

SK Holdings Co., Ltd. and its subsidiaries

Consolidated financial statements for the years ended December 31, 2017 and 2016 with the independent auditors' report

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Independent auditors' report

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Independent auditors' report

The Shareholders and Board of Directors SK Holdings Co., Ltd.

We have audited the accompanying consolidated financial statements of SK Holdings Co., Ltd. (the "Company") and its subsidiaries (collectively, the "Group"), which comprise the consolidated statements of financial position as at December 31, 2017 and 2016, and the consolidated statements of comprehensive income, consolidated statements of changes in shareholders' equity and consolidated statements of cash flows for the years then ended, presented in Korean won, and a summary of significant accounting policies and other explanatory information.

Management's responsibility for the consolidated financial statements

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

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we comply with ethical requirements and plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above, presented in Korean won, present fairly, in all material respects, the financial position of the Group as at December 31, 2017 and 2016, and its financial performance and cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.



Emphasis of matter

Without modifying our audit opinion, we draw attention to the following matters: Emphasis of matter in regard to key audit matters in the engineer-to-order manufacturing sector (ETO)

In accordance with Accounting Audit Practice Guidelines 2016-1, key audit matters in ETO are selected on the basis of auditors' professional judgment and communication with those charged with governance. Such procedures are based on the financial statements as a whole, and we do not express an opinion in regard to such matter.

We have performed below auditing procedures on the key audit matters in forming the audit opinion.

(1) Revenue recognition based on the percentage-of-completion, the appropriateness of the percentage-of-completion and the recoverability of unbilled construction contract

As explained in Note 2 to the accompanying consolidated financial statements, when the outcome of a construction contract is reliably measurable, construction revenue and construction costs are recognized based on the percentage-of-completion method. The percentage-of-completion is calculated by dividing cumulative construction costs to date by the total estimated costs of the construction, and if such method does not reliably measure the construction contract, there exists a risk in relation to measurement of construction revenue and construction costs.

Further, the Group recognized accounts receivable (unbilled construction contract) for the amount that cumulative construction costs to date plus profit recognized (or minus the loss recognized) exceeds the amount billed to customers. As at December 31, 2017, unbilled construction contract amounted to \$810,837 million, and if such amount is uncollected, the Group is exposed to risks in relation to asset measurement.

We performed the following audit procedures for the key audit matters associated with revenue recognition based on the percentage-of-completion, the appropriateness of percentage-of-completion and the recoverability of unbilled construction contract:

- Inquiry about accounting policies on revenue recognition and any changes to the policies
- Review as to whether it meets the criteria for reliably estimating the outcome of construction contracts
- Inquiry and analytic review as to construction contracts with a significant change in the percentage-of-completion
- Review as to reasons for the significant change and recoverability of unbilled construction contract



(2) Uncertainty in estimating the total estimated costs of the construction contract and the appropriateness of accounting treatment for changes in construction

As explained in Note 2 to the accompanying consolidated financial statements, the total estimated costs of the contract are based on the future estimates, and the total construction revenue is based on the agreed amount in the contract. However, the total revenue may change due to alterations in the original contract work and delays caused by the contractor in the completion of the contract. As a result, the measurement of construction costs and contract revenue is affected by uncertainties associated with the outcomes of future events.

We performed the following audit procedures for the key audit matters, selected on the basis of auditors' professional judgment, in relation to uncertainties in estimating the total contract costs and the appropriateness of accounting treatment for changes in construction:

- Inquiry about the appropriateness of accounting treatments for changes in total estimated costs and changes in construction contracts
- Inquiry about and document inspection as to the reason of significant changes in total construction revenue or total estimated costs

Ernoth Joung Han Young

March 9, 2018

This audit report is effective as at March 9, 2018, the independent auditors' report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditors' report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

SK Holdings Co., Ltd. and its subsidiaries

Consolidated financial statements for the years ended December 31, 2017 and 2016

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

		Korean won				Translation into U.S. dollar (Note 2)			
	Notes	_	2017		2016	_	2017		2016
Assets		. —					-		
Current assets:									
Cash and cash equivalents	6,34,36,37	₩	7,145,842	₩	7,086,957	\$	6,669,630	\$	6,614,670
Trade accounts receivable	6,7,34,37		11,538,468		10,398,471		10,769,524		9,705,498
Other accounts receivable	6,37		1,991,725		1,828,941		1,858,993		1,707,057
Inventories	8,34		8,177,933		6,018,855		7,632,941		5,617,748
Available-for-sale financial assets	6,9,37		188,603		179,448		176,034		167,489
Other current assets	6,19,20,31,34,36,37		5,632,223		6,301,260		5,256,882		5,881,333
Assets held for sale	30		524,117		636,110		489,189		593,718
Total current assets			35,198,911		32,450,042		32,853,193		30,287,513
Non-current assets:									
Long-term trade accounts receivable	6,7,37		12,908		24,188		12,048		22,576
•			,		,		,		,
Long-term other accounts receivable	6,37		321,154		205,584		299,752		191,884
Available-for-sale financial assets	6,9,34,37		1,596,033		1,527,092		1,489,671		1,425,324
Investments in associates and joint ventrues	10,34		14,629,502		11,559,899		13,654,566		10,789,527
Property, plant and equipment	11,31,34		41,286,418		41,032,505		38,535,018		38,298,026
Investment property	12,34		622,846		727,783		581,338		679,282
Goodwill	13		899,213		575,233		839,288		536,898
Intangible assets	14		11,451,616		11,197,157		10,688,460		10,450,959
Deferred income tax assets	26		734,524		711,591		685,574		664,169
Other non-current assets	6,18,19,20,31,36,37		3,023,795		3,036,263		2,822,283		2,833,921
Total non-current assets			74,578,009		70,597,295	_	69,607,998		65,892,566
Total assets		₩	109,776,920	₩	103,047,337	<u>\$</u>	102,461,191	<u>\$</u>	96,180,079
Liabilities and equity									
Current liabilities:									
Short-term borrowings	6,7,15,32,34,37	₩	2,999,032	₩	2,614,117	\$	2,799,171	\$	2,439,908
Trade accounts payable	6,37		9,588,642		8,897,260		8,949,638		8,304,331
Other accounts payable	6,37		3,610,562		3,241,765		3,369,948		3,025,728
Provisions	17		246,800		420,803		230,353		392,760
Current portion of long-term debt	6,15,32,33,34,37		6,548,146		5,629,577		6,111,766		5,254,412
Other current liabilities	6,19,20,31,37		8,230,998		7,850,072		7,682,469		7,326,929
Liabilities held for sale	30		143,869		63,016		134,281		58,817
Total current liabilities			31,368,049		28,716,610		29,277,626		26,802,885
Non-current liabilities:									
Bonds payable and long-term borrowings	6,15,32,34,37		23,359,518		23,133,506		21,802,798		21,591,848
Long-term other accounts payable	6,16,32,33,37		3,740,381		4,601,776		3,491,115		4,295,105
Retirement benefit obligation	18		257,783		229,378		240.604		214,092
Provisions	17		167,002		104,331		155,873		97.378
Deferred income tax liabilities	26		3,988,276		3,098,508		3,722,490		2,892,018
Other non-current liabilities	6,19,20,31,37		1,139,491		836,504		1,063,553		780,758
Total non-current liabilities	0,10,20,01,07		32,652,451		32,004,003		30,476,433		29,871,199
Total liabilities			64,020,500		60,720,613		59,754,059		56,674,084
Total habilities			04,020,300		00,720,013		00,704,000		30,074,004
Equity attributable to owners of the Company:	0.4		45.005		45.005		44.000		44.000
Issued capital	21		15,385		15,385		14,360		14,360
Other paid-in capital	21		4,112,475		4,741,139		3,838,412		4,425,181
Retained earnings	21		9,837,619		8,368,122		9,182,023		7,810,455
Other capital components	21		(305,397)		(12,289)		(285,045)		(11,470)
Total equity attributable to owner of the Comp	any		13,660,082		13,112,357		12,749,750		12,238,526
Non-controlling interests Total equity			32,096,338 45,756,420		29,214,367 42,326,724		29,957,382 42,707,132		27,267,469 39,505,995
Total liabilities and equity		₩	109,776,920	₩	103,047,337	<u></u>	102,461,191	•	96,180,079
iotai nasinues anu equity			103,110,320		100,041,001	Φ	102,701,191	<u>1</u>	55, 100,075

(Korean won in millions and U.S. dollar in thousands, except for earnings per share)

		Korean won				Translation into U.S. dollar (Note 2)				
	Notes		2017		2016		2017		2016	
Sales	4	₩	93,296,368	₩	82,729,874	\$	87,078,932	\$	77,216,608	
Cost of sales	25		82,399,676		73,005,595	_	76,908,415	_	68,140,372	
Gross profit			10,896,692		9,724,279		10,170,517		9,076,236	
Selling and administrative expenses	22,25		5,035,653		4,443,496		4,700,068		4,147,374	
Operating income	4		5,861,039		5,280,783		5,470,449		4,928,862	
Financial income	6,23		3,042,835		2,536,979		2,840,055		2,367,910	
Financial costs	6,23		3,475,187		3,350,587		3,243,594		3,127,298	
Gain related to investments in associates and joint ventures, net	10		2,487,838		721,758		2,322,044		673,659	
Other non-operating income	6,24		622,886		662,478		581,376		618,329	
Other non-operating income Other non-operating expenses	6,24		1,097,234		1,461,754		1,024,112		1,364,340	
Other horr-operating expenses	0,24		1,097,234		1,401,734		1,024,112		1,304,340	
Income from continuing operations before income tax expense	4		7,442,177		4,389,657		6,946,218		4,097,122	
Income tax expense from continuing operations	26		2,260,810		1,359,633		2,110,146		1,269,025	
Net income from continuing operations	4		5,181,367		3,030,024		4,836,072		2,828,097	
Loss from discontinued operation	29		(114,885)		(207,540)		(107,229)		(193,709)	
Net income		₩	5,066,482	₩	2,822,484	\$	4,728,843	\$	2,634,388	
Attributable to:			0,000,402		2,022,404	Ψ_	4,7 20,040	Ψ_	2,004,000	
Owners of the Company			1,677,432		765,580		1,565,645		714,560	
Non-controlling interests			3,389,050		2,056,904		3,163,198		1,919,828	
Other comprehensive income:										
Items not to be reclassified to profit or										
loss in subsequent periods (net of tax):										
Remeasurement gain (loss) on defined benefit plans			26,707		(21,116)		24,927		(19,709)	
Items to be reclassified to profit or loss										
in subsequent periods (net of tax):										
Net gain on available-for-sale financial assets			202,311		34,703		188,829		32,390	
Equity adjustments of investments in associates and joint ventures			(281,370)		(10,985)		(262,619)		(10,253)	
Net change in valuation of cash flow hedges			(10,944)		(37,245)		(10,215)		(34,763)	
			(529,240)		73,865		. , ,		, , ,	
Net gain (loss) on translation of foreign operations			, , ,		5,617		(493,971)		68,943	
Net gain (loss) on translation to the presentation currency			(7,825)				(7,304)		5,243	
		_	(627,068)		65,955		(585,280)	_	61,560	
Total comprehensive income Attributable to:		₩	4,466,121	₩	2,867,323	\$	4,168,490	\$	2,676,239	
Owners of the Company			1,395,482		766,478		1,302,485		715,399	
Non-controlling interests			3,070,639		2,100,845		2,866,005		1,960,840	
Earnings per share (Korean won and U.S. dollar):	27									
Basic earnings per share		₩	30,007	₩	13,676	\$	28.01	\$	12.76	
Basic earnings per share from continuing operations			30,586		14,705	•	28.55		13.73	
2 P. L			,		.,. 20					

SK Holdings Co., Ltd. and its subsidiaries Consolidated statements of changes in shareholders' equity for the years ended December 31, 2017 and 2016

(Korean won in millions)

	loous	ed capital	nai	Other		Retained		ther capital		Controlling interests	No	n-controlling interests		otal aquity
As at January 4, 2046	₩	15,385	₩	d-in capital 4,773,965	₩	earnings 7,801,713		omponents (24,545)		12,566,518	₩	27,510,732	₩	otal equity 40,077,250
As at January 1, 2016	W	15,305	77	4,773,965	W	7,001,713	₩	(24,545)	W	12,500,510	77	27,510,732	77	40,077,250
Total comprehensive income:						765 500				765 500		2.056.004		0.000.404
Net income		-		-		765,580		-		765,580		2,056,904		2,822,484
Remeasurement loss on defined benefit plans		-		-		(11,358)		40.705		(11,358)		(9,758)		(21,116)
Net gain on available-for-sale financial assets		-		-		-		10,705		10,705		23,998		34,703
Equity adjustments of investment in associates and joint ventures		-		-		-		(37,655)		(37,655)		26,670		(10,985)
Loss on valuation of derivative financial instruments		_		_		_		(18,788)		(18,788)		(18,457)		(37,245)
Net gain on translation of foreign operations		_		_		_		54,477		54,477		19,388		73,865
Net gain on translation to the presentation currency		_		_		_		3,517		3,517		2,100		5,617
Transaction with shareholders:								-,-		-,-		,		-,-
Dividends		_		_		(191,750)		_		(191,750)		(939,232)		(1,130,982)
Equity transactions in consolidated entities		_		(30,338)		-		_		(30,338)		112,744		82,406
Changes in the scope of consolidation		_		-		_		_		-		430,338		430,338
Others		_		(2,488)		3,937		_		1,449		(1,060)		389
As at December 31, 2016	₩	15,385	₩	4,741,139	₩	8,368,122	₩	(12,289)	₩	13,112,357	₩	29,214,367	₩	42,326,724
As at January 1, 2017	₩	15,385	₩	4,741,139	₩	8,368,122	₩	(12,289)	₩	13,112,357	₩	29,214,367	₩	42,326,724
Total comprehensive income:	•••	,	•••	.,,	**	0,000,1	• • • • • • • • • • • • • • • • • • • •	(12,200)	**	,,	•••		•••	,0_0,
Net income		_		_		1,677,432		_		1,677,432		3,389,050		5,066,482
Remeasurement gain on defined benefit plans		_		_		11,158		_		11,158		15,549		26,707
Net gain on available-for-sale financial assets		_		_		-		62,378		62,378		139,933		202,311
Equity adjustments of investment in		_		_		_		(105,573)		(105,573)		(175,797)		(281,370)
associates and joint ventures								(100,010)		(100,010)		(,)		(=0:,0:0)
Gain (loss) on valuation of derivative financial instrumen	ts	_		_		_		9,055		9,055		(19,999)		(10,944)
Net loss on translation of foreign operations		_		_		_		(265,151)		(265,151)		(264,089)		(529,240)
Net gain (loss) on translation to the presentation currence	v	_		_		_		6,183		6.183		(14,008)		(7,825)
Transaction with shareholders:	,							0,.00		3,.33		(: :,555)		(.,0=0)
Dividends		_		_		(208,666)		_		(208,666)		(1,150,609)		(1,359,275)
Equity transactions in consolidated entities		_		(624,635)		(=00,000)		_		(624,635)		380,172		(244,463)
Changes in the scope of consolidation		_		(52 .,556)		_		_		(02.,000)		584,881		584,881
Others		_		(4,029)		(10,427)		_		(14,456)		(3,112)		(17,568)
As at December 31, 2017	₩	15,385	₩	4,112,475	₩	9,837,619	₩	(305,397)	₩	13,660,082	₩	32,096,338	₩	45,756,420

(Continued)

SK Holdings Co., Ltd. and its subsidiaries Consolidated statements of changes in shareholders' equity for the years ended December 31, 2017 and 2016 (cont'd)

(U.S. dollar in thousands)

	Issue	ed capital	pai	Other d-in capital	Retained earnings	Other capital components	Controlling interests	No	on-controlling interests	Fotal equity
As at January 1, 2016	\$	14,360	\$	4,455,819	\$ 7,281,793	\$ (22,909)	\$ 11,729,063	\$	25,677,368	\$ 37,406,431
Total comprehensive income:										
Net income		-		-	714,560	-	714,560		1,919,828	2,634,388
Remeasurement loss on defined benefit plans		-		-	(10,601)	_	(10,601)		(9,108)	(19,709)
Net gain on available-for-sale financial assets		-		-	_	9,991	9,991		22,399	32,390
Equity adjustments of investment in		-		_	-	(35,146)	(35,146)		24,893	(10,253)
associates and joint ventures							,			,
Loss on valuation of derivative financial instruments		-		-	_	(17,536)	(17,536)		(17,227)	(34,763)
Net gain on translation of foreign operations		-		-	-	50,847	50,847		18,096	68,943
Net gain on translation to the presentation currency		-		-	-	3,283	3,283		1,960	5,243
Transaction with shareholders:										
Dividends		-		-	(178,971)	-	(178,971)		(876,640)	(1,055,611)
Equity transactions in consolidated entities		-		(28,316)	-	-	(28,316)		105,231	76,915
Changes in the scope of consolidation		-		-	-	-	-		401,660	401,660
Others				(2,322)	 3,674	 _	 1,352		(991)	361
As at December 31, 2016	\$	14,360	\$	4,425,181	\$ 7,810,455	\$ (11,470)	\$ 12,238,526	\$	27,267,469	\$ 39,505,995
As at January 1, 2017	\$	14,360	\$	4,425,181	\$ 7,810,455	\$ (11,470)	\$ 12,238,526	\$	27,267,469	\$ 39,505,995
Total comprehensive income:										
Net income		-		-	1,565,645	-	1,565,645		3,163,198	4,728,843
Remeasurement gain on defined benefit plans		-		-	10,414	-	10,414		14,513	24,927
Net gain on available-for-sale financial assets		-		-	-	58,221	58,221		130,608	188,829
Equity adjustments of investment in associates and joint ventures		-		-	-	(98,537)	(98,537)		(164,082)	(262,619)
Gain (loss) on valuation of derivative financial instrumen	ts	_		_	-	8,451	8,451		(18,666)	(10,215)
Net loss on translation of foreign operations		_		-	-	(247,481)	(247,481)		(246,490)	(493,971)
Net gain (loss) on translation to the presentation currence	٧	_		_	_	5,771	5,771		(13,075)	(7,304)
Transaction with shareholders:						·	•		, ,	,
Dividends		_		_	(194,760)	_	(194,760)		(1,073,930)	(1,268,690)
Equity transactions in consolidated entities		_		(583,008)	-	_	(583,008)		354,836	(228,172)
Changes in the scope of consolidation		-		-	_	-	-		545,903	545,903
Others		-		(3,761)	(9,731)	-	(13,492)		(2,902)	(16,394)
As at December 31, 2017	\$	14,360	\$	3,838,412	\$ 9,182,023	\$ (285,045)	\$ 12,749,750	\$	29,957,382	\$ 42,707,132

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

(Korean won in millions and U.S. dollar in thousands)

		Korean won				Translation into U.S. dollar (Note 2)			
	Notes	-	2017	iii w	2016		2017	le 2)	2016
Cash flows from operating activities:	Notes		2017		2016		2017		2016
Net income		₩	5,066,482	₩	2,822,484	\$	4,728,843	\$	2,634,388
	32	VV	6,580,676	VV	8,145,103	Ф	6,142,128	Ф	7,602,299
Non-cash adjustments Working capital adjustments	32								
0 1 ,	32		(2,559,772)		130,353		(2,389,184)		121,666
Interest received			213,774		198,642		199,528		185,404
Interest paid			(1,128,516)		(1,140,901)		(1,053,310)		(1,064,869)
Dividends received			217,572		172,033		203,073		160,568
Income tax paid			(1,460,136)		(1,217,042)		(1,362,830)		(1,135,936)
Net cash provided by operating activities			6,930,080		9,110,672		6,468,248		8,503,520
Cash flows from investing activities:									
Decrease (increase) in short-term and			693,888		(1,428,609)		647,646		(1,333,404)
long-term financial assets, net									
Decrease (increase) in short-term loans, net			3,862		(25,642)		3,605		(23,933)
Proceeds from disposal of available-for-sale financial assets			252,787		587,816		235,941		548,643
Proceeds from disposal of investments in associates and joint ventures			17,168		92,180		16,024		86,037
Proceeds from disposal of property, plant and equipment			275,691		167,465		257,318		156,305
Proceeds from disposal of investment property			2,461		258,149		2,297		240,945
Proceeds from disposal of intangible assets			23,502		35,886		21,936		33,494
Proceeds from disposal of assets held for sale			516,187		152,323		481,787		142,172
Acquisition of available-for-sale financial assets			(294,769)		(108,762)		(275,125)		(101,514)
Acquisition of investments in associates and joint ventures			(1,185,619)		(218,704)		(1,106,607)		(204,129)
Acquisition of property, plant and equipment			(4,971,873)		(4,935,373)		(4,640,539)		(4,606,471)
Acquisition of investment property			(4,253)		(2,967)		(3,970)		(2,769)
Acquisition of intangible assets			(382,647)		(914,120)		(357,147)		(853,201)
Changes in cash from changes in the scope of consolidation			(1,388,381)		(1,053,037)		(1,295,857)		(982,861)
Business transfer			299,651		(1,000,007)		279,682		(002,001)
Others, net			(150,514)		12,885		(140,483)		12,026
outers, net			(130,314)		12,000		(140,400)		12,020
Net cash used in investing activities			(6,292,859)		(7,380,510)		(5,873,492)		(6,888,660)
Cash flows from financing activities:									
Decrease (increase) in short-term borrowings, net			206,701		(150,109)		192,926		(140,105)
Repayment of current portion of long-term debt			(5,014,248)		(6,109,821)		(4,680,090)		(5,702,652)
Increase in bonds payable and borrowings			6,097,851		5,956,151		5,691,479		5,559,223
Increase in other accounts payable			146,999		653,730		137,203		610,164
Cash inflows from transactions in equity of			1,173,381		113,132		1,095,185		105,593
consolidated subsidiaries									
Decrease in bonds payable and borrowings			(608,888)		(627,336)		(568,311)		(585,529)
Decrease in other accounts payable			(751,516)		(321,925)		(701,434)		(300,471)
Payment of dividends			(1,356,415)		(1,132,614)		(1,266,021)		(1,057,135)
Others, net			(301,863)		(3,582)		(281,746)		(3,343)
Net cash used in financing activities			(407,998)		(1,622,374)		(380,809)		(1,514,255)
Net increase in cash and cash equivalents			229,223		107,788		213,947		100,605
Net foreign exchange effects			(160,753)		(13,961)		(150,041)		(13,031)
Cash and cash equivalents included in assets held-for-sale			(9,585)		(2,094)		(8,946)		(1,954)
Cash and cash equivalents at the beginning of the year			7,086,957		6,995,224		6,614,670		6,529,050
Cash and cash equivalents at the end of the year		₩	7,145,842	₩	7,086,957	\$	6,669,630	\$	6,614,670

1. Corporate information

1.1 Outline of the parent

SK Holdings Co., Ltd. (the "Company") was established on April 13, 1991 and has been engaged in providing systems integration, software design and development, information processing, consulting services and sales of pre-owned automobiles, and is headquartered at 26, Jong-ro, Jongno-gu, Seoul. The Company's ordinary shares have been listed on the Korea Exchange since November 11, 2009.

Upon the acquisition of SK Holdings Co., Ltd. by SK C&C Co., Ltd. effective on August 1, 2015, the Company added the investment business to its existing operations for the purpose of holding the securities of its subsidiaries. Furthermore, the Company changed its name to its current form as at the acquisition date.

As at December 31, 2017, the issued capital of the Company amounts to $$\mathbb{W}$15,385$ million (including \mathbb{W}113 million of preferred shares). Major shareholders and their equity ownership are Tae-won Chey, National Pension Service and Ki-won Choi each holding 23.40%, 8.40%, and 7.46%, respectively, as at December 31, 2017.$

1.2 Consolidated subsidiaries

The Company and its subsidiaries (collectively, the "Group") are engaged in petroleum refining, telecommunications, wholesale and retail, chemicals, construction and other industries. Subsidiaries whose accounts are included in the consolidated financial statements as at December 31, 2017 are as follows:

				Equity ownership
Subsidiary	Domicile	Principal business activity	The largest shareholders	(*1)
SK Innovation Co., Ltd. (*2)	Korea	Resource development	SK Holdings Co., Ltd.	33.40%
SK Energy Co., Ltd.	Korea	Crude oil refining and sales	SK Innovation Co., Ltd.	100.00%
Netruck Co., Ltd.	Korea	Transportation and oil sales	SK Energy Co., Ltd.	100.00%
Jeju United FC Corporation	Korea	Sports association sponsoring	SK Energy Co., Ltd.	100.00%
SK Energy Road Investment Co., Ltd.	Cayman	Investment	SK Energy Co., Ltd.	100.00%
SK Energy Hong Kong Co., Ltd.	Hong Kong	Investment	SK Energy Co., Ltd.	100.00%
Shandong SK Hightech Oil Co., Ltd.	China	Gas station operation	SK Energy Hong Kong Co., Ltd.	51.00%
SK Energy Road Investment (HK) Co., Ltd.	Hong Kong	Investment and trade	SK Energy Road Investment Co., Ltd.	100.00%
Ningbo SK Baoying Asphalt Storage Co., Ltd.	China	Asphalt manufacturing	SK Energy Road Investment (HK) Co., Ltd.	51.00%
Hefei SK Baoying Asphalt Co., Ltd.	China	Asphalt manufacturing	SK Energy Road Investment (HK) Co., Ltd.	51.00%
Chongqing SK Asphalt Co., Ltd.	China	Asphalt manufacturing	SK Energy Road Investment (HK) Co., Ltd.	51.00%
SK Shanghai Asphalt Co., Ltd.	China	Asphalt manufacturing	SK Energy Road Investment (HK) Co., Ltd.	100.00%
SK Global Chemical Co., Ltd.	Korea	Chemicals manufacturing and sales	SK Innovation Co., Ltd.	100.00%
SK Global Chemical (China) Holding Co., Ltd.	China	Investment	SK Global Chemical Co., Ltd.	100.00%
SK Global Chemical International Trading (Shanghai) Co., Ltd.	China	Petrochemicals sales	SK Global Chemical (China) Holding Co., Ltd.	100.00%
SK Golden Tide Plastics (Yantai) Co., Ltd.	China	Petrochemicals sales	SK Global Chemical (China) Holding Co., Ltd.	51.00%
SK Global Chemical International Trading (Guangzhou) Co., Ltd.	China	Petrochemicals sales	SK Global Chemical (China) Holding Co., Ltd.	100.00%
SK Global Chemical Americas, Inc.	USA	Petrochemicals sales	SK Global Chemical Co., Ltd.	100.00%
SK Primacor Americas LLC	USA	Petrochemicals sales	SK Global Chemical Americas, Inc.	100.00%
SK Primacor Europe, S.L.U.	Spain	Petrochemicals sales	SK Global Chemical Americas, Inc.	100.00%
SK Saran Americas LLC	USA	Petrochemicals Manufacturing and sales	SK Global Chemical Americas, Inc.	100.00%
SK Global Chemical Japan Co., Ltd.	Japan	Petrochemicals sales	SK Global Chemical Co., Ltd.	100.00%
SK Global Chemical Singapore Pte. Ltd.	Singapore	Petrochemicals sales	SK Global Chemical Co., Ltd.	100.00%
SK Global Chemical Investment Hong Kong Ltd.	Hong Kong	Investment	SK Global Chemical Co., Ltd.	100.00%
Ningbo SK Performance Rubber Co., Ltd.	China	Synthetic rubber manufacturing	SK Global Chemical Investment Hong Kong Ltd.	80.00%
SK Incheon Petrochem Co., Ltd. (*3)	Korea	Chemicals manufacturing and sales	SK Innovation Co., Ltd.	100.00%
SK Trading International Co., Ltd.	Korea	Trading business	SK Innovation Co., Ltd.	100.00%
SK Energy International Pte. Ltd.	Singapore	Trading business	SK Trading International Co., Ltd.	100.00%
SK Energy Europe, Ltd.	UK	Trading business	SK Energy International Pte. Ltd.	100.00%
SK Energy Americas, Inc.	USA	Trading business	SK Energy International Pte. Ltd.	100.00%
SK Terminal B.V.	Netherlands	Investment	SK Energy International Pte. Ltd.	100.00%
Bergaya International Pte. Ltd.	Singapore	Management and consulting	SK Energy International Pte. Ltd.	100.00% 100.00%
SK Lubricants Co., Ltd.	Korea Korea	Lubricants oil manufacturing	SK Innovation Co., Ltd. SK Lubricants Co., Ltd.	70.00%
Yubase Manufacturing Asia Corporation SK Energy Lubricants (Tianjin) Co., Ltd.	China	Lubricants oil manufacturing and sales Lubricants oil manufacturing and sales	SK Lubricants Co., Ltd.	100.00%
PT. Patra SK	Indonesia	Lubricants oil manufacturing and sales	SK Lubricants Co., Ltd.	65.00%
SK Lubricants Americas, Inc.	USA	Lubricants oil manufacturing and sales	SK Lubricants Co., Ltd.	100.00%
SK Lubricants Europe B.V.	Netherlands	Lubricants oil sales	SK Lubricants Co., Ltd.	100.00%
SK Lubricants Japan Co., Ltd.	Japan	Lubricants oil sales	SK Lubricants Co., Ltd.	100.00%
SK Lubricants & Oils India Pte. Ltd.	India	Lubricants oil sales	SK Lubricants Co., Ltd.	100.00%
Iberian Lube Base Oils, S.A.	Spain	Lubricants oil sales Lubricants oil manufacturing and sales	SK Lubricants Co., Ltd.	70.00%
SK Lubricants Russia LLC	Russia	Lubricants oil sales	SK Lubricants Co., Ltd.	100.00%
SK Mobile Energy Co., Ltd.	Korea	Lithium battery manufacturing	SK Innovation Co., Ltd.	100.00%
SK Innovation Insurance (Bermuda), Ltd.	Bermuda	Insurance	SK Innovation Co., Ltd.	100.00%
SK USA, Inc.	USA	Management consulting services	SK Innovation Co., Ltd.	100.00%
SK Battery Systems Co., Ltd.	Korea	Battery pack manufacturing	SK Innovation Co., Ltd.	100.00%
SK Battery China Holdings Co., Ltd.	China	Investment	SK Innovation Co., Ltd.	100.00%
SK Battery Hungary Kft.	Hungary	Battery manufacturing	SK Innovation Co., Ltd.	100.00%
SK E&P Company	USA	Crude oil development	SK Innovation Co., Ltd.	100.00%
SK E&P America, Inc.	USA	Investment	SK Innovation Co., Ltd.	100.00%
SK Plymouth, LLC	USA	Crude oil development	SK E&P America, Inc.	100.00%
SK Permian, LLC	USA	Crude oil development	SK E&P America, Inc.	100.00%
SK Telecom Co., Ltd. (*2)	Korea	Mobile telecommunications	SK Holdings Co., Ltd.	25.22%
SK Telink Co., Ltd. (*4)	Korea	International call and MVNO business	SK Telecom Co., Ltd.	100.00%

				Equity ownership
Subsidiary NSOK Co., Ltd. (formerly, Neos Networks Co., Ltd.)	Domicile	Principal business activity	The largest shareholders SK Telink Co., Ltd.	(*1)
SK Broadband Co., Ltd.	Korea Korea	Machine security and facilities security Wire communications	SK Telecom Co., Ltd.	100.00% 100.00%
Home&Service Co., Ltd.	Korea	Information and communication facilities	SK Broadband Co., Ltd.	100.00%
		management business		
SK Store Co., Ltd.	Korea Korea	Other resale communication business	SK Broadband Co., Ltd. SK Telecom Co., Ltd.	100.00% 100.00%
PS&Marketing Corp. Serviceace Co., Ltd.	Korea	Resale communication business Call center and telemarketing business	SK Telecom Co., Ltd.	100.00%
Service Top Co., Ltd.	Korea	Call center and telemarketing business	SK Telecom Co., Ltd.	100.00%
Network O&S Co., Ltd.	Korea	Maintenance management	SK Telecom Co., Ltd.	100.00%
SK techx Co., Ltd.	Korea	System software development and supplying	SK Telecom Co., Ltd.	100.00%
K-Net Culture & Contents Venture Fund	Korea	Investment fund	SK techx Co., Ltd.	59.00%
One store Co., Ltd.	Korea	Telecommunication service	SK Telecom Co., Ltd.	65.54%
SK Communications Co., Ltd. (*5)	Korea	Internet portal service	SK Telecom Co., Ltd.	100.00%
SK Planet Co., Ltd. SK M & Service Co., Ltd.	Korea Korea	Telecommunication service Internet website service	SK Telecom Co., Ltd. SK Planet Co., Ltd.	98.10% 100.00%
Hello Nature Co., Ltd.	Korea	Agriculture and livestock retailing	SK Planet Co., Ltd.	100.00%
11street (Thailand) Co., Ltd.	Thailand	E-commerce	SK Planet Co., Ltd.	100.00%
SK Planet Japan K.K. SK Planet Global Pte. Ltd.	Japan Singapore	Digital contents sourcing and presenting Digital contents sourcing and presenting	SK Planet Co., Ltd. SK Planet Co., Ltd.	79.45% 100.00%
SKP Global Holdings Pte. Ltd.	Singapore	Holding Company	SK Planet Co., Ltd.	100.00%
SKP America, LLC	ŬSA	Digital contents sourcing and presenting	SK Planet Co., Ltd.	100.00%
shopkick Management Company, Inc.	USA	Investment	SKP America, LLC	100.00%
shopkick, Inc.	USA	Mileage based E-commerce App. development	shopkick Management Company, Inc.	100.00%
SK Telecom China Holding Co., Ltd.	China	Holding Company	SK Telecom Co., Ltd.	100.00%
SK Global Healthcare Business Group., Ltd.	Hong Kong	Investment	SK Telecom Co., Ltd.	100.00%
SKT Vietnam Pte. Ltd.	Singapore	Wireless communications	SK Telecom Co., Ltd.	73.32%
SKT Americas, Inc.	USA	Management consulting and information gathering	SK Telecom Co., Ltd.	100.00%
YTK Investment, Ltd.	Cayman	Investment	SK Telecom Co., Ltd.	100.00%
Atlas Investment, Ltd.	Cayman	Investment	SK Telecom Co., Ltd.	100.00%
SK Telecom Innovation Fund, L.P. SK Telecom China Fund I L.P.	USA Cayman	Investment Investment	Atlas Investment, Ltd. Atlas Investment, Ltd.	100.00% 100.00%
iriver Co., Ltd. (*2)	Korea	Video and audio equipment	SK Telecom Co., Ltd.	45.90%
		manufacturing		10.0070
iriver Inc.	USA	Marketing and sales in North America	iriver Co., Ltd.	100.00%
iriver Enterprise Ltd. iriver China Co., Ltd.	Hong Kong China	Chinese subsidiary management MP3,4 production and sales	iriver Co., Ltd. iriver Enterprise, Ltd.	100.00% 100.00%
Dongguan iriver Electronics Co., Ltd.	China	Electronic book production and sales	iriver Enterprise, Ltd.	100.00%
groovers Japan Co., Ltd.	Japan	Music distribution and sales	iriver Co., Ltd.	100.00%
S.M.Life Design Company Japan, Inc.	Japan	Japan goods sales	Iriver Co., Ltd.	100.00%
S.M.Mobile Communications Japan, Inc. SK Networks Co., Ltd. (*2)	Japan Korea	Digital contents service Distribution and trading business	Iriver Co., Ltd. SK Holdings Co., Ltd.	100.00% 39.14%
SK Networks Service Co., Ltd.	Korea	Communications equipment	SK Networks Co., Ltd.	86.50%
		repair service		
SK Pinx Co., Ltd.	Korea	Golf club operating	SK Networks Co., Ltd.	100.00% 100.00%
Car Life Service Co., Ltd. SK Magic Co., Ltd.	Korea Korea	Business support services Household appliances manufacturing,	SK Networks Co., Ltd. SK Networks Co., Ltd.	100.00%
or magic con, etc.	110104	sales and rent	Civitationa Co., Ltd.	100.0070
SK Magic Service Co., Ltd.	Korea	House appliances repair and others	SK Magic Co., Ltd.	100.00%
Mokgam Service (*6) SK Networks (China) Holdings Co., Ltd.	Korea China	Real property lease Holding Company	SK Networks Co., Ltd. SK Networks Co., Ltd.	100.00% 100.00%
Liaoning SK Networks Real Estate Development Co., Ltd.	China	Real estate development	SKN (China) Holdings Co., Ltd.	100.00%
Shenyang SK Bus Terminal Co., Ltd.	China	Bus terminal business	SKN (China) Holdings Co., Ltd.	75.00%
SK Networks (Liaoning) Logistics Co., Ltd.	China	Distribution and logistics	SKN (China) Holdings Co., Ltd.	100.00% 100.00%
SK Networks (Dandong) Energy Co., Ltd. Shenyang SK Networks Energy Co., Ltd.	China China	Petroleum sales Petroleum sales	SKN (China) Holdings Co., Ltd. SK Networks Co., Ltd.	100.00%
SK (GZ FreeZone) Co., Ltd.	China	Trading business	SK Networks Co., Ltd.	100.00%
SK Networks (Shanghai) Co., Ltd.	China	Trading business	SK Networks Co., Ltd.	100.00%
POSK (Pinghu) Steel Processing Center Co., Ltd. SK Networks Hong Kong Ltd.	China Hong Kong	Steel processing and sales Trading business	SK Networks Co., Ltd. SK Networks Co., Ltd.	80.00% 100.00%
SK (Guangzhou) Metal Co., Ltd.	China	Steel processing and sales	SK Networks Hong Kong Ltd.	100.00%
SK Networks (Xiamen) Steel Processing Center Co., Ltd.	China	Steel processing and sales	SK Networks Hong Kong Ltd.	100.00%
SK Networks Japan Co., Ltd.	Japan	Trading business	SK Networks Co., Ltd.	100.00%
SK Networks Deutschland GmbH Daiyang SK Networks SAN. VE TIC. Ltd. STI (*7)	Germany Turkey	Trading business Steel processing and sales	SK Networks Co., Ltd. SK Networks Co., Ltd.	100.00% 51.22%
SK Networks Resources Australia Pty. Ltd.	Australia	Resource development	SK Networks Co., Ltd.	100.00%
SK Networks Middle East FZE	UAE	Trading business	SK Networks Co., Ltd.	100.00%
SK Brasil LTDA SK Networks Trading Malaysia Sdn Bhd	Brazil Malaysia	Trading business Trading business	SK Networks Co., Ltd. SK Networks Co., Ltd.	100.00% 100.00%
SKC Co., Ltd. (*2)	Korea	Petrochemicals manufacturing	SK Holdings Co., Ltd.	41.00%
SK Telesys Co., Ltd.	Korea	Communications equipment	SKC Co., Ltd.	79.39%
		manufacturing and sales		
SE (Jiangsu) Electronic Materials Co., Ltd.	China	Sales of raw chemical materials and	SK Telesys Co., Ltd.	51.00%
		chemical products related to semiconductor		
Techdream Co., Ltd.	Hong Kong	Semiconductor component	SK Telesys Co., Ltd.	100.00%
SKC Infra Service Co., Ltd.	Korea	Electrical contractor,	SK Telesys Co., Ltd.	100.00%
SKC Solmics Co., Ltd.	Korea	Semiconductor component manufacturing	SKC Co., Ltd.	57.70%
Solmics Taiwan Co., Ltd.	Taiwan	Semiconductor component distribution	SKC Solmics Co., Ltd.	100.00%
Solmics Shanghai Co., Ltd.	China	Semiconductor component distribution	SKC Solmics Co., Ltd.	100.00%
SKW Co., Ltd.	Korea	Film manufacturing	SKC Co., Ltd.	100.00%
SKC (Jiangsu) High tech Plastics Co., Ltd. (*8) SKC, Inc.	China USA	Film manufacturing Manufacturing	SKC Co., Ltd. SKC Co., Ltd.	91.38% 100.00%
SKC Europe GmbH	Germany	Sales	SKC Co., Ltd.	100.00%
SK Bioland Co., Ltd. (*2)	Korea	Manufacturing	SKC Co., Ltd.	27.94%
Bioland Biotec Co., Ltd.	China	Research and manufacturing	SK Bioland Co., Ltd	100.00%
Bioland Haimen Co., Ltd. SKC Hi-Tech&Marketing Co., Ltd. (*9)	China Korea	Manufacturing Film manufacturing	Bioland Biotec Co., Ltd. SKC Co., Ltd.	100.00% 100.00%
(formerly, SKC Haas Display Film Co., Ltd.)		· ·····	22 301, 2.01	.00.0070
SKC Hi-Tech&Marketing (Suzhou) Co., Ltd. (*9)	China	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	100.00%
		Ŭ	(formerly, SKC Haas Display Film Co., Ltd.)	
SKC Hi-Tech&Marketing Taiwan Co., Ltd. (*9)	Taiwan	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	100.00%
			(formerly, SKC Haas Display Film Co., Ltd.)	
SKC Hi-Tech&Marketing Japan Co., Ltd. (*9)	Japan	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	100.00%

