- (*11) U-best 5th Co., Ltd. was established for the purpose of securitizing newly issued bonds of the Company and DI. The amount is ₩160,000 million based on the carrying amount in the financial statements as of June 30, 2020.

(12) Other commitments and contingencies

1) As of June 30, 2020, DI issued 32nd and 57th series bond denominated in USD 300 million respectively. In accordance with the agreement for issuing the 32nd and 57th series bonds, an early redemption clause exists for when and if DI's guarantor, KDB, becomes no longer controlled by Korean government. In addition, DI has provided its 11,533,388 shares and 11,362,886 shares of Doosan Bobcat Inc. to lenders as collateral for above bonds, respectively. And if the total value of the shares provided is less than the collateral standard price, additional shares or deposits equivalent to the difference amounts should be provided. Meanwhile, as of June 30, 2020, ₩40,759 million in time deposits has been provided as collateral to KDB and others for 32nd overseas bonds.

2) As of June 30, 2020, DI has provided 8,595,047 shares of Doosan Bobcat Inc. as collateral for borrowings of ₩160,000 million from KDB and other 4 other financial institutions. In connection with the borrowings, if the ratio does not meet the contracted collateral limit, additional collateral must be provided. In addition, in case DI receives a long-term credit rating of BB0 or lower from more than two of the domestic credit rating agencies (NICE Investors Service Co., Ltd., Korea Investors Service, Inc., Korea Ratings Corporation), this is a trigger clause for the financial institutions to collect the loans before the maturity.

3) For ₩50,000 million of 61st bond issued by DI as of June 30, 2020, DI includes an agreement that constitutes the reason for the loss of profit due when the long-term credit rating granted by one or more of the three domestic credit rating agencies (NICE Investors Service Co., Ltd., Korea Investors Service, Inc., Korea Ratings Corporation) is below BB+.

4) As of June 30, 2020, DI has provided 3,650,000 shares of Doosan Bobcat Inc. as collateral for borrowings of ₩100,000 million from SC Bank. In connection with the borrowings, if the ratio does not meet the contracted collateral limit, additional shares or deposits equivalent to the difference amounts should be provided.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

5) As of June 30, 2020, DI's borrowings of ₩40,000 million from Mizuho Bank, DI includes an agreement that constitutes the reason for the loss of profit due when the credit rating granted by accredited credit rating agency is below BB+.

6) As of June 30, 2020, DEC entered into construction contracts with INTDC Co., Ltd. and Daewon Plus Constructions Co., Ltd., to develop Ilsan Zenith project and Haeundae Zenith project, respectively. DEC has provided guarantees to customers, who purchase the Ilsan Zenith and Haeundae Zenith apartments, for the consideration paid to purchase the apartments during the repurchase guarantee periods (2~3 years after the date of sale), should customers apply for such guarantees (See Note 25-(8)). As of June 30, 2020, the Group's consolidated interim financial statements do not reflect the effect from such guarantees as the Group cannot reasonably predict the number of purchasers applying for the guarantee and the related guaranteed amount.

7) As of June 30, 2020, the Company has agreed to take responsibility for the completion of projects and assume liabilities (limit: ₩446,300 million). If it fails to complete construction of Namyangju Baekbong District Apartment House, Gyeongju Yonggang-dong Doosan We've, Anyang Myeonghak, Hanam Misa and Yeosu Ungcheon Project.

8) As of June 30, 2020, DI entered into invest agreements with Nautilus Venture Partners Fund II, L.P. and other 4 funds. And the amounts of remaining agreements are USD 14,000 thousand.

9) As of June 30, 2020, the Company and DI, DEC and Doosan Bobcat Korea Co., Ltd. which are its subsidiaries have signed a 15-year lease contract with DBC to lease Doosan Bundang Center.

10) As of June 30, 2020, Doosan Heavy Industries Vietnam Haiphong Co., Ltd., a subsidiary of DEC, didn't recognized provisions because it could not estimate payment obligations and the resources to be leaked from the costs incurred at the end of the land permit for the lease of factory land with Haiphong Department of Natural and Resources.

11) As of June 30, 2020, the Company is an investor of Samcheok Blue Power Co., Ltd. which is responsible for the EPC construction project of Samcheok #1, 2 TPP and is obligated to make an additional investment of ₩77,740 million in the related investor agreement in September 2023. If two or more credit rating agencies give a rating below BBB-, it is required to submit an investment performance guarantee for additional investment obligations within 60 days from the date of decline in the Company's credit rating.