Subsidiary	Domicile	Principal business activity	The largest shareholders	Equity Ownership (*1)
- Castraia, y	Bonnono	. mopal sacrices activity	(formerly, SKC Haas Display Film Co., Ltd.)	
SKC Hi-Tech&Marketing Polska SP.Z.O.O (*9)	Poland	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	100.00%
SKC Hi-Tech&Marketing USA LLC (*9)	USA	Film manufacturing	(formerly, SKC Haas Display Film Co., Ltd.) SKC Hi-Tech&Marketing Co., Ltd.	100.00%
			(formerly, SKC Haas Display Film Co., Ltd.)	
SKC PU Specialty Co., Ltd. SKC (Nantong) PU Specialty Co., Ltd.	Hong Kong	Special purpose company Eletronic materials manufacturing	SKC Co., Ltd.	100.00% 100.00%
SKC-ENF Electronic Materials Co., Ltd.	China Hong Kong	Special purpose company	SKC PU Specialty Co., Ltd. SKC Co., Ltd.	75.10%
SKC (Nantong) Semiconductor Materials Technology Co., Ltd.	China	Eletronic materials manufacturing	SKC-ENF Electronic Materials Co., Ltd.	100.00%
SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) (*10)	Korea	Shipping	SK Holdings Co., Ltd.	100.00%
SK Shipping Co., Ltd. (*10) Blueseaocean 1st LLC	Korea Korea	Shipping Securitization company	SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd)	57.22%
Blueseaocean 2nd LLC	Korea	Securitization company Securitization company	(*11) (*11)	
Blueseaocean 3rd LLC	Korea	Securitization company	(*11)	-
With Ocean LLC	Korea	Securitization company	(*11)	-
Yukyungjiju 1st LLC Neptune Solution LLC	Korea Korea	Securitization company Securitization company	(*11) (*11)	-
SK Shipping Hong Kong Ltd.	Hong Kong	Shipping	SK Shipping Co., Ltd.	100.00%
SK Shipping Singapore Pte. Ltd.	Singapore	Shipping	SK Shipping Co., Ltd.	100.00%
SK B&T Pte. Ltd.	Singapore	Petroleum sales	SK Shipping Co., Ltd.	55.00%
Promise Shipholding S.A. and 56 other companies	Panama and others	Special purpose company for acquiring ship	(*11)	-
SK Shipping Europe Plc.	UK	Shipping	SK Shipping Co., Ltd.	100.00%
SK E&S Co., Ltd. (*12)	Korea	City gas business and power	SK Holdings Co., Ltd.	90.00%
	.,	generation	8V = 8 8 8 1 1 1	
Kangwon City Gas Co., Ltd. Yeongnam Energy Service Co., Ltd.	Korea Korea	City gas business	SK E&S Co., Ltd. SK E&S Co., Ltd.	100.00% 100.00%
Ko-one Energy Service Co., Ltd.	Korea	City gas business City gas business	SK E&S Co., Ltd. SK E&S Co., Ltd.	100.00%
Narae Energy Service Co., Ltd.	Korea	Integrated energy service	SK E&S Co., Ltd.	100.00%
Pusan City Gas Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd.	74.10%
Jeonbuk Energy Service Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd.	100.00%
Chonnam City Gas Co., Ltd. Chungcheong Energy Service Co., Ltd.	Korea Korea	City gas business City gas business	SK E&S Co., Ltd. SK E&S Co., Ltd.	100.00% 100.00%
Paju Energy Service Co., Ltd.	Korea	Energy business	SK E&S Co., Ltd.	100.00%
Wirye Energy Service Co., Ltd.	Korea	Integrated energy service	SK E&S Co., Ltd.	95.17%
SK E&S Hong Kong Co., Ltd.	Hong Kong	City gas business	SK E&S Co., Ltd., Pusan City Gas Co., Ltd.	100.00%
SK E&S Australia Pty. Ltd.	Australia	Resource development	SK E&S Co., Ltd.	100.00% 100.00%
SK E&S Ameriacas, Inc. SK E&S LNG, LLC	USA USA	Holding company Liquefied natural gas sales	SK E&S Co., Ltd. SK E&S Americas, Inc.	100.00%
DewBlaine Energy, LLC	USA	Resource development	SK E&S Americas, Inc.	100.00%
CAILIP Gas Marketing, LLC	USA	Resource development	SK E&S Americas, Inc.	100.00%
Prism Energy International Pte. Ltd.	Singapore	Liquefied natural gas sales	SK E&S Co., Ltd.	100.00%
(formerly, SK LNG Trading Pte. Ltd.) Fajar Energy International Pte. Ltd.	Singapore	Liquefied natural gas sales	Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.)	100.00%
PT SK E&S Nusantara	Indonesia	Management consulting	SK E&S Co., Ltd.	100.00%
SK Engineering & Construction Co., Ltd. (*2) Seosuwon Development Company (*2)	Korea Korea	Construction Real estate development and construction	SK Holdings Co., Ltd. SK Engineering & Construction Co., Ltd.	44.48% 19.90%
SK TNS Co., Ltd. (*3)	Korea	Construction and services	SK Engineering & Construction Co., Ltd.	100.00%
SKEC Nanjing Co., Ltd.	China	Construction	SK Engineering & Construction Co., Ltd.	100.00%
SKEC (Thai), Ltd. Thai Woo Ree Engineering Co., Ltd.	Thailand Thailand	Construction Construction	SK Engineering & Construction Co., Ltd. SKEC (Thai), Ltd.	100.00% 99.77%
SKEC Anadolu EC, LLC	Turkey	Construction	SK Engineering & Construction Co., Ltd.	100.00%
SK E&C Betek Corporation	USA	Real estate development	SK Engineering & Construction Co., Ltd.	100.00%
Mesa Verde RE Ventures, LLC	USA	and construction Real estate development	SK E&C Betek Corporation	100.00%
SKEC Consultores Ecquador, S.A	Ecuador	Construction	SK Engineering & Construction Co., Ltd.	100.00%
Sunlake Co., Ltd.	Canada	Construction and services	SK Engineering & Construction Co., Ltd.	100.00%
SK E&C India Pvt. Ltd.	India	Engineering service	SK Engineering & Construction Co., Ltd.	99.94%
SK Holdco Pte. Ltd. SK Materials Co., Ltd. (*2)	Singapore Korea	Holding Company Special gas manufacturing and sales	SK Engineering & Construction Co., Ltd. SK Holdings Co., Ltd.	63.51% 49.10%
SK Materials Japan Co., Ltd.	Japan	Special gas sales	SK Materials Co., Ltd.	95.00%
SK Materials Taiwan Co., Ltd.	Taiwan	Special gas sales	SK Materials Co., Ltd.	100.00%
SK Materials (Jiangsu) Co., Ltd.	China	Special gas manufacturing and sales	SK Materials Co., Ltd.	100.00%
SK Materials (Xian) Co., Ltd.	China	Trading business and	SK Materials Co., Ltd.	100.00%
SK Airgas Co., Ltd.	Korea	warehouse operation Industrial gas sales	SK Materials Co., Ltd.	80.00%
SK Tri Chem Co., Ltd.	Korea	Manufacturing and sales of precursors and others	SK Materials Co., Ltd.	65.00%
SK Siltron Co., Ltd.	Korea	Silicon wafer for electronic industry manufacturing and sales	SK Holdings Co., Ltd.	51.00%
SK Siltron America, Inc.	USA	Silicon wafer for electronic industry manufacturing and sales	SK Siltron Co., Ltd.	100.00%
SK Siltron Japan, Inc.	Japan	Silicon wafer for electronic industry manufacturing and sales	SK Siltron Co., Ltd.	100.00%
SK Infosec Co., Ltd. SK Encarsales.com Ltd. (*13)	Korea	Information security service On-line used car sales and others	SK Holdings Co., Ltd. SK Holdings Co., Ltd.	100.00%
SK C&C Beijing Co., Ltd.	Korea China	Consulting for computer	SK Holdings Co., Ltd. SK Holdings Co., Ltd.	50.01% 100.00%
		system integration	-	
SK C&C Chengdu Co., Ltd.	China	Consulting for computer system integration	SK C&C Beijing Co., Ltd.	100.00%
SK C&C India Pvt. Ltd.	India	Consulting for computer system integration	SK Holdings Co., Ltd.	100.00%
SK S.E.Asia Pte. Ltd. Essencore Limited	Singapore Hong Kong	Investment Manufacturing and distribution of semiconductor modules	SK Holdings Co., Ltd. SK S.E.Asia Pte. Ltd.	100.00% 100.00%
ISD Techology (ShenZhen) Limited	China	Consulting for computer system integration	Essencore Limited	100.00%
S&G Technology	Saudi Arabia	Consulting for computer system integration	SK Holdings Co., Ltd.	51.00%
FSK L&S Co., Ltd. FSK L&S (Shanghai) Co., Ltd. (*14) (formerly, Shanghai Huayou	Korea China	Convergence logistics business Foreign freight forwarding	SK Holdings Co., Ltd. FSK L&S Co., Ltd.	60.00% 100.00%
International Freight. Forwarding Co., Ltd.) Saturn Agriculture Investment Co., Limited	Hong Kong	Investment	SK Holdings Co., Ltd.	100.00%
SK Biopharmaceuticals Co., Ltd.	Korea	Medicine and life science	SK Holdings Co., Ltd. SK Holdings Co., Ltd.	100.00%
SK Biotek Co., Ltd.	Korea	Drug medicine	SK Holdings Co., Ltd.	100.00%
SK Life Science, Inc.	USA	Life science	SK Biopharmaceuticals Co., Ltd.	100.00%

				Equity ownership
Subsidiary	Domicile	Principal business activity	The largest shareholders	(*1)
SK Investment Management Co., Ltd.	Hong Kong	Investment management	SK Holdings Co., Ltd.	100.00%
SK Computer and Communication LLC (*2)	UAE	Consulting for computer system integration and others	SK Holdings Co., Ltd.	49.00%
SK China Company, Ltd. (*15)	Hong Kong	Consulting and investment	SK Holdings Co., Ltd.	88.13%
SK China (Beijing) Co., Ltd.	China	Consulting	SK China Company, Ltd.	100.00%
SK Beijing Investment Management Ltd.	China	Real estate fund management	SK China (Beijing) Co., Ltd.	100.00%
SKY Property Mgmt (Beijing) Co., Ltd.	China	Real estate management	SK China Company, Ltd.	100.00%
SK Bio Energy Hong Kong Co., Ltd.	Hong Kong	Biomass electricity generation	SK China Company, Ltd.	69.40%
SK Property Investment Management Co., Ltd.	Hong Kong	Real estate investment	SK China Company, Ltd.	100.00%
SK Industrial Development China Co., Ltd. (*15)	Hong Kong	Investment	SK China Company, Ltd.	100.00%
Shanghai SKY Real Estate Development Co., Ltd.	China	Real estate investment	SK Industrial Development China Co., Ltd.	100.00%
SK International Supply Chain Management Co., Ltd.	Hong Kong	Distribution	SK China Company, Ltd.	100.00%
Ningde Sky Beverage Co., Ltd.	China	Mineral water development	SK International Supply Chain Management Co., Ltd.	80.00%
SK China Investment Management Co., Ltd.	Hong Kong	Real estate investment	SK China Company, Ltd.	100.00%
SK International Agro-Products Logistics Development Co., Ltd.	Hong Kong	Agriculture product logistics	SK China Investment Management Co., Ltd.	100.00%
SK Auto Service Hong Kong Co., Ltd.	Hong Kong	Holding Company	SK China Company, Ltd.	100.00%
SK (Shenyang) auto rental Co., Ltd.	China	Car rental	SK Auto Service Hong Kong Co., Ltd.	100.00%
SK (Beijing) auto rental Co., Ltd.	China	Car rental	SK Auto Service Hong Kong Co., Ltd.	100.00%
SK Rent-A-Car (Qingdao) Co., Ltd.	China	Car rental	SK Auto Service Hong Kong Co., Ltd.	100.00%
Skyline Auto Financial Leasing Co., Ltd.	Hong Kong	Investment	SK Auto Service Hong Kong Co., Ltd.	100.00%
SK Financial Leasing Co., Ltd.	China	Financial lease	Skyline Auto Financial Leasing Co., Ltd.	100.00%
SKY Property Management Ltd. (*15)	Virgin Islands	Investment	SK China Company, Ltd.	100.00%
SKY Investment Co., Ltd.	China	Real estate management	SKY Property Management Ltd.	100.00%
SK China Real Estate Co., Ltd.	Hong Kong	Real estate investment	SKY Property Management Ltd.	100.00%
SK China Creative Industry Development Co., Ltd.	China	Service	SKY Property Management Ltd.	100.00%
Gemini Partners Pte. Ltd.	Singapore	Consulting	SK Holdings Co., Ltd., SK Innovation Co., Ltd. SK Telecom Co., Ltd., and SK E&S Co., Ltd.	80.00%
Solaris Partners Pte. Ltd.	Singapore	Consulting	Gemini Partners Pte. Ltd.	100.00%
Beijing SK Magellan Capital Advisors Co., Ltd.	China	Investment consulting	Solaris Partners Pte. Ltd.	100.00%
SK GI Management	Cayman	Investment	SK Holdings Co., Ltd.	100.00%
SK MENA Investment B.V.	Netherlands	Investment	SK Telecom Co., Ltd.	100.00%
SK Latin America Investment S.A.	Spain	Investment	SK Telecom Co., Ltd.	100.00%
Plutus Capital NY, Inc.	USA	Investment	SK Holdings Co., Ltd.	100.00%
Hudson Energy NY, LLC	USA	Investment	Plutus Capital NY, Inc.	50.13%
Plutus Fashion NY, Inc.	USA	Investment	SK Holdings Co., Ltd.	100.00%
Wonderland NY, Inc.	USA	Investment	Plutus Fashion NY, Inc	100.00%
SK Biotek Ireland Limited	Ireland	Investment	SK Biotek Co., Ltd.	100.00%
SK Technology Innovation Company	Cayman	Research and development	SK Telecom Co., Ltd.	96.88%
Happynarae Co., Ltd.	Korea	E-commerce	SK Telecom Co., Ltd., SK Innovation Co., Ltd.	90.00%
Suzhou Happynarae Co., Ltd.	China	Electrical and machine equipment and others	Happynarae Co., Ltd.	100.00%
SK Forest Co., Ltd.	Korea	Landscaping and planting business	SK Holdings Co., Ltd.	100.00%

- (*1) The equity ownership is based on ordinary shares and includes indirect investments held by the consolidated subsidiaries.
- (*2) SK Innovation Co., Ltd. and nine other companies are included in the consolidated financial statements as the Company is able to exercise de facto control. The remaining voting rights of SK Innovation Co., Ltd. and nine other companies are widely dispersed, so it is determined that the Company has voting rights to exercise de facto control.
- (*3) The Group owns 100% of the ordinary shares of SK Incheon Petrochem Co., Ltd. and SK TNS Co., Ltd., but holds 68.0% and 59.5% of equity ownership respectively, due to the issuance of its preferred shares having voting rights.
- (*4) In accordance with a resolution of the Board of Directors on September 28, 2017, SK Telecom Co., Ltd., on December 14, 2017, acquired the remaining shares of SK Telink Co., Ltd. (excluding the shares owned by SK Telecom Co., Ltd.) which were held by other shareholders of SK Telink Co., Ltd. The Board of Directors elected to pay cash of \(\pmu\)270,583 per share in exchange. For the exchange, SK Telecom Co., Ltd. and its subsidiaries paid \(\pmu\)35,281 million in cash, and as at December 31, 2017, SK Telecom Co., Ltd. owns 100% of equity ownership of SK Tellink Co., Ltd.
- (*5) On November 24, 2016, SK Telecom Co., Ltd. acquired all of the shares of SK Communications Co., Ltd., on February 7, 2017, that are held by the other shareholders of SK Communications Co., Ltd. at ₩2,814 per share in cash. As at December 31, 2017, SK Telecom Co., Ltd. wholly owns the ordinary shares of SK Communications Co., Ltd..
- (*6) During the current reporting period, SK Energy Co., Ltd. transferred the entire equity ownership to SK Networks Co., Ltd., resulting in a change of the largest shareholder.
- (*7) The assets and liabilities of Daiyang SK Networks SAN. VE TIC. Ltd. STI are classified as assets and liabilities held for sale (see Note 30 Non-current assets and non-current liabilities classified as held for sale).
- (*8) The equity ownership of SKC (Jiangsu) High Tech Plastics Co., Ltd. is 100% based on the shareholders' agreement, which gives preemptive rights to the non-controlling ownership.

- (*9) During the current reporting period, SKC Co., Ltd. acquired additional 51% equity ownership of SKC Hi-Tech & Marketing Co., Ltd. (formerly, SKC Haas Display Film Co., Ltd.) and classified it as the Group's subsidiaries (see Note 38).
- (*10) In accordance with a resolution of the Board of Directors on February 27, 2017, SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.), a subsidiary, split its shipping business division on April 1, 2017. The name of the surviving company is SK Maritime Co., Ltd., and the name of the spin-off company is SK Shipping Co., Ltd.. SK Maritime Co., Ltd. reduced its capital of \(\psi\)162,696 million and consequently, the Group's equity ownership increased from 83.08% to 99.99%. After this, the Company has received shares from other shareholders of SK Maritime Co., Ltd., and thus, its equity ownership become 100% as at December 31, 2017. SK Shipping Co., Ltd. issued shares amounting to \(\psi\)222 billion under the third-party allocation method on April 13, 2017, and SK Maritime Co., Ltd. sold 18.11% of the equity ownership in SK Shipping Co., Ltd. at \(\psi\)163 billion. Subsequently, SK Maritime's equity ownership in SK Shipping Co., Ltd. decreased from 100% to 57.22%.
- (*11) The Group's 63 consolidated structured entities are classified as subsidiaries in the consolidated financial statements. In accordance with the terms of the agreement on establishment of these entities, the Group substantially receives all of the returns related to their operations and net assets, and has the ability to direct these entities' activities in a way that most significantly affects these returns.
- (*12) Equity ownership has changed due to the capital increase during the current reporting period.
- (*13) The assets and liabilities of SK Encarsales.com Ltd. are classified as assets and liabilities held for sale (see Note 30 Non-current assets and non-current liabilities classified as held for sale).
- (*14) During the current reporting period, SK Global Chemical (China) Holding Co., Ltd. transferred 66% of the equity ownership to FSK L&S Co., Ltd., resulting in a change of the largest shareholder.
- (*15) During the current reporting period, the Group transferred all of its ordinary shares in SKY Property Management Ltd. and SK Industrial Development China Co., Ltd. and cash consideration of USD 300 million to SK China Company Ltd., one of the Group's subsidiaries.

1.3 Changes in consolidated subsidiaries

SK Shipping Co., Ltd.

1.3 Changes in consolidated subsidiaries	
Changes in the consolidated subsidiaries for the year ended December 31,	2017 are as follows:
December 31, 2016 Inclusion Exclusion	December 31, 2017
290 39 (20)	309
For the year ended December 31, 2017, subsidiaries newly included in con	solidation are as follows:
Subsidiary	Reasons for changes
SK Investment Management Co., Ltd.	Establishment
Skyline Auto Financial Leasing Co., Ltd.	(21 companies)
SK Financial Leasing Co., Ltd.	
SK Computer and Communication LLC	
SK Primacor Americas LLC	
SK Primacor Europe, S.L.U.	
SK Battery China Holdings Co., Ltd.	
SK Battery Hungary Kft.	
SK Saran Americas LLC	
SKC PU Specialty Co., Ltd.	
SKC (Nantong) PU Specialty Co., Ltd.	
SKC-ENF Electronic Materials Co., Ltd.	
SKC (Nantong) Semiconductor Materials Technology Co., Ltd.	
Home&Service Co., Ltd.	
Plutus Capital NY, LLC	
Hudson Energy NY, LLC	
SK Biotek Ireland Limited	
Blueseaocean 3rd LLC	
Plutus Fashion NY, Inc.	
Wonderland NY, Inc.	
SK Store Co., Ltd.	
SM Core, Inc.	Acquisition
Point Code Inc.	(17 companies)
SMC US, Inc.	(17 companies)
SKC Hi-Tech&Marketing Co., Ltd. (formerly, SKC Haas Display Film Co., Ltd.)	
SKC Hi-Tech&Marketing (Suzhou) Co., Ltd.	
SKC Hi-Tech&Marketing (Guzhou) Go., Ltd.	
SKC Hi-Tech&Marketing Japan Co., Ltd.	
SKC Hi-Tech&Marketing Polska SP.Z.O.O	
SKC Hi-Tech&Marketing USA LLC	
SK Siltron Co., Ltd.	
SK Siltron America, Inc.	
SK Siltron Japan, Inc.	
S.M. Life Design Company Japan, Inc.	
SK Networks Middle East FZE	
SK Brasil LTDA	
SK Networks Trading Malaysia Sdn Bhd	

Spin-off (1 company)

1.3 Changes in consolidated subsidiaries (cont'd)

During the year ended December 31, 2017, subsidiaries excluded from consolidation are as follows:

Subsidary	Reasons for changes
SK Energy Australia (Togara) Pty. Ltd.	Liquidation
Moche Energy Company, LLC	(13 companies)
GaSan 2nd LLC	
SK MENA B.V.	
N-Compass Development, LLC	
Stonebridge Cinema Fund	
Adventure Shipholding S.A.	
Ambition Shipholding S.A.	
ZH-A Shipholding Group S.A.	
ZH-B Shipholding Group S.A.	
Brave Shipholding Group S.A.	
Hope Shipholding S.A.	
APMA Shipholding Company S.A.	
SK Networks (China) Fashion Co., Ltd.	Disposal
Obzee N.Y. Inc.	(3 companies)
Planet11 E-commerce Solutions India Pvt. Ltd.	
Entrix Co., Ltd.	Merge
	(1 company)
SM Core, Inc.	Others
Point Code Inc.	(3 companies) (*1)
SMC US, Inc.	

(*1) During the current reporting period, the Company acquired 26.65% ownership equity of SM Core, Inc. and voting rights of shares (16.93%) owned by the CEO have been delegated to the Group. Consequently, the Group classified SM Core, Inc. as its subsidiary. However, as the delegation expired, the Group is unable to exercise de facto control so the Group classified SM Core, Inc. as its investments in associates and joint ventures.

1.4 Condensed financial information of significant consolidated subsidiaries

Details of condensed financial information of the significant subsidiaries as at and for the year ended December 31, 2017 are as follows (Korean won in millions):

Sk Imovation Co, Ltd. Subsidiary assets Isabilities Sales (loss) SK Energy Co, Ltd. 112,990,532 7,124,985 28,885,192 937,993 SK Global Chemical Co, Ltd. 5,101,213 11,883,689 28,885,192 937,993 SK Global Chemical Co, Ltd. 5,718,014 2,995,593 7,236,355 283,205 SK Trading International Co, Ltd. 116,166 3,137,425 290,364 388,528 SK Global Chemical Americas, Inc. 160,636 64,283 791,974 9,447 SK Global Chemical International Trading (Shanghai) Co, Ltd. 110,777 99,506 74,773 1,589 SK Energy International Pte, Ltd. 3,119,759 2,601,735 22,022,865 (17,132) SK Energy International Pte, Ltd. 3,119,759 2,601,735 22,022,865 (17,132) SK Lubricants Europe B.V. 232,643 225,171 3,590,360 (8,471) SK Ele America, Inc. 213,440 166,192 513,723 1,550 SK Ele America, Inc. 212,034 4,945,252 1,950,131 12,480,		Total	Total		Net income
SK Innovation Co., Ltd. W*14795,190 W*1,7108,216 W*3,103,343 W*1600,005 SK Energy Co., Ltd. 12,996,532 7,124,985 937,903 SC Blobal Chemical Co., Ltd. 1,818,859 10,327,976 640,304 SK Incheon Petrochem Co., Ltd. 5,716,014 1,818,858 10,327,976 640,304 SK Trading International Co., Ltd. 2,116,156 1,317,425 10,346,656 139,108 SK Lubricants Co., Ltd. 2,144,149 744,772 2,904,364 368,528 SK Global Chemical International Trading (Shanghai) Co., Ltd. 160,636 62,333 35,624 2,587 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,777 99,506 74,7730 1,589 SK Energy International Problem Ltd. 110,777 99,506 74,7730 1,589 SK Energy Hemational Problem Ltd. 608,719 510,112 3,000,056 (4,771) SK Energy International Problem Ltd. 608,719 510,112 3,000,056 (4,711) SK Lubricants Europe B.V. 1,000,003 4,000,003 1,000,003 1,000,003 1,000,003 <td>Subsidiary</td> <td>assets</td> <td>liabilities</td> <td>Sales</td> <td>(loss)</td>	Subsidiary	assets	liabilities	Sales	(loss)
SK Energy Co., Ltd. 12,990,532 7,124,985 28,885,192 937,903 SK Global Chemical Co., Ltd. 5,716,014 2,995,536 7,236,355 283,205 SK Trading International Co., Ltd. 2,116,156 1,317,427 2,904,364 388,528 SK Global Chemical International Trading (Shanghai) Co., Ltd. 160,636 64,283 791,974 9,447 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,777 99,506 747,730 1,589 SK Global Chemical Singapore Pte, Ltd. 110,777 99,506 747,730 1,589 SK Energy International Pte, Ltd. 3,119,759 2,601,735 22,022,685 (17,132) SK Energy Europe, Ltd. 608,719 510,112 3,906,056 (8,471) SK Lubricants Europe B.V. 232,643 225,177,23 1,537 1,557,723 1,1953 SK Tellink Co., Ltd. 255,575,522 10,550,131 12,468,035 1,311,114 43,006 80,442 1,2876 SK Tellink Co., Ltd. 455,885 104,727 3,899,44 2,557,522 1,550,131 12,468,035 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
SK Global Chemical Co., Ltd. 5,810,213 1,683,659 1,0327,976 640,304 SK Incheon Petrochem Co., Ltd. 2,116,166 1,317,425 1,0934,656 139,108 SK Lubricants Co., Ltd. 2,114,149 744,772 2,904,364 388,528 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,636 64,233 791,749 49,472 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,636 64,233 791,794 9,474 SK Global Chemical International Ptc. Ltd. 110,777 99,506 747,730 1,589 SK Energy International Ptc. Ltd. 608,719 510,112 3,906,096 (8,471) SK Lubricants Americas, Inc. 213,440 166,192 513,723 1,953 SK Lubricants Americas, Inc. 121,034 48,308 225,171 566,528 1,607 SK Telecom Co., Ltd. 455,587 445,588 141,224 430,442 1,268 SK Telecom Co., Ltd. 455,685 104,727 389,944 32,728 SK Telecom Co., Ltd. 455,685 104,727	•		, ,	, ,	, ,
SK Incheon Petrochem Co., Ltd. 5,716,014 2,995,536 7,236,355 283,205 SK Trading International Co., Ltd. 2,114,149 744,772 2,904,364 368,528 SK Global Chemical International Trading (Shanghai) Co., Ltd. 150,836 64,233 791,974 9,447 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,777 99,506 747,730 1,589 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,777 99,506 747,730 1,589 SK Energy International Pte. Ltd. 3,119,759 560,1735 22,022,885 (17,132) SK Energy International Pte. Ltd. 3,119,759 560,1735 22,022,885 (17,132) SK Energy Europe, Ltd. 688,719 510,122 3,960,666 (8,471) SK 112 3,960,666 (8,471) SK 112 3,960,666 (8,471) SK 112 3,960,666 (8,471) SK 112 SK 112 3,960,666 (8,471) SK 112 SK 112 3,960,668 3,471 SK 112		, ,			
SK Trading International Co., Ltd. 2,114,196 1,317,425 1,0934,686 139,108 SK Lubricants Co., Ltd. 553,810 223,739 35,624 2,587 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,077 99,506 747,730 1,589 SK Ghobal Chemical Isingapore Pte. Ltd. 110,777 99,506 747,730 1,589 SK Energy International Pte. Ltd. 608,719 510,112 3,906,056 (8,471) SK Lebra Chemical International Pte. Ltd. 608,719 510,112 3,906,056 (8,471) SK Lubricants Americas, Inc. 232,643 225,171 586,528 1,607 Iberian Lube Base Oils SA. 404,528 141,224 430,442 12,676 SK EEAP America, Inc. 121,034 48,088 22,248,433 225,171 586,528 1,607 Iberian Lube Base Oils SA. 404,528 141,224 430,442 12,676 58 1860,000 1,501,141 3,906,056 (8,471) 586,555,522 1,506,013 12,248,033 1,301,114 430,442 12,278 58 (Ter					,
SK Lubricants Co., Ltd. SK Global Chemical Americas, Inc. S53,810 223,739 35,624 2,587 SK Global Chemical International Trading (Shanghai) Co., Ltd. 160,636 42,83 791,974 9,447 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,777 99,506 747,730 1,589 SK Energy International Pte. Ltd. 608,719 510,112 3,906,056 (47,732) SK Energy Europe, Ltd. 608,719 510,112 3,906,056 (8,471) SK Lubricants Europe B.V. 222,643 225,171 556,528 1,697 Iberian Lube Base Olis S.A. SK Lubricants Europe B.V. 121,034 44,308 - (20,675) SK EAP America. Inc. 121,034 44,308 - (20,675) SK Telecom Co., Ltd. 455,557,522 10,550,131 12,468,035 1,331,145 SK Telmore, Co., Ltd. 455,685 104,727 39,944 SK Telmore, Co., Ltd. 455,685 104,727 39,944 SK Telmore, Co., Ltd. 455,685 104,727 39,944 SK Palmore, Co., Ltd. 455,685 104,727 39,944 SK Networks Co., Ltd. 510,285 (513,667) SK Networks Co., Ltd. 510,285 (513,667) SK Networks Co., Ltd. 510,285 (513,667) SK Networks Hong Kong Ltd. 510,285 (513,667) SK Shipping Co., Ltd. 510,447 (513,447) SK S		, ,		, ,	
SK Global Chemical Americas, Inc. 553,810 223,739 35,624 2,887 SK Global Chemical International Trading (Shanghai) Co., Ltd. 110,777 99,506 747,730 1,589 SK Energy International Pred. 3,119,759 2,601,735 22,02,285 (17,132) SK Energy Europe, Ltd. 608,719 510,112 3,906,056 (8,471) SK Lubricants Americas, Inc. 232,643 225,171 586,528 1,607 Iberian Lube Base Olis S.A. 404,528 141,224 430,442 12,876 SK EAP America, Inc. 121,034 404,538 11,468,308 1,2876 SK Tellocon Co., Ltd. 25,557,622 10,550,131 12,468,035 1,331,114 SK Tellocon Co., Ltd. 455,685 104,727 389,944 3,2728 SK Tellocon Co., Ltd. 1,534,866 920,677 1,082,685 1,042 SK Barbandard Co., Ltd. 1,534,866 920,677 1,082,685 1,042 SK Tellocon Co., Ltd. 1,534,866 920,677 1,082,685 (13,364) SK Tellocon Co., Ltd.					
SK Global Chemical Singapore Piet. Ltd. 110,777 99,506 747,730 1,589 SK Energy International Piet. Ltd. 3,19,759 2,601,735 22,022,685 (17,132) SK Energy Europe, Ltd. 608,719 510,112 3,906,056 (8,471) SK Lubricants Americas, Inc. 213,440 166,192 513,723 1,583 SK Lubricants Europe B.V. 232,643 225,171 586,528 1,607 Iberian Lube Base Oils S.A. 404,528 141,224 430,442 12,876 SK EAP America, Inc. 121,034 48,308 42 20,6075 SK Tellecom Co., Ltd. 455,685 104,727 389,944 32,728 SK Tellos Co., Ltd. 455,685 104,727 389,944 32,728 SK Broadband Co., Ltd. 455,685 104,727 389,944 32,728 SK Parkenker Sco., Ltd. 417,584 4172,210 18,004,889 32,030 SK Networks Group Co., Ltd. 6,417,584 4,172,210 18,004,889 (22,227) SK Networks Group Co., Ltd. 751,232 <th< td=""><td></td><td></td><td></td><td></td><td></td></th<>					
SK Global Chemical Singapore Piet. Ltd. 110,777 99,506 747,730 1,589 SK Energy International Piet. Ltd. 3,19,759 2,601,735 22,022,685 (17,132) SK Energy Europe, Ltd. 608,719 510,112 3,906,056 (8,471) SK Lubricants Americas, Inc. 213,440 166,192 513,723 1,583 SK Lubricants Europe B.V. 232,643 225,171 586,528 1,607 Iberian Lube Base Oils S.A. 404,528 141,224 430,442 12,876 SK EAP America, Inc. 121,034 48,308 42 20,6075 SK Tellecom Co., Ltd. 455,685 104,727 389,944 32,728 SK Tellos Co., Ltd. 455,685 104,727 389,944 32,728 SK Broadband Co., Ltd. 455,685 104,727 389,944 32,728 SK Parkenker Sco., Ltd. 417,584 4172,210 18,004,889 32,030 SK Networks Group Co., Ltd. 6,417,584 4,172,210 18,004,889 (22,227) SK Networks Group Co., Ltd. 751,232 <th< td=""><td></td><td>,</td><td></td><td>,</td><td>,</td></th<>		,		,	,
SK Energy International Pies. Ltd. 3,119,759 2,601,735 22,022,685 (17,132) SK Energy Europe, Ltd. 608,719 510,112 3,306,056 (8,471) SK Lubricants Americas, Inc. 213,440 166,192 513,723 1,953 SK Lubricants Europe BV. 232,643 225,5171 586,528 1,600 Iberian Lube Base Oils S.A. 404,528 141,224 430,442 1,2876 SK Falecom GO., Ltd. 25,557,522 10,550,131 12,468,035 1,331,114 SK Briecom GO., Ltd. 3,802,349 2,16,617 3,899,44 32,728 SK Broadband Co., Ltd. 1,534,866 20,677 389,944 32,728 SK Planet Co., Ltd. 1,534,866 20,677 1,082,685 161,472 389,944 32,728 SK Magic Co., Ltd. 1,534,866 290,077 10,826,685 151,667,377 391 560,483 288,881 1,766,142 391 SK Magic Co., Ltd. 1,512,285 324,047 524,172 18,089 282,277 554,472 354,047 524,172		,	,		
SK Lubricants Americas, Inc. 213,440 166,192 513,723 1,953 SK Lubricants Europe B.V 223,643 225,171 586,528 1,607 Iberian Lube Base Oils S.A. 404,528 141,224 430,442 12,876 SK EBR America, Inc. 121,034 48,388 - (20,675) SK Telecom Co., Ltd. 455,685 104,727 389,944 32,728 SK Broadboard Co., Ltd. 3,802,349 26,16,317 3,950,083 32,030 SK Marketing Corp. 506,883 288,881 1,766,142 391 SK Networks Co., Ltd. 6417,584 4,172,210 18,004,489 (22,927) SK Magic Co., Ltd. 510,285 324,047 524,172 18,004 SK Networks (Shanghai) Co., Ltd. 75,437 29,682 435,129 1,004 489 SK Coc, Ltd. 75,437 29,682 435,129 1,004 489 SK Carrier, Ltd. 37,517 29,682 435,129 1,017 1,034,473 3,791 SK Coc, Ltd. 37,517		3,119,759	2,601,735	22,022,685	(17,132)
SK Lubricants Americas, Inc. 213,440 166,192 513,723 1,953 SK Lubricants Europe B.V 223,643 225,171 586,528 1,607 Iberian Lube Base Oils S.A. 404,528 141,224 430,442 12,876 SK EBR America, Inc. 121,034 48,388 - (20,675) SK Telecom Co., Ltd. 455,685 104,727 389,944 32,728 SK Broadboard Co., Ltd. 3,802,349 26,16,317 3,950,083 32,030 SK Marketing Corp. 506,883 288,881 1,766,142 391 SK Networks Co., Ltd. 6417,584 4,172,210 18,004,489 (22,927) SK Magic Co., Ltd. 510,285 324,047 524,172 18,004 SK Networks (Shanghai) Co., Ltd. 75,437 29,682 435,129 1,004 489 SK Coc, Ltd. 75,437 29,682 435,129 1,004 489 SK Carrier, Ltd. 37,517 29,682 435,129 1,017 1,034,473 3,791 SK Coc, Ltd. 37,517	SK Energy Europe, Ltd.	608,719	510,112	3,906,056	(8,471)
Iberian Lube Base Oils S.A. 404,528 141,224 430,442 12,876 K.E.R.P. Menica, Inc. 121,034 48,308 - (20,675) SK Telecom Co., Ltd. 25,557,522 10,550,131 12,468,035 1,331,114 SK Telink Co., Ltd. 365,685 104,727 389,944 32,728 SK Broadband Co., Ltd. 360,349 2,616,317 3,950,083 32,003 SK Broadband Co., Ltd. 1,534,866 290,677 1,082,685 (513,667) SK Planet Co., Ltd. 1,534,866 290,677 1,082,685 (513,667) SK Planet Co., Ltd. 64,47,584 4,172,210 18,004,489 (22,927) SK Magic Co., Ltd. 510,285 324,047 524,172 18,008, SK Networks (Shanghai) Co., Ltd. 87,437 51,549 569,407 (363) SK Networks (Shanghai) Co., Ltd. 87,437 29,682 435,129 1,107 SK Co., Ltd. 2690,926 1,152,171 1,403,473 37,918 SK Ilesys Co., Ltd. 175,210 229,462 398,402 19,327 SKC, Inc. 399,564 1,157 258,572 127,397 SK Shipping Co., Ltd. 39,564 1,157 258,572 127,397 SK Shipping Co., Ltd. 154,472 50,164 754,032 3,377 SK E&S Co., Ltd. 4,501,454 1,751,325 623,511 103,121 1,403,473 3,778 SK E&S Co., Ltd. 4,501,454 1,751,325 623,511 103,121 1,403,473 3,778 SK E&S Co., Ltd. 4,501,454 1,751,325 623,511 103,121 1,403,473 3,778 1,403,473 3,404,473 3,404,473 3,404,473 3,404,473 3,404,473 3,404,473 3		213,440	166,192	513,723	1,953
SK ER PAmerica, Inc. 121,034 48,308 - (20,675) SK Telecom Co., Ltd. 25,557,525 10,550,131 12,486,035 1,31,114 SK Telecom Co., Ltd. 3,502,349 2,616,317 389,944 32,728 SK Broadband Co., Ltd. 506,883 288,881 1,766,142 391 SK Planet Co., Ltd. 1,534,866 920,677 1,082,685 (513,667) SK Networks Co., Ltd. 6,417,584 4,172,210 18,004,489 (22,927) SK Magic Co., Ltd. 510,285 324,047 524,172 18,008 SK Networks (Shanghai) Co., Ltd. 75,437 51,549 569,407 (363) SK Networks (Shong Ltd. 75,437 51,549 569,407 (363) SK Telesys Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. 175,210 229,462 398,402 19,327 SK, Jee, Ltd. 175,210 3,360,033 3,240,990 697,059 (66,456) SK Aratitime Co., Ltd. (formerly, SK Shipping Co., Ltd. 1,544,722	SK Lubricants Europe B.V.	232,643	225,171	586,528	1,607
SK Telecom Co., Ltd. 25,557,522 10,550,131 12,488,035 1,331,114 SK Telink Co., Ltd. 45,5685 104,727 389,944 32,728 SK Broadband Co., Ltd. 3,802,349 2,616,317 3,050,083 32,030 PS&Marketing Corp. 506,883 288,881 1,766,142 3,91 SK Planet Co., Ltd. 1,534,866 920,677 1,082,685 (513,667) SK Networks Co., Ltd. 6,417,584 4,172,210 18,004,489 (22,927) SK Networks Co., Ltd. 510,285 324,047 524,172 18,089 SK Networks (Shanghai) Co., Ltd. 87,127 29,682 435,129 1,107 SKC Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telsesys Co., Ltd. 355,560,53 3,240,99 398,402 19,327 SK Maritine Co., Ltd. (formerly, SK Shipping Co., Ltd. 3,560,053 3,240,99 697,059 (9,906) SK B&T Pte. Ltd. 154,472 50,164 754,032 3,377 SK E&S Co., Ltd. 4,501,454 1,751,325 623	Iberian Lube Base Oils S.A.	404,528	141,224	430,442	12,876
SK Tellink Co., Ltd. 455,685 104,727 389,944 32,728 SK Broadband Co., Ltd. 3,802,349 2,616,317 3,050,083 32,030 PS&Marketing Corp. 506,883 288,881 1,766,142 391 SK Planet Co., Ltd. 1,534,866 920,677 1,082,685 (513,667) SK Networks Co., Ltd. 6,417,584 4,172,10 18,004,489 (22,927) SK Networks (Shanghai) Co., Ltd. 75,437 51,549 569,407 3(363,38) SK Networks Hong Kong Ltd. 87,127 29,682 435,129 1,107 SK Telesys Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. 2,661 1,157 229,462 398,402 19,327 SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) 3,560,053 3,240,990 697,059 (9,906) SK B&T Pte. Ltd. 3,560,053 3,240,990 697,059 (9,906) SK B&S T Pte. Ltd. 3,407				· -	
SK Tellink Co., Ltd. 455,685 104,727 389,944 32,728 SK Broadband Co., Ltd. 3,802,349 2,616,317 3,050,083 32,030 PS&Marketing Corp. 506,883 288,881 1,766,142 391 SK Planet Co., Ltd. 1,534,866 920,677 1,082,685 (513,667) SK Networks Co., Ltd. 6,417,584 4,172,10 18,004,489 (22,927) SK Networks (Shanghai) Co., Ltd. 75,437 51,549 569,407 3(363,38) SK Networks Hong Kong Ltd. 87,127 29,682 435,129 1,107 SK Telesys Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. 2,661 1,157 229,462 398,402 19,327 SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) 3,560,053 3,240,990 697,059 (9,906) SK B&T Pte. Ltd. 3,560,053 3,240,990 697,059 (9,906) SK B&S T Pte. Ltd. 3,407	SK Telecom Co., Ltd.	25,557,522	10,550,131	12,468,035	1,331,114
SK Broadband Co., Ltd. 3,802,349 2,616,317 3,050,083 32,030 PS&Marketing Corp. 506,883 288,881 1,766,142 391 SK Planet Co., Ltd. 6,417,584 4,172,210 18,004,489 (22,927) SK Magic Co., Ltd. 510,285 324,047 524,172 18,004 SK Networks (Shanghai) Co., Ltd. 75,437 51,549 569,407 (363) SK Networks (Shanghai) Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. (formerly, SK Shipping Co., Ltd.) 175,210 229,462 398,402 19,327 SK Agritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) 23,651 1,157 258,572 127,397 SK Shipping Co., Ltd. 359,564 312,201 316,279 366,456 SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd. 3,560,053 3,240,990 697,059 9,906) SK B&T Pte. Ltd. 3,560,053 3,240,990 697,059 9,906) 364,560,53					
PS&Marketling Corp. 506,883 288,881 1,766,142 391 SK Planet Co., Ltd. 1,534,866 920,677 1,082,685 (513,667) SK Networks Co., Ltd. 510,285 324,047 524,172 18,004,489 (22,927) SK Magic Co., Ltd. 510,285 324,047 524,172 18,089 SK Networks (Shanghai) Co., Ltd. 87,127 29,682 435,129 1,107 SKC Co., Ltd. 2,690,926 1,152,171 1,403,473 37,918 SK Telesys Co., Ltd. 175,210 229,462 398,402 19,327 SKC, Inc. 359,564 312,201 316,279 (66,456) SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) 3,560,033 3,240,990 697,059 (9,906) SK B&S TPle. Ltd. 154,472 50,164 754,032 3,377 SK E&S Co., Ltd. 4,501,447 25,164 754,032 3,377 SK E&S Co., Ltd. 175,147 1,54,472 50,164 754,032 3,377 SK E&S Co., Ltd. 175,343 175,522 </td <td></td> <td></td> <td></td> <td></td> <td></td>					
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SK B&T Pte. Ltd. 154,472 50,164 754,032 3,377 SK E&S Co., Ltd. 4,501,454 1,751,325 623,511 103,121 Yeongnam Energy Service Co., Ltd. 408,416 208,317 641,872 28,557 Ko-one Energy Service Co., Ltd. 797,081 419,788 1,063,058 16,314 Narae Energy Service Co., Ltd. 753,343 575,558 283,128 (5,371) Pusan City Gas Co., Ltd. 907,165 326,247 935,235 45,014 Chungcheong Energy Service Co., Ltd. 309,465 185,604 451,768 22,054 Paju Energy Service Co., Ltd. 1,823,078 951,684 907,050 106,754 Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Americas, Inc. 703,910 172,317 - (4,017) SK Es&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC					
SK E&S Co., Ltd. 4,501,454 1,751,325 623,511 103,121 Yeongnam Energy Service Co., Ltd. 408,416 208,317 641,872 28,557 Ko-one Energy Service Co., Ltd. 797,081 419,788 1,063,058 16,314 Narae Energy Service Co., Ltd. 753,343 575,558 283,128 (5,371) Pusan City Gas Co., Ltd. 907,165 326,247 935,235 45,014 Chungcheong Energy Service Co., Ltd. 309,465 185,604 451,768 22,054 Paju Energy Service Co., Ltd. 1,823,078 951,684 907,050 106,754 Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (4,017) SK Ess Americas, Inc. 647,507 9,650 84,254 5,043 SK TNS Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157		154,472	50,164	754,032	3,377
Ko-one Energy Service Co., Ltd. 797,081 419,788 1,063,058 16,314 Narae Energy Service Co., Ltd. 753,343 575,558 283,128 (5,371) Pusan City Gas Co., Ltd. 907,165 326,247 935,235 45,014 Chungcheong Energy Service Co., Ltd. 309,465 185,604 451,768 22,054 Paju Energy Service Co., Ltd. 1,823,078 951,684 907,050 106,754 Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1)	SK E&S Co., Ltd.	4,501,454	1,751,325	623,511	103,121
Narae Energy Service Co., Ltd. 753,343 575,558 283,128 (5,371) Pusan City Gas Co., Ltd. 907,165 326,247 935,235 45,014 Chungcheong Energy Service Co., Ltd. 309,465 185,604 451,768 22,054 Paju Energy Service Co., Ltd. 1,823,078 951,684 907,050 106,754 Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK TNS Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd.	Yeongnam Energy Service Co., Ltd.	408,416	208,317	641,872	28,557
Pusan City Gas Co., Ltd. 907,165 326,247 935,235 45,014 Chungcheong Energy Service Co., Ltd. 309,465 185,604 451,768 22,054 Paju Energy Service Co., Ltd. 1,823,078 951,684 907,050 106,754 Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd.	Ko-one Energy Service Co., Ltd.	797,081	419,788	1,063,058	16,314
Chungcheong Energy Service Co., Ltd. 309,465 185,604 451,768 22,054 Paju Energy Service Co., Ltd. 1,823,078 951,684 907,050 106,754 Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126	Narae Energy Service Co., Ltd.	753,343	575,558	283,128	(5,371)
Paju Energy Service Co., Ltd. 1,823,078 951,684 907,050 106,754 Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035 <	Pusan City Gas Co., Ltd.	907,165	326,247	935,235	45,014
Wirye Energy Service Co., Ltd. 815,150 591,427 229,935 1,263 Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	Chungcheong Energy Service Co., Ltd.	309,465	185,604	451,768	22,054
Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.) 165,221 122,203 874,544 20,262 SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. (*1, *2) 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	Paju Energy Service Co., Ltd.	1,823,078	951,684	907,050	106,754
SK E&S Australia Pty. Ltd. 410,842 152,137 - (4,017) SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	Wirye Energy Service Co., Ltd.	815,150	591,427	229,935	1,263
SK E&S Americas, Inc. 703,910 172,317 - (10,738) DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.)	165,221	122,203	874,544	20,262
DewBlaine Energy, LLC 647,507 9,650 84,254 5,043 SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	SK E&S Australia Pty. Ltd.	410,842	152,137	-	(4,017)
SK Engineering & Construction Co., Ltd. 5,241,943 4,262,118 6,439,815 73,157 SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	SK E&S Americas, Inc.	703,910	172,317	-	(10,738)
SK TNS Co., Ltd. 207,342 182,935 541,996 30,734 SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	DewBlaine Energy, LLC	647,507	9,650	84,254	5,043
SK Materials Co., Ltd. (*1) 1,118,007 709,870 512,294 104,063 Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	SK Engineering & Construction Co., Ltd.	5,241,943	4,262,118	6,439,815	73,157
Essencore Limited (*1) 355,055 123,837 930,967 163,731 SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	SK TNS Co., Ltd.	207,342	182,935	541,996	30,734
SK China Company, Ltd. 2,159,391 4,404 - 6,346 SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	SK Materials Co., Ltd. (*1)	1,118,007	709,870	512,294	104,063
SKY Property Management Ltd. (*1) 608,960 43,406 59,819 22,126 Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035	Essencore Limited (*1)	355,055	123,837	930,967	163,731
Happynarae Co., Ltd. 171,122 141,208 1,050,641 9,352 SK Siltron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035		2,159,391	4,404	-	6,346
SK Ślitron Co., Ltd. (*1, *2) 1,650,793 1,207,016 328,854 47,035				,	,
	Happynarae Co., Ltd.	171,122	141,208	1,050,641	9,352
Plutus Capital NY, Inc. (*1) 438,984 216,412 - 470				328,854	
	Plutus Capital NY, Inc. (*1)	438,984	216,412	-	470

^(*1) The condensed financial information is consolidated financial information.

^(*2) Sales and net income are the amounts occurring after business combinations.

1.5 Disclosure of significant non-controlling interests in subsidiaries

Information about significant non-controlling interests in subsidiaries as at and for the year ended December 31, 2017 is as follows (Korean won in millions):

	December 31, 2017						
							SK Engineering&
	SK Innovation	SK Telecom	SK Networks		SK Maritime	SK E&S	Construction
Segment	Co., Ltd.	Co., Ltd.	Co., Ltd.	SKC Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.
Percentage of the non-controlling ownership	66.86%	71.16%	59.64%	56.55%	-%	10.00%	53.79%
Current assets	₩16,219,199	₩ 6,201,799	₩ 2,609,399	₩ 897,152	₩ 634,856	₩2,494,905	₩ 3,705,511
Non-current assets	18,024,405	27,226,870	4,617,973	2,770,159	3,819,682	6,848,014	1,835,637
Current liabilities	9,954,797	7,109,123	3,207,069	1,200,800	1,479,705	2,187,233	3,766,718
Non-current liabilities	4,979,473	8,290,351	1,671,802	872,936	2,803,840	3,395,566	867,705
Net assets	19,309,334	18,029,195	2,348,501	1,593,575	170,993	3,760,120	906,725
Book value of the non-controlling interests	13,695,172	12,442,900	1,481,369	1,010,822	168,002	1,587,914	696,307
Sales	46,260,932	17,520,013	19,593,651	2,653,544	1,534,619	5,535,226	7,316,082
Net income (loss)	2,145,102	2,657,595	34,610	136,347	(27,785)	374,325	146,897
Total comprehensive income (loss)	1,878,123	2,656,582	22,336	114,279	(43,607)	270,026	109,819
Net income (loss) of the non- controlling interests	1,353,956	1,826,867	(82,968)	86,131	663	63,019	82,413
Total comprehensive income (loss) of the non-controlling interests	1,187,135	1,829,992	(89,044)	103,043	(18,127)	59,974	41,140
Net cash flows from operating activities	2,180,164	3,855,820	(634,642)	209,335	(26,120)	542,148	254,526
Net cash flows from (used in) investing activities	(1,066,147)	(3,070,607)	878,023	(175,691)	69,883	(663,073)	85,317
Net cash flows from (used in) financing activities before dividends paid to the non-controlling interests	(1,160,987)	(307,041)	(661,028)	56,049	39,355	760,914	(286,776)
Dividends paid to the non- controlling interests	(509,745)	(519,577)	(15,118)	(18,007)	(10,700)	(45,509)	(7,888)
Net increase (decrease) in cash and cash equivalents	(556,715)	(41,405)	(432,765)	71,686	72,418	594,480	45,179

The aforementioned condensed financial information is consolidated financial information of each subsidiary and non-controlling interests include hybrid bonds.

2. Summary of significant accounting policies

The Group maintains its official accounting records in Korean won and prepares consolidated financial statements in conformity with the Korean International Financial Reporting Standards ("KIFRS"), in the Korean language. Accordingly, these consolidated financial statements are intended for use by those who are informed about KIFRS and Korean practices. The accompanying consolidated financial statements have been restructured and translated into English with certain expanded descriptions from the Korean language financial statements. Certain information included in the Korean language consolidated financial statements, but not required for a fair presentation of the consolidated financial position, comprehensive income, changes in shareholders' equity or cash flows of the Group, is not presented in the accompanying consolidated financial statements.

The accompanying consolidated financial statements are stated in Korean won, the currency of the country in which the Company is incorporated and operates. The translation of Korean won amounts into U.S. dollar amounts is included solely for the convenience of readers of the financial statements and has been made at the rate of $\mathbb{W}1,071.40$ to USD 1.00, the basic exchange rate in the Seoul Money Brokerage Service for cable transfers in Korean won on the last business day of the year ended December 31, 2017. Such translations into U.S. dollar should not be construed as representations that the Korean won amounts could be converted into U.S. dollar at that or any other rate.

2.1 Basis of preparation

The Group has prepared the consolidated financial statements in accordance with KIFRS.

The significant accounting policies used for the preparation of the accompanying consolidated financial statements as at and for the year ended December 31, 2017, are the same as the accounting policies adopted for the preparation of consolidated financial statements as at and for the year ended December 31, 2016, except for adoption of new and revised KIFRSs applied in the current period, which are summarized below.

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

The accompanying consolidated financial statements were approved at the Company's Board of Directors' meeting on February 6, 2018.

The principal accounting policies are set out below:

2.1.1 New and revised KIFRSs adopted in the current period

The Group has applied amendments to KIFRS issued that are mandatorily effective for accounting periods beginning on or after January 1, 2017.

Amendments to KIFRS 1007 - Statement of Cash Flows

The amendments require entities to provide disclosure of changes in their liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes (such as foreign exchange gains or losses). It is not necessary to compare prior information when applying for the first time. The Group has provided the information for both the current and the comparative period in Note 32. The amendments do not have a material impact on the consolidated financial statements of the Group except for additional disclosure.

Amendments to KIFRS 1012 - Income Taxes

The amendments clarify that an entity needs to consider whether tax law restricts the sources of taxable profits against which it may make deductions on the reversal of deductible temporary difference related to unrealized losses. Furthermore, the amendments provide guidance on how an entity should determine future taxable profits and explain the circumstances in which taxable profit may include the recovery of some assets for more than their carrying amount. The amendments do not have a material impact on the consolidated financial statements of the Group.

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Amendments to KIFRS 1112 - Disclosure of Interests in Other Entities

The amendments clarify that the disclosure requirements in KIFRS 1112, other than those in paragraphs B10–B16, apply to an entity's interest in a subsidiary, a joint venture or an associate (or a portion of its interest in a joint venture or an associate) that is classified (or included in a disposal group that is classified) as held for sale. The amendments do not have a material impact on the consolidated financial statements of the Group.

The Group has not applied the following new and revised KIFRS that have been issued, but are not yet effective:

KIFRS 1102 - Share-based Payment

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

On adoption, entities are required to apply the amendments without restating prior periods, but retrospective application is permitted if elected for all three amendments and other criteria are met. The amendments are effective for annual periods beginning on or after January 1, 2018, with early application permitted.

The Group is assessing the potential effect of the amendments on its consolidated financial statements. The Group will apply these amendments on the required effective date.

KIFRS 1109 - Financial Instruments

KIFRS 1109, published on September 25, 2015 which will replace the KIFRS 1039 *Financial Instruments: Recognition and Measurement*, is effective for annual periods beginning on or after January 1, 2018. The Group currently plans to apply KIFRS 1109 in the period beginning on January 1, 2018.

Adoption of KIFRS 1109 will generally be applied retrospectively, except for the following:

- Exemption allowing the Group not to restate comparative information for prior periods with respect to classification and measurement (including impairment) changes; and
- Prospective application of new hedge accounting except for those specified in KIFRS 1109 for retrospective application such as accounting for the time value of options and the forward element of forward contracts.

Key features of KIFRS 1109 include new classification and measurement approach for financial assets that reflects the business model in which assets are managed and their cash flow characteristics, impairment model based on changes in expected credit losses, and new approaches to hedge qualification and methods for assessing hedge effectiveness.

To ensure smooth implementation of KIFRS 1109, the Group needs to assess the financial impact of adopting KIFRS 1109, to formulate the accounting policy, and to design, implement and enhance the accounting system and related controls. The expected quantitative impact of adopting KIFRS 1109 on the Group's consolidated financial statements cannot be reliably estimated because it will be dependent on the financial instruments that the Group holds and economic conditions at that time as well as accounting elections and judgments that it will make in the future.

The Group has preliminarily assessed the potential impact on the consolidated financial statements for the fiscal year 2017 based on the current situation and information available at the end of the current year to assess the financial impact of the initial adoption of KIFRS 1109. The Group will analyze more specific financial impacts based on additional information later, and the results of the preliminary impact assessments may change based on additional information which is available. Meanwhile, the Group expects that the impact of adoption of KIFRS 1109 on the consolidated financial statements and equity will not be significant.

Classification and measurement of financial assets

Classification of financial assets under KIFRS 1109 is driven by the entity's business model for managing financial assets and their contractual cash flows. This contains three principal classification categories: financial assets measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). Derivatives embedded in contracts where the host is a financial asset are never bifurcated. Instead, the hybrid financial instrument as a whole is assessed for classification. Details of the classification based on business models and contractual cash flows are as follows:

	Contractual cash flow characteristics		
Business model assessment	Solely payments of principal and interest Others		
Purpose of collecting contractual cash flows	Amortized cost (*1)		
Purpose of collecting contractual cash flows and selling	FVOCI-measured at fair value FVTPL-measured at (*1) fair value (*2)		
Purpose of selling, etc.	FVTPL-measured at fair value		

- (*1) To eliminate or significantly reduce the accounting mismatch, the Group may irrevocably designate a financial asset as measured at FVTPL using the fair value option at initial recognition.
- (*2) Equity instruments that are not held for trading may be irrevocably designated as FVOCI using the fair value option.

As new classification requirements for financial assets under KIFRS 1109 are more stringent than requirements under KIFRS 1039, the adoption of the new standard may result in an increase in financial assets designated as FVTPL and higher volatility in profit or loss of the Group. As at December 31, 2017, the Group's financial assets consist of \$25,579,243 million of loans and receivables, \$1,784,636 million of available-for-sale financial assets, and \$369,436 million of financial assets at fair value through profit or loss.

A financial asset is measured at amortized cost under KIFRS 1109 if the asset is held by the Group to collect its contractual cash flows and the asset's contractual cash flows represent solely payments of principal and interest. As at December 31, 2017, the Group has \(\pm25,579,243\) million of loans and receivables measured at amortized cost.

According to the results of the preliminary impact assessment, if the Group applies KIFRS 1109 to its financial assets as at December 31, 2017, the amendments above do not have a material impact on the consolidated financial statements of the Group because the objective of the business model is mostly achieved by collecting contractual cash flows; and the asset's contractual cash flows represent solely payments of principal and interest and most of the financial assets are classified to be measured at amortized cost.

According to KIFRS 1109, a financial asset that is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial asset, and the contractual terms of the debt instruments give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, is measured at FVOCI. As at December 31, 2017, the Group has \$W69,248\$ million of debt instruments classified as available-for-sale financial assets.

Most of the debt instruments held by the Group classified as available-for-sale financial assets are expected to be classified as financial assets measured at FVOCI upon adoption of KIFRS 1109 as at January 1, 2018. Therefore, management does not expect there to be a significant impact.

Under KIFRS 1109, equity instruments that are not held for trading may be irrevocably designated as FVOCI on initial recognition with no recycling of amounts from OCI to profit and loss. As at December 31, 2017, the Group has \(\pm\)1,577,678 million of available-for-sale equity instruments.

The Group plans to designate long-term investment equity securities, which account for most of the available-for-sale equity instruments, as measured at FVOCI. This is why the adoption of KIFRS 1109 will not have a material impact on the consolidated financial statements, except that it will not be recycled to profit and loss.

According to KIFRS 1109, a financial asset whose contractual terms do not give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding, or a debt instrument that is held for trading, or an equity instrument that is not designated as a financial asset measured at FVOCI, are measured at FVTPL. As at December 31, 2017, the Group has $\frac{1}{2}$ 98,643 million designated as measured at FVTPL.

According to the results of the preliminary impact assessment, if the Group applies KIFRS 1109 to its financial assets at FVTPL as at December 31, 2017, the amendments above will not have a material impact on the consolidated financial statements of the Group. This is because most of the Group's financial assets will be designated as financial assets measured at FVTPL.

② Classification and measurement of financial liabilities

Under KIFRS 1109, for the financial liabilities designated as measured at FVTPL using the fair value option, the element of gains or losses attributable to changes in the own credit risk should normally be recognized in other comprehensive income (OCI), with the remainder recognized in profit or loss. These amounts recognized in OCI are not recycled to profit or loss even when the liability is derecognized. However, if presentation of the fair value change in respect of the liability's credit risk in OCI results in or enlarges an accounting mismatch in profit or loss, gains and losses are entirely presented in profit or loss.

According to the results of the preliminary impact assessment, as at December 31, 2017, since financial liabilities at FVTPL are mostly short-term and credit risk fluctuations of financial liabilities are trivial, the adoption of KIFRS 1109 will not have a material impact on the consolidated financial statements.

③ Impairment: financial assets and contract assets

The current impairment requirements under KIFRS 1039 are based on an 'incurred loss model', where the impairment exists if there is objective evidence as a result of one or more events that occurred after the initial recognition of an asset. However, KIFRS 1109 replaces the incurred loss model in KIFRS 1039 with an 'expected credit loss model' which applies to debt instruments measured at amortized cost or at fair value through other comprehensive income.

Under KIFRS 1109, the Group should recognize a loss allowance or provision at an amount equal to 12-month expected credit losses or lifetime expected credit losses for financial assets determined by the extent of probable credit deterioration since initial recognition as explained below. Therefore, the new impairment requirements are expected to result in earlier recognition of credit losses compared to the incurred loss model of KIFRS 1039.

	Stages (*1)	Loss allowances	
Stage 1	No significant increase in credit risk since initial recognition (*2)	Loss allowances are determined for the amount of the expected credit losses that result from default events that are possible within 12 months after the reporting date.	
Stage 2	Significant increase in credit risk since initial recognition	Loss allowances are determined for the amount of the expected credit losses that result from a	
Stage 3	Objective evidence of credit risk impairment	possible default events over the expected life of the financial instrument.	

- (*1) Under KIFRS 1115 Revenue from Contracts with Customers for trade receivables and contract assets arising with no significant credit risk, loss allowances are recognized at an amount equal to lifetime expected credit losses. However, for trade receivables and contract assets with a significant financing component arising under KIFRS 1115, the Group may choose as its accounting policy to recognize loss allowances at an amount equal to lifetime expected credit losses. In addition, for receivables under lease arrangement, the Group may choose to recognize loss allowances at an amount equal to lifetime expected credit losses.
- (*2) The Group may determine that a financial asset's credit risk has not increased significantly if the asset has low credit risk at the reporting date.

4 Hedge accounting

KIFRS 1109 maintains the mechanics of hedge accounting from those in KIFRS 1039. However, KIFRS 1109 replaces existing rule-based requirements under KIFRS 1039 that are complex and difficult to apply with principle based requirement focusing more on the Group's risk management purposes and procedures. Under KIFRS 1109, more hedging instruments and hedged items are permitted and the 80%-125% effectiveness requirement is removed.

By complying with the hedging rules in KIFRS 1109, the Group may apply hedge accounting for transactions that currently do not meet the hedging criteria under KIFRS 1039 thereby reducing volatility in profit or loss.

As at December 31, 2017, the Group owns derivative financial assets and liabilities designated as hedging instruments of \$103,849 million and \$54,566 million, respectively. Meanwhile, the Group owns derivative financial assets and liabilities not designated as hedging instruments, amounting to \$270,793 million and \$126,421 million, respectively.

KIFRS 1115 - Revenue from Contracts with Customers

The new revenue standard will supersede all current revenue recognition requirements under KIFRS. Either a full retrospective application or a modified retrospective application of the standard is required for annual periods beginning on or after January 1, 2018. Early adoption is permitted. The Group plans to adopt KIFRS 1115 for annual periods beginning on or after January 1, 2018.

The Group has elected to recognize the cumulative effect of initially applying this standard as an adjustment to the opening balance of retained earnings at the date of initial application, and to apply this standard retrospectively only to contracts that are not completed as at January 1, 2018.

The current KIFRS 1018 provides the criteria for the recognition of revenue relating to: sale of goods, rendering of services, interest, royalties, dividends and construction contracts; however, under the new KIFRS 1115, revenue is recognized by applying a five-stage revenue recognition model (① Identify a contract with a customer. \rightarrow ② Identify the performance obligations in the contract \rightarrow ③ Determine the transaction price \rightarrow ④ Allocate the transaction price to the performance obligations in the contract \rightarrow ⑤ Recognize revenue when the Group satisfies a performance obligation) to its all contracts with customers.

During 2017, the Group has performed a detailed impact assessment on the adoption of KIFRS 1115. This assessment is based on currently available information and may be subject to changes arising from further reasonable and supportable information being made available to the Group in 2018 when the Group will adopt KIFRS 1115.

① Identification of the separate performance obligations in the contract

The Group is engaged in providing petroleum, chemicals and resources development, telecommunications, constructions and others

KIFRS 1115 requires the Group to separately identify performance obligation for wireless telecommunications services and other sales of goods and services. The Group may also determine the timing of fulfilling each performance obligation so that revenue can be recognized thereafter.

In the case that the Group provides the wireless telecommunications services and a handset to the same customer, transaction price allocated to the handset will be recognized as revenue immediately while the transaction price allocated to wireless telecommunication service will be recognized as revenue over a period of time specified in the contract.

The Group has identified a performance obligation to provide additional shipping services or transportation brokerage services on some contract types. In this case, the transaction price shall be allocated to each performance obligation and the revenue shall be recognized for each obligation performed. As a result of this, the revenue recognition will be deferred or the revenue will decrease.

2) The consideration to be paid to a customer

Consideration payable to a customer includes credit or other items (for example, a coupon or voucher) that can be applied against amounts owed to the entity (or to other parties that purchase the entity's goods or services from the customer). An entity shall account for consideration payable to a customer as a reduction of the transaction price and, therefore, of revenue unless the payment to the customer is in exchange for a distinct good or service that the customer transfers to the entity.

The Group has been paying the consideration for reserving points, which is not in exchange for goods or services transferred, to customers. In this case, KIFRS 1115 requires the consideration to be subtracted from the revenue, which will result in a decrease in revenue.

3 Allocation of the transaction price to the separate performance obligations

In accordance with KIFRS 1115, the Group should allocate the transaction price to each performance obligation in a contract in proportion to its stand-alone selling price. To estimate the transaction price to each performance obligation, the Group will use the adjusted market assessment approach. However, in some circumstances, the expected cost plus a margin approach will be used.

In the case that the Group provides the wireless telecommunications services and a handset to the same customer, the Company is analyzing the financial impact from the allocation of transaction prices based on stand-alone selling price.

4 Incremental costs to acquire a contract

The Group has exclusive contracts with its sales agents to sell the Group's wireless telecommunications services to subscribers. These agents receive commissions depending on the number of subscribers newly added and retained. The commissions paid to the agents constitute a significant portion of the Group's operating expenses. The portion of these commissions would not have been incurred if there have been no binding contracts with the subscribers.

Under KIFRS 1115, the Group's incremental costs to acquire a subscription contract, are recognized as asset and amortized over the expected subscription period estimated based on historical experience. However, as a practical expedient, the Group plans to expense the incremental cost as incurred if the amortization period is considered to be not longer than one year.

As at December 31, 2017, the Group is assessing the impact of capitalizing the incremental costs associated with obtaining customer contracts. Based on the preliminary assessment, the Group expects commission accounted as expenses are partially recognized as assets and amortized over a certain period of time and thus, related assets (incremental costs from contract acquisition) and amortization expenses are newly recognized, and commission paid will decrease.

5 Requirements for presentation and disclosure

The presentation and disclosure requirements in KIFRS 1115 are more detailed than under current KIFRS. The presentation requirements represent a significant change from current practice and significantly increases the volume of disclosures required in the Company's financial statements. Many of the disclosure requirements in KIFRS 1115 are new and the Group has assessed that the impact of some of these disclosures requirements will be significant.

6 Other adjustments

The recognition and measurement requirements in KIFRS 1115 are also applicable to the recognition and measurement of gains or losses on disposal of non-financial assets (such as property and equipment and intangible assets), when that disposal is not in the ordinary course of business. However, the Group does not expect that these amendments will have a material impact on the consolidated financial statements.

KIFRS 1116 - Leases

KIFRS 1116 Leases enacted in May 2017, is effective for annual periods beginning on or after January 1, 2019. Early application is permitted, but not before an entity applies KIFRS 1115 Revenue from Contracts with Customers. This standard replaces KIFRS 1017 Leases, KIFRS 2104 Determining whether an Arrangement contains a Lease, KIFRS 2015 Operating Leases-Incentives and KIFRS 2027 Evaluating the Substance of Transactions Involving the Legal Form of a Lease.

The Group assesses whether a contract is, or contains, a lease at inception of a contract and also assesses whether a contract is, or contains, a lease at the initial adoption of KIFRS 1116. However, the Group may not reassess all arrangements entered into before the date of initial application of the standard by applying the simplified approach.

For a contract that is, or contains a lease, the Group will account for each lease component within the contract as a lease separately from non-lease components of the contract.

A lessee will recognize an asset representing the right to use the underlying asset during the lease term (i.e., the right-of-use asset) and a liability representing the right to make lease payments (i.e., the lease liability). However, in case of short-term leases (i.e., leases with a lease term of 12 months or less at the commencement date) and leases of 'low-value' assets, the Group may elect to apply the exception under KIFRS 1116. As a practical expedient, a lessee may elect, by class of the underlying asset, not to separate non-lease components from lease components, and instead account for each lease component and any associated non-lease components as a single component.

Lessor accounting under KIFRS 1116 is not significantly changed from current accounting under KIFRS 1017.

In relation to sale and leaseback transactions, the Group (the seller-lessee) will apply the requirements of KIFRS 1115 to determine whether the transfer of an asset is accounted for as a sale of the asset. However, the Group does not reassess sale and leaseback transactions entered into before the date of initial application.

1 Lease accounting for lessees

As a lessee, the Group can either apply the KIFRS 1116 using a full retrospective approach; or modified retrospective approach. The full retrospective approach requires the Group to retrospectively apply the new standard to each prior reporting period presented, while modified retrospective approach requires the lessee to recognize the cumulative effect of initial application at the date of initial application of the new leases standard.

(2) Lease accounting for lessors

In case where the Group is lessor, the Group should reassess leases that were classified as operating leases applying KIFRS 1017 and are ongoing at the date of initial application, whether each sublease should be classified as an operating lease or a finance lease in the application of KIFRS 1116. As a result, if the leases are classified as finance lease, they are accounted as new finance lease contracted on the initial application date of KIFRS 1116.

The Group plans to change the accounting process and internal control and to assess the financial impact on its consolidated financial statements resulting from the adoption of KIFRS 1116 by December 31, 2018.

KIFRS 1040 - Investment Property

The amendments clarify when an entity should transfer property, including property under construction or development into, or out of investment property. The amendments state that a change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. Entities should apply the amendments prospectively to changes in use that occur on or after the beginning of the annual reporting period in which the entity first applies the amendments. An entity should reassess the classification of property held at that date and, if applicable, reclassify property to reflect the conditions that exist at that date. Retrospective application in accordance with KIFRS 1008 is only permitted if it is possible without the use of hindsight. These amendments are effective for annual periods beginning on or after January 1, 2018. Early application of the amendments is permitted and must be disclosed.

The Group is assessing the potential effect of the amendments on its financial statements. The Group will apply these amendments on the required effective date.

KIFRS 2122 - Foreign Currency Transactions and Advance Consideration

The interpretation clarifies that, in determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which an entity initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration.

The Interpretation is effective for annual periods beginning on or after January 1, 2018. Early application of interpretation is permitted and must be disclosed.

Entities may apply the amendments on a fully retrospective basis. Alternatively, an entity may apply the Interpretation prospectively to all assets, expenses and income in its scope that are initially recognized on or after:

- (i) The beginning of the reporting period in which the entity first applies the interpretation, or
- (ii) The beginning of a prior reporting period presented as comparative information in the financial statements of the reporting period in which the entity first applies the interpretation.

The Group is assessing the potential effect of the amendments on its financial statements. The Group will apply these amendments on the required effective date.

2.2 Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved where the Company 1) has the power over the investee, 2) is exposed, or has rights, to variable returns from its involvement with the investee, and 3) has the ability to use its power to affect its returns. The Company reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

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

2.2 Basis of consolidation (cont'd)

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

Income and expenses of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the date the Company gains control until the date when the Company ceases to control the subsidiary. Profit or loss and each component of OCI are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

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

All intragroup transactions and related assets and liabilities, income and expenses are eliminated in full on consolidation.

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

When the Group loses control of a subsidiary, a gain or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognized in OCI and accumulated in equity, the amounts previously recognized in OCI and accumulated in equity are accounted for as if the Company had directly disposed of the relevant assets (i.e., reclassified to profit or loss or transferred directly to retained earnings).

2.3 Business combinations

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

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

2.3 Business combinations (cont'd)

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

2.4 Foreign currencies

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

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

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

- Exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings,
- Exchange differences on transactions entered into in order to hedge certain foreign currency risks, and
- Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in OCI and reclassified from equity to profit or loss on disposal or partial disposal of the net investment

For the purpose of presenting the consolidated financial statements, the assets and liabilities of the Group's foreign operations are expressed in Korean won using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in OCI and accumulated in equity. On the disposal of a foreign operation, all of the accumulated exchange differences in respect of that operation attributable to the owners of the Group are reclassified to profit or loss.

2.5 Cash and cash equivalents

Cash and cash equivalents include cash, bank balances and short-term highly liquid investments with an original maturity of three months or less.

2.6 Financial assets

Financial assets are recognized when an entity becomes a party to the contractual provisions of the instruments. Financial assets are initially measured at fair value. Transaction costs that are directly attributable to the acquisition of financial assets are added to the fair value of the financial assets, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets at fair value through profit or loss ("FVTPL") are recognized immediately in profit or loss.

Financial assets are classified into the following specified categories: 'financial assets at FVTPL', 'held-to-maturity investments', 'available-for-sale ("AFS") financial assets' and 'loans and receivables.' The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

2.6.1 Financial assets at FVTPL

Financial assets are classified as at FVTPL when the financial asset is either held for trading or it is designated as at FVTPL. A financial asset is classified as held for trading if it has been acquired principally for the purpose of selling in the near term or it is a derivative or embedded derivative separated from contracts that is not designated and effective as a hedging instrument. Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

2.6.2 Held-to-maturity investments

Non-derivatives financial assets with fixed or determinable payments and fixed maturity dates that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are measured at amortized cost using the effective interest method, less any impairment, with revenue recognized on an effective yield basis.

2.6.3 AFS financial assets

AFS financial assets are non-derivatives that are either designated as AFS or are not classified as (a) loans and receivables, (b) held-to-maturity investments or (c) financial assets at FVTPL. They are subsequently measured at fair value at the end of each reporting period. Changes in the carrying amount of AFS financial assets are recognized in OCI (as gain or loss on valuation of AFS financial assets). When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in OCI is reclassified to profit or loss.

Dividends on AFS equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established.

AFS equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to, and must be settled by, delivery of such unquoted equity investments are measured at cost, less any identified impairment losses at the end of each reporting period.

2.6.4 Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables including trade and other receivables, bank balances and cash are measured at amortized cost using the effective interest method, less any impairment.

2.6.5 Impairment of financial assets

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that one or more events have occurred after the initial recognition of the financial asset and the estimated future cash flows of the investment have been affected.

For AFS equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For certain categories of financial asset, such as trade accounts receivable, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of receivables could include the Group's past experience of collecting payments and an increase in the number of delayed payments in the portfolio past the average credit period, as well as observable changes in national or local economic conditions that correlate with default on receivables.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate. For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

For financial assets that are carried at cost and whose fair value cannot be reliably measured, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

When an AFS financial asset is considered to be impaired, cumulative gains or losses previously recognized in OCI are reclassified to profit or loss in the period. In respect of AFS equity securities, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in OCI. In respect of AFS debt securities, impairment losses are subsequently reversed through profit or loss if an increase in the fair value of the investment can be objectively related to an event occurring after the recognition of the impairment loss.

2.6.6 Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognize a collateralized borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulated gain or loss that had been recognized in OCI and accumulated in equity is recognized in profit or loss.

2.7 Inventories

Inventories are measured at the lower of cost and net realizable value. Cost of inventories, except for materials in in-transit and work in progress (specific identification), are measured under the gross average method, moving average method or first-in first-out method and consists of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale.

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

2.8 Investments in associates and joint ventures

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

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

The results and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with KIFRS 1105, *Non-current Assets Held for Sale and Discontinued Operations*. Under the equity method, an investment in an associate or a joint venture is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and OCI of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate or a joint venture recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment.

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

2.9 Interests in joint operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, relating to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The Group accounts for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the KIFRSs applicable to the particular assets, liabilities, revenues and expenses.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a sale or contribution of assets), the Group is considered to be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognized in the Group's consolidated financial statements only to the extent of other parties' interests in the joint operation.

When a group entity transacts with a joint operation in which a group entity is a joint operator (such as a purchase of assets), the Group does not recognize its share of the gains and losses until it resells those assets to a third party.

2.10 Property, plant and equipment

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

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

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

Description	Useful lives (years)	Description	Useful lives (years)
Buildings	10 ~ 60	Machinery and equipment	3 ~ 40
Structures	4 ~ 50	Vehicles	1 ~ 20
Ships and vessels	6 ~ 25	Others	2 ~ 40

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

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

2.11 Goodwill

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

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

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

2.12 Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost, less accumulated amortization and accumulated impairment losses. The cost of intangible asset acquired in a business combination, separately from goodwill, is its fair value at the acquisition date and shall be carried at its cost less any accumulated amortization and any accumulated impairment losses.

Amortization of development cost, industrial property rights and other intangible assets is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value is zero. Development cost for petroleum resource is amortized by the unit of production method based on the amount of proved reserves. However, intangible assets with indefinite useful lives such as membership and brand contract-related assets are not amortized as there is no foreseeable limit to the period over which the asset is expected to use.

<u>Description</u>	<u>Useful lives (years)</u>	Description	<u>Useful lives (years)</u>
Development costs	3 ~ 10	Developed technology	5 ~ 14
Customer-related assets	3 ~ 25	Others	3 ~ 50

The useful lives of intangible assets are assessed as either finite or indefinite. Intangible assets with finite lives are amortized over the useful economic life. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at the end of each annual reporting period. If expectations differ from previous estimates, the changes are accounted for as a change in an accounting estimate. Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually.

2.12.1 Development cost for petroleum resource

The Group accounts for expenditures with high probability of future economic benefits related to the acquisition costs of assets, exploration and evaluation, and development activities as intangible assets.

Expenditures for exploration and evaluation of oil and natural gas are related to geographical, geological, geochemical, geophysical research, and prospect for commercialization. Development expenditures are related to the construction of various production equipment and drilling oil wells. Impairment testing is performed when the carrying amount of the intangible asset exceeds the estimated recoverable amounts.

Oil-producing fields refer to those which acquired the permission of development for reserves with economic benefits. The cost of an item of oil-producing fields includes the costs directly attributable to its purchase, construction, other expenditures for production, and the estimated costs of provision for restoration. The Group amortizes oil-producing fields by the unit of production method based on the amount of proved reserves.

2.12.2 Research and development

Expenditures on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit or loss as incurred. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditures are recognized in profit or loss as incurred.

2.12.3 Subsequent expenditures

Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures, including expenditures on internally generated goodwill and brands, are recognized in profit or loss as incurred.

2.13 Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the CGU to which the asset belongs.

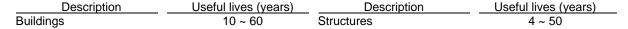
Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired. Recoverable amount is the higher of fair value, less costs to sell and value in use. If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or the CGU) is reduced to its recoverable amount and the reduced amount is recognized in profit or loss.

2.14 Investment property

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

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

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



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

2.15 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings, pending their expenditure on qualifying assets, is deducted from the borrowing costs eligible for capitalization. All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

2.16 Government grants

Government grants are not recognized until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants related to assets are presented in the statement of financial position by deducting the grant from the carrying amount of the asset. The related grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

Government grants related to income are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

2.17 Non-current assets held for sale

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

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

When the Group is committed to a sale plan involving disposal of an investment, or a portion of an investment, in an associate or joint venture, the investment or the portion of the investment that will be disposed of is classified as held for sale when the criteria described above are met, and the Group discontinues the use of the equity method in relation to the portion that is classified a held for sale. Any retained portion of an investment in an associate or a joint venture that has not been classified as held for sale continues to be accounted for using the equity method. The Group discontinues the use of the equity method at the time of disposal when the disposal results in the Group losing significant influence over the associate or joint venture.

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

2.18 Discount (premium) on bonds

Discount (premium) on bonds is presented as a direct deduction from (addition to) the nominal value of the bonds and is amortized using the effective interest rate method over the lives of the bonds.

2.19 Leases

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

2.19.1 The Group as a lessor

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

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

2.19.2 The Group as a lessee

Assets held under finance leases are initially recognized as assets of the Group at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation.

Lease payments are apportioned between finance expenses and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognized immediately in profit or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Group's general policy on borrowing costs. Contingent rentals are recognized as expenses in the periods in which they are incurred.

2.20 Financial liabilities and equity instruments

2.20.1 Classification as debt or equity

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

2.20.2 Equity instruments

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

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

2.20.3 Compound instruments

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

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

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

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

2.20.4 Financial liabilities

Financial liabilities are recognized when the Group becomes a party to the contractual provisions of the instruments. Financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the issue of financial liabilities are deducted from the fair value of the financial liabilities on initial recognition. Transaction costs directly attributable to acquisition of financial liabilities at FVTPL are recognized immediately in profit or loss.