12) The Group is providing payment guarantee to the client in connection with the implementation of the Sharqiyah EPC project. The credit rating of the Company evaluated by the Korea Credit Rating Agency must be maintained at the BBB or higher, and if this is not maintained, it is obligated to provide a valid guarantee under the same conditions within 10 days from the date of the decline in the credit rating. Meanwhile, as of June 30, 2020, the application of the related provisions has been suspended in consideration of various circumstances such as changes in the Company's business environment.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

26. Assets pledged as collateral

(1) Assets pledged as collateral related with debt

1) As of June 30, 2020, assets that have been pledged as collateral for the Group's borrowings and others are as follows:

(In millions of won)

Pledger	Collateralized asset	Amount of		Pledgee
		Collateralized amount	borrowings and others	
The Company	Property, plant and equipment	₩ 2,171,008	1,630,290	KDB and others
	Investments in subsidiaries and equity shares(*1)	1,082,288	2,478,922	Construction Guarantee Cooperative and others
	Inventories	18,065	15,000	Korea EXIM Bank
	Subtotal	3,271,361	4,124,212	
DI	Property, plant and equipment(*2)	673,733	318,232	KDB and others
	Inventories(*2)	195,000	150,000	Korea EXIM Bank
	Subtotal	868,733	468,232	
DEC	Property, plant and equipment(*3)	305,000	168,952	KDB and others
	Investments in subsidiaries and the rights to the benefits(*4)	234,055	-	Woori Bank
	Equity shares	36,517	27,039	Construction Guarantee Cooperative
	Subtotal	575,572	195,991	
Cuvex	The rights to the benefits(*5)	63,600	53,000	Saengbo Real Estate Trust Co., Ltd.
	Total	₩ 4,779,266	4,841,435	

(*1) The amount of collateral provided for ₩614,600 million is included in borrowing ₩2,120,000 million related to emergency operation fund arrangements. In accordance with this borrowing agreement, Doosan Corp., Park Jeong-won and 31 related persons provide stocks of Doosan Corp. and Doosan Heavy Industries & Construction and others and real estate trust beneficiary rights and others as collateral (See Note 25).

(*2) The rights to the benefits from property insurance have been pledged as collateral to KDB.

(*3) Doosan Mecatec Co., Ltd.'s borrowing of ₩80,052 million is included in the amount of collateral provided to ₩97,000 million.

(*4) It includes collateral (₩107,796 million) on investment property provided by subsidiary Valueworks Co., Ltd.

(*5) Receivables of real estate security on property, plant and equipment.

2) Subsidiary of DI, Clark Equipment Co. ("CEC") entered into a loan agreement to borrow USD 1,345,000 thousand and overdraft limit agreement of USD 150,000 thousand on May 18, 2017. In addition, as of May 29, 2020, it issued USD 300,000 thousand bonds. Doosan Bobcat Inc. provided all of shares of CEC, Doosan Bobcat EMEA s.r.o, Doosan Bobcat Global Collaboration Center, Inc. and Doosan Bobcat Singapore Pte. Ltd. as collateral for borrowings, bonds and overdraft limit agreement. Doosan Bobcat Inc. also provided the certain portion of properties and its shares of subsidiaries as collateral. As of June 30, 2020, the relevant balance of borrowings and bonds are USD 950,288 thousand and the total collateral amount is USD 1,449,724 thousand.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(2) Other Assets pledged as collateral

1) As of June 30, 2020, assets pledged as collateral on behalf of others are summarized as follows:

(In millions of won)

<u>Pledger</u>	<u>Collateralized asset</u>	<u>Book value</u>	<u>Pledgee</u>	<u>Beneficiary</u>
The Company	Long-term investment securities and others	₩ 21,596	Kookmin Bank and others	Incheon-Gimpo Expressway Co., Ltd. and others
DEC	Long-term investment securities	64,940	KDB and others	Sudokwon Seobu Expressway Co., Ltd. and others
	Investments in associates and joint venture	7,046	KDB and others	New Seoul Railroad Co., Ltd. and others
	Subtotal	71,986		
	Total	₩ 93,582		

2) As of June 30, 2020, the Company has entered into a contract of completion guarantee regarding the Samcheok #1,2 TPP construction project and provided 1,193,066 shares (₩43,568 million) in Samcheok Blue Power Co., Ltd. as collateral.