Financial liabilities are classified as either financial liabilities at FVTPL or other financial liabilities.

2.20.4.1 Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as FVTPL. Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest paid on the financial liability and is included in financial income and costs in the statement of comprehensive income.

2.20.4.2 Other financial liabilities

Other financial liabilities are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis.

2.20.5 Financial guarantee contracts

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

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of:

- ➤ The amount of the obligation under the contract, as determined in accordance with KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets, or
- > The amount initially recognized, less cumulative amortization recognized in accordance with the KIFRS 1018 *Revenue*.

2.20.6 Derecognition of financial liabilities

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

2.21 Retirement benefit costs

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

For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each reporting period. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately in the separate statement of financial position with a charge or credit recognized in OCI in the period in which it occurs. Remeasurement recognized in OCI is reflected immediately in retained earnings and will not be reclassified to profit or loss. Past service cost is recognized in profit or loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are composed of service cost (including current service cost and past service cost, as well as gains and losses on curtailments and settlements), net interest expense (income) and remeasurement.

The Group presents the service cost and net interest expense (income) components in profit or loss, and the remeasurement component in OCI. Curtailment gains and losses are accounted for as past service costs.

2.22 Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest. At the end of each reporting period, the Group revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment in other component of equity as the equity-settled employee benefits reserve.

Equity-settled share-based payment transactions with parties other than employees are measured at the fair value of the goods or services received, except where that fair value cannot be estimated reliably, in which case they are measured at the fair value of the equity instruments granted, measured at the date the entity obtains the goods or the counterparty renders the service.

For cash-settled share-based payments, a liability is recognized for the goods or services acquired, measured initially at the fair value of the liability. At the end of each reporting period until the liability is settled, and at the date of settlement, the fair value of the liability is remeasured, with any changes in fair value recognized in profit or loss for the year.

2.23 Provision

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

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

2.23.1 Provision for warranties

A provision for warranties is recognized when the underlying products or services are sold. The provision is based on historical warranty data and a weighting of all possible outcomes against their associated probabilities.

2.23.2 Provision for installment of handset subsidies

The Group provides lump-sum handset subsidies to customers who agree to use the Group's service for a predetermined service period and the subsidies are charged to commission paid expense as the related payments are made. When customers agree to use the Group's service for a predetermined service period and purchase handsets on an installment basis, the subsidies are paid every month over the installment period and the Group estimates a provision for handset subsidies to be paid, which is recognized as commissions expense at the time telecommunication service contracts are made.

2.23.3 Provision for service/construction warranties

If the Group has an obligation to repair the product after selling the product or providing the service, the Group estimates the warranty expense based on the repair period and the past experience rate.

2.23.4 Provision for restoration

Provision for restoration of contaminated area is recognized in the related costs in accordance with published environmental policy and appropriate legal requirements of the Group.

2.23.5 Provision for onerous contracts

A provision for onerous contracts is recognized when the expected benefits to be derived by the Group from a contract are lower than the unavoidable costs of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognizes any impairment loss on the assets associated with that contract.

2.23.6 Greenhouse gas emissions

The Group classifies the emission allowances that it receives from the government free of charge as intangible assets, measures them at nil ("0"), and measures any purchased emission allowances at cost. A liability (emission obligation) is measured at nil ("0") only where the allocated emission allowances by the government free of charge are enough to settle the obligation arisen from actual emissions. However, if actual emissions exceed the allocated emission allowances, the amount recognized as a liability is the best estimate of expenditures, as at the end of a reporting period, in performing emission obligations exceeding the above emission allowances.

A provision shall be used only for expenditures for which the provision was originally recognized.

2.24 Derivative financial instruments

The Group enters into foreign exchange forward contracts to manage its exposure to foreign exchange rate risk. Derivatives are initially recognized at fair value at the date the derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately, unless the derivative is designated and effective as a hedging instrument, in such case the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

2.24.1 Hedge accounting

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

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

2.24.2 Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognized in the line of the statement of comprehensive income relating to the hedged item.

Hedge accounting is discontinued when the Group revokes the hedging relationship, when the hedging instrument expires or is sold, terminated or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to profit or loss from that date.

2.24.3 Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in OCI. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss, and is included in the financial income and financial costs.

Hedge accounting is discontinued when the Group revokes the hedging relationship, when the hedging instrument expires or is sold, terminated or exercised, or it no longer qualifies for hedge accounting. Any gain or loss accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

2.24.4 Embedded derivatives

Derivatives embedded in non-derivative host contracts are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are closely related to those of the host contracts and the contracts are not measured at FVTPL. Changes in the fair value of separable embedded derivatives are recognized immediately in profit or loss.

2.25 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. The Group recognizes revenue when the amount of revenue can be reliably measured; when it is probable that the future economic benefits will flow to the entity; and when specific criteria have been met for each of the Group's activities, as described below:

2.25.1 Sale of goods

Revenue from sale of goods is recognized when all of the following conditions are satisfied:

- The Group has transferred to the buyer the significant risks and rewards of ownership of the goods
- > The Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold
- The amount of revenue can be measured reliably
- > It is probable that the economic benefits associated with the transaction will flow to the Group
- > The costs incurred or to be incurred in respect of the transaction can be measured reliably

2.25.2 Rendering of services

Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract. The percentage of completion is assessed by surveys of work performed.

2.25.3 Construction contracts

When the outcome of a construction contract can be estimated reliably, contract revenue and costs are recognized in profit or loss in proportion to the stage of completion of the contract. Contract revenue includes the initial amount agreed in the contract, plus any variation in contract work, claims and incentive payments, to the extent that it is probable that they will result in revenue and can be measured reliably. The stage of completion of a contract is determined based on the proportion of contract costs incurred for work performed to date to the estimated total contract costs.

Where the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized only to the extent that it is probable that contract costs incurred will be recoverable. Contract costs are recognized as expenses in the period in which they are incurred. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

2.25.4 Commissions

When the Group acts in the capacity of an agent rather than as the principal in a transaction, the revenue recognized is the net amount of commission made by the Group.

2.25.5 Rental income and others

Rental income from investment property is recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives granted are recognized as an integral part of the total rental income, over the term of the lease. Rental income from subleased property is recognized as other income.

2.26 Income tax

Income tax expense represents the sum of the tax currently payable and deferred tax. Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in OCI or directly in equity, in which case, the current and deferred tax are also recognized in OCI or directly in equity.

2.26.1 Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the separate statement of profit or loss and comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

2.26.2 Deferred tax

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

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

2.26.2 Deferred tax (cont'd)

Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized and they are expected to reverse in the foreseeable future. The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

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

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

2.26.3 Current tax and deferred tax for the year

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

2.27 Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date.

Fair value for measurement and/or disclosure purposes in these separate financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of KIFRS 1102 *Share-based Payment*, leasing transactions that are within the scope of KIFRS 1017 *Leases*; and measurements that have some similarities to fair value, but are not fair value, such as net realizable value in KIFRS 1002 *Inventories* or value in use in KIFRS 1036 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorized into Level 1, 2 or 3, based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1: inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2: inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3: inputs are unobservable inputs for the asset or liability.

3. Significant accounting judgements, estimates and assumptions

When preparing the consolidated financial statements, management is required to make judgments, estimates and assumptions that affect the reported amount of assets, liabilities, revenues and expenses. Actual results may be different from those estimates.

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

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

3.1 Impairment of non-financial assets

The Group assesses at each reporting date, whether there is an indication of impairment of its non-financial assets. If any indication exists, or annually, intangible assets with indefinite useful lives including brand contract-related asset are tested for impairment. Other non-financial assets are tested for impairment when there is an indication that the carrying amount of an asset is not recoverable. In assessing value in use, management estimates future cash flows of the assets or CGU and determines an appropriate discount rate to calculate the present value of the estimated future cash flows.

3.2 Valuation of financial instruments

Subsequent to initial recognition, AFS financial assets are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss or OCI. Where the fair value of financial assets and financial liabilities recorded in the consolidated statements of financial position cannot be derived from active markets, the Group uses valuation techniques that require the management's judgments on the expected future cash flows and discount rates.

3.3 Bad debt allowance for trade receivables, loans and other receivables

The Group estimates a bad debt allowance for trade receivables, loans and other receivables, based on the aging of accounts receivables and past experience of bad debt, as well as observable changes in economic and industrial conditions that correlate with default on receivables.

3.4 Measurement and useful lives of tangible and intangible assets

If the Group acquires property and equipment or intangible assets from business combination, it is required to estimate the fair value of these assets at the acquisition date. For estimating the useful lives of tangible and intangible assets, significant management judgment is required.

3.5 Defined benefit plan

The Group's defined benefit obligation is determined based on the actuarial valuation carried out at the end of each annual reporting period. Actuarial assumptions are the Group's best estimates of the variables in determining the cost of providing post-retirement benefits, such as discount rates, rates of expected future salary increases and mortality rates. Significant estimation uncertainty is likely to persist in making such assumptions due to the long-term nature of post-retirement benefit plan.

3.6 Deferred tax assets

Recognition and measurement of deferred tax assets and liabilities requires significant management judgment. Especially, when determining if deferred tax assets will be realizable or not in the future, it involves significant management assumptions and judgment on the Group's future performance.

4. Operating segments

(1) Overview of operating segments

The Group makes decisions on resources to be allocated to business segments and divides the business segments based on the internal reports which the chief operating decision maker periodically reviews to evaluate the performances of the sales segments. As SK Holdings Co., Ltd. was acquired during the current reporting period, details of changes to segment operations of each segment are as follows:

Operating segments	Business
SK Innovation Co., Ltd.	Refining, chemical, and resources development
SK Telecom Co., Ltd.	Telecommunication
SK Networks Co., Ltd.	Network, information communication, trade, and energy marketing
SKC Co., Ltd.	Chemical, film, and information communication
SK Maritime Co., Ltd.	Sea transportation, and ocean bunkering and others
SK E&S Co., Ltd.	Gas and energy
SK Engineering & Construction Co., Ltd.	Civil engineering, housing, plant and others
Others	IT services, security service, special gas manufacturing and sale,
	medicine and life science and others

(2) Details of financial information for each operating segment as at and for the years ended December 31, 2017 and 2016 are as follows (Korean won in billions):

			As	at and for t	he year en	ded Decen	nber 31, 2017		
	SK	SK	SK		SK		SK Engineering		solidation
	Innovation	Telecom	Networks	SKC	Maritime	SK E&S	& Construction		ustments
	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Others	(*1) Total
Total sales	₩ 46,261	₩ 17,520	₩ 19,593	₩ 2,654	₩ 1,535	₩ 5,535	₩ 7,316	,	(8,711)₩93,296
Internal sales	(4,490)	(88)	(70)	(423)	(265)	(54)	(804)	(2,517)	8,711 -
Net sales	41,771	17,432	19,523	2,231	1,270	5,481	6,512	(924)	- 93,296
Income (loss)	3,235	3,403	214	181	(24)	464	256	959	(1,246) 7,442
from									
continuing									
operations									
before									
income tax									
expense					(00)				(4.000) = 404
Net income	2,156	2,658	162	136	(28)	374	147	959	(1,383) 5,181
(loss) from									
continuing									
operations	04.044	00.400	7.007	0.007	4.455	0.040	E E 44	00.000	(40.045) 400.777
Total assets	34,244	33,429	7,227	3,667	4,455	9,343	5,541	28,686	(16,815) 109,777
Total liabilities	,	15,399	4,879	2,074	4,284	5,583	4,634	10,393	1,841 64,021
Depreciation	791	2,445	235	117	136	311	30	191	62 4,318
Amortization	109	803	13	5	1	6	7	20	360 1,324

			As	at and for t	he year en	ded Decen	nber 31, 2016			
	SK	SK	SK		SK		SK Engineering	Cor	solidation	
	Innovation	Telecom	Networks	SKC	Maritime	SK E&S	& Construction	adj	ustments	
	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Others	(*1)	Total
Total sales	₩ 39,521	₩ 17,092	₩ 18,418	₩ 2,379	₩ 1,643	₩ 4,045	₩ 8,583	₩ 4,403 ₩	(13,354)	₩82,730
Internal sales	(4,665)	(77)	(5,110)	(405)	(299)	(46)	(646)	(2,106)	13,354	-
Net sales	34,856	17,015	13,308	1,974	1,344	3,999	7,937	2,297	-	82,730
Income (loss)	2,423	2,096	89	124	(496)	254	(37)	989	(1,052)	4,390
from										
continuing										
operations before										
income tax										
expense										
Net income	1,721	1,660	(52)	29	(512)	198	(31)	882	(865)	3,030
(loss) from	.,	.,000	(02)		(0.2)		(0.)	002	(000)	0,000
continuing										
operations										
Total assets	32,581	31,298	8,620	3,529	5,130	7,815	5,883	22,452	(14,261)	103,047
Total liabilities	, -	15,181	6,215	2,005	5,126	4,806	5,051	7,361	700	60,721
Depreciation	799	2,380	167	120	148	198	46	168	26	4,052
Amortization	115	688	9	5	3	8	7	28	298	1,161

(*1) Consolidation adjustments of the parent company, excluding consolidation adjustments of each subsidiary.

4. Operating segments (cont'd)

(3) Details of financial information by geographical location as at and for the years ended December 31, 2017 and 2016 (Korean won in billions):

			As at and for	or the year e	nded Decen	nber 31, 20 ⁻	17	
				North	South			
	Korea	Asia	Europe	America	America	Others	adjustments	Total
Total sales	₩ 119,238	₩ 29,321	₩ 5,266	₩ 1,655	₩ -	₩ 96	₩ (62,280)₩	93,296
Operating income	8,572	208	28	(19)	-	27	(2,955)	5,861
Income (loss) from continuing operations before income tax expens	8,049 e	201	44	(130)	-	41	(763)	7,442
Net income (loss)	6,508	166	40	(133)	-	136	(1,536)	5,181
Total assets Total liabilities	131,648 60,098	9,814 4,266	,	4,566 1,469	739 701	1,241 230	(40,339) (4,146)	109,777 64,021

					As a	at and fo	r the	e year er	nde	ed Decem	nber	31, 20°	16		
							North		5	South					
	\perp	Korea		Asia	E	urope	_Ar	merica	Α	merica	0	thers	<u>adj</u>	ustments	Total
Total sales	₩	99,608	₩	21,365	₩	4,865	₩	3,181	₩	-	₩	69	₩	(46,358)₩	82,730
Operation income		6,377		72		(81)		7		-		27		(1,121)	5,281
Income (loss) from continuing operations before income tax expens	e	4,894		129		(110)		(200))	9		72		(404)	4,390
Net income (loss)		3,571		56		(111)		(215))	9		261		(541)	3,030
Total assets		126,046		6,890		1,439		3,164		1,054		1,231		(36,777)	103,047
Total liabilities		58,632		2,995		1,007		917		1,018		252		(4,100)	60,721

5. Acquisitions and disposals of subsidiaries and non-controlling interest

5.1 Acquisitions of significant subsidiaries

Acquisitions of significant subsidiaries during the current reporting period are as follows:

1) Acquisition of shares of SK Siltron Co., Ltd.

The Company acquired 51.0% shares with voting rights of SK Siltron Co., Ltd. to promote synergy between its subsidiaries. Consequently, SK Siltron Co., Ltd. and its two subsidiaries were included in the consolidation.

2) Acquisition of additional shares of SKC Hightech & Marketing LLC

As at June 30, 2017, SKC Co., Ltd., a subsidiary, acquired 51% equity ownership of SKC Hi-Tech & Marketing Co., Ltd. (formerly, SKC Haas Display Film Co., Ltd.). Accordingly, its equity ownership increased from 49% to 100%. Consequently, SKC Hi-Tech & Marketing Co., Ltd. and its 5 subsidiaries were included in the consolidation.

5.2 Disposal of subsidiaries

There is no disposal of significant subsidiaries during the current reporting period.

5.3 Other significant capital transaction

1) Share issuance of SK E&S Co., Ltd. under the third-party allocation method SK E&S Co., Ltd., a subsidiary, issued new shares under the third-party allocation method. Due to the issuance, the equity interests of the Company decreased from 100% to 90% and non-controlling interests of the Group increased by $$\mathbb{W}$408,434$ million.$

2) Acquisition of treasury stock of SK Networks Co., Ltd.

SK Networks Co., Ltd., a subsidiary, acquired 7,622,000 shares of treasury stock to stabilize stock price and enhance stockholder's value. Consequently, the Group's effective ownership interests in SK Networks Co., Ltd. increased by 1.24% and non-controlling interests decreased by \widetarrow 23,727 million.

6. Financial instruments

6.1 Financial assets

Details of financial assets as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017										
					Financial						
				Available-for-	assets						
	Financial	Held-to-		sale	designated						
	assets at	maturity	Loans and	financial	as hedging						
	FVTPL	investments	receivables	assets	instruments	Total					
Current assets:											
Cash and cash equivalents	₩ -	₩ -	₩ 7,145,842	₩ -	₩ -	₩ 7,145,842					
Short-term financial instruments	98,643	-	3,442,030	-	-	3,540,673					
Trade accounts receivable (*1)	, -	-	10,727,631	-	-	10,727,631					
Other accounts receivable \(\)	-	-	1,991,725	-	-	1,991,725					
Short-term loans	-	-	123,130	-	-	123,130					
Accrued income	-	-	44,240	-	-	44,240					
Available-for-sale financial assets	-	-	-	188,603	-	188,603					
Held-to-maturity investments	-	45	-	-	-	45					
Guarantee deposits	-	-	209,181	-	-	209,181					
Derivative financial assets	35,319	-	-	-	57,094	92,413					
Finance lease receivables			73,199			73,199					
	133,962	45	23,756,978	188,603	57,094	24,136,682					
Non-current assets:											
Long-term financial instruments	-	-	200,853	-	-	200,853					
Long-term trade accounts receivable		-	12,908	-	-	12,908					
Long-term other accounts receivable	-	-	321,154	-	-	321,154					
Long-term loans	-	-	378,534	-	=	378,534					
Available-for-sale financial assets	-	-	-	1,596,033	=	1,596,033					
Held-to-maturity investments	-	825	-	-	=	825					
Guarantee deposits	-	-	740,326	-	-	740,326					
Derivative financial assets	235,474	-	-	-	46,755	282,229					
Finance lease receivables			168,490			168,490					
	235,474	825	1,822,265	1,596,033	46,755	3,701,352					
	₩ 369,436	₩ 870	₩ 25,579,243	<u>₩ 1,784,636</u>	₩ 103,849	₩ 27,838,034					

6.1 Financial assets (cont'd)

	December 31, 2016										
							Financial				
					Available-fo	r-	assets				
	Financial		Held-to-		sale		designated				
	assets at		maturity	Loans and	financial		as hedging				
	FVTPL		investments	receivables	assets	_	instruments	Total			
Current assets:											
Cash and cash equivalents	₩	- ₹	₩ -	₩ 7,086,957	₩	-	₩ -	₩ 7,086,957			
Short-term financial instruments		-	-	4,265,992		-	-	4,265,992			
Trade accounts receivable (*1)		-	-	9,611,793		-	-	9,611,793			
Other accounts receivable		-	-	1,828,941		-	-	1,828,941			
Short-term loans		-	-	239,915		-	-	239,915			
Accrued income		-	-	23,782		-	-	23,782			
Available-for-sale financial assets		-	-	-	179,44	18	-	179,448			
Held-to-maturity investments		-	67	-		-	-	67			
Guarantee deposits		-	-	192,214		-	-	192,214			
Derivative financial assets	59,6	73	-	-		-	91,490	151,163			
Finance lease receivables				79,896				79,896			
	59,6	73	67	23,329,490	179,44	18	91,490	23,660,168			
Non-current assets:											
Long-term financial instruments		-	-	131,033		-	-	131,033			
Long-term trade accounts receivable		-	=	24,188		-	-	24,188			
Long-term other accounts receivable		-	-	205,584		-	-	205,584			
Long-term loans		-	-	314,455		-	-	314,455			
Available-for-sale financial assets		-	-	-	1,527,09	92	-	1,527,092			
Held-to-maturity investments		-	870	-		-	-	870			
Guarantee deposits		-	-	732,770		-	-	732,770			
Derivative financial assets	44,3	45	-	-		-	207,683	252,028			
Finance lease receivables			<u>-</u>	275,288				275,288			
	44,3	<u>45</u>	870	1,683,318	1,527,09	92	207,683	3,463,308			
	₩ 104,0	<u>18</u> ₹	∛ 937	₩ 25,012,808	₩ 1,706,54	1 0	₩ 299,173	₩ 27,123,476			

^(*1) Unbilled receivables amounting to \$810,837 million and \$786,678 million as at December 31, 2017 and 2016, respectively, are not included in the financial instruments.

6.2 Financial liabilities

Details of financial liabilities as at December 31, 2017 and 2016 are as follows (Korean won in millions):

				Decemb	er 3	1. 2017		
Common tinkiliting		Financial liabilities at FVTPL	Ot	ther financial liabilities		Financial liabilities designated as hedging instruments		Total
Current liabilities: Short-term borrowings Trade accounts payable Other accounts payable Current portion of long-term debt Accrued expenses	₩	- - - -	₩	2,999,032 9,588,642 3,610,562 6,548,146 2,875,130	₩	- - - -	₩	2,999,032 9,588,642 3,610,562 6,548,146 2,875,130
Dividends payable Leasehold deposits received Derivative financial liabilities Finance lease liabilities		- - 105,042 -		1,423 162,965 - 1,676		- 42,243 -		1,423 162,965 147,285 1,676
Finance guarantee liabilities	_	105,042		50 25,787,626	_	42,243	_	50 25,934,911
Non-current liabilities: Bonds payable and long-term borrowings		60,278		23,299,240		-		23,359,518
Long-term other accounts payable Leasehold deposits received Derivative financial liabilities		- - 21,379		3,740,381 310,050 -		- - 12,323		3,740,381 310,050 33,702
Finance lease liabilities Financial guarantee liabilities		- - 81.657		10 11,933 27,361,614		- - 12,323		10 11,933 27,455,594
	₩	186,699	₩	53,149,240 Decemb		54,566 1, 2016 Financial	₩	53,390,505
		Financial liabilities at FVTPL	Ot	ther financial liabilities		liabilities designated as hedging instruments		Total
Current liabilities: Short-term borrowings Trade accounts payable	₩	-	₩	2,614,117 8,897,260		-	₩	2,614,117 8,897,260
Other accounts payable Current portion of long-term debt Accrued expenses		- - -		3,241,765 5,629,577 2,480,547		- - -		3,241,765 5,629,577 2,480,547
Dividends payable Leasehold deposits received Derivative financial liabilities Finance lease liabilities		- - 112,950 -		614 125,157 - 1,747		143,123 -		614 125,157 256,073 1,747
	_	112,950		22,990,784	_	143,123		23,246,857
Non-current liabilities: Bonds payable and long-term borrowings		59,600		23,073,906		-		23,133,506
Long-term other accounts payable Leasehold deposits received Derivative financial liabilities		- - 12,281		4,601,776 357,384		- - 39,397		4,601,776 357,384 51,678
Finance lease liabilities Financial guarantee liabilities		- - 71,881		1,864 9,120 28,044,050		- - 39,397		1,864 9,120 28,155,328
	₩	184,831	₩	51,034,834		182,520	₩	51,402,185

6.3 Gain and loss by category of financial instruments

Details of gain and loss by category of financial instruments for the years ended in December 31, 2017 and 2016 are as follows (Korean won in millions):

			For th	e year ended	December 31, 20	17	
				-		Reversal	
				Gain (loss)	Gain (loss) on	(impairment)	
	Dividends	Interest	Interest	on foreign	derivatives	and gain (loss)	
	income	income	expense	currency	instruments	on disposals	Total
Financial assets at FVTPL	₩ -	₩ -	₩ -	₩ -	₩ 605,216	₩ -	₩ 605,216
Held-to-maturity investments	-	3,033	-	(1,236)	-		1,797
Loans and receivables	-	204,685	-	(505,554)	-	(30,602)	(331,471)
Available-for-sale financial assets	23,551	7,597	-	(575)	-	(155,839)	(125,266)
Financial assets designated as	-	-	-	-	229,696	-	229,696
hedging instruments Financial liabilities at FVTPL	_	_	_	_	(663,243)	_	(663,243)
Other financial liabilities	_	_	(912,108)	689,146	(000,210)	_	(222,962)
Financial liabilities designated as			(=,:=,				(===,===,
hedging instruments				(2,474)	(82,471)		(84,945)
	₩ 23,551	₩ 215,315	<u>₩ (912,108</u>)	₩ 179,307	₩ 89,198	₩ (186,441)	₩ (591,178)
			For th	o voar onded	December 31, 20°	16	
	-		1 01 111	e year ended	December 31, 20	Reversal	
				Gain (loss)	Gain (loss) on	(impairment)	
	Dividends	Interest	Interest	on foreign	derivatives	and gain (loss)	
	income	income	expense	currency	instruments	on disposals	Total
Financial assets at FVTPL	₩ -	₩ -	₩ -	₩ -	₩ 244,201	₩ -	₩ 244,201
Held-to-maturity investments	-	727	-	12	-	-	739
Loans and receivables	-	186,113	-	86,095	-	(249,052)	23,156
Available-for-sale financial assets	39,859	9,575	-	(313)	-	42,857	91,978
Financial assets designated as	-	-	-	-	66,074	-	66,074
hedging instruments Financial liabilities at FVTPL					(317,509)		(317,509)
Other financial liabilities	_	-	(796,127)	(139,089)	(317,309)		(935,216)
Financial liabilities designated as	_	_	(750,127)	(100,000)	_	_	(555,210)
hedging instruments	-	-	-	(32,325)	(120,594)	-	(152,919)
~ ~	₩ 39.859	₩ 196,415	₩(796,127)	₩ (85,620)	₩ (127,828)	₩ (206,195)	₩ (979,496)

6.4 Fair values of financial instruments by hierarchy level

1) Fair values and book values of financial instruments as at December 31, 2017 and 2016 are as follows (Korean won in millions):

<u>-</u>	December 31, 2017				December 31, 2016		
_	Book value			Fair value		Book value	Fair value
Bonds payable	₩	23,484,876	₩	23,588,353	₩	23,755,427	₩ 23,795,522
Borrowings		9,421,820		9,028,223		7,621,773	7,603,575

The fair value of bonds payable and borrowings was measured as the present value of the contractually determined stream of future cash flows discounted at the market interest rate (0.35%~6.63%) regarding residual market risks. As the book values of other financial assets and other financial liabilities are reasonable approximations to fair values, the fair values have not been disclosed.

6.4 Fair values of financial instruments by hierarchy level (cont'd)

2) Details of fair values of financial instruments by hierarchy level as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017									
		Level 1		Level 2		Level 3		Total		
Financial assets:										
Financial assets at FVTPL	₩	706	₩	144,285	₩	224,445	₩	369,436		
Available-for-sale financial assets (*1) Financial assets designated as		818,615		96,487		127,124		1,042,226		
hedging instruments				103,849		<u>-</u>		103,849		
	₩	819,321	₩	344,621	₩	351,569	₩	<u>1,515,511</u>		
Financial liabilities:										
Financial liabilities at FVTPL Financial liabilities designated as	₩	2,131	₩	184,568	₩	-	₩	186,699		
hedging instruments		_		54,566		_		54,566		
	₩	2,131	₩	239,134	₩		₩	241,265		
	December 31, 2016									
		Level 1		Level 2		Level 3		Total		
Financial assets:										
Financial assets at FVTPL	₩	-	₩	104,018	₩	-	₩	104,018		
Available-for-sale financial assets (*1) Financial assets designated as		754,983		178,766		121,669		1,055,418		
hedging instruments		-		299,173		-		299,173		
5 0										
	₩	754,983	₩	<u>581,957</u>	₩	121,669	₩	1,458,609		
Financial liabilities:	₩	754,983	₩	<u>581,957</u>	₩	<u>121,669</u>	₩	<u>1,458,609</u>		
Financial liabilities: Financial liabilities at FVTPL	₩		₩	581,957 184,831		<u>121,669</u> -	₩	1,458,609 184,831		
Financial liabilities at FVTPL Financial liabilities designated as				184,831		<u>121,669</u> - -		184,831		
Financial liabilities at FVTPL		-			₩					

^(*1) This does not include available-for-sale financial assets, which are measured at cost because their fair values could not be reliably measured.

7. Trade accounts receivable

(1) Details of trade accounts receivable as at December 31, 2017 and 2016 are as follows (Korean won in millions):

		Decembe	er 31,	2017		Decembe	er 31,	2016
	Current		Non-current		Current		No	on-current
Trade accounts receivable:								
Trade accounts receivable	₩	11,230,420	₩	14,669	₩	10,158,904	₩	24,469
Unbilled receivables		810,837		-		786,678		-
Allowance for doubtful accounts:								
Trade accounts receivable		(502,789)		(1,761)		(547,111)		(281)
	₩	11,538,468	₩	12,908	₩	10,398,471	₩	24,188

7. Trade accounts receivable (cont'd)

(2) Details of accumulated cost, accumulated profit, unbilled receivables and overbilled receivables related to construction contracts in progress as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017										
		Accumulated cost and profit				Jnbilled ceivables		Overbilled eceivables	Provision for construction losses		
SK Engineering & Construction Co., Ltd. and its subsidiaries	₩	38,385,591	₩	38,373,380	₩	757,326	₩	745,115	₩	37,714	
Others		216,101		177,563		53,511		14,973		<u>-</u>	
	₩	38,601,692	₩	38,550,943	₩	810,837	₩	760,088	₩	37,714	
				[Dece	mber 31, 20	16				
		Accumulated cost and profit	Pr	ogress billings		Jnbilled ceivables		Overbilled eceivables		rovision for onstruction losses	
SK Engineering & Construction Co., Ltd. and its subsidiaries	₩	34,657,316		35,123,840	₩	750,205	₩	1,216,729	₩	71,101	
Others		247,622		220,739		36,473		9,590			
	₩	34,904,938	₩	35,344,579	₩	786,678	₩	1,226,319	₩	71,101	

(3) Details of construction profit variation by changes of accounting estimates related to construction contracts as at December 31, 2017 are as follows (Korean won in millions):

				D	ece	mber 31, 2017				
		Change in estimated construction revenue		Change in estimated cost	CL	Impact on current period profit (loss)		Impact on uture period profit (loss)		Change in unbilled (overbilled) receivables
SK Engineering & Construction Co., Ltd. and its subsidiaries	₩	2,422,950	₩	2,558,603	₩	(117,741)	₩	(17,912)	₩	(117,741)
Others		4,178		(12,293)		13,131		3,340		13,131
	₩	2,427,128	₩	2,546,310	₩	(104,610)	₩	(14,572)	₩	(104,610)

Impact on profit of current and future period has been calculated by the estimated construction costs based on the situations which occurred from the inception of construction contracts to current reporting period and the estimated construction revenue as at current reporting period. Estimated construction costs and revenue can be changed in the future period.

(4) Details of the construction contracts where the contract revenue exceeds 5% of the preceding year's revenue under the percentage-of-completion method as at December 31, 2017 are as follows (Korean won in millions):

						Unbilled re	eceivables	Tra	ade accounts	receivable	e (*1)
		Contract	Completion	Percentage						Allowar for doub	
Subsidiary	Project	date	date	(%)		Amount	Impairment		Amount	accour	nts
SK Engineering &	RRE Project	2009.12	2017.12	99.9	₩	7,842	₩	₩	13,546	₩	-
Construction	Goseong Green	2014.07	2021.07	13.9		84,569		-	66,791		-
Co., Ltd.	Power Project										

(*1) It refers to amounts of billed receivables.

(5) The amount includes the carrying amount of trade receivables accounted for secured borrowing (\W300,621 million as at December 31, 2017 and \W356,441 million as at December 31, 2016) when financial assets were transferred by trade receivables factoring and asset securitization, but are not derecognized, in entirety or in part.

8. Inventories

Details of inventories as at December 31, 2017 and 2016 are as follows (Korean won in millions):

		De	cember 31	, 2017		December 31, 2016						
			Valuatio		Valuation							
		Cost	allowand	<u>ce E</u>	Book value	Co	st	allowance	<u> </u>	ook value		
Merchandise	₩	944,645	₩ (23,	603)₩	921,042	₩ 89	94,567	₩ (17,02	29)₩	877,538		
Finished goods		2,066,616	(35,	884)	2,030,732	1,50	05,234	(39,85	50)	1,465,384		
Semifinished goods and work in progress		935,045	(28,	893)	906,152	62	20,820	(16,09	90)	604,730		
Raw materials and sub-materials		1,499,412	(13,	864)	1,485,548	1,33	34,776	(8,19	96)	1,326,580		
Materials in transit		2,562,226		-	2,562,226	1,5	12,078		-	1,512,078		
Supplies		264,640	(5,	383)	259,257	2	12,776	(94	18)	211,828		
Uncompleted contracts		26		-	26		6,995		-	6,995		
Others		13,627	(677) <u> </u>	12,950		14,625	(90) <u>3</u>)	13,722		
	₩	8,286,237	₩ (108,	<u>304)₩</u>	8,177,933	₩ 6,10	01,871	₩ (83,0	<u>16</u>) ₩	6,018,855		

9. Available-for-sale financial assets

Details of available-for-sale financial assets as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	Dece	mber 31, 2017	<u>Dece</u>	mber 31, 2016
Marketable equity instruments	₩	818,615	₩	754,983
Non-marketable equity instruments		759,063		442,111
Corporate and government bonds		69,248		65,010
Others (*1)		137,710		444,436
	₩	1,784,636	₩	1,706,540
Current available-for-sale financial assets	₩	188,603	₩	179,448
Non-current available-for-sale financial assets		1,596,033		1,527,092

(*1) They include beneficiary certificates.

(1) Investments in associates and joint ventures

Details of investments in associates and joint ventures as at December 31, 2017 and 2016 are as follows (Korean won in millions):

			Danamban 24 - 24	247	December 31,
	-		December 31, 20	J17	2016
		Equity ownership	Acquisition	Book	Book
Company	Domicile	(*1)	cost	value	value
Associates:	<u> </u>			<u> varao</u>	<u> </u>
SK Hynix Inc.	Korea	20.1%	₩ 5.420.310	₩ 7,976,784	₩ 6,088,485
China Gas Holdings Ltd. (*2, *3)	Hong Kong	15.7%	1,597,222	1,687,587	1,621,030
Eureka Midstream Holdings (*4)	ŬSA	40.0%	465,582	434,164	, ,
ESR Cayman Limited (*2, *4)	Cayman Islands	11.2%	378,427	382,040	
Daehan Oil Pipeline Corporation	Korea	41.0%	311,372	334,331	327,066
Peru LNG Company, LLC	Peru	20.0%	331,144	274,738	314,425
Korea IT Fund (*5)	Korea	63.3%	242,170	257,003	263,850
Hana Card Co., Ltd. (*2)	Korea	15.0%	253,707	280,988	265,798
Yemen LNG Company Ltd. (*2)	Yemen	6.9%	252,813	-	12,936
Eurasia Tunnel	Turkey	50.0%	112,726	198,645	173,273
Springvale SK Kores Pty. Ltd.	Australia	-	-	-	107,093
Socar, Inc.	Korea	28.2%	91,800	82,720	
SM Core, Inc. (*6)	Korea	26.7%	75,948	75,500	
Korea Ras Laffan LNG Limited (*2)	Bermuda	8.0%	65,435	58,081	77,284
NanoEnTek, Inc.	Korea	28.5%	68,996	61,861	62,657
SKC Hi-Tech&Marketing Co., Ltd. (formerly,SKC Haas Display Film Co., Ltd.) (*7)	Korea	-	-	-	63,171
TSK Water Co., Ltd.	Korea	25.0%	45,811	61,926	,
SM Culture & contents (*4)	Korea	23.4%	65,341	64,965	
Xe-Pian Xe-Namnoy Power Company	Laos	26.0%	71,924	53,159	47,423
Others				526,416	426,839
1				12,810,908	9,960,402
Joint ventures (*8):	China	35.0%	488,809	681,901	565,226
Sinopec-SK (Wuhan) Petrochemical Co., Ltd.	Korea	50.0%	349.942	430.170	378.870
Mitsui Chemicals & SKC Polyurethanes Co., Ltd. Hana Land Chip PEF 33 (*5)	Korea	65.2%	196,001	221,081	196,897
Boryeong LNG Terminal Co., Ltd.	Korea	50.0%	108,323	105,117	
SKC-Kolon PI Co., Ltd.	Korea	27.0%	83,753	94,730	,
SABIC SK Nexlene Company Pte. Ltd.	Singapore	50.0%	112,670	91,907	76,946
Others	Sirigapore	30.076	112,070	193,688	193,776
Ouleis				1,818,594	1.599.497
					₩ 11,559,899
				vv 14,029,302	<u>vv 11,559,699</u>

- (*1) The equity ownership includes indirect investments held by consolidated subsidiaries.
- (*2) The Group retains significant influence on the associate despite having less than 20% equity interests.
- (*3) As we were unable to obtain the financial statements for December 31, 2017, we used the financial statements for September 30, 2017 and examined the effect of significant transactions and events during the three months.
- (*4) The investment in the entity was acquired during the current reporting period.
- (*5) These companies were not included as consolidated subsidiaries as the Group does not have power over more than half of the voting rights by agreements.
- (*6) During the current reporting period, the Group acquired 26.65% equity ownership of SM Core, Inc. and voting rights of shares (16.93%) owned by the CEO have been delegated to the Group. Consequently, the Group classified SM Core, Inc. as its subsidiary. However, as the delegation expired, the Group is unable to exercise de facto control so the Group classified SM Core, Inc. as its investments in associates and joint ventures.
- (*7) During the current reporting period, SKC Co., Ltd. acquired additional 51% equity ownership of SKC Hi-Tech & Marketing Co., Ltd. (formerly, SKC Haas Display Film Co., Ltd.) and classified it as the Group's subsidiaries (see Note 38 Business combination).

- (*8) All joint arrangements that the Group has joint control over are structured by a consolidated entity. The parties that have joint control with respect to the joint agreements hold the rights to the net assets of the agreements and accordingly, they are classified as joint ventures and accounted for using the equity method of accounting.
- (2) Changes in carrying amount of investments in associates and joint ventures

Changes in investments in associates and joint ventures accounted for using the equity method for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the year ended December 31, 2017									
				Equity profit	Other					
	Beginning			or losses on	capital	Dividends	Others	Ending		
	balance	Acquisitions	Disposals	investments	movements	received	(*1)	balance		
Associates:					<u> </u>					
SK Hynix Inc.	₩ 6,088,485	₩ -	₩ -	₩ 2,066,307	₩ (90,348)	₩ (87,660)	₩ - ₩	7,976,784		
China Gas Holdings Ltd.	1,621,030	-	-	125,174	(30,506)	(28,111)	-	1,687,587		
Eureka Midstream Holdings	· · · -	465,582	-	3,977		(11,308)	(24,087)	434,164		
ESR Cayman Limited	-	378,427	_	1,656	-		ì,957 [°]	382,040		
Daehan Oil Pipeline Corporation	327,066	´ -	-	12,203	596	(5,534)	, <u>-</u>	334,331		
Peru LNG Company, LLC	314,425	-	_	(4,231)	(35,456)	-	-	274,738		
Korea IT Fund	263,850	-	-	(8,815)		(1,403)	-	257,003		
Hana Card Co., Ltd.	265,798	-	-	15,494	(304)	-	-	280,988		
Yemen LNG Company Ltd.	12,936	-	-	(4,857)		-	(8,738)	,		
Eurasia Tunnel	173,273	17,432	-	30,149	-	-	(22,209)	198,645		
Springvale SK Kores Pty. Ltd.	107,093	´ -	_	181	6,991	-	(114,265)	, ·		
Socar, Inc.	54,680	32,940	-	(4,900)		-	-	82,720		
SM Core, Inc.	- ,	75,948	-	(492)		_	-	75,500		
Korea Ras Laffan LNG Limited	77,284	-	_	6,526	(17,481)	(8,248)	-	58,081		
NanoEnTek, Inc.	62,657	_	_	(733)		-	_	61,861		
SKC Hi-Tech&Marketing Co., Ltd.		-	-	(4,567)		_	(57,444)	-		
(formerly, SKC Haas Display	,			(1,001)	(1,100)		(,,			
Film Co., Ltd.)										
TSK Water Co., Ltd.	54,392	_	_	8,039	_	_	(505)	61,926		
SM Culture & contents	,	65,341	_	(376)	_	_	-	64,965		
Xe-Pian Xe-Namnoy Power	47,423	17,620	_	(4,262)		_	_	53,159		
Company	,.20	,020		(1,202)	(.,022)			00,.00		
Others	426.839	147,132	(17,539)	(1.591)	(22,258)	(33.332)	27.165	526,416		
0	9,960,402	1,200,422	(17,539)	2,234,882	(193,537)	(175,596)	(198,126)	12,810,908		
Joint ventures:	0,000,000	.,,	(,)	_, ,,,,,	(:,,	(,)	(,,	,,		
Sinopec-SK (Wuhan)	565,226	_	_	156,748	(40,073)	_	_	681,901		
Petrochemical Co., Ltd.	000,220			.00,0	(10,010)			001,001		
Mitsui Chemicals & SKC	378,870	_	_	61,857	(8,363)	(2,100)	(94)	430,170		
Polyurethanes Co., Ltd.	0.0,0.0			0.,00.	(0,000)	(2,:00)	(0.)	100,110		
Hana land chip PEF 33	196,897	_	_	39,985	_	(15,801)	_	221,081		
Boryeong LNG Terminal Co., Ltd.		_	_	7,414	_	(10,001)	_	105,117		
SKC-Kolon PI Co., Ltd.	90,079	_	_	8,877	_	(3,572)	(654)	94,730		
SABIC SK Nexlene Company	76,946	_	_	(2,969)	17,930	(0,072)	(001)	91,907		
Pte. Ltd.	7 0,040			(2,505)	17,000			01,007		
Others	193,776	70,124	(27,900)	(18,956)	(7,275)	(1,001)	(15,080)	193,688		
5	1.599.497	70,124	(27,900)	252.956	(37,781)	(22.474)	(15.828)	1,818,594		
				₩ 2.487.838						
	11,005,099	11,210,040	<u>,, (40,498</u>)	vv 2,401,030	<u>vv (201,010</u>)	11 (130,010)\	<u> (213,334) W</u>	17,023,002		

	For the year ended December 31, 2016											
				Equity profit								
				or losses on	Other							
	Beginning			investments	capital	Dividends	Others	Ending				
	balance	<u>Acquisitions</u>	Disposals	(*2)	movements	received	(*1)	balance				
Associates:												
SK Hynix Inc.	₩ 5,602,620	₩ -	₩ -	₩ 550,322	₩ 8,593	₩ (73,050)₩	<i>-</i> ₩	6,088,485				
China Gas Holdings Ltd.	1,647,330	5,465	-	62,777	(72,584)	(21,958)	-	1,621,030				
Daehan Oil Pipeline Corporation	313,694	-	-	16,857	204	(3,689)	-	327,066				
Peru LNG Company, LLC	297,965	13,675	-	(7,058)	9,843	-	-	314,425				
Korea IT Fund	260,456	-	-	14,863	(5,387)	(6,082)	-	263,850				
Hana Card Co., Ltd.	254,177	-	-	11,658	(37)	-	-	265,798				
Yemen LNG Company Ltd.	235,216	-	-	(20,333)	6,313	-	(208, 260)	12,936				
Eurasia Tunnel	81,153	19,814	-	27,101	(6,196)	-	51,401	173,273				
Springvale SK Kores Pty. Ltd.	105,916	-	-	(2,420)	1,236	-	2,361	107,093				
Socar, Inc.	-	58,860	-	(4,180)	· -	-	· -	54,680				
Korea Ras Laffan LNG Limited	77,416	-	-	4,398	(1,734)	(2,796)	-	77,284				
NanoEnTek, Inc.	68,150	-	-	(3,950)	(1,543)	-	-	62,657				
SKC Hi-Tech&Marketing Co., Ltd.	56,278	-	-	6,183	850	-	(140)	63,171				
(formerly, SKC Haas Display							, ,					
Film Co., Ltd.)												
TSK Water Co., Ltd.	48,881	-	-	5,402	(14)	-	123	54,392				
Xe-Pian Xe-Namnoy Power	36,094	12,594	-	(3,350)	2,085	-	-	47,423				
Company												
Others	592,592	50,421	(57,601)	4,778	7,098	(14,565)	(155,884)	426,839				
	9,677,938	160,829	(57,601)	663,048	(51,273)	(122,140)	(310,399)	9,960,402				
Joint ventures												
Sinopec-SK (Wuhan)	508,826	-	-	90,870	(34,470)	-	-	565,226				
Petrochemical Co., Ltd.												
Mitsui Chemicals & SKC	354,340	-	-	13,217	11,248	-	65	378,870				
Polyurethanes Co., Ltd.												
Hana land chip PEF 33	197,123	-	-	15,990	-	(16,216)	-	196,897				
Boryeong LNG Terminal Co., Ltd.	92,697	10,000	-	(4,944)	(50)	-	-	97,703				
SKC-Kolon PI Co., Ltd.	84,505	-	-	6,398	-	(873)	49	90,079				
Sabic SK Nexlene Company	86,242	-	-	(4,064)	(5,232)		-	76,946				
Pte. Ltd.												
Others	156,104	104,055	(3,488)	(59,850)	(5,354)	<u>-</u>	2,309	193,776				
	1,479,837	114,055	(3,488)	57,617	(33,858)	(17,089)	2,423	1,599,497				
	₩ 11,157,775	₩ 274,884	₩ (61,089)	₩ 720,665	₩ (85,131)	₩(139,229)₩	₹ (307,976)	11,559,899				

- (*1) Others include the effects of changes in scope of consolidation, net foreign currency differences and others.
- (*2) The Group recognized additional loans receivable of \(\pi\)1,327 million of unrecognized losses, which were incurred as losses on investments in associates exceeded the investments' carrying amounts for the year ended December 31, 2016.
- (3) Details of unrecognized changes in equity method caused by discontinuing the application of equity method as at December 31, 2017 are as follows (Korean won in millions):

	Beginning balance	Changes	Ending balance
Pentaport Development Co., Ltd.	₩ 45,888	₩ 11,154	₩ 57,042
Harmony Country Club	-	4,774	4,774
SK Telesys Corporation	3,960	-	3,960
Wave City Development Co., Ltd.	3,290	(1,190)	2,100
Daehan Kanggun BcN Co., Ltd. and others	10,791	(5,475)	5,316

(4) Details of the fair value of marketable investments in associates and joint ventures as at December 31, 2017 are as follows (Korean won in millions):

		Fair value
SK Hynix Inc.	₩	11,176,650
China Gas Holdings Ltd.		2,312,270
SKC-Kolon PI Co., Ltd.		375,104
SM Core, Inc.		90,072
SM Culture & contents		59,492
NanoEnTek, Inc.		41,415

(5) Details of reconciliation from net assets of investments of associates and joint ventures to book value of investments in associates and joinft ventures as at December 31, 2017 are as follows (Korean won in millions):

			December	31, 2017		
			Net assets			
			attributable to	Cost-book	Internal	
		Equity	the ownership	value	transactions	
	Net assets	ownership	interests	differentials	and others	Book value
Associates:						
SK Hynix Inc. (*1,2)	₩ 33,820,919	20.1%	₩ 6,998,912	₩ 997,693	₩ (19,821) ₩	₹ 7,976,784
China Gas Holdings Ltd. (*1)	3,790,068	15.7%	595,690	1,194,891	(102,994)	1,687,587
Eureka Midstream Holdings	447,915	40.0%	179,166	254,998	-	434,164
ESR Cayman Limited	1,650,513	11.2%	185,188	253,376	(56,524)	382,040
Daehan Oil Pipeline Corporation	764,330	41.0%	313,375	22,878	(1,922)	334,331
Peru LNG Company, LLC	1,373,690	20.0%	274,738	-	` -	274,738
Korea IT Fund	405,794	63.3%	257,003	-	-	257,003
Hana Card Co., Ltd.	1,516,162	15.0%	227,423	53,565	-	280,988
Yemen LNG Company Ltd.	2,674,605	6.9%	184,548	-	(184,548)	-
Eurasia Tunnel	382,997	50.0%	191,499	17,543	(10,397)	198,645
Socar, Inc.	31,786	28.2%	8,974	73,361	385	82,720
SM Core, Inc. (*1)	76,130	26.7%	20,289	50,580	4,631	75,500
Korea Ras Laffan LNG Limited	726,007	8.0%	58,081	-	-	58,081
NanoEnTek, Inc.	23,731	28.5%	6,763	53,998	1,100	61,861
TSK Water Co., Ltd. (*1)	180,134	25.0%	45,034	17,304	(412)	61,926
Xe-Pian Xe-Namnoy	251,327	26.0%	65,345	-	(12,186)	53,159
Power Company						
Joint ventures:						
Sinopec-SK (Wuhan) Petrochemical	1,842,382	35.0%	644,834	37,067	-	681,901
Co., Ltd.					(10.000)	
Mitsui Chemicals & SKC	899,077	50.0%	449,539	-	(19,369)	430,170
Polyurethanes Co., Ltd. (*1)	000 000	05.00/	204 204			004.004
Hana land chip PEF 33	339,068	65.2%	221,081	-	(0.700)	221,081
Boryeong LNG Terminal Co., Ltd.	169,894	50.0%	84,947	28,736	(8,566)	105,117
SKC-Kolon PI Co., Ltd.	248,107	27.0%	67,063	28,215	(548)	94,730
Sabic SK Nexlene Company	280,258	50.0%	140,129	-	(48,222)	91,907
Pte. Ltd.						

^(*1) The associate's net assets represent the net assets of the controlling interests of the Group in the associate as the associate prepares consolidated financial statements.

^(*2) The equity ownership presented is the ownership of the number of shares issued by the investee, and the effective equity ratio of 20.69% was applied to the equity method evaluation.

(6) Condensed financial informations of significant investments in associates and joint ventures as at December 31, 2017 are as follows (Korean won in millions).

	As at and for the year ended December 31, 2017												
		Current assets	N	lon-current assets		Current liabilities	N	on-current		Sales	Net income (loss)		Total aprehensive income (loss)
Associates:											***		
	₩	17,310,444	₩	28,108,020	₩	8,116,133	₩		₩ ;		₩10,642,219	₩	
China Gas Holdings Ltd.		2,746,438		6,805,020		3,647,120		2,114,270		5,740,840	934,062		958,953
Eureka Midstream Holdings		37,895		631,822		26,268		195,534		98,604	33,925		33,925
ESR Cayman Limited		790,423		2,303,949		118,880		1,324,979		154,138	40,431		40,431
Daehan Oil Pipeline Corporation		109,180		908,551		28,013		225,388		157,997	35,538		35,725
Peru LNG Company, LLC		338,513		2,854,123		206,389		1,612,557		731,882	(15,826)		(82,373)
Korea IT Fund		144,874		260,920		-		-		11,743	1,916		6,024
Hana Card Co., Ltd.		7,339,492		220,258		1,181,746		4,861,842		1,519,607	106,352		105,368
Yemen LNG Company Ltd.		132,765		4,664,592		121,092		2,001,660		-	(240,452)		(240,452)
Eurasia Tunnel		185,980		1,300,519		126,550		976,952		55,689	59,819		59,819
Socar, Inc.		31,158		110,826		45,043		65,155		124,001	(24,448))	(24,448)
SM Core, Inc.		76,524		22,590		20,386		2,598		72,415	(1,833))	(2,337)
Korea Ras Laffan LNG Limited		667		745,725		86		20,299		83,560	81,570		(64,308)
NanoEnTek, Inc.		22,636		19,734		16,448		2,191		23,810	(2,072))	(2,002)
TSK Water Co., Ltd.		124,743		337,751		97,640		184,720		421,869	32,160		32,160
Xe-Pian Xe-Namnoy Power Company		33,984		824,805		23,619		583,843		-	(16,681))	(17,585)
Joint ventures:													
Sinopec-SK (Wuhan) Petrochemical Co., Ltd.		267,623		2,225,275		650,407		109		2,702,659	457,675		457,675
Mitsui Chemicals & SKC Polyurethanes Co., Ltd.		547,831		803,596		380,062		72,288		1,204,988	126,869		106,311
Hana land chip PEF 33		11.038		645.900		3.387		314.483		123.261	61.258		61.258
Boryeong LNG Terminal Co., Ltd.		197,560		1,137,990		50,511		1,115,145		142,617	17,410		17,410
SKC-Kolon PI Co., Ltd.		130,132		210,925		57,787		35,163		216,379	32,640		32,770
SABIC SK Nexlene Company		,		,		,		,		•	,		*
Pte. Ltd.		153,974		583,727		135,578		321,865		310,000	(11,511))	(11,511)

11. Property, plant and equipment

(1) Details of property, plant and equipment as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	Dece	mber 31, 2017	December 31, 2016
Acquisition cost	₩	49,598,443	₩ 44,164,521
Accumulated depreciation			
and accumulated impairment loss		(8,312,025)	(3,132,016)
	$\underline{\mathbb{W}}$	41,286,418	₩ 41,032,505

11. Property, plant and equipment (cont'd)

(2) Changes in property, plant and equipment for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

				For the year	ende	<u>ed Decemb</u>	oer 31, 2017		
	Beginning	Bu	ısiness						Ending
	balance	com	bination	Acquisitions	Di	sposals	Depreciation	Others (*1)	balance
Land	₩ 9,994,777	₩	116,329	₩ 29,026	₩	(462,002)	₩ -	₩ 67,727	₩ 9,745,857
Buildings	3,365,986		402,155	12,945		(23,299)	(155,939)	229,545	3,831,393
Structures	1,313,084		33,693	56,654		(24,026)	(106,340)	296,698	1,569,763
Ships and vessels	2,671,277		-	1,442		-	(127,209)	(237,026)	2,308,484
Machinery and equipment	15,680,963		315,825	700,040		(73,552)	(3,157,036)	3,692,229	17,158,469
Vehicles	825,012		2,771	52,907		(17,468)	(19,323)	(71,998)	771,901
Others	3,029,187		10,551	1,017,824		(41,668)	(743,189)	(146,579)	3,126,126
Construction-in-progress	4,152,219		86,168	3,541,049		(9,844)		(4,995,167)	2,774,425
	₩ 41,032,505	₩	967,492	₩5,411,887	₩	(651,859)	₩ (4,309,036)	₩(1,164,571)	₩41,286,418
				For the year	ende	ed Decemb	per 31, 2016		
	Beginning	Bu	ısiness	For the year	ende	ed Decemb	per 31, 2016		Ending
	Beginning balance		isiness	For the year Acquisitions		ed Decemb	per 31, 2016 Depreciation	Others (*1)	Ending balance
Land		com		Acquisitions	Di		Depreciation	_Others (*1)_ ₩ (12,924)	balance
Land Buildings	balance	com	bination	Acquisitions	Di	sposals	Depreciation -	₩ (12,924)	balance
	<u>balance</u> ₩ 9,900,793	<u>com</u> ₩	nbination 160,723	Acquisitions ₩ 4,348	Di ₩	sposals (58,163)	Depreciation ₩ - (144,609)	₩ (12,924) 134,834	<u>balance</u> ₩ 9,994,777
Buildings	balance ₩ 9,900,793 3,292,931	<u>com</u> ₩	160,723 103,892	Acquisitions ₩ 4,348 10,584	Di ₩	sposals (58,163) (31,646)	Depreciation ₩ - (144,609)	₩ (12,924) 134,834 78,627	balance ₩ 9,994,777 3,365,986 1,313,084
Buildings Structures	balance ₩ 9,900,793 3,292,931 1,227,202	<u>com</u> ₩	160,723 103,892	Acquisitions W 4,348 10,584 70,466	Di ₩	sposals (58,163) (31,646) (4,170)	Depreciation W - (144,609) (99,561)	₩ (12,924) 134,834 78,627 (197,232)	balance ₩ 9,994,777 3,365,986 1,313,084
Buildings Structures Ships and vessels	balance ₩ 9,900,793 3,292,931 1,227,202 2,805,736	<u>com</u> ₩	160,723 103,892 40,520	Acquisitions W 4,348	Di ₩	(58,163) (31,646) (4,170) (4,341)	Depreciation W - (144,609) (99,561) (145,941)	₩ (12,924) 134,834 78,627 (197,232) 1,577,196	balance ₩ 9,994,777 3,365,986 1,313,084 2,671,277 15,680,963
Buildings Structures Ships and vessels Machinery and equipment	balance W 9,900,793 3,292,931 1,227,202 2,805,736 16,189,361	<u>com</u> ₩	160,723 103,892 40,520 - 273,478	Acquisitions W 4,348 10,584 70,466 213,055 671,669	Di ₩	(58,163) (31,646) (4,170) (4,341) (70,552)	Depreciation W - (144,609) (99,561) (145,941) (2,960,189)	W (12,924) 134,834 78,627 (197,232) 1,577,196 (50,219)	balance W 9,994,777 3,365,986 1,313,084 2,671,277 15,680,963 825,012
Buildings Structures Ships and vessels Machinery and equipment Vehicles	<u>balance</u> ₩ 9,900,793 3,292,931 1,227,202 2,805,736 16,189,361 485,429	<u>com</u> ₩	160,723 103,892 40,520 - 273,478 1,434	Acquisitions W 4,348 10,584 70,466 213,055 671,669 511,999	Di ₩	(58,163) (31,646) (4,170) (4,341) (70,552) (6,447)	Depreciation W - (144,609) (99,561) (145,941) (2,960,189) (117,184)	W (12,924) 134,834 78,627 (197,232) 1,577,196 (50,219)	balance W 9,994,777 3,365,986 1,313,084 2,671,277 15,680,963 825,012

^(*1) This includes impairment losses, transfer of construction-in-progress to depreciable assets and investment property, net translation differences and others.

(3) Borrowing costs capitalized

Borrowing costs capitalized and capitalization rates for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	Dece	ember 31, 2017	<u>December 31, 2016</u>
Property, plant and equipment and intangible assets	₩	27,100	₩ 61,652
Capitalization rate		2.4% ~ 4.7%	2.1% ~ 4.8%

12. Investment property

(1) Details of investment property as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	Decem	nber 31, 2017	December 31, 2016
Acquisition cost	₩	659,702	₩ 740,264
Accumulated depreciation			
and accumulated impairment loss		(36,856)	(12,481)
	$\overline{\mathbb{W}}$	622,846	₩ 727,783

411,120

1,756

797,808 ₩

12. Investment property (cont'd)

(2) Changes in investment property for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

For the year ended December 31, 2017

(56,570)

(56,570) ₩

(11,091)

(147)

(11,238) ₩

(4,977)

(5,184) ₩

341,449

727,783

1,609

	Beginnin	g								Ending
	balance		Acquisition		Disposal	Depreciat	<u>ion</u>	Others (*1)		balance
Land	₩ 384,	725 ₩	285	₩	(1,758)	₩	-	₩ (75,816)	₩	307,436
Buildings	341,	449	3,968		(815)	(9,	054	(20,812)		314,736
Structures	1,	609	-		<u> </u>		(67	(868)		674
	₩ 727,	<u>783</u> ₩	4,253	₩	(2,573)	₩ (9,	121) ₩ (97,496)	₩	622,846
			Fo	r the	year ended Dec	ember 31, 2	2016	i		
	Beginnin	g								Ending
	balance		Acquisition		Disposal	Depreciat	ion	Others (*1)		balance
Land	₩ 384,	932 ₩	-	₩	-	₩	-	₩ (207)	₩	384,725

- (*1) This includes net translation differences, transferred amounts to property, plant and equipment and others.
- (3) Details of profit or loss recognized for the year ended December 31, 2017 with regards to investment property are as follows (Korean won in millions):

	Decemb	oer 31, 2017
Rental revenue	₩	11,407
Depreciation		(9,121)
	₩	2,286

The Group does not distinguish between rental revenue and related operating expenses.

2,967

2.967

(4) As at December 31, 2017, the fair value of investment property is ₩783,466 million.

13. Goodwill

Buildings

Structures

(1) Changes in goodwill for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

		For the years ended				
	Dec	ember 31, 2017	December 31, 2016			
Beginning balance	₩	575,233	₩ 27,078			
Business combination (*1)		363,608	533,785			
Others (*2)		(39,628)	14,370			
Ending balance	₩	899,213	₩ 575,233			

- (*1) The amount of business combination for the year ended December 31, 2017 consists of goodwill resulting from acquiring shares of SK Siltron Co., Ltd., and others (see Note 38 Business Combination).
- (*2) Others include net translation differences, transferred amounts to an asset held for sale and others.

13. Goodwill (cont'd)

- (2) Impairment testing of goodwill
- 1) Goodwill of each operating segment for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended					
	Decen	nber 31, 2017	Decem	ber 31, 2016		
SK Holdings Co., Ltd.	₩	277,227	₩	141,304		
Group of SK Innovation Co., Ltd.		150,496		-		
Group of SK Telecom Co., Ltd.		53,911		-		
Group of SK Networks Co., Ltd.		253,004		253,004		
Group of SK Engineering & Construction Co., Ltd.		144,116		144,116		
Others		20,459		36,809		
	₩	899,213	₩	575,233		

As a result of goodwill impairment test, there is no operating segment of which the carrying amount exceeds the recoverable amount, so there is no impairment loss recognized during the current reporting period.

2) Significant assumptions to estimate the recoverable amounts reflected the management's expectation of future trend considered with external and internal (historical) information.

Significant assumptions used in impairment testing of goodwill for the year ended 2017 are as follows:

	Recoverable		
	amount	Growth rate (*2)	Discount rate (*3)
SK Holdings Co., Ltd	Net fair value and	1.0%	10.7%
	and value in use (*1)		
Group of SK Innovation Co., Ltd.	Value in use	0.0%	8.6%
Group of SK Telecom Co., Ltd.	Value in use	1.0%	13.0%
Group of SK Networks Co., Ltd.	Value in use	1.0%	9.3%
Group of SK Engineering & Construction Co., Ltd.	Value in use	0.0%	9.9%

- (*1) Net fair value is estimated by subtracting disposal cost from expected gain on disposal of the asset.
- (*2) Future cash flows for additional periods after the estimated period are estimated using a fixed growth rate.
- (*3) The discount rate used to determine the recoverable amount of each operating segment is based on the weighted-average cost of capital.

14. Intangible assets

(1) Details of intangible assets for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

		For the year ended December 31, 2017									
	E	Beginning	Βι	ısiness							Ending
		balance	con	bination	Ac	quisitions	D	isposals A	Amortization	Others (*2)	balance
Development costs	₩	77,867	₩	518	₩	43,224	₩	(404)₩	(22,793)₩	₹ (3,864) ₩	94,548
Facility usage rights		54,435		7,050		7,287		(1,091)	(8,615)	(675)	58,391
Industrial property rights		126,524		4		3,168		(148)	(7,863)	(6,817)	114,868
Frequency usage rights		2,580,828		-		-		-	(403,888)	-	2,176,940
Customer-related assets		1,439,745		539,969		1,054		-	(151,214)	(7,349)	1,822,205
Membership (*1)		222,513		17,560		21,985		(16,022)	-	(20,015)	226,021
Development costs for petroleum		1,775,135		-		225,183		-	(98,547)	(132,937)	1,768,834
resource											
Brand-related assets (*1)		2,185,119		9,569		-		-	-	(462)	2,194,226
Developed technology		1,039,213		279,274		-		-	(131,835)	(16,950)	1,169,702
Others (*3)		1,695,778		3,134		152,777		(21,393)	(498,757)	494,342	1,825,881
	₩	11,197,157	₩	857,078	₩	454,678	₩	(39,058) ₩	(1,323,512)	₹ 305,273 <u>₩</u>	⁷ 11,451,616

14. Intangible assets (cont'd)

	For the year ended December 31, 2016						
	Beginning	Business					Ending
	balance	combination	Acquisitions	Disposals	Amortization	Others (*2)	balance
Development costs	₩ 79,158	₩ 40	₩ 28,211	₩ (151)	₩ (26,673) 3	₩ (2,718)	₩ 77,867
Facility usage rights	61,386	-	2,254	(50)	(8,929)	(226)	54,435
Industrial property rights	120,701	-	6,394	(185)	(7,150)	6,764	126,524
Frequency usage rights	1,103,517	-	1,810,076	-	(332,765)	-	2,580,828
Customer-related assets	1,263,503	287,813	499	-	(115,099)	3,029	1,439,745
Membership (*1)	241,874	1,728	29,975	(23,980)	-	(27,084)	222,513
Development costs for petroleum resource	1,862,146	-	180,366	-	(108,511)	(158,866)	1,775,135
Brand-related assets (*1)	1,975,000	210,119	-	-	-	-	2,185,119
Developed technology	1,045,951	111,717	-	-	(118,455)	-	1,039,213
Others (*3)	1,969,115	8,366	192,076	(24,907)	(443,536)	(5,336)	1,695,778
	₩ 9,722,351	₩ 619,783	₩ 2,249,851	₩ (49,273)	₩ (1,161,118) ³	₩ (184,437)	₩ 11,197,157

- (*1) Membership and brand-related assets are classified as intangible assets with infinite useful lives and are not amortized.
- (*2) This includes impairment loss, net translation differences, transfer to intangible assets from construction-in-progress and others.
- (*3) This comprises intangible assets recognized through business combination, software, usable and profitable donation assets and others.
- (2) Impairment testing of brand-related assets

The Company has estimated the recoverable amount of brand-related assets with indefinite useful lives for the impairment test. Significant assumptions to estimate the recoverable amounts reflected the management's expectation of future trend considered with external and internal (historical) information.

Significant assumptions used in impairment testing of brand contract-related assets as ate December 31, 2017 are as follows:

	Growth rate (*1)	Discount rate (*2)
Value in use	1.00%	13.30%

- (*1) Future cash flows for additional periods after the estimated period are estimated using a fixed growth rate.
- (*2) The discount rate was estimated by adding risk premium to weighted average cost of capital.

As a result of goodwill impairment test of brand contract-related assets, the carrying amount does not exceed the recoverable amount, so there is no impairment loss recognized during the current reporting period.

15. Borrowings and bonds payable

(1) Details of borrowings and bonds payable as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017			December 31, 2016		
		Current	Non-current		Current	Non-current
Short-term borrowings (*1)	₩	2,999,032	₩ -	₩	2,614,117	₩ -
Bonds and long-term borrowings:						
Bonds payable		5,290,911	18,193,965		4,378,668	19,376,759
Long-term borrowings		1,257,235	5,165,553		1,250,909	3,756,747
		6,548,146	23,359,518		5,629,577	23,133,506
	$\underline{\mathbb{W}}$	9,547,178	₩ 23,359,518	₩	8,243,694	₩ 23,133,506

(*1) It includes transferred accounts receivable that has not been removed and borrowings collaterized for accounts receivable amounting to \$300,621 million and \$356,441 million as at December 31, 2017 and 2016, respectively.

15. Borrowings and bonds payable (cont'd)

(2) Details of bonds payable as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017	December 31, 2016
SK Holdings Co., Ltd.	₩ 6,060,000	₩ 5,410,000
SK Innovation Co., Ltd.	634,990	682,975
SK Energy Co., Ltd.	1,730,000	2,070,000
SK Global Chemical Co., Ltd.	490,000	840,000
SK Incheon Petrochem Co., Ltd.	1,230,000	1,630,000
SK Lubricants Co., Ltd.	300,000	450,000
SK Telecom Co., Ltd.	5,470,238	5,627,514
SK Broadband Co., Ltd.	1,631,420	1,572,550
PS&Marketing Corp.	-	20,000
iriver Co., Ltd. (*1)	5,558	-
SK Networks Co., Ltd.	1,160,000	1,290,000
SK Magic Co., Ltd.	40,000	-
SKC Co., Ltd.	680,000	630,000
SKC Solmics Co., Ltd.	59,000	69,000
SK Telesys Co., Ltd.	40,000	40,000
SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.)	-	417,000
SK Shipping Co., Ltd.	517,428	-
SK Shipping Europe Plc.	-	24,170
SK E&S Co., Ltd.	1,040,000	1,050,000
Paju Energy Service Co., Ltd.	500,000	500,000
Wirye Energy Service Co., Ltd.	385,000	250,000
Narae Energy Service Co., Ltd.	80,000	80,000
SK Engineering & Construction Co., Ltd.	795,000	595,000
SK Materials Co., Ltd.	200,000	100,000
SK Siltron Co., Ltd.	180,000	
	23,228,634	23,348,209
Addition: premium on bonds payable	256,242	407,218
Less: current portion	(5,290,911)	(4,378,668)
	<u>₩ 18,193,965</u>	<u>₩ 19,376,759</u>

^(*1) During the current period, the Group sold its convertible bond issued by iriver Co., Ltd., one of the subsidiaries, to the third party.

(3) Details of long-term borrowings as at December 31, 2017 and 2016 are as follows (Korean won in millions):

Financial institution	Description	Interest rate (%)	December 31, 2017	December 31, 2016
Korea Development Bank and others	General	0.75 ~ 7.22	₹ 1,493,559	₩ 1,515,098
Korea Development Bank and others (*1)	Fund for facility	1.75 ~ 4.85	1,939,243	1,932,951
Industrial and Commercial Bank of China and others	Foreign borrowings	1.70 ~ 6.00	496,621	218,041
Korea Energy Agency and others (*2)	Fund for mine exploration	$0.00 \sim 7.00$	81,757	61,681
Econg 1st Co., Ltd. and others	Callable preferred share	5.00 ~ 6.40	450,000	525,000
Korea Development Bank and others	Fund for operation	1.99 ~ 5.60	499,741	563,298
Kookmin Bank and others	Fund for supply pipeline	1.75	12,512	16,539
Kookmin Bank	Fund for catalyzing information	1.95	717	4,083
KEB Hana Bank and others	Fund for reasonable energy consumption	1.75 ~ 1.80	6,245	3,829
Sinhan Bank and others	Fund for safety management	1.75	1,121	1,564
Citibank and others (*3)	Takeover	2.85	203,566	-
Special situation 1st LLC and others	Others	3.07, 3.14, 3.20	1,231,906	158,563
·		_	6,416,988	5,000,647
Addition: premium			5,800	7,009
Less: current portion		_	(1,257,235)	(1,250,909)
		<u> </u>	₹ 5,165,553	₩ 3,756,747

15. Borrowings and bonds payable (cont'd)

- (*1) The borrowings from Korea Development Bank amounting to ₩149,859 million of SK Global Chemical Co., Ltd., a subsidiary of the Company, are related to the facility borrowings of Ulsan Aromatics Co., Ltd., which is accounted for as joint operation, and the amount of the Group's repayment obligation according to the cash deficiency support agreement is recorded as borrowings as at December 31, 2017.
- (*2) As at December 31, 2017 and 2016, the Group holds loans from Korea Energy Agency for the purpose of oil exploration and development in which there is no repayment obligation in case for failure in exploration for \(\pi 45,693\) milion and \(\pi 47,427\) million, respectively.
- (*3) SK Global Chemical Co., Ltd., one of the subsidiaries, has a repayment obligation for borrowings of SK Golbal Chemical Americas, Inc. in the event of default. The purpose of the borrowings of SK Global Chemical Americas, Inc. was to acquire The Dow Chemical Company's EAA business domiciled in the US and Spain and its tangible-intangible assets.

Long-term borrowings presented above are to be repaid either in installments or all at once at maturity. Financial instruments and other assets of the Group are pledged as detailed in Note 34.

16. Long-term other accounts payable

Details of long-term other accounts payable as at December 31, 2017 and 2016 are as follows (Korean won in millions):

		Decembe	er 31, 2017	
	-	Discount		Long-term
		on long-term		other accounts
	Nominal value	other payable	Current portion	payable
Bare Boat Charter Hire Purchase contract (*1)	₩ 2,988,380	₩ (326,262)₩	₹ (312,086)	₩ 2,350,032
Frequency usage right	1,710,255	(61,048)	(301,751)	1,347,456
Others	44,412	(346)	(1,173)	42,893
	₩ 4,743,047	\(\frac{\partial}{\partial}\) (387,656) \(\frac{\partial}{\partial}\)	∀ (615,010)	₩ 3,740,381
		Decembe	er 31, 2016	
		Discount		Long-term
		on long-term		other accounts
	Nominal value	other payable	Current portion	payable
Bare Boat Charter Hire Purchase contract (*1)	₩ 3,741,583	₩ (357,930) ₩	₹ (465,665)	₩ 2,917,988
Frequency usage right	2,013,122	(77,678)	(301,773)	1,633,671
Others	75,224	(380)	(24,727)	50,117
	<u>₩ 5,829,929</u>	₩ (435,988) \	∀ (792,165)	₩ 4,601,776

(*1) Under the Bare Boat Charter Hire Purchase contracts, if certain requirements are met, creditors have reimbursement recourse options that allow an early redemption of the bond before the due date. Most of the Bare Boat Charter Hire Purchase contracts are based on the contracts of affreightment with Korea Gas Corporation and others as detailed in Note 33.

17. Provisions

Changes in the provisions for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the year ended December 31, 2017								
	Beginnii	ng	Business				Ending		Non-
	balanc	<u> </u>	combination	Increase		Decrease	balance	Current	current
Provision for sale warranties	₩ 16,	036	₩ 1,413	₩ 56,65	6 ₩	₹ (8,733)	65,372	₩ 3,535	₩ 61,837
Provision for handset subsidy	24,	711	-		2	(20,839)	3,874	3,874	-
Provision for service / construction warranties	57,	561	-	20,65	9	(16,644)	61,576	61,576	-
Provision for restoration	116,	019	-	14,94	-8	(16,046)	114,921	41,898	73,023
Provision for losses on contracts	155,	154	418	54,40	1	(182,377)	27,596	27,596	-
Others (*1)	155,	653		89,13	9	(104,329)	140,463	108,321	32,142
	₩ 525,	134	₩ 1,831	₩ 235,80	5 ₩	∀ (348,968)	413,802	₩ 246,800	₩ 167,002

(*1) Other provisions include greenhouse gas emissions provision of ₩45,950 million, and the provision is recognized only when actual emissions exceed the emission rights granted and still held. Permitted greenhouse gas emissions were 13,579,032 KAU, and estimated greenhouse gas emissions were 12,682,236 KAU in 2017.

	For the year ended December 31, 2016						
	Beginning	Business			Ending		Non-
	balance	combination	Increase	Decrease	balance	Current	current
Provision for sale warranties	₩ 9,607	′ ₩ 1,319 ₩	₹ 5,662	₩ (552)₩	⁷ 16,036	₩ 2,316	₩ 13,720
Provision for handset subsidy	5,671	-	37,530	(18,490)	24,711	19,939	4,772
Provision for service / construction warranties	49,491	5	14,929	(6,864)	57,561	57,561	-
Provision for restoration	93,920	671	24,074	(2,646)	116,019	38,703	77,316
Provision for losses on contracts	178,370	-	127,495	(150,711)	155,154	155,154	-
Others	103,441	9,235	74,698	(31,721)	155,653	147,130	8,523
	₩ 440,500	₩ 11,230 ¥	∀ 284,388	₩ (210,984) ₩	₹ 525,134	₩ 420,803	₩ 104,331

18. Retirement benefit obligation

(1) Details of retirement benefit obligation as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	Dece	mber 31, 2017	Dec	ember 31, 2016
Present value of defined benefit obligation	₩	2,260,864	₩	1,961,251
Fair value of plan assets (*1)	-	(2,049,033)		(1,770,247)
Total	₩	211,831	₩	191,004

(*1) The Group has recognized \pm 45,952 million and \pm 38,374 million as defined benefit assets as at December 31, 2017 and 2016, respectively.

18. Retirement benefit obligation (cont'd)

(2) Changes in the retirement benefit obligation for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

		For the yea	ar en	ded December 31	, 2017
	Pre	sent value of			
	de	fined benefit	Fa	air value of	
		obligation	p	lan assets	Total
Beginning balance	₩	1,961,251	₩	(1,770,247) ₩	191,004
Business combination		131,744		(93,050)	38,694
Provision for pension benefits:		,		, , ,	,
Current service cost		336,925		-	336,925
Past service cost		1,734		-	1,734
Net interest expense (income)		52,144		(46,717)	5,427
Remeasurement:		•		, , ,	,
Return on plan assets		-		17,224	17,224
(excluding amounts included in net interest expenses)				,	,
Actuarial changes arising from changes		(52,745))	-	(52,745)
in financial assumptions and others		, ,			, , ,
Contributions by employer directly to plan assets		-		(347,420)	(347,420)
Benefit paid		(221,029))	`191,306 [´]	(29,723)
Others		50,840		(129)	50,711
Ending balance	₩	2,260,864	₩	(2,049,033) \\	211,831
		For the year	ar en	ded December 31	, 2016
	Pre	For the yearsent value of	ar en	ded December 31	, 2016
				ded December 31 air value of	, 2016
		sent value of	Fa		, 2016 Total
Beginning balance		sent value of fined benefit	Fa	air value of	
Beginning balance Business combination	de	sent value of fined benefit obligation	Fa	air value of lan assets	Total
	de	esent value of fined benefit obligation 1,736,303	Fa	air value of lan assets (1,470,600)	Total 265,703
Business combination	de	esent value of fined benefit obligation 1,736,303	Fa	air value of lan assets (1,470,600)	Total 265,703
Business combination Provision for pension benefits:	de	esent value of fined benefit obligation 1,736,303 54,506	Fa	air value of lan assets (1,470,600)	Total 265,703 34,801
Business combination Provision for pension benefits: Current service cost	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614	Fa	air value of lan assets (1,470,600)	Total 265,703 34,801 305,614
Business combination Provision for pension benefits: Current service cost Past service cost	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402	Fa	air value of lan assets (1,470,600) W (19,705)	Total 265,703 34,801 305,614 402
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement:	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402	Fa	air value of lan assets (1,470,600) \times (19,705) \times (34,561)	Total 265,703 34,801 305,614 402 7,188
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement: Return on plan assets	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402	Fa	air value of lan assets (1,470,600) W (19,705)	Total 265,703 34,801 305,614 402
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement: Return on plan assets (excluding amounts included in net interest expenses)	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402 41,749	Fa	air value of lan assets (1,470,600) \times (19,705) \times (34,561)	Total 265,703 34,801 305,614 402 7,188 10,584
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement: Return on plan assets (excluding amounts included in net interest expenses) Actuarial changes arising from changes	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402	Fa	air value of lan assets (1,470,600) \times (19,705) \times (34,561)	Total 265,703 34,801 305,614 402 7,188
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement: Return on plan assets (excluding amounts included in net interest expenses) Actuarial changes arising from changes in financial assumptions and others	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402 41,749	Fa	air value of lan assets (1,470,600) \times (19,705) \times (34,561)	Total 265,703 34,801 305,614 402 7,188 10,584 15,714
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement: Return on plan assets (excluding amounts included in net interest expenses) Actuarial changes arising from changes	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402 41,749	Fa <u>p</u> W	air value of lan assets (1,470,600) \times (19,705) \times (34,561) \tag{34,561}	Total 265,703 34,801 305,614 402 7,188 10,584
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement: Return on plan assets (excluding amounts included in net interest expenses) Actuarial changes arising from changes in financial assumptions and others Contributions by employer directly to plan assets	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402 41,749 - 15,714	Fa <u>p</u> W	air value of lan assets (1,470,600) \(\pi \) (19,705) \(\pi \) (34,561) \(10,584\) \(\pi \) (403,083)	Total 265,703 34,801 305,614 402 7,188 10,584 15,714 (403,083)
Business combination Provision for pension benefits: Current service cost Past service cost Net interest expense (income) Remeasurement: Return on plan assets (excluding amounts included in net interest expenses) Actuarial changes arising from changes in financial assumptions and others Contributions by employer directly to plan assets Benefit paid	de	ssent value of fined benefit obligation 1,736,303 54,506 305,614 402 41,749	Fap ₩	air value of lan assets (1,470,600) \(\pi \) (19,705) \(\pi \) (34,561) \(\pi \) (403,083) \(\pi \) (35,057	Total 265,703 34,801 305,614 402 7,188 10,584 15,714 (403,083) (65,949)

- (3) As at December 31, 2017 and 2016, 66.03% and 73.76% of the plan assets, respectively, consist of cash and cash equivalents and debt instruments.
- (4) The principal assumptions used in actuarial calculation as at December 31, 2017 and 2016 are as follows:

	December 31, 2017	December 31, 2016
Discount rate for defined benefit obligations	2.00% ~ 4.03%	1.90% ~ 3.24%
Expected rate of salary increase	2.60% ~ 5.93%	1.39% ~ 6.30%

18. Retirement benefit obligation (cont'd)

(5) The sensitivity analysis for significant actuarial assumptions as at December 31, 2017 is as follows (Korean won in millions).

_	Impact on the defined benefit obligation						
_	Sensitivity level		Increase		Increase Decre		Decrease
Discount rate for defined benefit obligations	0.5% point	₩	(80,164)	₩	86,474		
Expected rate of salary increase	0.5% point		86,296		(80,784)		

The sensitivity analysis above has been done under the assumption that all other variables remain unchanged. However, actual results may change through the interaction among other variables.

19. Other assets and liabilities

(1) Details of other assets as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	De	ecember 31, 2017	December 31, 2016
Current assets:		_	
Short-term financial instruments	₩	3,540,673	₩ 4,265,992
Short-term loans		123,130	239,915
Accrued income		44,240	23,782
Advance payments		793,180	676,453
Prepaid expenses		721,801	665,088
Held-to-maturity investments		45	67
Guarantee deposits		209,181	192,214
Derivative financial assets		92,413	151,163
Finance lease receivables		73,199	79,896
Others		34,361	6,690
	₩	5,632,223	₩ 6,301,260
Non-current assets:			
Long-term financial instruments	₩	200,853	₩ 131,033
Long-term prepaid expenses		1,079,822	1,203,876
Long-term loans		378,534	314,455
Held-to-maturity investments		825	870
Guarantee deposits		740,326	732,770
Derivative financial assets		282,229	252,028
Finance lease receivables		168,490	275,288
Defined benefit assets (*1)		45,952	38,374
Others		126,764	87,569
	₩	3,023,795	₩ 3,036,263

^(*1) The excess amount of certain plans in the Group has not been offset because the amount was not entitled and intended to settle the defined benefit obligation of other plans (see Note 18).