3) As of June 30, 2020, the Company entered into exchange rights agreement with the Korea EXIM Bank regarding hybrid bonds with equity shares issued by DPS S.A. The Korea EXIM Bank is granted the right to request the exchange of hybrid securities for the Company's common stock and obliged to cash settlement in accordance with the investor's put option rights exercise. In this regard, the Company has provided as collateral 75,509,366 shares (₩1,483,471 million) of the subsidiary DI to Korea EXIM Bank.

4) The Group, DI has entered into a contract of completion guarantee for the ₩375,000 million PF loan contract signed by its affiliated company, DBC, to establish the Doosan Bundang Center. As of June 30, 2020, the Group provides 1,057,880 shares of DBC (₩53,066 million) and claims for construction insurance claims (₩252,300 million) as collateral.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

27. Related party transactions

(1) The related parties of the Group and nature of their relationship with the Group as of June 30, 2020 are as follows:

1) As of June 30, 2020, the Group's ultimate parent company is Doosan Corp. (equity ownership: 44.86%).

2) The details of the Group's associates, joint ventures, and other related parties as of June 30, 2020 are as follows :

Control relationship	Related party
Associates and joint ventures(*3)	The HS-City Expressway, Samcheok Blue Power Co., Ltd.(*1), Daejung Offshore Wind Power Co., Ltd., Doosan Babcock Blackcat W.L.L, Shinbundang Railroad Co., Ltd., Kyunggi Railroad Co., Ltd., Neo Trans Co., Ltd., New Seoul Railroad Co., Ltd., Potenit Co., Ltd., KIAMCO Kyunggi Railway Investment Private property investment trust, Incheon fuel cell Co., Ltd., Doosan Infracore Liaoning Machinery Sales Co., Ltd., Tianjin Lovol Doosan Engine Co., Ltd., DBC Co., Ltd., ReCarbon, Inc.(*2) and others
Other related parties	
Subsidiaries of the parent company(*5)	Oricom Inc., Hancorn Co., Ltd., Doosan Bears Inc., Doosan Business Research Institute(*4), Doosan Robotics Co., Ltd., Neoplux Co., Ltd., Doosan Mobility Innovation Inc., Doosan Logistics solution Co., Ltd., Sunny Russel 8 th Corporation, D PAY 1 st Co., Ltd., D PAY 2 nd Co., Ltd.(*6), New Star Motive 1 st Co., Ltd.(*6), Doosan 2 nd Real Estate Securitization Specialty Co., Ltd., Doosan Mobility Innovation (Shenzhen) Co., Ltd., Doosan Electro-Materials Singapore Pte Ltd., Doosan Hongkong Ltd., Doosan Electro-Materials (Shen Zhen) Ltd., Doosan Shanghai Chemical Materials Co., Ltd., Doosan Electro-Materials (Changshu) Co., Ltd., Doosan Digital Innovation America LLC, Doosan Digital Innovation China LLC, Doosan Mottrol (Jiangyin) Co., Ltd., Doosan Digital Innovation Europe Limited, Doosan Industrial Vehicle Europe N.A., Doosan Industrial Vehicle UK Ltd., Doosan Logistics Europe GmbH, Doosan Industrial Vehicle America Corp., Doosan Material Handling Solutions LLC, Doosan Industrial Vehicle Yantai Co., Ltd., Genesis Forklift Trucks Limited, Rushlift Holdings Ltd., Doosan Materials Handling UK Ltd., Rushlift Ltd., Doosan Electro-Materials America, LLC, Doosan Fuel Cell America, Inc., DESA Service, LLC, Doosan Energy Solutions America, Inc., Doosan Electro-Materials Vietnam Company Limited(*6) and others
Associates and joint ventures of the parent company	Prestoliteasia Co., Ltd., KDDI Korea Co., Ltd., Wise Fashion Co., Ltd., Protera SAS.(*7), Sichuan Kelun-Doosan Biotechnology Company Limited and others
Others	Chung-Ang University, Chung-Ang University Hospital, Doosan Credit Union, Yonkang Foundation, Dongdaemoon Miraechangcho Foundation, Daejeon Riverside Expressway Co., Ltd., Doosan Solus Co., Ltd., Doosan Fuel Cell Co., Ltd., Doosan Electro-Materials Luxembourg Sarl, Doosan Corporation Europe Kft. and others

(*1) The company name was changed from POSPOWER Co., Ltd. to Samcheok Blue Power Co., Ltd. in 2020.