19. Other assets and liabilities (cont'd)

(2) Details of other liabilities as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017	December 31, 2016
Current liabilities:		<u> </u>
Accrued expenses	₩ 2,875,130	₩ 2,480,547
Dividends payable	1,423	614
Advance received	1,947,370	1,828,650
Unearned revenue	255,149	267,063
Withholdings	1,943,249	
Leasehold deposits received	162,965	125,157
Income tax payable	895,672	•
Derivative financial liabilities	147,285	256,073
Finance lease liabilities	1,676	1,747
Financial guarantee liabilities	50	-
Others	1,029	<u>561</u>
	₩ 8,230,998	₩ 7,850,072
Non-current liabilities:		
Long-term unearned revenue	₩ 413,046	₩ 365,904
Leasehold deposits received	310,050	357,384
Derivative financial liabilities	33,702	51,678
Finance lease liabilities	10	1,864
Financial guarantee liabilities	11,933	9,120
Others (*1)	370,750	50,554
	₩ 1,139,491	₩ 836,504

^(*1) Includes long-term employee benefits amounting to \$54,679 million and \$45,927 million as at December 31, 2017 and 2016, respectively.

20. Derivative financial assets and liabilities

(1) Details of derivative financial assets and liabilities as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017			December 31, 2016		2016	
		Current	Non-current		Current	No	n-current
Firm contracts	₩	9,320	₩ -	₩	84,296	₩	-
Swap contracts		(77,784)	41,234		(169,632)		197,183
Forward contracts		13,182	(17,502))	(20,206)		3,167
Futures contracts		420	-		1,051		-
Options contracts		(10)	-		(419)		-
Embedded derivative			224,795				
	₩	(54,872)	₩ 248,527	₩	(104,910)	₩	200,350
Derivative financial assets	₩	92,413	₩ 282,229	₩	151,163	₩	252,028
Derivative financial liabilities		(147,285)	(33,702))	(256,073)		(51,678)

20. Derivative financial assets and liabilities (cont'd)

(2) The Group has entered into derivatives (such as foreign exchange forwards, foreign exchange swap and interest swap) contracts in order to avoid exchange rate risk of foreign currency assets and liabilities and the interest rate risk associated with debts. As at December 31, 2017, significant derivative financial instruments that the Group holds as a hedge or held-for-trading are as follows:

Segments	Purpose of transaction	Classification	Financial institutes
SK Holdings Co., Ltd.	Hedge of foreign currency exchange risk of foreign currency denominated contract	Foreign exchange forwards and embedded derivative	KEB Hana Bank
SK Innovation Co., Ltd.	Fair value hedge of fixed priced aviation fuel supply contract Cash flow hedge of forecasted purchase of crude oil, forecasted sales of products and the risk of changes in market interest rates	Swaps for oil and others Merchandise forwards and interest swaps	Barclays Bank and others Societe Generale, DBS Bank and others
SK Telecom Co., Ltd.	Hedge of foreign currency exchange risk of foreign currency denominated bond, hedge of currency exchange, and interest rate risk of floating rate foreign currency denominated bond and the risk of changes in market interest rates	Foreign exchange swaps interest swaps and embedded derivative	Korea Development Bank, DBS Bank and others
SK Networks Co., Ltd.	Hedge of foreign currency exchange risk of foreign currency denominated debt and bond	Foreign exchange forwards and others	KEB Hana Bank, Kookmin Bank and others
SKC Co., Ltd.	Hedge of foreign currency exchange risk of foreign currency Denominated debt and bond	Foreign exchange forwards and others	KEB Hana Bank, Woori Bank
SK Maritime Co., Ltd.	Hedge of interest rate risk of floating rate foreign currency denominated bond and long term payables	Interest swaps	Credit Agricole and others
	Hedge of currency exchange and interest rate risk of long term borrowings	Foreign exchange swaps	Korea Development Bank and Standard Chartered Bank
	Hedge of bunker price change risk	Bunker forwards	Eugene Investment Co., Ltd. and others
SK E&S Co., Ltd.	Hedge of foreign currency exchange risk of foreign currency denominated borrowings and hedge of interest rate of floating rate borrowings.	Foreign exchange forwards and interest rate swaps	Korea Development Bank and Woori Bank
	Price change hedge of natural gas purchase contract	Merchandise swaps	Barclays Bank and JP Morgan
SK Engineering & Construction Co., Ltd.	Hedge of changes in revenue from construction contract denominated in foreign currency	Foreign exchange forwards	JP Morgan, Credit Agricole and others
	Hedge of changes in construction cost of construction contract denominated in foreign currency	Foreign exchange forwards	Standard Charted Bank, Kookmin Bank and others

21. Equity

(1) Details of issued capital as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	Dece	ember 31, 2017	December 31, 20	16
Number of shares authorized for issued		400,000,000	400,000	0,000
Per share (Korean won)	₩	200	₩	200
Number of shares issued:				
Ordinary share		70,360,297	70,360	0,297
Preferred share		566,135	566	5,135
Issued capital:				
Ordinary share	₩	15,272	₩ 15	5,272
Preferred share	<u> </u>	113		113
	₩	15,385	₩ 15	<u>5,385</u>

The Company retired 6,000,000 shares of its treasury share (par value: \$1,200 million) by reducing retained earnings, which resulted in a difference between total par value of ordinary shares and issued capital

(2) Details of other paid-in capital as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	<u>December 31, 2017</u>	December 31, 2016
Paid-in surplus (*1)	₩ 5,605,83	1 ₩ 5,605,831
Treasury shares (*2)	(904,49	1) (904,490)
Others	(588,86	5) 39,798
	₩ 4,112,47	5 ₩ 4,741,139

21. Equity (cont'd)

- (*1) During the year ended December 31, 2015, the Company repurchased treasury shares of ₩3,369,310 million from merger with SK Holdings Co., Ltd. which was recognized as a contraequity account on additional paid-in capital.
- (*2) As at December 31, 2017, treasury stock consists of those acquired to increase the enterprise value and to stabilize share price (3,514,276 ordinary shares), and those acquired from repurchase of shares from dissenting shareholders on business combination and shares arising from odd lot shares (11,021,669 ordinary shares and 1,818 preferred shares) during the 2015 reporting period. Out of those shares, 5 ordinary shares are acquired during the current reporting period.
- (3) Details of retained earnings as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	Decer	mber 31, 2017	Decem	nber 31, 2016
Legal reserve (*1)	₩	7,693	₩	7,693
Voluntary reserve		71,563		80,896
Unappropriated retained earnings	-	9,758,363		8,279,533
	₩	9,837,619	₩	8,368,122

- (*1) In accordance with the Korean Commercial Code, an amount equal to at least 10% of cash dividends is required to be appropriated as a legal reserve until the reserve equals 50% of issued capital. The legal reserve may not be utilized for cash dividends but may only be used to offset a deficit, if any, or be transferred to issued capital through approval at the general meeting of the shareholders.
- (4) Details of dividends proposed for approval at the annual ordinary shareholders' meeting for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

_	For the years ended							
		December 3)17		December	31,	2016	
_	Ordi	nary share	F	Preferred share		Ordinary share		Preferred share
Number of shares (*1)		55,824,352		564,317		55,824,357		564,317
Par value per share (Korean won)	₩	200	₩	200	₩	200	₩	200
Dividend rate		2,000%		2,025%		1,850%		1,875%
Dividends	₩	223,297	₩	2,286	₩	206,550	₩	2,116

- (*1) The total number of shares was calculated from the number of issued shares excluding treasury shares.
- (5) Details of other capital components as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	<u>Decemb</u>	oer 31, 2017	December 31, 2016
Net gain (loss) on valuation of available-for-sale financial assets	₩	60,324	₩ (2,054)
Changes in equity in equity method		(153,763)	(48,190)
Net loss on valuation of cash flow hedges		(7,752)	(16,807)
Net gain (loss) on translation of foreign operation		(214,606)	50,545
Net gain on foreign currency translation		10,400	4,217
	₩	(305,397)	₩ (12,289)

21. Equity (cont'd)

(6) Upon resolution by the shareholders and the Board of Directors, the Group established a stock option program that entitles key management personnel an option to purchase ordinary shares. The terms and conditions related to the grants of the stock options granted under the share option program are as follows:

1) SK Holdings Co., Ltd.						
-	1-1	1-2	1-3			
Grant date	2017-03-24					
Type of shares to be issued	Ordinary shares					
Grant method	Reissue of treasury shares, but if the stock option's exercise price is lower than the stock's real price (evaluated based on exercise date), the Group may settle the difference in cash or with treasury stock equivalent to the difference amount.					
Number of shares (shares)	41,429	41,430	41,431			
Exercise price (Korean won)	₩ 226,290	₩ 244,400	₩ 263,950			
Contractual life of options	2019.03.25 ~ 2022.03.24	2020.03.25 ~ 2023.03.24	2021.03.25 ~ 2024.03.24			
Vesting conditions	2 year service from the grant date	3 year service from the grant date	4 year service from the grant date			

Share compensation expense recognized during the current reporting period is \$1,220 million, and the remaining share compensation expense to be recognized in later periods is \$3,067 million.

The Group used the binomial option pricing model, and the inputs used in the measurement of the fair values at the grant date of the share-based payment plans are as follows (Korean won):

		1-1		1-2		1-3
Risk-free interest rate		1.86%		1.95%		2.07%
Life of the options		5 Years		6 Years		7 Years
Expected price (closing price on the preceding)	₩	236,000	₩	236,000	₩	236,000
Expected volatility		16.78%		16.78%		16.78%
Rate of returns		1.60%		1.60%		1.60%
Exercise price	₩	226,290	₩	244,400	₩	263,950
Fair value per share	₩	38,317	₩	34,200	₩	30,962
2) SK Telecom Co., Ltd.						
		1-1		1-2		1-3
Grant date	2017-03-	24				
Type of shares to be issued	Ordinary	shares				
Grant method	lower the	nan the stock's	real the	but if the stock opt price (evaluated bad difference in cash of e amount.	sed o	n exercise date),
Number of shares (shares)	oquiru.	22,168		22,168		22,168
Exercise price (Korean won)	₩	246,750	₩	266,490	₩	287,810
Contractual life of options		.03.25 2022.03.24		2020.03.25 ~ 2023.03.24	2	2021.03.25 ~ 2024.03.24
Vesting conditions	•	service from rant date		year service from the grant date	-	vear service from he grant date

21. Equity (cont'd)

Share compensation expense recognized during the current reporting period ended December 31, 2017 was $\mathbb{W}414$ million and the remaining share compensation expense to be recognized in later periods is $\mathbb{W}977$ million.

The Group used the binomial option pricing model and the inputs used in the measurement of the fair values at the grant date of the share-based payment plans are as follows (Korean won):

		1-1		1-2		1-3
Risk-free interest rate		1.86%		1.95%		2.07%
Life of the options		5 Years		6 Years		7 Years
Expected price (closing price on the preceding day)	₩	262,500	₩	262,500	₩	262,500
Expected volatility		13.38%		13.38%		13.38%
Rate of returns		3.80%		3.80%		3.80%
Exercise price	₩	246,750	₩	266,490	₩	287,810
Fair value per share	₩	27,015	₩	20,240	₩	15,480

22. Selling and administrative expenses

Details of selling and administrative expenses for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended			
	December 31, 2017	·		
Salaries	₩ 1,143,462	998,706		
Provision for pension benefits	126,243	90,348		
Employee welfare benefits	207,447	173,910		
Travel	61,350	50,975		
Bad debt expenses	16,386	255,947		
Communications	10,449	8,683		
Utilities	40,780	38,439		
Taxes and dues	71,769	•		
Supplies	20,481	15,507		
Rents	172,951	151,436		
Depreciation	207,609			
Amortization	159,615	142,283		
Repairs	25,534	19,620		
Insurance	29,064			
Advertising	698,239	600,351		
Research and development	406,135	237,025		
Education and examination	73,817	51,811		
Outsourcing technology services	697,725	552,298		
Commissions	20,991	4,218		
Transport	672,392			
Others	173,214	135,127		
	₩ 5,035,653	₩ 4,443,496		

23. Financial income and costs

Details of financial income and costs for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended				
	Dece	mber 31, 2017	December 31, 2016		
Financial income:					
Interest income	₩	215,315	₩ 196,415		
Gain on foreign currency transactions		1,324,586	1,385,609		
Gain on foreign currency translation		406,069	333,188		
Gain on transactions of derivatives		681,163	482,602		
Gain on valuation of derivatives		415,665	135,596		
Others		37	3,569		
	₩	3,042,835	₩ 2,536,979		
		For the ye	ars ended		
	Dece	mber 31, 2017	December 31, 2016		
Financial costs:					
Interest expenses	₩	912,108	₩ 796,127		
Loss on foreign currency transactions		1,259,165	1,402,555		
Loss on foreign currency translation		292,183	401,862		
Loss on transactions of derivatives		784,141	589,213		
Loss on valuation of derivatives		223,489	156,813		
Others		4,101	4,017		
	₩	3,475,187	₩ 3,350,587		

24. Other non-operating income and expenses

(1) Details of other non-operating income for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended				
	Decer	nber 31, 2017	Decem	ber 31, 2016	
Other non-operation income:					
Dividend income	₩	23,551	₩	39,859	
Rental income		267		254	
Gain on disposal of trade accounts receivable		-		18,639	
Gain on disposal of available-for-sale financial assets		7,005		96,936	
Gain on disposal of investments in subsidiaries and associates		196,361		49,923	
Gain on disposal of property, plant and equipment		50,560		21,072	
Gain on disposal of intangible assets		2,465		3,228	
Gain on disposal of other investment property		861		46,075	
Others		341,816		386,492	
	₩	622,886	₩	662,478	

24. Other non-operating income and expenses (cont'd)

(2) Details of other non-operating expenses for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended			
	Dec	ember 31, 2017	December 31, 2016	
Other non-operation expenses:				
Loss on disposal of trade accounts receivable	₩	14,216	₩ 11,744	
Loss on disposal of available-for-sale financial assets		36,331	21,476	
Loss on impairment of available-for-sale financial assets		126,513	32,603	
Loss on disposal of investments in subsidiaries and associates		98,096	19,383	
Loss on disposal of property, plant and equipment		99,349	93,310	
Loss on impairment of property, plant and equipment		150,993	253,677	
Loss on disposal of intangible assets		18,848	16,936	
Loss on impairment of intangible assets		52,912	312,260	
Loss on disposal of other investment property		70	-	
Loss on impairment of other investment property		13,093	24,947	
Donations		181,927	178,910	
Others		304,886	496,508	
	₩	1,097,234	₩ 1,461,754	

25. Expense classified based on nature of expense

Details of classification based on nature of expenses for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended				
	December 31,	2017 Dec	December 31, 2016		
Employee benefits	₩ 5,75	53,110 ₩	5,234,300		
Depreciation and amortization	5,62	26,327	5,203,847		
Network connection	87	79,767	958,379		
Transport	80)4,214	728,428		
Advertising	71	0,079	607,060		
Operating lease payments and rents	1,05	52,430	1,183,314		
Others	17,06	52,464	15,834,319		
Use of raw materials and purchase of finshed goods and merchandise	55,67	76,215	47,734,932		
Changes in finished goods and semi-finished goods	(12	29,277)	(35,488)		
	₩ 87,43	<u>₩</u>	77,449,091		

26. Income taxes

(1) Components of income tax expense for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended				
	Dece	ember 31, 2017	Dec	ember 31, 2016	
Current income tax	₩	1,533,873	₩	1,367,428	
Adjustments in respect of current income tax of prior year		(102,839)		1,678	
Origination and reversal of temporary difference		759,801		(165,282)	
Income tax related to other capital components		(11,547)		97,939	
Others		232		6,905	
Income tax expense	₩	2,179,520	₩	1,308,668	
Income tax expense from continuing operation	₩	2,260,810	₩	1,359,633	
Income tax benefits from discontinued operation		(81,290)		(50,965)	

26. Income taxes (cont'd)

(2) Details of tax effect on temporary difference charged or credited directly to shareholders' equity for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended				
	Decem	ber 31, 2017	December 31, 2016		
Remeasurement gain on defined benefit plan	₩	8,814	₩ 5,182		
Gain (loss) on valuation of available-for-sale financial assets		(74,251)	83,836		
Equity adjustments of investments in associates and joint ventures		7,152	6,293		
Gain (loss) on valuation of derivatives		(5,177)	636		
Others		51,915	1,992		
	₩	(11,547)	₩ 97,939		

(3) Reconciliations of income before income tax at the Korea statutory tax rate to income tax expense at the effective income tax rate of the Group for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended					
	Dec	December 31, 2016				
Income before income tax expense	₩	7,246,002	₩ 4,131,152			
Income before income tax expense from continuing operations		7,442,177	4,389,657			
Loss before income tax expense from discontinued operations		(196,175)	(258,505)			
Applied tax rates (*1)		24.2%	24.2%			
Income tax at statutory income tax rate		1,753,532	999,739			
Non-taxable income		(329,462)	(187,731)			
Non-deductible expenses		196,156	122,847			
Tax credit		(16,316)	(44,476)			
Unrecognized deferred income tax		77,439	9,556			
Effect of changes in tax rates		100,059	(6,678)			
Others (*1)		398,112	415,411			
Income tax expense	₩	2,179,520	₩ 1,308,668			
Income tax expense from continuing operations	₩	2,260,810	₩ 1,359,633			
Income tax benefits from discontinued operations		(81,290)	(50,965)			
Effective tax rate		30.4%	31.0%			

^(*1) The Company is subject to corporate income tax of Republic of Korea where the parent company is located. For the year ended December 31, 2017, the difference between the Korean tax burdens and the foreign tax burdens on foreign subsidiaries amounting to ₩325,989 million is included in others.

26. Income taxes (cont'd)

(4) Significant changes in deferred tax assets (liabilities) for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the year ended December 31, 2017											
					Ŕ	Recognized	F	Recognized				
		Beginning	В	usiness		directly		directly				Ending
	_	balance	COI	mbination_		in loss		in equity		Others		balance
Temporary differences	₩	(2,799,806)	₩	(170,922)	₩	(669,900)	₩	(11,547)	₩	25,750	₩	(3,626,425)
Tax loss carryforward		345,820		55,033		(25,831)		-		(21,942)		353,080
Tax credits carryforward		67,069		5,124		(52,523)				(77)		19,593
	₩	(2,386,917)	₩	(110,765)	₩	(748,254)	₩	(11,547)	₩	3,731	₩	(3,253,752)
Deferred tax assets (*1)	₩	711,591									₩	734,524
Deferred tax liabilities (*1)		(3,098,508)										(3,988,276)

	For the year ended December 31, 2016										
	-				R	Recognized					_
		Beginning balance		Business mbination		directly in profit or loss	F	Recognized directly in equity		Others	Ending balance
Temporary differences	₩	(2,581,803)	₩	(134,735)	₩	(100,299)	₩	97,939	₩	(80,908) ₩	(2,799,806)
Tax loss carryforward		327,813		2,962		153,782		-		(138,737)	345,820
Tax credits carryforward		(77,239)				13,860				130,448	67,069
	₩	(2,331,229)	₩	(131,773)	₩	67,343	₩	97,939	₩	(89,197) ₩	(2,386,917)
Deferred tax assets (*1)	₩	629,235								₩	711,591
Deferred tax liabilities (*1)		(2,960,464)									(3,098,508)

- (*1) The Group offsets tax assets and liabilities if, and only if, it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities related to income taxes are levied by the same tax authority.
- (5) The expected expiration schedule of tax loss carryforward and tax credits carryforward for which deferred tax assets are not recognized as at December 31, 2017 is as follows (Korean won in millions):

		Tax loss carryforward	Tax credits carryforward
1 year or less	₩	-	₩ 1,627
1 year ~ 2 years		7,686	476
2 year ~ 3 years		358,237	17,520
More than 3 years		1,285,046	12,348
	$\underline{\mathbb{W}}$	1,650,969	₩ 31,971

27. Earnings per share

(1) Basic earnings per share for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions, except per share and weighted-average number of ordinary shares outstanding):

	For the years ended					
		December 31, 2017		December 31, 2016		
Net income attributable to owners of the Company	₩	1,677,432	₩	765,580		
Less: preferred share dividends		(2,286)		(2,116)		
Net income attributable to ordinary share owners of the Company	₩	1,675,146	₩	763,464		
Weighted-average number of ordinary share outstanding (*1)		55,824,357		55,824,357		
Basic earnings per share (in Korean won) (*2)	₩	30,007	₩	13,676		

- (*1) The weighted-average number of common share outstanding is calculated by multiplying the number of shares issued by the portion of the reporting period those shares covered. The treasury shares held until the disposal date, after the date of acquisition, are excluded from the number of common shares outstanding.
- (*2) Basic earnings per share are net income attributable to share owners of the parent per ordinary share.

The basis of calculating weighted-average number of ordinary shares for the years ended December 31, 2017 and 2016 is as follows:

	For the years ended				
	December 31, 2017	December 31, 2016			
Weighted-average number of issued shares outstanding	70,360,297	70,360,297			
Weighted-average number of treasury shares	(14,535,940)	(14,535,940)			
Weighted-average number of ordinary shares outstanding	55,824,357	55,824,357			

(2) Basic earnings per share from continuing operations

Basic earnings per share from continuing operations for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions, except basic earnings per share and weighted-average number of common shares outstanding):

	For the years ended					
	Dec	ember 31, 2017	De	cember 31, 2016		
Net income attributable to owners of the Company	₩	1,675,146	₩	763,464		
Addition: loss from discontinued operations		32,322		57,452		
Income from continuing operations attributable to owners of the Company	₩	1,707,468	₩	820,916		
Weighted-average number of ordinary shares outstanding		55,824,357		55,824,357		
Basic earnings per share from continuing operations						
(in Korean won)	₩	30,586	₩	14,705		

27. Earnings per share (cont'd)

(3) Basic losses per share from discontinued operations for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions, except basic losses per share and weighted-average number of ordinary shares outstanding):

	I of the years ended				
	Dece	ember 31, 2017	December 31, 2016		
Loss from discontinued operations	₩	(32,322) ₹	₹ (57,452)		
Weighted-average number of ordinary shares outstanding		55,824,357	55,824,357		
Basic losses per share from discontinued operations					
(in Korean won)	₩	<u>(579</u>) <u>\tag{579}</u>	<u>∀ (1,029</u>)		

28. Transactions with related parties

Balances on transactions arising from intercompany transactions within the Group were eliminated in preparing the consolidated financial statements as at and for the years ended December 31, 2017 and 2016.

(1) Details of significant transactions with the related parties for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	December 31, 2017			
		Revenue	Expenses	
Daehan Oil Pipeline Corporation	₩	41,562	₩ 50,624	
Korea Nexlene Company		124,111	717	
F&U Credit Information Co., Ltd.		3,441	55,293	
SK Wyverns Baseball Club Co., Ltd.		2,394	19,539	
Hana Card Co., Ltd.		18,283	15,124	
SK Hynix Inc.		2,572,345	18,088	
SK Hystec Inc.		28,467	2,251	
SK Hyeng Inc.		25,342	33,604	
SK Hynix Semiconductor (China) Ltd.		110,858	723	
SK Hynix Semiconductor (Chongqing) Ltd.		26,108	260	
SK Hynix Semiconductor HK Ltd.		-	744,048	
SKC Hi-Tech&Marketing Co., Ltd.		28,359	370	
(formerly, SKC Haas Display Film Co., Ltd.)				
SKC Hi-Tech&Marketing(Suzhou) Co., Ltd.		5,810	-	
(formerly, SKC HAAS FILM Co., Ltd. (Suzhou))				
SKC Evonik Peroxide Korea Co., Ltd.		1,111	45,272	
SKC MNT Co., Ltd.		2,433	15,350	
Mitsui Chemicals & SKC Polyurethanes Inc.		226,357	17,750	
AnTS Co., Ltd.		221	63,890	
Boryeong LNG Terminal Co., Ltd		43,473	95,001	
Eurasia Tunnel		71,206	-	
XE-PIAN XE-NAMNOY Power Company		143,736	-	
Hana land chip PEF 33		15,796	33,996	
SK Discovery Co., Ltd.		89,948	102,962	
(formerly, SK Chemicals Co., Ltd.)				
SK Chemicals Co., Ltd.		4,621	7,888	
SK Gas Co., Ltd.		395,865	361,213	
SK Advanced Co., Ltd.		10,616	14,940	
G. Hub Co., Ltd.		1,721	46,231	
SK Gas International Pte. Ltd.		19,520	-	
SK Petrochemical Co., Ltd.		79,871	7,624	
SK Securities Co., Ltd.		25,023	212	
Others		50,149	235,009	
	$\overline{\mathbb{W}}$	4,168,747	₩ 1,987,979	

28. Transactions with related parties (cont'd)

	December 31, 2016				
		Revenue	Expenses		
Daehan Oil Pipeline Corporation	₩	5,111	₩ 49,283		
Korea Nexlene Company		128,987	2,965		
F&U Credit Information Co., Ltd.		3,061	48,995		
SK Wyverns Baseball Club Co., Ltd.		2,240	18,583		
Hana Card Co., Ltd.		19,866	41,016		
SK Hynix Inc.		1,328,577	2,020		
SK Hystec Inc.		20,487	1,411		
SK Hyeng Inc.		20,263	5,732		
SK Hynix Semiconductor (China) Ltd.		64,687	524		
SK Hynix Semiconductor (Chongqing) Ltd.		13,086	26		
SK Hynix Semiconductor HK Ltd.		233	571,188		
SKC Evonik Peroxide Korea Co., Ltd.		287	39,145		
SKC MNT Co., Ltd.		3,608	22,279		
Mitsui Chemicals & SKC Polyurethanes Inc.		201,854	30,271		
AnTS Co., Ltd.		175	59,919		
Boryeong LNG Terminal Co., Ltd		94,194	-		
Eurasia Tunnel		110,147	-		
XE-PIAN XE-NAMNOY Power Company		250,085	-		
Hana land chip PEF 33		16,211	34,377		
SK Discovery Co., Ltd.		106,074	105,472		
(formerly, SK Chemicals Co., Ltd.)					
SK Gas Co., Ltd.		334,394	519,607		
SK Advanced Co., Ltd.		100,796	16,557		
G. Hub Co., Ltd.		1,256	45,895		
SK Gas International Pte. Ltd.		18,492	1,708		
SK Petrochemical Co., Ltd.		57,528	3,250		
SK Securities Co., Ltd.		27,302	285		
Others		147,881	460,899		
	₩	3,076,882	₩ 2,081,407		

28. Transactions with related parties (cont'd)

(2) Details of significant outstanding balances of receivables and payables with the related parties as at December 31, 2017 and 2016 are as follows (Korean won in millions):

	December	31, 2017	December 31, 2016			
Company	Receivables (*1)	Payables	Receivables (*1)	Payables		
Daehan Oil Pipeline Corporation	₩ 578	₩ 787	₩ 53 ₩	519		
Korea Nexlene Company	15,451	19	15,804	2,938		
Korea Consortium Kazakh B.V.	146,170	-	146,170	-		
F&U Credit Information Co., Ltd.	45	1,723	39	1,386		
SK Wyverns Baseball Club Co., Ltd.	835	17	5,011	-		
Wave City Development Co., Ltd.	72,696	-	64,804	-		
Hana Card Co., Ltd.	1,427	11,107	1,812	7,684		
SK Hynix Inc.	463,490	343,939	381,995	249,635		
SK Hystec Inc.	7,073	348	2,374	170		
SK Hyeng Inc.	3,455	7,628	2,782	2,283		
SK Hynix Semiconductor (China) Ltd.	24,417	138	10,890	610		
SK Hynix Semiconductor (Chongqing) Ltd.	2,663	38	4,151	-		
SK Hynix Semiconductor HK Ltd.	-	90,367	-	72,507		
SKC Evonik Peroxide Korea Co., Ltd.	-	4,571	-	4,831		
SKC MNT Co., Ltd.	436	1,793	464	3,002		
Mitsui Chemicals & SKC Polyurethanes, Inc.	10,626	2,575	27,814	2,086		
AnTS Co., Ltd.	5	15,307	33	28,958		
Boryeong LNG Terminal Co., Ltd.	5,104	-	1,025	28,779		
Pentaport Development Co., Ltd.	97,807	3	105,367	-		
Eurasia Tunnel	15,147	-	13,076	59,660		
SK E&C JURONG Investment Singapore Pte. Ltd.	59,914	-	60,007	-		
XE-PIAN XE-NAMNOY Power Company	29,925	30,558	54,528	-		
SK Discovery Co., Ltd. (formerly, SK Chemicals Co., Ltd.)	-	2	18,525	8,713		
SK Chemicals Co., Ltd.	22,232	9,420	-	-		
SK Gas Co., Ltd.	62,225	69,843	33,833	103,956		
SK Advanced Co., Ltd	578	1,294	2,248	7,933		
G. Hub Co., Ltd	237	4,204	174	4,193		
SK Gas International Pte. Ltd.	1,058	-	-	-		
SK Petrochemical Co., Ltd.	12,257	387	12,707	201		
SK Securities Co., Ltd.	3,394	-	2,737	160		
Others	22,361	51,566	101,176	37,445		
	₩ 1,081,606	₩ 647,634	₩ 1,069,599 ₩	627,649		

- (*1) The Company recognized bad debt expense amounting to $\mbox{$\mathbb{W}$23,512}$ million and $\mbox{$\mathbb{W}$129,216}$ million for the years ended December 31, 2017 and 2016, respectively. The Company recognized the allowance for doubtful accounts amounting to $\mbox{$\mathbb{W}$298,916}$ million and $\mbox{$\mathbb{W}$275,404}$ million as at December 31, 2017 and 2016, respectively.
- (3) Details of significant treasury transactions with related-parties for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

		December 31, 2017		December 3	31, 2016
Company	Currency	Loans	Collection	Loans	Collection
Yemen LNG Company Ltd.	USD	6,479	=	9,542	=
SK E&C USA, Inc.	KRW	-	2,420	1,354	135
Eurasia Tunnel	KRW	11,369	-	-	=
Pentaport Development Co., Ltd.	KRW	-	2,233	-	-
SK Wyverns Baseball Club Co., Ltd.	KRW	-	202	-	204
SK E&C Jurong Investment Singapore Pte. Ltd.	KRW	-	93	-	-
Jurong Aromatics Corporation Pte. Ltd.	KRW	-	-	22,514	=
Wave City Development Co., Ltd.	KRW	-	-	1,100	2,990
Springvale SK Kores Pty. Ltd.	AUD	9,000	3,000	3,000	=
SKC Hi-Tech&Marketing Co., Ltd. (formerly, SKC Haas Display Film Co., Ltd.)	KRW	4,900	3,900	-	-

28. Transactions with related parties (cont'd)

- (4) During the current reporting period, there were additional investment transactions for subsidiaries, associates and joint ventures (see Note 10 'Investments in associates and joint ventures').
- (5) Compensation for key management personnel of the Company.

Benefits for key management consist of registered executives who are responsible for the planning, operation and control of the Company's business activities. Details of compensation for them for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

		For the years ended					
	Decer	nber 31, 2017	December 31, 2016				
Salaries	₩	5,339	₩ 4,610				
Provision for pension benefits		1,821	475				
Share compensation expense		1,220					
•	₩	8,380	₩ 5,085				

29. Discontinued operations

(1) Details of discontinued operations

SK Innovation Co., Ltd., a subsidiary of the Group, decided to cease its operation of the tri-acetyl-cellulose (TAC) business in 2015 in order to focus on core business such as the exploration and development of oil and the production of batteries, and subsequently classified the assets of the TAC business that are expected to be sold as available-for-sale (AFS). Despite the Group's effort to search for the buyers, the assets classified as AFS have not been sold, and the Group re-classified some of the assets classified as AFS that can be utilized in other business units to non-current assets, and impairment losses have been recognized for the remaining assets classified as AFS. In addition, SK Innovation Co., Ltd. received a portion of the facility purchase amount paid before the decision to discontinue the tri-acetyl-cellulose (TAC) business, and recognized it as net income from discontinued operations.

SK Networks, Co., Ltd., a subsidiary of the Group, elected to close down its fashion business and duty-free business in prior year, resources business in current year to strengthen its financial soundness and secure investment resources. SK Networks Co., Ltd. completed the sale of its fashion business in February 2017, and cleared the assets and liabilities of the duty-free business in 2017.

The Company elected to discontinue its operation of used car sales business to close down its non-core business and to secure investment resources. The sale of SK Encarsales.com Ltd., for the online used car sales business was completed in January 2018, and the sale of assets and liabilities of offline Encar used car sales business segment is planned to be completed in 2018.

29. Discontinued operations (cont'd)

SKC Co., Ltd., a subsidiary of the Group, sold its solar business in October 2016, with the aim of enhancing competitiveness of the fine ceramics business through enhancing its expertise and management efficiency, and efficient allocation of company resources.

(2) Income and expenses from discontinued operations

Income and expenses from the discontinued operation for the years ended December 31, 2017 and 2016 are as follows (in millions of Korean won):

	For the year ended December 31, 2017									
		Resources business	Used car							
	TAC business in	and others in	business in	SK Encarsales						
	SK Innovation Co., Ltd.	SK Networks Co., Ltd.	SK Holdings Co., Ltd.	.com Ltd.		Total				
Revenue	₩ 7	₩ 168,414	₩ 931,416	₩ 41,006	₩	1,140,843				
Expenses	13,948	379,540	920,787	22,743		1,337,018				
Gain (loss) before income tax expense	(13,941) (211,126)	10,629	18,263		(196,175)				
Income tax benefit (expense)	(3,374) <u>(84,531</u>)	2,611	4,004		(81,290)				
Gain (loss) from discontinued										
operations attributable to	₩ (10,567) ₩ (126,595)	₩ 8,018	₩ 14,259	₩	(114,88 <u>5</u>)				
Owners of the Company	₩ (3,502) ₩ (51,097)	₩ 8,018	₩ 14,259	₩	(32,322)				
Non-controlling interests	(7,065) (75,498)	-	-		(82,563)				
		For the ve	er ended December 31	2016						
			ar ended December 31,	, 2016						
	Solar husiness in	Resources business	Used car							
	Solar business in SKC Solmics Co. Ltd.	Resources business and others in	Used car business in	SK Encarsales						
Revenue	Solar business in SKC Solmics Co., Ltd W 21,848	Resources business and others in SK Networks Co., Ltd.	Used car business in	SK Encarsales .com Ltd.	₩	Total 1,517,194				
Revenue Expenses	SKC Solmics Co., Ltd	Resources business and others in SK Networks Co., Ltd. ₩ 645,906	Used car business in SK Holdings Co., Ltd.	SK Encarsales .com Ltd.	₩					
	SKC Solmics Co., Ltd ₩ 21,848	Resources business and others in SK Networks Co., Ltd. W 645,906 877,912	Used car business in SK Holdings Co., Ltd. ₩ 815,295	SK Encarsales .com Ltd. W 34,145	₩	1,517,194				
Expenses	SKC Solmics Co., Ltd ₩ 21,848 73,754	Resources business and others in SK Networks Co., Ltd. W 645,906 877,912	Used car business in SK Holdings Co., Ltd. W 815,295 804,647	SK Encarsales .com Ltd. W 34,145 19,386	W	1,517,194 1,775,699				
Expenses Gain (loss) before income tax expense Income tax benefit	SKC Solmics Co., Ltd ₩ 21,848 73,754	Resources business and others in SK Networks Co., Ltd. W 645,906 877,912	Used car business in SK Holdings Co., Ltd. W 815,295 804,647	SK Encarsales .com Ltd. W 34,145 19,386	W	1,517,194 1,775,699				
Expenses Gain (loss) before income tax expense Income tax benefit Gain (loss) from discontinued	SKC Solmics Co., Ltd W 21,848 73,754 (51,906	Resources business and others in SK Networks Co Ltd. ₩ 645,906 877,912 (232,006) (54,858)	Used car business in SK Holdings Co., Ltd. ₩ 815,295 804,647 10,648	SK Encarsales .com Ltd. ₩ 34,145 19,386 14,759		1,517,194 1,775,699 (258,505) (50,965)				
Expenses Gain (loss) before income tax expense Income tax benefit Gain (loss) from discontinued operations attributable to	<u>SKC Solmics Co., Ltd</u> ₩ 21,848	Resources business and others in SK Networks Co Ltd. ₩ 645,906 877,912 (232,006) (54,858)	Used car business in SK Holdings Co., Ltd. W 815,295 804,647 10,648 2,206	SK Encarsales .com Ltd. ₩ 34,145 19,386 14,759 1,687 ₩ 13,072	<u>₩</u>	1,517,194 1,775,699 (258,505)				
Expenses Gain (loss) before income tax expense Income tax benefit Gain (loss) from discontinued	SKC Solmics Co., Ltd W 21,848 73,754 (51,906	Resources business and others in SK Networks Co Ltd. ₩ 645,906 877,912 (232,006) (54,858)	Used car business in SK Holdings Co., Ltd. W 815,295 804,647 10,648 2,206	SK Encarsales .com Ltd. ₩ 34,145 19,386 14,759 1,687 ₩ 13,072		1,517,194 1,775,699 (258,505) (50,965)				

(3) Details of cash flows relating to discontinued operation for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

		Resources business	Used car		
	TAC business in	and others in	business in	SK Encarsales	
	SK Innovation Co., Ltd.	SK Networks Co., Ltd.	SK Holdings Co., Ltd.	.com Ltd.	Total
Cash flows from operating activities	₩ 597	₩ (23,830)	₩ 3,848	₩ 16,711 ₩	(2,674)
Cash flows from investing activities	807	304,557	(10,968)	(19,919)	274,477
Cash flows from financing activities	-	(24,886)	47	(10,458)	(35,297)
		For the yea	r ended December 3	1, 2016	
		Resources business	Used car		
	Solar business in	and others in	business in	SK Encarsales	
	SKC Solmics Co., Ltd	SK Networks Co., Ltd.	SK Holdings Co., Ltd.	.com Ltd.	Total
Cash flows from operating activities	₩ (404))₩ 28,679	₩ 9,346	₩ 14,462 ₩	52,083
Cash flows from investing activities	2,343	(8,092)	(3,827)	(3,969)	(13,545)
Cash flows from financing					
activities	(31,062)	21,290	(10,005)	(8,022)	(27,799)

30. Non-current assets and non-current liabilities classified as held for sale

Details of non-current assets and non-current liabilities held for sale as at December 31, 2017 are as follows (Korean won in millions):

			I, 2017	
			Assets	Liabilities
Subsidiaries	SK Encarsales.com Ltd. (*1)	₩	60,366 ₩	13,431
	Daiyang SK Networks San. VE TIC. Ltd. STI		765	654
Available-for-sale financial assets	SK Securities Co., Ltd. (*2)		36,813	-
	Sichuan sinoeco recycle Co,. Ltd.		1,637	-
Business segment	Used car business segment (*1)		174,215	16,583
	Fashion business segment (*3)		2,041	494
	Resources and other business segment (*4)		248,280	112,707
Property, plant and equipment	Property, plant and equipment related			
	to the TAC business (*5)		<u> </u>	<u>-</u>
		₩	<u>524,117</u> ₩	143,869

- (*1) The Company elected to close down and sell used car sales business segment to focus on its core business and close down non-core business. Consequently, the Company classified SK Encarsales.com Ltd. and Encar used car sales business as assets and liabilities held-for-sale, and measured at the lower of their carrying amount and fair value less costs to sell. In addition, the sale of SK Encarsales.com Ltd. was completed as at January 19, 2018
- (*2) The Company decided to sell its interests in SK Securities Co., Ltd., which are classified as AFS securities in accordance with the Article 8-2 "Restrictions on activities by holding companies" of *Monopoly Regulation and Fair Trade Act of the Republic of Korea*, in the year ended December 31, 2017. The entire stake of the equity ownership is publicly offered, and the investment has been classified as AFS. The stock sale and purchase agreement with J&W Partners Ltd, with regards to a sale of ordinary shares of SK Securities Co., Ltd. has been approved by the Board of Directors on March 5, 2018.
- (*3) As SK Networks, Co., Ltd., a subsidiary of the Group, decided to transfer the fashion business in 2016, the assets and liabilities held-for-sale are classified as non-current assets and liabilities, and are measured at the lower of their carrying amount and fair value less costs to sell.
- (*4) SK Networks Co., Ltd., a subsidiary, decided to discontinue resources business segment and others during the current reporting period. The Company classified related assets and liabilities as held-for-sale, and measured at the lower of their carrying amount and fair value less costs to sell.
- (*5) SK Innovation Co., Ltd., a subsidiary of the Group, decided to discontinue its operation of the TAC business in 2015 and recognized impairment loss in 2017 for the entire facility assets which were held for sale.