(*2) It was converted from other related parties into associates.

(*3) Haman Industrial Complex Company was liquidated in 2020.

(*4) The company name was changed from Doosan Leadership Institute to Doosan Business Research Institute in 2020.

(*5) Doosan Mecatec Co., Ltd. was converted from other related parties into subsidiaries in 2020.

(*6) Newly acquired in 2020.

(*7) The company name was changed from Geaenzymes to Protera SAS. in 2020.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(2) Significant transactions (excluding financial and investment) with related parties for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

		June 30, 2020						
		Sales and others			Purchases and others			
		Disposal of PP&E and intangible assets			Acquisition of PP&E and intangible assets			Acquisition of right-of-use assets
		Sales	Other revenue	Other	Purchase	Other expense		
Parent:								
Doosan Corp.	₩	36,586	473	2,221	51,373	3,539	43,869	2,228
Associates and joint ventures:								
DBC Co., Ltd.		28,497	-	169	-	-	-	-
New Seoul Railroad Co., Ltd.		7,722	-	-	-	-	-	-
Neo Trans Co., Ltd.		2,970	-	-	-	-	-	-
Samcheok Blue Power Co., Ltd.		122,981	-	-	-	-	-	-
Others		38	-	-	93	-	-	-
Subtotal		<u>162,208</u>	<u>-</u>	<u>169</u>	<u>93</u>	<u>-</u>	<u>-</u>	<u>-</u>
Other related parties:								
Oricom Inc.		802	-	18	7	-	6,466	-
Doosan Bears Inc.		490	-	-	257	-	10,159	-
Doosan Digital Innovation America LLC		-	-	443	-	-	24,326	-
Doosan Digital Innovation China LLC		-	-	-	-	-	2,639	-
Doosan Mottrol (Jiangyin) Co., Ltd.		-	-	-	52,629	-	-	-
Doosan Business Research Institute		1,063	-	9	-	-	4,441	-
Chung-Ang University		-	-	-	-	-	5,924	-
Others		2,533	-	335	-	-	513	105
Subtotal		<u>4,888</u>	<u>-</u>	<u>805</u>	<u>52,893</u>	<u>-</u>	<u>54,468</u>	<u>105</u>
Total	₩	<u>203,682</u>	<u>473</u>	<u>3,195</u>	<u>104,359</u>	<u>3,539</u>	<u>98,337</u>	<u>2,333</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(In millions of won)

		June 30, 2019						
		Sales and others			Purchases and others			
		Disposal of PP&E and intangible assets		Other revenue	Acquisition of PP&E and intangible assets			Acquisition of right-of-use assets
		Sales	Purchase	Purchase	Purchase	Other expense	Purchase	Purchase
Parent:								
Doosan Corp.	₩	44,095	2	3,521	58,404	47,563	49,938	-
Associates and joint ventures:								
New Seoul Railroad Co., Ltd.		14,914	-	-	-	-	-	-
Neo Trans Co., Ltd.		3,027	-	-	-	-	-	-
POSPOWER Co., Ltd.		46,506	-	-	-	-	-	-
Others		192	-	-	-	75	-	-
Subtotal		<u>64,639</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>75</u>	<u>-</u>
Other related parties:								
Oricom Inc.		1,186	-	19	144	-	9,582	-
Doosan Bears Inc.		547	-	1	271	-	11,535	-
Doosan Digital Innovation America LLC		-	-	24	-	-	22,875	2,019
Doosan Information and Communications China Co., Ltd.		-	-	-	-	-	2,076	-
Doosan Leadership Institute		1,082	-	8	-	-	4,870	-
Chung-Ang University Industrial-Academic Cooperation Group		-	-	-	-	-	5,500	-
Doosan Mecatec Co., Ltd.		5,450	-	10	3	-	3	-
Doosan Energy Solution Kft.		2,794	-	-	-	-	-	-
Others		924	-	438	53,347	-	1,691	-
Subtotal		<u>11,983</u>	<u>-</u>	<u>500</u>	<u>53,765</u>	<u>-</u>	<u>58,132</u>	<u>2,019</u>
Total	₩	<u>120,717</u>	<u>2</u>	<u>4,021</u>	<u>112,169</u>	<u>47,563</u>	<u>108,145</u>	<u>2,019</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(3) The outstanding receivables and payables arising from the transactions with related parties (excluding dividend and investment) as of June 30, 2020 and December 31, 2019 are as follows:

(In millions of won)

		June 30, 2020					
		Receivables			Payables		
		Trade	Loans	Other	Trade	Other	Lease
		receivables	receivables	receivables	payables	payables	liabilities
Parent:							
Doosan Corp.	₩	21,730	-	5,584	18,963	29,381	4,731
Associates and joint ventures:							
Kyunggi Railroad Co., Ltd.		792	40,217	-	-	-	-
Shinbundang Railroad Co., Ltd.		11,023	32,574	-	-	-	-
Others		699	-	9	-	152	-
Subtotal		<u>12,514</u>	<u>72,791</u>	<u>9</u>	<u>-</u>	<u>152</u>	<u>-</u>
Other related parties:							
Oricom Inc.		701	-	1,607	4,232	4,002	-
Doosan Fuel Cell Co., Ltd.		-	-	-	13,398	404	-
Doosan Mottrol (Jiangyin) Co., Ltd.		-	-	-	40,952	-	-
Others		573	-	2,118	94	5,468	1,617
Subtotal		<u>1,274</u>	<u>-</u>	<u>3,725</u>	<u>58,676</u>	<u>9,874</u>	<u>1,617</u>
Total	₩	<u>35,518</u>	<u>72,791</u>	<u>9,318</u>	<u>77,639</u>	<u>39,407</u>	<u>6,348</u>

(In millions of won)

		December 31, 2019						
		Receivables			Payables			
		Trade	Loans	Other	Trade	Other	Lease	
		receivables	receivables	receivables	payables	Borrowings	payables	
						liabilities		
Parent:								
Doosan Corp.	₩	11,659	-	5,200	19,247	-	23,610	5,285
Associates and joint ventures:								
Kyunggi Railroad Co., Ltd.		792	36,521	-	-	-	-	-
Shinbundang Railroad Co., Ltd.		11,023	32,574	-	-	-	-	-
Others		2,059	-	9	-	-	152	-
Subtotal		<u>13,874</u>	<u>69,095</u>	<u>9</u>	<u>-</u>	<u>-</u>	<u>152</u>	<u>-</u>
Other related parties:								
Oricom Inc.		763	-	18	6,035	-	5,092	-
Doosan Fuel Cell America, Inc.		-	-	-	-	6,258	-	-
Doosan Mecatec Co., Ltd.		2,321	-	11	-	-	6,960	-
Others		3,490	-	772	43,596	-	4,986	1,863
Subtotal		<u>6,574</u>	<u>-</u>	<u>801</u>	<u>49,631</u>	<u>6,258</u>	<u>17,038</u>	<u>1,863</u>
Total	₩	<u>32,107</u>	<u>69,095</u>	<u>6,010</u>	<u>68,878</u>	<u>6,258</u>	<u>40,800</u>	<u>7,148</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(4) Financial transactions (including investment) with related parties for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

		June 30, 2020			
		Loans		Investments	
		Loans	Collection	Received	Provided
Parent:					
Doosan Corp.	₩	-	-	238,199	-
Associates and joint ventures:					
Kyunggi Railroad Co., Ltd.		3,696	-	-	-
Incheon fuel cell Co., Ltd.		20,500	20,500	-	-
Others		-	-	-	5,403
Subtotal		24,196	20,500	-	5,403
Total	₩	24,196	20,500	238,199	5,403

(In millions of won)

		June 30, 2019										
		Loans		Borrowings		Investments		Dividend		Shares		
		Repayment of										
		Loans	Collection	Borrowing	Repayment	lease liabilities	Received	Provided	Income	Payout	Acquisition	Disposal
Parent:												
Doosan Corp.	₩	-	-	-	-	-	141,586	-	-	-	-	29,114
Associates and joint ventures:												
Kyunggi Railroad Co., Ltd.		4,312	-	-	-	-	-	-	-	-	-	-
Other related parties:												
Doosan Digital Innovation America LLC		-	-	-	-	468	-	-	-	-	-	-
Doosan Fuel Cell America, Inc.		-	-	6,258	-	-	-	-	-	-	-	-
KDDI Korea Co., Ltd.		-	-	-	-	-	-	-	58	-	-	-

(5) The Group provides payment guarantees and collateral for certain related parties as of June 30, 2020 (See Notes 25 and 26).

(6) Key management personnel are standing directors who have authorities and responsibilities for planning, operation and control of the business of the Group. Compensation for key management personnel for the three-month and six-month periods ended June 30, 2020 and 2019 consists of following:

(In millions of won)

		June 30, 2020		June 30, 2019	
		Three-month period ended	Six-month period ended	Three-month period ended	Six-month period ended
Short-term employee benefits	₩	7,237	19,851	11,470	25,312
Severance and retirement benefits		375	1,197	934	2,730
Total	₩	7,612	21,048	12,404	28,042

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

28. Consolidated interim statements of cash flows

(1) Details of cash generated from operation for the six-month periods ended June 30, 2020 and 2019 are as follows:

<i>(In millions of won)</i>	<u>June 30, 2020</u>	<u>June 30, 2019</u>
Profit (loss) for the period:	₩ (623,117)	240,301
Adjustments:		
Interest expenses	229,381	257,258
Loss on foreign currency translation	97,639	102,713
Bad debt expenses (reversal)	21,058	(1,369)
Other bad debt expenses	147,203	7,302
Loss on valuation of inventory	8,509	15,596
Loss on valuation of derivative financial instruments	156,391	146,241
Loss on valuation of firm commitments	8,218	16,541
Loss on equity method investments	7,997	1,066
Depreciation	197,569	164,489
Amortization	90,294	89,649
Loss on disposal of property, plant and equipment	702	892
(Reversal of) Impairment loss of property, plant and equipment	16	(9)
Impairment loss of intangible assets	-	263
Impairment loss of asset held-for sale	-	24,589
Severance and retirement benefits	60,782	52,357
Provision for construction warranties	21,197	6,061
Provision for others	132,023	-
Loss on redemption of bonds	32,538	2,745
Loss on disposal of trade receivables	10,920	8,618
Income tax expense	121,072	133,547
Interest income	(21,589)	(20,909)
Dividend income	(1,115)	(1,341)
Gain on foreign currency translation	(77,237)	(54,080)
Gain on valuation of derivatives financial instruments	(62,183)	(87,841)
Gain on valuation of firm commitments	(67,759)	(101,122)
Gain on disposal of property, plant and equipment	(2,060)	(934)
Gain on disposal of discontinued operations	-	(30,096)
Others	26,065	11,715
Subtotal	₩ <u>1,137,631</u>	<u>743,941</u>

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(In millions of won)

	June 30, 2020	June 30, 2019
Changes in operating assets and liabilities:		
Trade receivables	₩ (220,792)	(368,143)
Due from customers for contract work	39,702	(275,143)
Other receivables	(141,053)	25,385
Derivative financial assets and liabilities	(8,072)	(39,131)
Firm commitments assets and liabilities	40,383	39,042
Inventories	(12,636)	(248,113)
Other current assets	(101,897)	(95,238)
Other non-current assets	703	5,722
Trade payables	(230,008)	(205,883)
Due to customers for contract work	204,222	(78,463)
Other payables	(21,769)	(171,780)
Reserve for construction warranties	(15,803)	23,204
Reserve for other warranties	(9,470)	(1,909)
Other current liabilities	2,597	93,672
Other non-current liabilities	10,004	7,564
Severance payments paid	(133,191)	(39,567)
Plan assets	121,216	765
Subtotal	<u>(475,864)</u>	<u>(1,328,016)</u>
Total	<u>₩ 38,650</u>	<u>(343,774)</u>

(2) Significant non-cash transactions for the six-month periods ended June 30, 2020 and 2019 are as follows:

(In millions of won)

	June 30, 2020	June 30, 2019
Transfer from investment property to property, plant and equipment	₩ 433,702	-
Classification of assets classified as disposal group held-for-sale	-	170,736
Transfer from construction-in-progress to another account	65,112	31,899
Transfer to current portion of bonds, borrowings and others	590,475	1,441,151
Changes in other payables from acquisition of property, plant and equipment	(28,184)	(28,465)

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

(3) Change of liability in financing activities for the six-month periods ended June 30, 2020 and 2019 are summarized as follows:

(In millions of won)