31. Leases

(1) Assets under finance lease as at December 31, 2017 and 2016 are as follows (Korean won in millions):

		For the years ended				
		December 31, 2017	December 31, 2016			
Property, plant and equipment	₩	5	₩ 3,850)		

(2) The Group has entered into lease agreements for various purposes, and minimum lease payments of the Group as a lessee as at December 31, 2017 are as follows (Korean won in millions):

		1 year or less	1 year- 5 years		ore than 5 years	Total
Finance leases:			-			_
Future minimum lease payments	₩	1,791 ₩	11	₩	- ₩	1,802
Less: interests paid		115	1		<u>-</u>	116
Present value (*1)	$\overline{\mathbf{W}}$	1,676 ₩	10	₩	<u>-</u> ₩	1,686
Operating leases	₩	482,892 ₩	760,258	₩	212,480 ₩	1,455,630

(*1) Finance lease liabilities are classified as other current and non-current liabilities.

(3) The Group recorded a finance lease receivables regarding long-term transit contracts, and minimum lease payments of the Group as a lessor as at December 31, 2017 are as follows (Korean won in millions):

	1	year	1 year-	More than		
	0	r less	5 years	5 years		Total
Total lease receivables	₩	76,107 ₩	172,247	₩	- ₩	248,354
Net lease receivables (*1)		73,199	168,490		-	241,689

(*1) Finance lease receivables including the present value of unguaranteed residual value amounting to ₩72,337 million are classified as other current and other non-current assets.

32. Cash flow information

(1) Details of non-cash adjustments for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended				
	December 31, 2017	December 31, 2016			
Provision for pension benefits	₩ 344,086	₩ 313,204			
Depreciation	4,318,157	4,052,087			
Amortization	1,323,512	1,161,118			
Bad debt expenses	16,487	255,058			
Valuation loss (gain) on inventories	25,288	(46,032)			
Interest expenses	928,004	804,937			
Loss on foreign currency translation	311,892	411,020			
Loss on transactions of derivatives	792,146	589,218			
Loss on valuation of derivatives	261,745	168,110			
Loss on disposal of trade accounts receivable	14,216	-			
Loss on disposal of available-for-sale financial assets	36,331	21,476			
Loss on impairment of available-for-sale financial assets	126,513	32,603			
Loss on disposal of investments in subsidiaries and associates	98,096	25,077			
Loss on impairment of investments in subsidiaries and associates	10,049	216,385			
Loss on disposal of property, plant and equipment	138,785	96,087			
Loss on impairment of property, plant and equipment	150,993	347,168			
Loss on disposal of intangible assets	20,618	16,957			
Loss on impairment of intangible assets	52,912	312,260			
Income tax expense	2,179,520	1,308,668			
Gain related to investments in associates and joint ventures	(2,488,020)	(719,338)			
Interest income	(219,346)	(202,376)			
Dividends income	(23,551)	(39,859)			
Gain on foreign currency translation	(418,517)	(340,683)			
Gain on transactions of derivatives	(691,156)	(484,967)			
Gain on valuation of derivatives	(415,665)	(142,722)			
Gain on disposal of available-for-sale financial assets	(7,005)	(96,936)			
Gain on disposal of investments in subsidiaries and associates	(196,361)	(49,923)			
Gain on disposal of property, plant and equipment	(50,595)	(21,150)			
Gain on disposal of intangible assets	(2,465)	(3,860)			
Others	(55,993)	<u>161,516</u>			
	₩ 6,580,676	₩ 8,145,103			

(2) Details of working capital adjustments for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended					
	Decen	nber 31, 2017	December 3	1, 2016		
Inventories	₩	(2,184,365)	₩ ((329,495)		
Trade accounts receivable		(1,378,979)	((267,495)		
Other accounts receivable		(246,741)		(32,831)		
Trade accounts payable		965,063	1	,196,241		
Other accounts payable		378,919		286,524		
Advance received		182,213		(223,403)		
Defined benefit obligation		(170,189)		(201,037)		
Plan assets		(156,243)		(255,965)		
Others		50,550		(42,186)		
	₩	(2,559,772)	₩	130,353		

32. Cash flow information (cont'd)

(3) Significant non-cash transactions for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended				
	Decem	ber 31, 2017	December 31, 2016		
Increase in other accounts payable due to	₩	309,929	₩ 1,535,106		
acquisition of property, plant and equipment and others					
Reclassification to assets held-for-sale		521,311	602,434		
Reclassification to liabilities held-for-sale		142,721	62,318		
Reclassification of advance payments to		-	58,860		
investments in associates					

(4) Details of changes of liabilities from financing activities for the year ended December 31, 2017 are as follows (Korean won in millions):

		Beginning balance	fro	Cash flows om financing activities		Changes fair value		Changes exchange rate		Others		Ending balance
Short-term borrowings	₩	2,614,117	₩	206,701	₩		₩	(7,005)	₩	185,219	₩	2,999,032
Bonds Payable and long-term borrowings		28,763,083		474,715		(4,658)		(340,639)		1,015,163		29,907,664
Long-term account payable		4,601,776		(604,517)		-		-		(256,878)		3,740,381
Dividends payable		614		(1,356,415)				<u>-</u>		1,357,224		1,423
	₩	35,979,590	₩	(1,279,516)	₩	(4,658)	₩	(347,644)	₩	2,300,728	₩	36,648,500

33. Commitments and contingencies

(1) Guarantees provided for the Group as at December 31, 2017 are as follows (Korean won in millions and foreign currencies in thousands):

Guarantee	Guarantor	Currency	Amount	Description of guarantee
SK Holdings Co., Ltd.	Korea Trade Insurance	USD	1,077	Guarantee of payment
	Corporation			
	Korea Eximbank	USD		Performance guarantees for contract and others
	Korea Software Financial Cooperative	KRW	238,871	Performance guarantees for contract and others
	Seoul Guarantee Insurance	KRW	2,477	Performance guarantees for contract and others
SK Engineering &	HSBC and others	USD	919,608	Performance guarantees for overseas construction
Construction Co., Ltd.		SGD	48,497	Performance guarantees for overseas construction
		AED	23,294	Performance guarantees for overseas construction
		KWD	104,741	Performance guarantees for overseas construction
		QAR	628,023	Performance guarantees for overseas construction
		TRY	30,847	Performance guarantees for overseas construction
		SAR	294,437	Performance guarantees for overseas construction
		THB	1,159,263	Performance guarantees for overseas construction
		CAD	50,000	Performance guarantees for overseas construction
		KZT	92,508	Performance guarantees for overseas construction
		INR	1,150,000	Performance guarantees for overseas construction
		IQD	2,600,000	Performance guarantees for overseas construction
	KEB Hana Bank	USD	161,004	Performance guarantees for overseas construction
		VND	253,962,932	Performance guarantees for overseas construction
		KRW	9,833	Performance guarantees for domestic construction
	Shinhan Bank	USD	12,751	Performance guarantees for overseas construction
	Korea Eximbank	USD	273,885	Performance guarantees for overseas construction
		SAR	171,595	Performance guarantees for overseas construction
	Construction Guarantee Cooperative	KRW	2,395,612	Performance guarantees for domestic construction
	Seoul Guarantee Insurance	KRW	350,218	Performance guarantees for domestic construction
	Korea Housing Guarantee Co., Ltd.	KRW		Housing guarantees and others
	Engineering Financial Cooperative	KRW		Performance guarantees for domestic construction
SK Forest Co., Ltd.	Construction Guarantee Cooperative	KRW		Performance guarantees for contract and others
	Seoul Guarantee Insurance	KRW	9.634	Performance guarantees for contract and others
SK Airgas Co., Ltd.	Taiyo Nippon Sanso Coporation	KRW		Guarantee of debt
Iberian Lube Base Oils S.A.	REPSOL Petroleo	EUR		Guarantee of debt

Cuarantas	Cuerenter	Currency	A	Description of automates
Guarantee SK Shipping Co., Ltd.	Guarantor Seoul Guarantee Insurance	Currency KRW	Amount	Description of guarantee Performance guarantees for contract and others
SK Snipping Co., Ltd.				
CLUIC 1 Chipholding C A	Shinhan Financial Investment	USD		Stand by L/C
SHIKC 1 Shipholding S.A.	Korea Eximbank	USD		Performance guarantees for shipbuilding
SHIKC 2 Shipholding S.A.	Korea Eximbank	USD		Performance guarantees for shipbuilding
VLGC 4 Shipholding S.A.	Korea Eximbank	USD		Performance guarantees for shipbuilding
VLGC 5 Shipholding S.A.	Korea Eximbank	USD		Performance guarantees for shipbuilding
SK B&T Pte. Ltd.	KEB Hana Bank	USD		Guarantee for acquiring the license
HHIENS 1 Shipholding S.A.	KEB Hana Bank	USD		Performance guarantees for shipbuilding
HHIENS 2 Shipholding S.A.	Korea Eximbank	USD		Performance guarantees for shipbuilding
SK E&S Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract and others
Yeongnam energy service	Seoul Guarantee Insurance	KRW	1,196	Guarantee of warranties and approval
Co., Ltd. Chonnam energy service	Seoul Guarantee Insurance	KRW	6,164	Guarantee of contract defect and price of gas
Co., Ltd. Pusan City Gas Co., Ltd.	Seoul Guarantee Insurance	KRW	2 348	Community energy service facility management,
,				consignment operating agreement and others
Jeonbuk energy service Co., Ltd.	Seoul Guarantee Insurance	KRW	114	Performance guarantees and guarantee of warranties
Chungcheong energy service Co., Ltd.	Seoul Guarantee Insurance	KRW	809	Performance guarantees for contract and warranties
Ko-one energy service	Seoul Guarantee Insurance	KRW	1,126	Performance guarantees for contract
Co., Ltd. Paju energy service	Seoul Guarantee Insurance	KRW	14,075	Deposits for safety management and others
Co., Ltd.	Social Cuarantee Incurence	KRW		, , ,
Narae energy service Co., Ltd.	Seoul Guarantee Insurance			Performance quarantees for contract
Wirye energy service Co., Ltd	. Seoul Guarantee Insurance	KRW	4,337	Guarantee of payment for TUA and others
SK Telesys. Co., Ltd.	Seoul Guarantee Insurance	KRW	5.304	Guarantee of warranties and contract
SKC Infra Service Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of payment
SK Bioland Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of payment
SK Networks Co., Ltd.	Kookmin Bank	USD		Performance guarantees for sales
	KEB Hana Bank	KRW		Contract of supply of goods
		USD		Performance guarantees for sales
	Woori Bank	KRW		Performance guarantees for sales
SK Networks Service Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of warranties and others
,	Seoul Guarantee Insurance	KRW	10 110	Performance guarantees for contract
SK Magic Co., Ltd.		KRW		Performance guarantees for contract
SK Magic Sandas Co. Ltd	Machinery Financial Cooperative Seoul Guarantee Insurance			Performance guarantees for contract
SK Magic Service Co., Ltd.		KRW		Performance guarantees for contract
SK Pinx Co.,Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of approval
SK Telink Co., Ltd.	KB Insurance Co., Ltd.	KRW		Performance guarantees for contract
CV Communications	Seoul Guarantee Insurance	KRW		Performance guarantees for contract
SK Communications Co., Ltd.	Seoul Guarantee Insurance and others	KRW	828	Guarantee of bonds provisional deposit and others
SK Planet Co., Ltd.	Seoul Guarantee Insurance	KRW	20,214	Guarantee for E-commerce and others
	KEB Hana Bank	KRW	1,157	Performance guarantees for contract and others
SK Broadband Co., Ltd.	Kookmin Bank and others	KRW	24,564	Guarantee of warranties-contract and others
SK M & Service Co., Ltd.	Seoul Guarantee Insurance	KRW	980	Guarantee of payment and others
DC 9 Marketing Care	and others Seould Guarantee Insurance	KRW	200	Parformance guarantees
PS&Marketing Corp.				Performance guarantees
01/ + 0- 14-1	Shinhan Bank	KRW	,	Performance guarantees for contract
SK techx Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract
NSOK Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees insurance for contract
One store Co., Ltd.	KEB Hana Bank	KRW		Guarantee of Korean won payment method
SK Infosec Co., Ltd.	Korea Software Financial Cooperative	KRW	33,933	Guarantee of bid payment and others
SK Encarsales.com Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract
Happynarae Co., Ltd.	Seoul Guarantee Insurance	KRW	1,104	Performance guarantees insurance
SK Materials Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of payment
	Korea Trade Insurance Corporation	USD	3,000	Guarantee of export sales receivable backed finance
SK Materials Taiwan Co., Ltd.	Korea Development Bank	USD	3 000	Guarantee of debt
C. Materialo falwari Co., Eta.	Industrial Bank of Korea	USD		Guarantee of debt
SK Materials (Jiangsu)	Woori Bank	USD		Guarantee of debt
Co., Ltd.	Industrial Bank of Korea	CNY		Guarantee of debt
SK Siltron Co., Ltd.	Seoul Guarantee Insurance	KRW	,	Performance guarantees insurance
5 J	Coosi Cadiantos modianos	131377	54,000	. S

In addition, SK Engineering & Construction Co., Ltd., a subsidiary of the Group, has performance guarantees for domestic construction by other construction companies amounting to \$420,695 million as at December 31, 2017.

(2) Guarantees provided to others as at December 31, 2017 are as follows (Korean won in millions and foreign currencies in thousands):

Guarantee		Currency	Amount	Description of guarantee
SK Engineering & Construction Co., Ltd.	SBC General Trading & Contracting Co. WLL and others	KWD	5,146	Performance guarantees for contract and others
	Pohang Clean Water Co., Ltd. and others	KRW	47,700	Supplementing funds for principal and interest of loan
	Hwaseong Jeongnam Industrial	KRW	36,400	Guarantees for project financing
	Howon elementary school Area redevelopment maintenance business association	KRW	89,162	Guarantees for reconstruction project financing
	Gwacheon area II housing reconstruction maintenance business association	KRW	72,687	Guarantees for reconstruction project financing
	Daeyeon area VII housing redevelopment maintenance business association	KRW	82,008	Guarantees for reconstruction project financing
	Ahyeon area II housing reconstruction maintenance business association	KRW	73,767	Guarantees for reconstruction project financing
	Bomun area II housing redevelopment maintenance	KRW	12,480	Guarantees for reconstruction project financing
	business association Susaek area IX housing redevelopment maintenance business association	KRW	110,654	Guarantees for reconstruction project financing
	Bugae-seocho bridge North side redevelopment maintenance business association	KRW	41,142	Guarantees for reconstruction project financing
	Paldal area VIII housing redevelopment maintenance business association	KRW	48,562	Guarantees for reconstruction project financing
	Customers of Seongsoo station SK V1 Tower	KRW	78,931	Guarantee of payment
	Customers of Moonjeong SK V1 GL Metrocity	KRW	144,960	Guarantee of payment
	Customers of GaSan SK V1 Customers of KwangKyo SK view Lake	KRW KRW		Guarantee of payment Guarantee of payment
	Customers of SongDo SK view	KRW	103.577	Guarantee of payment
	Doryong area I housing reconstruction development business association	KRW		Guarantee of payment
	Customers of Anyang SK V1	KRW		Guarantee of payment
	Customers of Dongtan SK V1	KRW		Guarantee of payment
	Baekryunsan SK view	KRW		Guarantee of payment
	Sungnam SK V1 tower	KRW		Guarantee of payment
	Boramae SK view Moonrae SK V1 center	KRW KRW		Guarantee of payment Guarantee of payment
	Member of Employee stock ownership association	KRW		Guarantee of payment
SK Shipping Co., Ltd.	Sindongtan SK view and others Milestone & Great Shale LNG Transport S.A.	KRW KRW		Conditional performance guarantees for debt Guarantee for shipbuilding and others
	S&Y Shipping S.A.	KRW	39 048	Performance guarantees for payment
SK Networks Co., Ltd.	PT. SK Networks Indonesia	USD		Standing surety for investee
SK Innovation Co., Ltd.	Peru LNG S.R.L	USD	,	Guarantee of supplies and others
SK Global Chemical Co., Ltd.	Sabic SK Nexlene Company Pte. Ltd.			Guarantee of debt
Iberian Lube Base Oils S.A.	Puertos del Estado Railway Administration and others	EUR EUR		Guarantees for construction Guarantee for installing facilities and others
SK E&S Co., Ltd.	Boryeong LNG Terminal Co., Ltd.	KRW KRW		Guarantee of debt Guarantees for project financing
SKC Co., Ltd.	SKC-Kolon PI Co., Ltd.	USD		Guarantee for litigation
SK Telink Co., Ltd.	Mobile phone agencies and others	KRW		Performance guarantees for contract
SK techx Co., Ltd.	Recording Industry Association of Korea and others	KRW		Performance guarantees for contract
SK Planet Co., Ltd.	Celcom Planet	USD		Guarantee of debt
SK M & Service Co., Ltd. SK Siltron Co., Ltd.	TourOK Co., Ltd. and others SIL 1st LLC	KRW KRW		Performance guarantees for transaction Asset backed debt

In addition, SK Engineering & Construction Co., Ltd., a subsidiary of the Group, provides other construction companies with performance guarantees for domestic construction, and the amount of the guarantees is $\mbox{$\mathbb{W}$}2,210,311$ million as at December 31, 2017.

(3) Pending litigations

The Group's significant pending litigations as at December 31, 2017, in which the Group is a plaintiff are as follows (Korean won in millions and foreign currencies in thousands):

Plaintiff	Defendant	Description	Claim	Status
SK Holdings Co., Ltd.	Samsung Card Co., Ltd.	Claim for payment	KRW 5,5	64 Second trial in progress
SK Forest Co., Ltd.	Seoul Special City and others	Claim for refund of payment	KRW 6	18 Second trial in progress
		construction and others		and others
SK Encarsales.com Ltd.	Individual and others	Claim for payment of trademark right infringement	KRW	57 First trial in progress
SK Telesys Co., Ltd.	Alcatel-lucent Korea	Claim for payment and others	KRW 9	31 Third trial in progress
SK E&S Co., Ltd.	Head of the customhouse,	Claim for annulment of		52 Second trial in progress
	Seoul	assessments of custom duties	-,-	
Ko-one Energy Service Co., Ltd.	Industrial Bank of Korea and others	Claim for trust and others	KRW 10,0	79 Second trial in progress and others
SK Networks Co., Ltd.	Individual and others	Claim for payment and others	KRW 18,2	10 First trial in progress and others
SK Networks Service Co., Ltd.	Individual and others	Claim for payment and others	KRW 2	72 First trial in progress
SK Shipping Co., Ltd.	Asia Green Energy and others	Litigation related to bunkering and others		88 Arbitration in progress and others
	Mcoil International S.A.	Claim for non-payment for	KRW 7	04 Second trial in progress
		fuel oil		
SK Shipping (Singapore) Pte. Ltd.	ST Shipping	Claim for payment	USD 2	60 First trial in progress
SK Shipping Europe Plc.	MOL	Lawsuit for employment and others	USD 3,1	75 Arbitration in progress and others
SK B&T Pte. Ltd.	Mumbai Singapore Pte. Ltd. and others	Off hire claim and others	USD 1,6	00 First trial in progress
PS&Marketing Corp.	Individual and others	Claim for provisional attachment and others	KRW 3	26 Second trial in progress and others
SK Engineering & Construction Co., Ltd.	K-Water Resources Corporation	Claim for payment of construction and others	KRW 6,5	59 Third trial in progress and others
	Korea Railroad Corporation	Litigation for affirmation of non-existence of debt	KRW 4,1	40 Third trial in progress
	Korea Rail Network Authority	Claim for payment and others	KRW 17,7	60 Third trial in progress and others
	Fair Trade Committee	Claim for corrective order and others	KRW 32,4	82 Third trial in progress and others
	Korea Hydro & Nuclear Power Co., Ltd.	Claim for payment	KRW 61,3	69 Second trial in progress
	Korea Specialty Contractor Financial Cooperative	Claim for payment and others	KRW 1,2	21 First trial in progress and others
	Dream Hub PFV	Claim for payment	KRW 12,7	28 Second trial in progress
	Business association	Litigation related to	KRW 8,8	23 Second trial in progress
	and others	business loans and others		and others
	Busan Metropolitan City	Claim for payment of construction	KRW 8,9	30 Second trial in progress
	Hyundai Construction Co., Ltd.	Claim for payment and others	KRW 88,5	54 Second trial in progress and others
	Korea Housing & Urban Guarantee Corporation	Claim for transfer of ownership right	KRW 2	01 First trial in progress
	Republic of Korea	Claim for surtax cancellation of Oryukdo SKView and others	KRW 47,6	07 Second trial in progress and others
	Korea Highway Corporation	Claim for tool overhead and others	KRW 21,9	39 First trial in progress
	Korea Land & Housing Corporation	Claim for Yeongdeungpo facility PF business		21 First trial in progress
	Korea Gas Corporation Individual and others	Claim for Jangrim Jinhae Claim for payment and others		20 First trial in progress 57 First trial in progress and others

In addition, SK E&S Co., Ltd., a subsidiary of the Group, was imposed \$161,919 million from tax authorities, including the value added tax related to LNG import price during the current reporting period. The Group recognized the amount as other accounts payable and of those, recognized \$160,575 million as advance payments.

The Group's significant pending litigations as at December 31, 2017, in which the Group is a defendant are as follows (Korean won in millions and foreign currencies in thousands):

Plaintiff	Defendant	Description	Clai	m	Status
Defense Acquisition Program Administration	SK Holdings Co., Ltd.	Claim for damages	USD 1	19,673	First trial in progress
Samsung Card Co., Ltd.		Claim for damages	KRW		Second trial in progress
Korea Minting, Security Printing & ID Card operating Corp.		Claim for damages	KRW	2,000	First trial in progress
Alcatel lucent Korea Co., Ltd. and others	SK Telesys Co., Ltd.	Claim for payment and others	KRW	2,421	Third trial in progress and others
Home Plus Co., Ltd. and others	SKC Co., Ltd.	Claim for damages and others	KRW		First trial in progress
Sang soo, Kim and 2,106 others	K F	Claim for damages and others	KRW		Arbitration in progress
Individuals Korea Veterans Health Service	Ko-one Energy Service Co., Ltd. Pusan City Gas Co., Ltd.	Claim for damages Claim for return of payment	KRW KRW		First trial in progress First trial in progress
and others	r usur only dus do., Eta.	and others	14144	0,010	and others
Smartro Co., Ltd. and others	SK Networks Co., Ltd.	Claim for patent infringement and others	KRW 1	15,698	First trial in progress and others
Individual and others	SK Magic Service Co., Ltd.	Claim for workers' status	KRW	6,629	First trial in progress
	and others	and others			and others
Individual and others	SK Communications Co., Ltd.	Claim for compensation of	KRW	1,064	Third trial in progress
M Seven System Limited	and others iriver Co., Ltd.	personal data spill and others Claim for damages due to	KRW	1 000	and others Second trial in progress
W deven dystem Emilied	inver co., Ltd.	non-fulfillment of obligation and illegal act	KKVV	1,000	Second that in progress
Individual and others	PS&Marketing Corp.	Litigation for affirmation of	KRW	475	First trial in progress
	.	non-existence of debt and others			and others
Allianz	SK Shipping Co., Ltd.	Claim for cargo damage	CAD		Second trial in progress
Hyundai Merchant Marine		Claim for cargo damage	USD ^	11,353	Arbitration in progress
Co., Ltd. and others Classic Maritime	SK Shipping Europe Plc.	and others Claim for payment	USD	E 000	and others
ST Shipping	SK Shipping (Singapore)	Claim for cargo damage	USD	100	Arbitration in progress First trial in progress
	Pte. Ltd.	0 0			
Supreme Prosecutor's Office	SK B&T Pte. Ltd.	Crimininal lawsuit against violation of tax punishment	KRW 3	33,119	First trial in progress
Suwon Gwonseon Housing reconstruction business	SK Engineering & Construction Co., Ltd.	Claim for compensation	KRW	201	First trial in progress
association	00., 2.a.				
K-Water Resources Corporation		Claim for damages	KRW	4,033	First trial in progress
and others		and others			and others
Incheon Metropolitan City		Claim for return and others	KRW 3	36,569	First trial in progress and others
Youn jong, Suh and 333 others		Claim for apartment	KRW 2	22.408	Third trial in progress
Samjung Construction Co., Ltd.		Claim for payment	KRW		First trial in progress
Hyundai Engineering &		Claim for payment and others	KRW	9,778	Second trial in progress
Construction Co., Ltd. Suseong SK Leader's View		Claim for apartment	KRW	201	First trial in progress
Tower's resident		old for aparamona		_0.	i not that in progress
Korea Rural Community Corporation		Claim for counterindemnity	KRW	1,861	First trial in progress
Republic of Korea		Claim for compensation	KRW 2	29 609	First trial in progress
republic of resea		and others		-0,000	and others
Korea Gas Corporation		Claim for compensation and others	KRW 4	47,295	First trial in progress and others
Korea Rail Network Authority		Claim for compensation and others	KRW 2	23,237	First trial in progress
Busan Transportation Corporation		Claim for compensation and others	KRW	1,119	First trial in progress and others
Individual and others		Claim for apartment	KRW 3	38,365	First trial in progress
		and others			and others

(4) Commitments

1) In accordance with the Commercial Code of the Republic of Korea, SK Innovation Co., Ltd., SK Energy Co., Ltd., SK Global Chemical Co., Ltd., SK Lubricants Co., Ltd., SK Incheon Petrochem Co., Ltd. and SK Trading International Co., Ltd., which spun off from the Company, are jointly obliged to repay the borrowings of those companies before the spin-off.

The Company and SK Biopharmaceuticals Co., Ltd. are jointly obliged to repay the borrowings of those companies before the spin-off on April 1, 2011.

- 2) The Company entered into a contract to lease the headquarters building from the National Agricultural Cooperative Federation (the "NACF"), the trustee of Hana Daol Fund Management. Under the terms of the lease, the lease period is until March 27, 2021, and the Company has the preemptive right to purchase the building at fair value when the lessor elects to dispose the property.
- 3) The Company holds IT outsourcing and IT system maintenance agreements with subsidiaries of the Group to provide hardware and information system maintenance and development service.
- 4) The Company entered into a contract with Gyeonggi Province on May 31, 2011 to purchase land located in the Pangyo Land Development District. The total agreement amount is ₩82,964 million (the Company's portion: ₩45,536 million (54.9%)), which will be used for the construction of urban infrastructure facilities ("designated purpose" of the land). The contract includes requirements to be complied with and restrictions in transfer of ownership of the land. When non-compliant, the contract may be terminated.
- 5) The Company has stock sale and purchase agreements in regards to SK Maritime Co., Ltd. (fomerly SK Shipping Co., Ltd.)'s issuance of ordinary shares and sale of existing shares, and details are as follows:

	Subscription of new shares	Sale of existing shares
Investor	Special Situation 1st Fund	Corporate Turnaround 1st Fund
Number of shares	6,548,672	4,808,259
Contract date	April 11, 2017	May 11, 2017
Expiry date	April 10, 2022	May 10, 2022
Settlement	The Company and the investor make	e a cash settlement of the amount that
	deducts the issue price from the ne	t selling price. If the amount is positive,
	the investor pays to the Company	y, and if the amount is negative, the
		ase where the sale is not complete, the
	selling price of the shares is conside	red to be nil.
Premium	The Company pays to the investor	the amount equivalent to 3.14% of the
	total shares held by the investor	annually. When the investor receives
	dividends on the shares held, the an	nount is paid to the Company.
Call option		se the shares held by the investor at the
	issued price of the ordinary shares v	vith certain level of additional charges.

As at the end of the nine months ended December 31, 2017, the value of the agreements amounting to \$385,000 million is recognized as long-term borrowings (see Note 15).

6) The Group entered into a shareholder agreement with ordinary shareholders of SK Siltron Co., Ltd., one of the subsidiaries. Details are as follows.

	Shareholder agreement
Investor	Warmachine Sixth Co., Ltd. and others
Number of shares	13,143,330
Contract date	August 25, 2017
Expiry date	August 24, 2022
Settlement	The Company and the investors are to settle the amount that deducts the issue price from the net selling price. If the amount is positive, the investor pays to the Company, and if the amount is negative, the Company pays to the investor. In case where the sale is not complete, the selling price of the shares is considered to be nil.
Premium	The Company is to pay 0.5% of the initial contract amount at the closing date of the transaction and pay to the investor the amount equivalent to 3.20% of the total shares held by the investors annually. When the investor receives dividends on the shares held, the amount is paid to the Company.
Call option	On a three-month basis from the closing date of sale ("the quarterly payment day"), the Company has the right to purchase the shares held by the investor at the initial contract price of the ordinary shares with a certain level of additional charges.

As at the end of the year ended December 31, 2017, the value of the agreements amounting to \\\\169,131\) million is recognized in long-term borrowings (see Note 15).

7) The Group entered into a shareholder agreement with ordinary shareholders of SK E&S Co., Ltd., one of the subsidiaries. Details are as follows.

	Shareholder agreement
Investor	MD Prime 1st Co., Ltd.
Number of shares	4,640,199
Contract date	November 14, 2017
Expiry date	November 13, 2022
Settlement	The Company and the investors are to settle the amount that deducts the issue price from the net selling price. If the amount is positive, the investor pays to the Company, and if the amount is negative, the Company pays to the investor. In case where the sale is not complete, the selling price of the shares is considered to be nil.
Premium	The Company is to pay to the investor the amount equivalent to 3.07% of the total shares held by the investors annually. When the investor receives dividends on the shares held, the amount is paid to the Company.
Call option	On a three-month basis from the closing date of sale ("the quarterly payment day"), the Company has the right to purchase the shares held by the investor at the initial contract price of the ordinary shares with a certain level of additional charges.

As at the end of the year ended December 31, 2017, the value of the agreements amounting to \$677,775 million is recognized in long-term borrowings (see Note 15).

8) As at September 28, 2017, the Company entered into a cash deficiency support agreement with Hudson Energy NY, LLC, a subsidiary of Plutus Capital NY, Inc., to lend funds for the shortfall of payment for loans and credit limit of USD 226,000 thousand.

- 9) SK E&S LNG, LLC, one of the subsidiaries, is scheduled to receive the liquefaction service from FLNG Liquefaction 3, LLC, amounting to 115 million MMBtu per year for 20 years, which plans to operate natural gas liquefaction plants in Texas starting from 2019. As at September 30, 2017, SK E&S Co., Ltd., one of the Group's subsidiaries, is responsible for a performance guarantee in case SK E&S LNG, LLC defaults on payments for the service or for claims against breach of obligation. In regard to this, the Company provides a performance guarantee for SK E&S Co., Ltd.'s guarantee.
- 10) As at December 31, 2017, details of contracts of the subsidiaries of SK E&S Co., Ltd. are as follows:

Description of contract	Name of subsidiaries	Contract opponent	Term of contract
Contract for the supply of natural gas (*1)	Kangwon City Gas Co., Ltd. and seven others	Korea Gas Corporation	-
Contract of supply for natural gas	SK E&S Co., Ltd.	Tangguh PSC Contractor Parties	2006.01 ~ 2025.12
Contract for the repair and maintenance of gas turbine	SK E&S Co., Ltd.	GE International Inc.	2004.06 ~ 2026.12 (estimated)
Contract for the storage and vaporization service of natural gas	SK E&S Co., Ltd.	POSCO Co., Ltd.	2005.06 ~ 2025.12
Rental contract of the plant and tower site	SK E&S Co., Ltd.	POSCO Co., Ltd.	2003.08 ~ 2028.12
Contract for the long term maintenance program	Paju Energy Service Co., Ltd.	Siemens AG and others	2014.06 ~ 2031.06 (estimated)
Contract for the long term maintenance program	Wirye Energy Service Co., Ltd.	Siemens AG and others	2015.01 ~ 2032.01 (estimated)
Contract for the long term maintenance program	Narae Energy Service Co., Ltd.	Doosan Heavy Industries & Construction Co., Ltd.	12 years from 2012
Contract for the liquefaction and storage of natural gas	SK E&S LNG, LLC	FLNG Liquefaction 3, LLC	20 years from 2019
Contract for the storage and vaporization service of natural gas	SK E&S Co., Ltd., Wirye Energy Service Co., Ltd. and Paju Energy Service Co., Ltd.	Boryeong LNG Terminal Co., Ltd.	20 years from 2017
Contract for the use plumbing system	Wirye Energy Service Co., Ltd. and Paju Energy Service Co., Ltd.	Korea Gas Corporation	20 years from 2017
Contract for the use pipeline of natural gas	SK E&S LNG, LLC	Kinder Morgan, Inc.	20 years from 2019
Contract of supply for natural gas	Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.)	Chevron Australia Pty Ltd. and others	2017.01 ~ 2022.03
Contract for operation and maintenance	Narae Energy Service Co., Ltd.	Jeonbuk Co-generation, Gimcheon Energy Service Co., Ltd.	2015.01 ~ 2025.01
Contract for operation and maintenance	Narae Energy Service Co., Ltd.	Pyeongtaek Energy Service Co., Ltd.	2015.01 ~ 2018.12

- (*1) The supply quantity is determined annually, and the supply price is authorized by the Ministry of Trade, Industry and Energy.
- 11) As at December 31, 2017, details of construction contracts about the subsidiaries of SK E&S Co., Ltd. are as follows (Korean won in millions):

Description of contract	Name of subsidiaries	Contract opponent	Term of contract	Contract
Contract for the transmission	Wirye Energy Service Co., Ltd.	Korea Electric Power	2015.08 ~ 2018.04	₩ 8,472
access construction		Corporation		
Contract for heat piping	Narae Energy Service Co., Ltd.	Jung Ho E&C Co., Ltd.	2017.08 ~ 2018.12	3,725
and others		and others		

12) As at December 31, 2017, details of material contracts of resource development by the subsidiaries of SK E&S Co., Ltd. are as follows (Foreign currencies in thousands):

Description			Equity	Co	ntract	Ex	ecutive
of contract	Name of subsidiary	Contract opponent	ownership	aı	mount	aı	mount
Barossa-Caldita,	SK E&S Australia Pty. Ltd.	Conoco Phillips Company	37.50%	USD	310,000	USD	280,000
Australia		and others					
Woodford, USA	Dew Blaine Energy, LLC	Continental Resources, Inc.	49.90%	USD	360.000	USD	259.032

SK E&S Co., Ltd., a subsidiary of the Group, has an obligation to pay for the development costs based on the equity ownership.

- 13) Subsidiaries of SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) have entered into a contract with Champion Shipholding S.A. and 53 others for Bare Boat Charter Hire Purchase ("BBCHP"). Outstanding boat purchase amount as at December 31, 2017 is USD 2,484,710 thousand (Korean won equivalent: \(\psi 2,662,118\) million) and is included in long-term other accounts payable.
- 14) Subsidiaries of SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) have leased vessels from Time Charter. Total payables of the vessels charter amount to \widetilde{W}285,815 million as at December 31, 2017.
- 15) Subsidiaries of SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) have entered into a long-term transportation contract with Korea Gas Corporation, SK Gas Co., Ltd., and SK Energy Co., Ltd. to transport liquefied natural gas, liquefied petroleum gas and crude oil. The subsidiaries also entered into a long-term transportation contract with Korea Southern Power Co., Ltd., Korea South-East Power Co., Ltd., Korea East-West Power Co., Ltd., Korea Western Power Co., Ltd. and Korea Midland Power Co., Ltd. to transport coal.

On the other hand, subsidiaries of SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.) have entered into a shipbuilding contract with a shipbuilder to fulfill the transportation agreement in which was entered into with a customer. As a result of delays in the production of essential parts, the vessel that was scheduled to be delivered during the year ended December 31, 2017, was also delayed. Accordingly, SK Maritime Co., Ltd. temporarily replaced the vessel with an alternative vessel in order to fulfill the transportation agreement with the customer. SK Maritime Co., Ltd. is negotiating with the customer about the scope and the amount of loss incurred due to the delays in the vessel building. SK Maritime Co., Ltd. is also negotiating with the shipbuilder for the claim amount due to delays in the delivery of the vessel.

- 16) As at December 31, 2017, SK Shipping Co., Ltd., one of the subsidiaries, has 44,000,000 shares (55%) of SK B&T Pte. Ltd., ("SK B&T") after the disposal of 36,000,000 shares (45%) of SK B&T to Atlantic Starr Ltd. Out of 44,000,000 shares, 3,999,999 shares are provided as a trust asset under the securities trust agreement (First Beneficiary: Atlantic Starr Ltd. / trustee: Korea Development Bank), and 40,000,001 shares are pledged as collaterals for Atlantic Starr Ltd.
- 17) On July 16, 2013, SK Incheon Petrochem Co., Ltd., one of the subsidiaries, issued new preferred shares by the third-party allocation method to Shinhan Stonebridge Petro Private Equity Fund (the "Investor"). In regard to the new issuance of preferred shares, the agreement between SK Innovation Co., Ltd. and the Investor includes the following commitments:
 - Investors' drag-along right and tag-along right
 - SK Innovation Co., Ltd.'s pre-emption right for the exercised investors' drag-along right
 - Restriction on disposal of shares under certain conditions

SK Incheon Perochemical Co., Ltd., one of subsidiaries, securitized $\mathbb{W}300,000$ million of SK Incheon Petrochemical Co., Ltd.'s trusts accounts receivable for SK Energy Co., Ltd., and SK Global Chemical, the other subsidiaries of the Group, to Industrial Bank of Korea. IPC Limited Company 1, which underwrites the first right to benefit issued by Industrial Bank of Korea, issues securitized commercial paper. In case of default in customer, the Group is required to pay a liability of up to $\mathbb{W}120,000$ million. As the Group has not transferred most of the risks and rewards of the related trade receivables, it continues to recognize the full amount of trade receivables and recognizes asset securitization liabilities related to accounts receivable trusts as borrowings. As at December 31, 2017, the outstanding balance of the borrowings amounted to $\mathbb{W}284,000$ million.

- 18) SK Telecom Co., Ltd., a subsidiary of the Group, sells its mobile handsets to customers on an installment payment plan through agents. SK Telecom Co., Ltd. entered into transfer agreements with the agents for the receivables of handset's installment payments, under which all the rights and obligations of the receivables are transferred to SK Telecom Co., Ltd. Then, SK Telecom Co., Ltd. entered into an asset securitization contract with a special purpose company for the receivables, and accordingly, the balance of the receivables as at the end of the current reporting period is \times 1,111,614 million which is recorded as other accounts receivable and long-term other accounts receivable.
- 19) SK Materials Co., Ltd., a subsidiary, transferred trade receivables for SK Energy Co., Ltd., SKC Co., Ltd. and SK Hynix Inc. to trust account of KDB in June 2016. In the same year, SK Materials Co., Ltd. entered into trade receivables securitization contract with KDB in which ABCP is issued at par value of \(\pi 30,000\) million on a three-month basis based on type 1 beneficiary certificate. As at December 31, 2017 and 2016, trade receivables transferred to trust account are \(\pi 6,096\) million and \(\pi 5.345\) million, respectively.
- 20) SK Materials Co., Ltd., a subsidiary, trusted the trade receivable that may incur from M15 Project Phase 1, of which the investment was in progress in September 2017, to the trust account of KEB Hana Bank. With this trusted amount as collateral, SK Materials Co., Ltd. entered into borrowing commitment for the facility for up to 120,000 million. As at December 31, 2017, there are no trade receivables trusted to the trust account in relation to the commitment.

(5) Others

As at December 31, 2017, 92 notes (including 86 blank notes) and 57 blank checks are provided to financial institutions as collateral for borrowings.