	Balance at January 1, 2020	Cash flows from financing activities, net	Non-cash changes				Balance at June 30, 2020
			Current portion of long-term debt	Changes in foreign currency translation	Changes in consolidation scope	Others	
Short-term borrowings	₩ 3,767,270	2,250,714	-	11,938	45,691	-	6,075,613
Asset-backed borrowings	381,574	(260,875)	-	-	-	(309)	120,390
Current portion of long-term debt	3,265,485	(1,942,272)	567,285	10,605	-	57,816	1,958,919
Current lease liabilities	80,788	(35,189)	23,190	798	98	4,630	74,315
Bonds	846,835	516,334	(292,534)	25,739	-	1,875	1,098,249
Long-term borrowings	1,697,983	173,755	(54,833)	23,612	-	6,783	1,847,300
Long-term asset backed borrowings	292,290	-	(219,918)	-	-	957	73,329
Non-current lease liabilities	175,750	(11,865)	(23,190)	85	115	38,682	179,577
Total	₩ 10,507,975	690,602	-	72,777	45,904	110,434	11,427,692

(In millions of won)

	Balance at January 1, 2019	Cash flows from financing activities, net	Non-cash changes				Balance at June 30, 2019
			Current portion of long-term debt	Changes in foreign currency translation	Changes in consolidation scope	Others(*1)	
Short-term borrowings	₩ 2,840,072	516,456	-	33,837	-	-	3,390,365
Asset-backed borrowings	491,371	12,500	-	-	-	(191)	503,680
Current portion of long-term debt	2,049,828	(1,031,965)	1,420,618	36,786	-	12,446	2,487,713
Current lease liabilities	-	(14,418)	20,533	(123)	-	48,421	54,413
Bonds	2,053,033	412,471	(702,582)	23,220	-	26,570	1,812,712
Long-term borrowings	3,043,437	(20,498)	(618,036)	36,422	(180,600)	3,981	2,264,706
Long-term asset backed borrowings	248,788	80,000	(100,000)	-	-	631	229,419
Non-current lease liabilities	-	(11,974)	(20,533)	2,076	-	200,019	169,588
Total	₩ 10,726,529	(57,428)	-	132,218	(180,600)	291,877	10,912,596

(*1) The amount of lease liability recognized in accordance with K-IFRS No. 1116 is included.

29. Discontinued operations

(1) Summary of discontinued operations

1) Business division of DBC

For the year ended December 31, 2019, the Group completed the disposal of shares of its subsidiary, DBC and lost control. The Group reclassified segment of DBC to discontinued operations in 2019.

2) HRSG & CPE business division

The Group completed the disposal of its HRSG and CPE divisions (owned by DEC and Doosan Heavy Industries Vietnam Co., Ltd., subsidiaries of the Company) in 2017.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

(2) The results of discontinued operations of the Group for the six-month period ended June 30, 2019 is as follows:

(In millions of won)

	June 30, 2019			
	DBC	HRSG	CPE	Total
Sales	₩ -	350	-	350
Cost of sales	-	120	-	120
Selling and administrative cost	54	6,600	(359)	6,295
Operating profit (loss)	(54)	(6,370)	359	(6,065)
Other non-operating income (expense)	14	(1,551)	(21)	(1,558)
Profit (loss) before income tax	(40)	(7,921)	338	(7,623)
Income tax expense	-	-	-	-
Profit (loss) from discontinued operations	(40)	(7,921)	338	(7,623)
Gain on disposal of discontinued operations	30,096	-	-	30,096
Tax expense related to disposal of discontinued operations	108	-	-	108
Subtotal	29,988	-	-	29,988
Profit (loss) for the six-month period from discontinued operations	₩ 29,948	(7,921)	338	22,365
Owners of the Company	29,965	(7,038)	301	23,228
Non-controlling interests	(17)	(883)	37	(863)

(3) The net cash flows incurred by discontinued operations of the Group for the six-month period ended June 30, 2019 is as follows:

(In millions of won)

	June 30, 2019			
	DBC	HRSG	CPE	Total
Net cash from (used in) operating activities	₩ 698	(10,614)	(3,812)	(13,728)
Net cash provided by (used in) investing activities(*1)	20,187	(1)	-	20,186
Net cash provided by financing activities	2,400	10,615	3,812	16,827
Net cash flow	₩ 23,285	-	-	23,285

(*1) Investing activities includes cash flows from disposal of discontinued operations.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES
Notes to the Consolidated Interim Financial Statements
As of June 30, 2020 and December 31, 2019
(Unaudited)

30. Business combinations

(1) Summary of business combinations

In accordance with the resolution of the Board of Directors on December 5, 2019, the Group acquired 100% of Doosan Mecatec Co., Ltd. common shares held by Doosan Corp. on February 5, 2020, through investment in kind.

	<u>Description</u>
Name of the acquired company	Doosan Mecatec Co., Ltd.
Major business activities	Manufacture of chemical equipment for oil, gas, and petrochemical plants
Purpose of acquisition	Creating business synergy with power generation facility supply business and diversifying portfolio
Ownership after acquisition	100%

(2) Acquisition accounting

The amounts of assets and liabilities were measured at fair value at the acquisition-date. The consideration transferred and fair value of identifiable net assets are as follows:

<i>(In millions of won)</i>	<u>Amount</u>
I. Consideration transferred	₩ 238,199
Common stock (44,102,845 shares)	
II. The amounts recognized as identifiable assets and liabilities	
Assets	
Cash and cash equivalents	60,687
Trade and other receivables	39,950
Due from customers for contract work	128,801
Inventories	12,456
Property, plant and equipment	30,931
Intangible assets(*1)	16,029
Other assets	120,571
Total assets	<u>409,425</u>
Liabilities	
Trade and other payables	92,785
Short-term borrowings	45,691
Due to customers for contract work	24,388
Deferred tax liabilities	3,322
Other liabilities	26,136
Total liabilities	<u>192,322</u>
Fair value of total identifiable net assets	<u>217,103</u>
III. Goodwill (I-II)	₩ <u>21,096</u>

(*1) The identifiable intangible assets include orders on hand of ₩6,200 million and customer relationship of ₩8,900 million.

DOOSAN HEAVY INDUSTRIES & CONSTRUCTION CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Interim Financial Statements

As of June 30, 2020 and December 31, 2019

(Unaudited)

The Group prepared the consolidated financial statements considering that the business combination occurred on January 1, 2020, and the revenue and net profit generated from Doosan Mecatec Co., Ltd. for the six-month period ended June 30, 2020 after acquisition was ₩191,504 million and ₩12,036 million, respectively.

31. Pursuance of the financial structure improvement plan

The Group faces financial difficulties as the current borrowings amounted to ₩8,154,922 million as of June 30, 2020, due to accumulated losses since 2014 arise from the recession in the global power market and changes in the external environment and the Group's current liabilities exceeds the current assets by ₩4,272,864 million. This situation raises significant questions about the Group's ability as a going concern.

In order to overcome such a management crisis, the Group is carrying out a plan to rationalize management, including improvement of profitability, including restructuring of human resources, and carries out a plan to improve the financial structure in stages, such as reducing debts through expansion of capital. As a result, the Board of Directors held on February 14, 2020 decided on a plan to restructure the workforce to secure financial soundness, and on March 10, 2020, the Company gave a notice about the shutdown of limited idle workforce at a level that would not interfere with operations. In addition, the Company signed ₩1,000,000 million, ₩800,000 million and ₩1,200,000 million emergency operating fund borrowing agreements with KDB and Korea EXIM Bank ("Creditor Banks") on March 30, 2020, April 29, 2020 and June 10, 2020, respectively, in order to respond to liquidity risks caused by the tight financial market, and the Company, other related parties other than Doosan Corp. and Park Jeong-won signed special agreements with Creditor Banks to improve the Company's financial structure through the sale of assets and capital expansion. For the purposes of the above borrowing and implementation of the special agreement, shares such as Doosan Mecatec Co., Ltd. held by the Company and Doosan Heavy Industries & Construction Co., Ltd. held by related parties other than Doosan Corp. and Park Jeong-won and the real estate trust beneficiary rights were provided to the creditor banks as collateral.

Meanwhile, although the Group's consolidated interim financial statements are accounted for under the assumption that assets and liabilities can be recovered or redeemed through normal course of business, depending on the success or failure of the financial and business improvement plan, there is a possibility that the financial position and management performance may fluctuate significantly. If these plans are disrupted, the Group's assets and liabilities may not be recovered or redeemed at their carrying amount through the normal course of business, and the Group's consolidated interim financial statements do not reflect such adjustments in relation to the assets and liabilities and the classification thereof and the related profit or loss that may arise from this uncertainty.

32. Effect of coronavirus disease-19 ("COVID-19")

The World Health Organization declared a global pandemic against COVID-19 on March 11, 2020 and the Group believes that the spread and persistence of COVID-19 will have a negative impact on the Group's business and financial environment. However, as of June 30, 2020, the effects of COVID-19 are not reflected in the consolidated interim financial statement in case the Group cannot reasonably estimate the effects.