34. Pledged assets

The following assets were pledged as collateral for the Group's borrowings and others as at December 31, 2017 (Korean won in millions and foreign currencies in thousands):

			Collateralized		
Company	Asset	Currency	amount (*1)	Provided to	Description
SK Innovation Co., Ltd.	Investments in associates	KRW	274,738	Peru LNG S.R.L. and others	Collateral for project financing
	Investments in associates	KRW	-	Yemen LNG Company	Collateral for project
	Property, plant and equipment	KRW	3,300	and others Seosan city	financing Location deposits
Netruck Co., Ltd.	Property, plant and equipment	KRW	8,612	Shinhan Bank	Collateral for borrowing
SK Incheon Petrochem Co., Ltd.		KRW	30,000	Korea Development Bank	Collateral for borrowing
SK Holdings Co., Ltd.	Property, plant and equipment	KRW	1,700	RCI Financial Service Korea	Guarantee of implementation of
					the agreement
Seosuwon Development	Investment property	KRW	234,000	New West Village and others	Collateral for borrowing
Company SK Engineering & Construction	Available-for-sale financial assets	KRW	122,847	Korea Housing Guarantee	Collateral for borrowing
Co., Ltd.	and others			Co., Ltd. and others	and others
SKC Co., Ltd.	Investment property Property, plant and equipment	KRW KRW	142,000 216,100	Kookmin Bank and others Korea Development Bank	Collateral for borrowing Collateral for borrowing
Sixe Go., Liu.	roperty, plant and equipment	KKVV	210,100	and others	Collateral for borrowing
SK Telesys Co., Ltd.	Property, plant and equipment	KRW	19,500		Collateral for borrowing
SKC Solmics Co., Ltd.	Property, plant and equipment	KRW	117,500	and others Korea Development Bank	Collateral for borrowing
Cito Commos Co., Etc.	. roporty, plant and oquipment		,000	and others	Conditional for Domesting
SK Bioland Co., Ltd.	Property, plant and equipment Inventories and trade accounts	KRW	40,500	Korea Development Bank	Collateral for borrowing
SKC, Inc.	receivable	USD	40,000	Korea Development Bank and others	Collateral for borrowing
	Property, plant and equipment	USD	50,000	Standed Charted Bank	Colateral for borrowing
SK Networks Co., Ltd.	Property, plant and equipment and others	KRW	476,478	Korea Development Bank and others	Collateral for sales and others
SK Magic Co., Ltd.	Property, plant and equipment	KRW	123,500	NH Bank and others	Collateral for borrowing
Shenyang SK Bus Terminal	Property, plant and equipment	CNY	137,820	KEB Hana Bank	Collateral for borrowing
Co., Ltd. SK E&S Co., Ltd.	Investments in joint ventures	KRW	105,117	Woori Bank and others	Collateral for project
on Edo Go., Etd.	investments in joint ventures	KKVV	103,117	Woon Bank and others	financing
	Investments in associates	KRW	7,240	Shinhan Bank and others	Collateral for project
	Investments in subsidiaries	KRW	176,205	Korea Development Bank	financing Collateral for borrowing
	Investments in subsidiaries	KRW	871,394	and Woori Bank Korea Development Bank	Collateral for project
Kangwon City Gas Co., Ltd.	Property, plant and equipment	KRW	6,157	and others Korea Development Bank	financing Collateral for borrowing
Pusan City Gas Co., Ltd.	Investment property	KRW	3,933	Megamart and others	Leasehold deposits
Paju Energy Service Co., Ltd.	Property, plant and equipment	KRW	840,000	Korea Development Bank	and others Collateral for project
r aju Energy Service Co., Etc.	and others	IXIXV	040,000	and others	financing
Chonnam City Gas Co., Ltd.	Property, plant and equipment	KRW	220	Dongbu Insurance Co., Ltd. and others	Collateral for deposits received
Wirye Energy Service Co., Ltd.	Property, plant and equipment	KRW	216,705	Kookmin Bank and others	Collateral for borrowing
Narae Energy Service Co., Ltd.	Property, plant and equipment and others	KRW	505,000	Korea Development Bank and others	Collateral for borrowing
SK Shipping Co., Ltd.	Property, plant and equipment	USD	1,718,995	KDB Asia Ltd. and others	Deposits for purchasing
	and others	1100	40.000	1/10 1/1 /// 0	ship and others
	Property, plant and equipment	USD	49,000	KIS MJ 4th Company and others	Collateral for borrowing
	Investments in subsidiaries	KRW	47,142	Atlanticsstarr Ltd.	Disposal of shares of
SK Shipping (Singapore)	Property, plant and equipment	USD	71,043	KDB Asia Ltd and others	SK B&T Deposits for purchasing
Pte. Ltd.	roperty, plant and equipment	OOD	71,043		ship and others
SK B&T Pte. Ltd.	Short-term financial instruments	KRW	2,031	KEB Hana Bank and others	Guarantees for license
SHIKC 1 Shipholding S.A.	and others Property, plant and equipment	USD	151,753	KDB Asia Ltd and others	acquisition and others Deposits for purchasing
SHIKC 2 Shipholding S.A.	Property, plant and equipment	USD	151.626	KDB Asia Ltd and others	ship Deposits for purchasing
HHIENS 1 Shipholding S.A.	Property, plant and equipment	USD	124,201	KDB Asia Ltd and others	ship Deposits for purchasing
· -			,		ship
HHIENS 2 Shipholding S.A.	Property, plant and equipment	USD	124,211	KDB Asia Ltd and others	Deposits for purchasing ship
VLGC 4 Shipholding S.A.	Property, plant and equipment	USD	58,881	KDB Asia Ltd and others	Deposits for purchasing ship
VLGC 5 Shipholding S.A.	Property, plant and equipment	USD	43,584	KDB Asia Ltd and others	Deposits for purchasing Ship
SK Shipping Europe Plc.	Property, plant and equipment	USD	53,625	KDB Asia Ltd and others	Deposits for purchasing ship
SK Broadband Co., Ltd.	Property, plant and equipment	KRW	4,144	Lessor	Restricted real rights for office lease
010/15	Short-term financial instruments	KRW	300	KEB Hana Bank and NH Bank	Collateral for loan
SKY Property Management, Ltd. SK China Company, Ltd.	Investment property and others Others	CNY USD	150,000 36,951	KEB Hana Bank and others Shinhan Bank and others	Collateral for borrowing Collateral for borrowing
SK Industrial Development	Others	CNY	2,000,000	Bank of China communications	Collateral for borrowing
China Co., Ltd.					

34. Pledged assets (cont'd)

			Collateral		
Company	Asset	Currency	amount (*1)	Provided to	Description
SK Materials Co., Ltd.	Property, plant and equipment	KRW	27,170	LG Display Co., Ltd.	Collateral for advance received
		KRW	137,000	Korea Development Bank	Collateral for borrowing
		USD	3,500	Korea Development Bank	Collateral for borrowing
		JPY	3,690,000	Korea Development Bank	Collateral for borrowing
		JPY	315,000	Hyakugo Bank	Collateral for borrowing
		TWD	20,000	Mega Bank	Collateral for borrowing
		KRW	1,075	Yeongju city and Gyeongsang Buk-do	Government subsidy
SK Airgas Co., Ltd.	Property, plant and equipment	KRW	336,596	Kyungnam Bank and others	Collateral for borrowing
SK Tri Chem Co., Ltd.	Property, plant and equipment	KRW	24,000	Korea Development Bank	Collateral for borrowing
SK Siltron Co., Ltd.	Property, plant and equipment and others	KRW	282,820	Korea Development Bank and others	Collateral for borrowing

(*1) The collateral amount includes the book value of collateralized investments related to the borrowings of project finance and facilities of the Group.

35. Guarantees provided among the Group entities

Guarantees provided among the Group entities as at December 31, 2017 are as follows (Korean won in millions and foreign currencies in thousands):

0	0	0		December 1
Guarantor	Guarantee	Currency	Amount	Description of guarantee
SK Holdings Co., Ltd. SK Holdings Co., Ltd. and	SK Computer and communication LLC SK Shipping Co., Ltd.	USD USD	6,000	Performance guarantees for payment Charterage (*1)
SK Innovation Co., Ltd.	3 - 11 3 ,			,
SK Innovation Co., Ltd.	SK E&P America, Inc.	USD	45,000	Guarantee of debt
SK Global Chemical Co., Ltd.	SK Ningbo Performance Rubber Co., Ltd.	USD	10,000	Guarantee of payment for license agreement
	SK Global Chemical Americas, Inc.	USD	190,000	Guarantee of payment for principal of debt
	SK Primacor Americas	USD	20,000	Guarantee of principal of debt in RCF withdrawal
	SK Primacor Europe	EUR	20,000	Guarantee of principal of debt in RCF withdrawal
SK Engineering & Construction Co., Ltd.	Thai Woo Ree Engineering Company Ltd.	USD	37,178	Guarantee of financial obligation
Or t Engineering at Contactaction Con, Etc.	mai vvoc vvoc zingmosning company zia.	THB	76,158	Performance guarantees for contract and others
	Seosuwon Development Company	KRW	234,000	Guarantees for project financing
	SKEC Anadolu LLC	USD	39,000	Performance guarantees for contract and others
	orteo / madora 220	TRY	25.077	Guarantee of W/H Tax
	Sunlake Co., Ltd.	CAD	33,000	Guarantee of financial obligation
SKC Co., Ltd.	SKC, Inc.	USD	138,000	Guarantee of payment
Sito co., Eta.	SKC (Jiangsu) High Tech Plastics Co., Ltd.	USD	71,950	Guarantee of payment
	orto (diangsu) riigir recirr lastics oo., Eta.	CNY	240,000	Guarantee of payment
	SK Telesys Co., Ltd.	KRW	40,000	Guarantee of payment Guarantee of financial obligation
	SKC Solmics Co., Ltd.	KRW	60,000	Guarantee or infancial obligation Guarantee for operation fund
SK Natworks Co. Ltd	SK Networks Deutschland GmbH	EUR	10,000	Standing surety for investee
SK Networks Co., Ltd.		USD	326,600	Standing surety for investee
	SK Networks Hong Kong Limited	USD	121,400	
	SK Networks (Shanghai) Co., Ltd.			Standing surety for investee
	OK Nationalis January On 144	CNY	54,000	Standing surety for investee
	SK Networks Japan Co., Ltd.	JPY	2,000,000	Standing surety for investee
01(01: : 0 111	SK (Guangzhou) Metal Co., Ltd.	CNY	60,000	Standing surety for investee
SK Shipping Co., Ltd.	SK Shipping Europe Plc.	USD	169,625	Guarantee for operation fund
		USD	53,625	Guarantee for derivative hedge
	SK Shipping Singapore Pte. Ltd.	USD	92,400	Guarantee of payment
		USD	81,107	Guarantee for operation fund
	SK B&T Pte. Ltd.	USD	48,800	Guarantee for operation fund and others
	SHIKC 1 Shipholding S.A.	USD	52,025	Guarantee of payment
	SHIKC 2 Shipholding S.A.	USD	52,025	Guarantee of payment
	Blueseaocean 1st LLC	USD	30,000	Guarantee for derivative hedge
	Blueseaocean 2nd LLC	USD	40,000	Guarantee for derivative hedge
	Blueseaocean 3rd LLC	USD	40,000	Guarantee for derivative hedge
	HHIENS1 Shipholding S.A.	USD	35,740	Performance guarantees for payment
	HHIENS2 Shipholding S.A.	USD	35,740	Performance guarantees for payment
	VLGC3 Shipholding S.A	USD	12,127	Performance guarantees for payment
	VLGC4 Shipholding S.A.	USD	15,297	Performance guarantees for payment
	VLGC5 Shipholding S.A.	USD	30,594	Performance guarantees for payment
	Neptune Solution LLC	KRW	64,000	Securitization. Capital reserve commitments
	HHIVLCC1 Shipholding S.A.	USD	28,478	Performance guarantees for payment
	HHIVLCC2 Shipholding S.A.	USD	28,478	Performance guarantees for payment
SK B&T Pte. Ltd.	Chuandong 1 Marine Holdings Co., Ltd.	USD	7,672	Guarantee related to BBCHP
	Chuandong 2 Marine Holdings Co., Ltd.	USD	7,641	Guarantee related to BBCHP
SK E&S Co., Ltd.	Cailip Gas Marketing, LLC	USD	121,000	Guarantee for derivative hedge and others
	SK E&S Australia Pty. Ltd.	USD	140,000	Guarantee for borrowings and others
	Paju energy service Co., Ltd.	KRW	500,000	Guarantee for borrowings and others
	Wirye energy service Co., Ltd.	KRW	250,000	Guarantee for borrowings and others
	Narae energy service Co., Ltd.	KRW	20,000	Guarantee for borrowings
	Dew Blaine Energy, LLC	USD	360,000	Performance for contracts and others
	SK E&S Americas, Inc.	USD	160.000	Guarantee for borrowings
	Prism Energy International Pte. Ltd.	USD	149,000	Guarantee for derivative hedge and others
	(formerly, SK LNG Trading Pte. Ltd.)	000	140,000	Callania for derivative rivage and official

35. Guarantees provided among the Group entities (cont'd)

Guarantor	Guarantee	Currency	Amount	Description of guarantee
Prism Energy International Pte. Ltd. (formerly, SK LNG Trading Pte. Ltd.)	SK Shipping Co., Ltd.	USD		Charterage (*2)
SK Materials Co., Ltd.	SK Materials (Jiangsu) Co., Ltd.	CNY	50,000	Guarantee for borrowings
		USD	34,000	Guarantee for borrowings
	SK Materials Taiwan Co., Ltd.	USD	4,000	Guarantee for borrowings
	SK Materials Japan Co., Ltd.	JPY	276,000	Guarantee for borrowings
SK China Company, Ltd.	SK (Beijing) auto rental Co., Ltd.	USD	16,835	Guarantee for borrowings
	SK (Shenyang) auto rental Co., Ltd.	USD	10,713	Guarantee for borrowings
	SK Rent-A-Car (Qingdao) Co., Ltd.	USD	9,404	Guarantee for borrowings
SK Biotek Co., Ltd.	SK Biotek Ireland Limited	USD	80,000	Credit limit gruarantee of overseas subsidiaries
	SK Biotek Ireland Limited	EUR	10,000	Performance guarantee of overseas subsidiaries
SK Telink Co., Ltd.	SK Broadband Co., Ltd.	KRW	3	Performance guarantees for contract

- (*1) The fair value of the vessels owned by SK Shipping Co., Ltd. is deducted from the total guarantee amount of ₩97,484 million.
- (*2) The fair value of the vessels owned by SK Shipping Co., Ltd. is deducted from the total guarantee amount of ₩266,149 million.

36. Deposits restricted

Deposits restricted for the use as at December 31, 2017 and 2016 are as follows (Korean won in millions):

Account	Classification	Institution	De	ecember 31, 2017	D	ecember 31, 2016	Description of restriction
Cash and cash equivalents	Deposits relating to project financing and others	Korea Development Bank and others	₩	79,985	₩	95,254	Pledged on collateral and others
Short-term financial instruments	Charitable fund and others	Industrial Bank of Korea and others		284,747		139,718	Pledged on collateral and others
Long-term financial instruments	CO2 emission allowances fund and others	Samsung Securities and others		8,057		15,828	Deposits and others
Other non-current assets	Refund guarantee and others	Korea Software Financial Cooperative and others	₩	3,653 376,442	₩	3,763 254,563	Deposits and others

37. Financial risk management

Regarding financial instruments, the Group is exposed to a variety of financial risks: credit, liquidity and market. This note presents information related to risk exposures of the Group and the main objective, strategy, evaluation of risk, management process and capital management. Additional quantitative information is stated throughout the condensed consolidated financial statements.

37.1 Financial risk management

37.1.1 Risk management activities

The board of directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The board of directors has established the risk management committee, which is responsible for developing and monitoring the Group's risk management policies. The risk management committee reports regularly to the board of directors on its activities. The Group audit committee is assisted in its oversight role by internal audit.

Internal audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Group audit committee. The Group's risk management policies are established to identify and analyze the risks faced by the Group, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

37.1.2 Credit risk

Credit risk is the risk of financial loss of the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. In addition, the maximum exposure to credit risk as at December 31, 2017 and 2016 is as follows (Korean won in millions):

		December 31, 2017	December 31, 2016
Financial assets at FVTPL	₩	369,436	₩ 104,018
Held-to-maturity investments		870	937
Loans and receivables		25,579,243	25,012,808
Available-for-sale financial assets		69,248	65,010
Derivatives designated as hedging instruments		103,849	299,173
	₩	26,122,646	₩ 25,481,946

On the other hand, the Group has provided payment guarantees for others including related parties, associates and others. The Group, due to its payment guarantees, is exposed to credit risk (See Note 33).

37.1.2.1 Trade and other accounts receivable

The Group recognizes a provision for losses expected to be incurred for receivables and others. This provision consists of specific impairment losses for individually significant items, and impairment losses have not yet been identified the occurrence of a group of financial assets with similar characteristics. Provision of a group of financial assets has been determined based on historical data for similar collection of financial assets.

The Group enters into transactions only with customers that are credit worthy. Credit quality of a customer is assessed based on an extensive credit rating scored and individual credit limits are defined in accordance with this assessment. Outstanding customer receivables are regularly monitored and credit quality may be adjusted to reflect the appropriate appetite of credit risk in accordance with the Group's risk management policies.

As at December 31, 2017 and 2016, the aging of trade receivables and others for which an allowance for doubtful accounts has not been made, as the allowance is deemed to be recoverable from a customer or counterparty later although the amount is past due, are as follows (Korean won in millions):

		Decembe	2017	December 31, 2016				
		Trade accounts				Trade accounts		
		receivable	Oth	er receivables		receivable	Ot	her receivables
Less than one month	₩	768,165	₩	80,644	₩	767,403	₩	69,444
One~three months		135,290		27,565		468,566		43,920
Three~six months		43,271		12,308		197,411		27,298
More than six months		328,435		148,615		491,479		246,352
	₩	1,275,161	₩	269,132	₩	1,924,859	₩	387,014

37.1.2.1 Trade and other accounts receivable (cont'd)

Changes in the allowance for doubtful accounts for the years ended December 31, 2017 and 2016 are as follows (Korean won in millions):

	For the years ended					
		December 31, 2017	December 31, 2016			
Beginning balance	₩	777,198	₩	515,317		
Bad debt expense		16,386		255,058		
Write-off		(160,011)		(86,447)		
Equity loss on investments (*1)		-		1,327		
Others (*2)		83,306		91,943		
Ending balance	₩	716,879	₩	777,198		

- (*1) For the year ended December 31, 2016, equity method loss amounting to ₩1,327 million, was recognized in the related loan, as book value of investment in associates was insufficient.
- (*2) Others include net foreign currency translation differences, changes in the scope of consolidation and others.

37.1.2.2 Guarantee

SK Engineering & Construction Co., Ltd., one of the subsidiaries, offers payment guarantees for loans of project financing. The financing liabilities related to the payment guarantees recognized amounts of \text{\text{\text{\text{W}}10,433}} million as at December 31, 2017. The Group recognizes the financial guarantee liabilities related to the payment guarantees contracted with the Group, such as SK Engineering & Construction Co., Ltd., as at December 31, 2017.

	D	ecember 31, 2017		December 31, 2016
SK Innovation Co., Ltd.	₩	1,131	₩	1,768
SK Engineering & Construction Co., Ltd.		10,433		7,352
SK Shipping Co., Ltd.		50		-
SK Biotek Co., Ltd.		369		<u>-</u>
	₩	11,983	₩	9,120

In addition, the Group has provided payment guarantees for others, including subsidiaries and others. (See Notes 33 and 35).

37.1.2.3 Other financial assets

Credit risk arising from other financial assets consists of long-term and short-term financial instruments, occurrence of trade opponent arising from the bankruptcy, etc. In this case, the credit risk exposure of the Group will be the same as the book value of the maximum applicable financial instruments. On the other hand, the management of the Group's credit rating, because it is excellent to deal with financial institutions, is judged to have limited impact on the credit risk of the financial institutions of the Group.

37.1.3 Liquidity risk

Liquidity risk is the risk that the Group encounters difficulty in meeting the obligations of the financial liabilities. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The contractual maturity of financial liabilities as at December 31, 2017 is as follows. Amounts include interests paid and presented at gross amounts (Korean won in millions):

		Contractual	Less than	3~12		More than
	Book value	cash flow	3 months	months	1~5 years	5 years
Loans and borrowings	₩ 9,421,820	₩ 9,760,904 ₩	3,616,331 ₩	2,001,983	₹ 3,455,537	₩ 687,053
Bonds	23,484,876	25,064,262	1,481,742	4,143,209	14,209,955	5,229,356
Derivative financial liabilities	180,987	180,987	83,379	63,906	33,482	220
Trade accounts payable	9,588,642	9,588,642	9,310,693	277,949	=	-
Other liabilities	10,714,180	11,288,945	5,695,622	1,082,489	2,551,849	1,958,985
	₩ 53,390,505	<u>₩ 55,883,740</u> <u>₩</u>	20,187,767 ₩	7,569,536	₹ 20,250,823	₩ 7,875,614

37.1.4 Market risk

Market risk is the fluctuating risk in fair value of the financial instruments or future cash flows caused by the changes in market price. Market risk consists of currency risk, interest rate risk, crude oil and petroleum product price risk, and others. The fundamental goal of market price management is the maximization of the profit and the limit of the exposure to market risk within an acceptable level. The Group sells and purchases financial derivatives and financial instruments or financial liabilities for the purpose of controlling the market risk. In general, the Group applies hedge accounting in order to minimize the volatility of profit.

37.1.4.1 Currency risk

The Group is exposed to foreign currency risk arising from sales and purchases denominated in currencies other than functional currency. Main currencies used for these transactions are USD, JPY, CNY and EUR.

Details of foreign currencies and liabilities as at December 31, 2017 and 2016 are as follows (Korean won in millions and foreign currencies in thousands):

		December	· 31, 2	2017	December	r 31,	2016
	Currency	Foreign currencies		orean won	Foreign currencies		Korean won equivalent
Assets	USD	7,854,281	₩	8,415,077	4,921,210	₩	5,947,476
	JPY	21,745,852		206,392	17,681,164		183,325
	CNY	2,295,359		375,636	2,601,217		450,687
	EUR	141,881		181,502	68,757		87,154
	Others			117,318			35,791
			₩	9,295,925		₩	6,704,433
Liabilities	USD	10,426,763	₩	11,171,234	8,162,297	₩	9,863,939
	JPY	6,935,029		65,821	7,342,973		76,106
	CNY	780,156		127,672	1,306,566		226,378
	EUR	148,624		190,127	74,224		94,087
	Others			82,194			699,236
			₩	11,637,048		₩	10,959,746

37.1.4.1 Currency risk (cont'd)

Should the exchange rate of the aforementioned currencies fluctuate by 10%, the effects on equity would be as follows (Korean won in millions):

	December	er 31, 2017	Decembe	er 31, 2016
Currency	Increase by 10%	Decrease by 10%	Increase by 10%	Decrease by 10%
USD	₩ (275,616)	₩ 275,616	₩ (391,646)	₩ 391,646
JPY	14,057	(14,057)	10,722	(10,722)
CNY	24,796	(24,796)	22,431	(22,431)
EUR	(863)	863	(693)	693

The Group is hedging currency risk by using derivative financial instruments such as currency swaps, currency forwards and others (See Note 20).

37.1.4.2 Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term debt obligations with floating interest rates. As at December 31, 2017, floating-rate bonds and floating-rate borrowings are \(\pi 4,732,561\) million (as at December 31, 2016: \(\pi 5,354,429\) million). The Group's management has entered into the foreign currency swap and interest rate swap contracts to manage its interest rate risk (See Note 20).

When all other variables are fixed and the interest rates are changed for the years ended December 31, 2017 and 2016, the effects of interest expense by fluctuated interest-bearing loan are as follows (Korean won in millions):

	For the years ended								
	December 31, 2	2017	December 31, 20	016					
Interest expenses	100 basis point increase	₩	47,326	100 basis point increase	₩	53,544			

37.1.4.3 Crude oil and petroleum product price risk

Crude oil and petroleum product price risk is the risk that profit or cash flow will fluctuate because of changes in international market prices of crude oil and petroleum products. The Group manages these risks to maintain stable margins through the use of fixed-price contracts with customers and derivative contracts of fluctuations in fair values according to changes in international market prices. Key management of the Group determined that the risk from changes in the price of crude oil and petroleum products and the risk to fluctuations in fair values are approximately managed.

37.1.5 Enforceable master netting agreement or similar agreement

Carrying amount of financial instruments recognized for which offset agreements are applicable as at December 31, 2017 and 2016 is as follows (Korean won in millions):

						December 3	31.	2017		
	Gross offset Gross financial financial		Gross offset financial	Net financial instruments presented in the consolidated			Relevant amount not offset in the consolidated statement of financial position			
		struments		nstruments		statement of		Financial Cash collaterals		
Financial assets:	re	cognized		recognized	tina	ancial position	_	instruments received		Net amount
Derivatives (*1) Trade accounts receivable	₩	26,645	₩	-	₩	26,645	₩	(19,875)₩	- ₩	6,770
and other receivables		93,146		(92,409)		737		-	-	737
	₩	119,791	₩	(92,409)	₩	27,382	₩	(19,875)₩	- ₩	7,507
Financial liabilities: Derivatives (*1)	₩	19,875	₩	-	₩	19,875	₩	(19,875)₩	- ₩	-
Other accounts payable		00.400		(00,400)						
and other liabilities	₩	92,409 112,284	₩	(92,409) (92,409)	₩.	19,875	₩	 (19.875)₩	<u>-</u> ₩	
		112,201		(02, 100)		10,070		(10,010) 11	=	
						December 3	31,	2016		
					-	Net financial instruments		Relevant amount not offset		
				Gross offset		esented in the		in the consolidated statement		
	Gros	ss financial		financial		consolidated		of financial position	_	
		struments		instruments		statement of		Financial Cash collaterals		
Financial assets:	re	cognized		recognized	fin	ancial position		instruments received		Net amount
Derivatives (*1)	₩	87.566	₩	_	₩	87,566	₩	(87,153)₩	- ₩	413
Trade accounts receivable	**	07,000	**		**	07,000	**	(07,100) **	**	410
and other receivables		114,135		(103,852)		10,283		<u> </u>	<u> </u>	10,283
	₩	201,701	₩	(103,852)	₩	97,849	₩	(87,153)₩	- ₩	10,696
Financial liabilities:										
Derivatives (*1)	₩	87,153	₩	-	₩	87,153	₩	(87,153)₩	- ₩	-
Other accounts payable and other liabilities		103.852		(103,852)		_		_	_	_
and other habilities	₩	191,005	₩	(103,852)	₩	87.153	₩	(87.153)₩	- ₩	
						·				

^(*1) Derivatives are subject to enforceable master netting arrangement in accordance with ISDA (International Swaps and Derivative Association).

37.2 Capital risk management

The fundamental goal of capital management is to keep a sound financial structure. The Group is using the debt ratio, calculated as total debt divided by total amount of capital, as an indicator of capital management. The Group maintains a debt ratio of 139.9% as at December 31, 2017. The maturity of the debt is dispersed in the long term; so, debt-repayments are not demanding.

The Group's debt ratio as at December 31, 2017 and 2016 is as follows: (Korean won in millions)

		December 31, 2017	<u>C</u>	<u>December 31, 2016</u>
Total liabilities	₩	64,020,500	₩	60,720,613
Total equity		45,756,420		42,326,724
Debt ratio		139.9%		143.5%

38. Business combination

38.1 2017

38.1.1 General information

On January 11, 2017, the Group acquired, at \widetilde{W}39,419 million, 26.65% of ordinary shares with voting rights of SM Core, Inc., which is engaged in the production and sales of logistics automation system that includes goods handling equipment, automated conveyors and loading equipment. This acquisition is to develop the smart factory and logistics business in the ICT integrated field. In addition, this transaction was accounted for by using the acquisition method.

As at June 30, 2017, SKC Co., Ltd., a subsidiary, acquired 51% equity ownership of SKC Hi-Tech & Marketing Co., Ltd. (formerly, SK Haas Display Film Co., Ltd.) for a consideration of \$81,187 million. The equity ownership of the Group increased from 49% to 100%, thereby giving control to the Group. The purpose of the acquisition is to enhance synergy of film business through value chain expansion. This transaction was accounted for by using the acquisition method. The interim condensed consolidated financial statements comprise financial performance of SKC Hi-Tech & Marketing Co., Ltd. (formerly, SK Haas Display Film Co., Ltd.) for the period from the acquisition date to the end of reporting period.

On August 17, 2017, the Company acquired 51% shares with voting rights of SK Siltron Co., Ltd. (formerly, LG Siltron Co., Ltd.), which manufactures and sells silicon thin-film for the electronics industry, at \(\pmathbb{W}620,000\) million. The purpose of the acquisition of the shares was to expand the semiconductor material business by entering into the manufacturing and sales business of silicon wafer. The acquisition was accounted for by using the acquisition method. The interim consolidated financial statements comprise financial performance of SK Siltron Co., Ltd., for the period from the acquisition date to the end of the reporting period.

In accordance with a resolution of the Board of Directors on February 1, 2017, SK Innovation Co., Ltd., a subsidiary, elected to acquire all of the US and Spain EAA businesses and their tangible/intangible assets owned by The Dow Chemical Company and completed the acquisition during the year ended December 31, 2017. The acquisition was made to diversify its business portfolio into high value-added packaging by entering the EAA business. The acquisition was accounted for by using the acquisition method, and the interim consolidated financial statements comprise financial performance of the Dow Chemical EAA business for the period from the acquisition date to the end of the reporting period.

In accordance with a resolution of the Board of Directors, SK Innovation Co., Ltd., a subsidiary, decided on the acquisition and transfer price of the U.S. PVDC business and tangible/intangible assets owned by The Dow Jones Chemical Company. However, as the initial accounting process for business combination is not completed as at the approval date for issuing the consolidated financial statements, the fair value of the assets liabilities acquired on the date of business combination is presented at a provisional amount.

On September 1, 2017, iriver Inc., a subsidiary, acquired all of the shares and control of S.M. Life Design Company Japan Inc., which was held by SM Entertainment Japan Co., Ltd., to maximize overseas business expansion and business synergy. In addition, the transaction was accounted for using the acquisition method and the consolidated financial statements comprise financial performance of S.M. Life Design Company Japan Inc. for the period from the acquisition date to the end of the reporting period.

On October 1, 2017, iriver Inc., a subsidiary, merged SM Mobile Communications Co., Ltd. to enter contents business and enhance competitivesness of its device business. As a result of merger, iriver Inc. obtained controls over S.M. Mobile Communications Japan Inc., which was wholly owned by SM Mobile Communications Co., Ltd. In addition, the transaction was accounted for using the acquisition method and the consolidated financial statements comprise financial performance of S.M. Mobile Communications Japan Inc. for the period from the acquisition date to the end of the reporting period.

38.1.1 General information (cont'd)

As at December 31, 2017, SK Biotek Ireland Limited, subsidiary, completed the acquisition of tangible assets, inventories, contracts and others of Bristol-Myers Squibb Comapny (BMS)'s Swords operation. The acquisition is for the purpose of business expansion of raw materials consignment production and the transaction is accounted for using the acquisition method.

38.1.2 Identifiable assets acquired and liabilities assured

1) Identifiable assets acquired and liabilities assured due to merger is as follows (Korean won in millions):

											S.M.	Life	5	S.M.		
			SKC	C Hi-Tech				Dow		Dow	Des	sign	Mob	ile Com		BMS
	SM (Core	&M	larketing	SK	Silton		hemical		emical	Com	pany	-mun	ications	5	Swords
	Co.,	Ltd.	C	o., Ltd.	Co.	, Ltd.	EA	A business	PV	DC (*1)	Japa	an Inc.	Co.,	Ltd.	an	d others
0	***	4.007	***	444400	TT7 4	00 000	***	40.000	***	44.004	***	0.704	***	4.0.40	***	100.017
Current assets:		4,987	W	144,166		93,803	W	43,862	₩	11,881	W	6,784		4,349	W	162,617
Cash and cash equivalents		5,463		15,835		05,400		.		-		3,434		4,112		-
Trade accounts receivable and other accounts receivable	2	7,364		83,882	1	18,367		12,742		3,365		1,471		237		-
Inventories		342		44,449	2	23,187		31,120		8,516		1,879		-		156,265
Other current assets		1,818		-		46,849		-		-		-		-		6,352
Non-current assets:	4	3,953		109,955	1,3	71,378		250,321		14,190		6,681		7,797		76,458
Investment Securities		-		-		1,986		-		-		-		-		-
Property, plant and equipment	2	0,249		62,620	7	36,977		56,683		14,190		4		311		76,458
Intangible assets	2	2,168		35,552	5	91,598		193,638		-		6,677		7,445		-
Deffered income tax assets		-		3,503		-		-		-		-		-		-
Other non-current assets		1,536		8,280		40,817		-		-		-		41		-
Current liabilities:	1	6,448		35,809	5	01,986		-		-		2,563		815		16,433
Trade accounts payable and	1	3,533		35,809	1	43,516		-		-		2,563		815		8,106
other accounts payable																
Short-term borrowings		500		-	3	55,169		-		-		-		-		-
Other current liabilities		2,415		-		3,301		-		-		-		-		8,327
Non-current liabilities:		7,357		76,645		22,539		-		-		2,650		154		25,625
Bonds payable and		-		62,900	2	25,398		-		-		-		-		-
long-term borrowings																
Retirement benefit obligation		2,272		12,644		23,778		-		-		-		-		-
Deferred income tax liabilities		5,085		-	1	00,531		-		-		2,324		-		6,328
Other non-current liabilities				1,101		72,832						326		154		19,297
Fair value of identifiable																
net assets	₩ 9	5,135	₩	141,667	₩ 9	<u>40,656</u>	₩	294,183	₩	26,071	₩	8,252	₩	11,177	₩	197,017

^(*1) It is determined by provisional amounts as the valuation of identifiable assets acquired and liabilities assured of the Dow Chemical PVDC businesses have not been completed as at the end of this reporting period.

38.1.2 Identifiable assets acquired and liabilities assured (cont'd)

2) Used valuation techniques for remeasurement at fair value of acquired significant assets and liabilities is as follow:

Acquired Assets	Measurement of fair value
Property, plant and equipment	Market approach or cost approach: The Company determines the fair value reflecting on the created price in the available market transactions of similar assets or on the replacement cost considering the appropriate functional and economic obsolescence as well as the physical deterioration degree.
Intangible assets	Relief from royalty method or multi-period excess earnings method: The Company determines the fair value of intangible assets by using relief from royalty method considering the royalty discount that is expected to be avoided by the retention of the patents or trademarks directly. And the Company also determines the fair value of intangible by using multiperiod excess earnings method considering the present value of net cash flows that is expected to be generated from the customer relationship.
Inventories	The Company determines the fair value on the basis of a reasonable profit based on the effort required to complete or sell inventories and the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.
Bonds payable and borrowings	The Company determines the fair value by discounting future cash flows at an effective interest rate that consider current credit rating at assessment date and spread applied to recently issued.

38.1.3 Goodwill

Goodwill arising from business combination is as follows (Korean won in millions):

						S.M. Life	S.M.	
		SKC Hi-Tech		Dow	Dow	Design	Mobile Com	BMS
	SM Core	&Marketing	SK Silton	Chemical	Chemical	Company	-munications	Swords
	Co., Ltd.	Co., Ltd.	Co., Ltd.	EAA business	PVDC	Japan Inc.	Co., Ltd.	and others
a. The total consideration transferred:								
Consideration transferred	₩ 39,41	9 ₩ 81,187 ₹	₩ 620,000	₩ 394,463 ₹	₩ 82,193	₩ 30,000	₩ 24,650	₩ 167,529
Fair value of share holding								
transferred		- 78,003	-	-	-	-	-	-
	39,41	159,190	620,000	394,463	82,193	30,000	24,650	167,529
					<u>.</u>			
 b. Fair value of proportionate share of acquired net assets: 								
Fair value of the net identifiable assets	₩ 95,13	5 ₩ 141,667 ₹	₩ 940,656	₩ 294,183 ₹	₩ 26,071	₩ 8,252	₩ 11,177	₩ 197,017
Non-controlling interests (*1)	(69,90	6) -	(460,928)	-	-	-	-	-
3 ()	25,22	9 141,667	479,728	294,183	26,071	8,252	11,177	197,017
c. Goodwill (c=a-b)	₩ 14,19	₩ 17,523	₩ 140,272	₩ 100,280	₩ 56,122	₩ 21,748	₩ 13,473	₩ (29,488)

^(*1) Non-controlling interests occurred due to the merger are measured in proportion to the non-controlling interest in net identifiable assets of the merged company.

38.2 2016

38.2.1 General information

As at February 16, 2016, the Company acquired 49.1% of voting shares of SK Materials Co., Ltd. (formerly, OCI Materials Co., Ltd.), which primarily engages in the manufacture and sale of special gas (NF3, SiH4, WF6), from OCI Company Ltd. for a consideration of \pm 472,866 million. The transaction was carried out for the purpose of developing a new line of business in the special gas market for semiconductor production.

On September 23, 2016, SK TNS Co., Ltd., which is engaged in information and communication technology, redeemed certain redeemable convertible preference shares with voting rights by which SK Engineering & Construction Co., Ltd.'s equity interests of the shares increased from 50.0% to 52.2%.

As at November 28, 2016, SK Networks Co., Ltd., a subsidiary of the Group, acquired 100% of voting shares of SK Magic Co., Ltd. (formerly, Tongyang Magic Inc.), which primarily engages in the manufacture and rent of home appliances, from Magic Holdings Co., Ltd. for a consideration of $\mathbb{W}610,000$ million.

In addition, such transaction was accounted for using the acquisition method and the consolidated financial statements comprise financial performance of SK Materials Co., Ltd., SK TNS Co., Ltd., and SK Magic Co., Ltd. for the period from the acquisition date to the end of reporting period.

38.2.2 Identifiable assets acquired and liabilities assured

1) Identifiable assets acquired and liabilities assured due to merger is as follows (Korean won in millions):

	S	K Materials Co., Ltd.		SK TNS Co., Ltd.	SK Magic Co., Ltd. (*1)
Current assets:	₩	197,414	₩	144,718	₩ 79,998
Cash and cash equivalents		73,056		27	11,512
Trade accounts receivable and	b	61,189		49,602	38,934
other accounts receivable					
Inventories		61,650		-	24,432
Other current assets		1,519		95,089	5,120
Non-current assets:		865,528		6,480	591,680
Investments in associates		84		1,424	-
and joint ventures					
Property, plant and equipment		510,096		7	254,673
and investment property					
Intangible assets		354,546		3,808	261,429
Trade accounts receivable		783		22	-
and other accounts receivabl	е				
Deferred income tax assets		-		-	8,913
Other non-current assets		19		1,219	66,665
Current liabilities:		162,187		109,128	114,998
Trade accounts payable and		50,906		90,815	61,018
other accounts payable					
Bonds payable and		88,461		-	24,708
short-term borrowings					
Other current liabilities		22,820		18,313	29,272
Non-current liabilities:		215,468		3,323	199,684
Bonds payable and		114,104		-	106,614
long-term borrowings					
Retirement benefit obligation		5,435		3,323	26,043
Deferred income tax liabilities		75,074		-	65,612
Other non-current liabilities		20,855		<u> </u>	1,415
Fair value of identifiable					
net assets	₩	685,287	₩	38,747	₩ 356,996

38.2.2 Identifiable assets acquired and liabilities assured (cont'd)

- (*1) The amounts of net assets of the acquiree as at December 31, 2016 are measured temporarily as the valuation for some assets has not been completed. The valuation has not been completed by the approval date of financial statements by managements.
- 2) Used valuation techniques for remeasurement at fair value of acquired significant assets and liabilities is as follow:

Acquired Assets	Measurement of fair value
Property, plant and equipment	Market approach or cost approach:
and investment property	The Company determines the fair value reflecting on the created price in the available market transactions of similar assets or on the replacement cost
	considering the appropriate functional and economic obsolescence as well as the physical deterioration degree.
Intangible assets	Relief from royalty method or multi-period excess earnings method:
	The Company determines the fair value of intangible assets by using relief from
	royalty method considering the royalty discount that is expected to be avoided by the retention of the patents or trademarks directly.
	And the Company also determines the fair value of intangible by using multi- period excess earnings method considering the present value of net cash
	flows that is expected to be generated from the customer relationship.
Inventories	The Company determines the fair value on the basis of a reasonable profit based on the effort required to complete or sell inventories and the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.
Bonds payable and borrowings	The Company determines the fair value by discounting future cash flows at an effective interest rate that consider current credit rating at assessment date and spread applied to recently issued.

38.2.3 Goodwill

Goodwill arising from business combination is as follows (Korean won in millions):

	SK Materials Co., Ltd.		SK TNS Co., Ltd.	SK Magic Co., Ltd. (*1)
 a. The total consideration transferred 	₩ 472,866	₩	165,721	₩ 610,000
 b. Fair value of porpotionate share of acquired net assets: 				
Fair value of the net identifiable assets	685,287		38,747	356,996
Non-controlling interests (*1)	(349,086)		(17,142)	<u> </u>
-	336,201		21,605	356,996
c. Goodwill (c=a-b)	₩ 136,665	₩	144,116	₩ 253,004

(*1) Non-controlling interests occurred due to the merger are measured in proportion to the non-controlling interest in net identifiable assets of the merged company.

39. Subsequent events

39.1 Disposal of shares of SK Encarsales.com Ltd.

As at January 19, 2018, the Group sold all of its shares (ordinary share: 250,001 shares, equity ownership: 50.01%) of SK Encarsales.com Ltd. to Carsales Holding Pty, Ltd. Consequently, SK Encarsales.com Ltd. was excluded from the consolidation.

39.2 SK Lubricants Co., Ltd. to be listed on the stock market

In accordance with a resolution of the Board of Directors on February 26, 2018, SK Lubricants Co., Ltd., a subsidiary, elected to push its IPO on the stock market to increase enterprise value.

39.3 Merger of SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.)

The Company entered into business combination with SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.), one of its subsidiaries, effective for March 1, 2018 for management efficiency. Details of significant information related to the merger are as follows:

	Details
Existing company after the acquisition	SK Holdings Co., Ltd.
Extinct company after the acquisition	SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.)
Effective date	March 1, 2018
Registration date	March 5, 2018
Ratio of acquisition	Ordinary shares of SK Holdings Co., Ltd. : ordinary shares
·	of SK Maritime Co., Ltd. (formerly, SK Shipping Co., Ltd.)
	= 1.0000000:0.0000000

39.4 Capital increase of SK Biopharmaceuticals Co., Ltd.

In accordance with a resolution of the Board of Directors on March 5, 2018, the Company participated in capital increase of SK Biopharmaceuticals Co., Ltd. and additionally acquired 15,000,000 ordinary shares amounting to $\mbox{$\mathbb{W}$}150,000$ million on March 9, 2018.