

# SK Inc. and its subsidiaries

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

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Ernst & Young Han Young 2-4F, 6-8F, Taeyoung Building, 111, Yeouigongwon-ro, Yeongdeungpo-gu, Seoul 07241 Korea

Tel: +82 2 3787 6600 Fax: +82 2 783 5890 ey.com/kr

#### Independent auditor's report

# SK Inc. The Shareholders and Board of Directors

## Opinion

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

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

# **Basis for opinion**

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

#### Key audit matters

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

(1) Impairment testing of goodwill and intangible assets with indefinite useful lives

As described in Notes 14 and 15 to the consolidated financial statements, through a number of business combinations in the past, the Group has recognized goodwill of \$5,618,511 million and intangible assets with indefinite useful life (brand-related assets) of \$2,634,144 million as of December 31, 2021.

Of the total goodwill and intangible assets recognized by the Group, SK brand-related assets of #1,975,000 million from merger with the Company in 2015 and goodwill of #1,155,037 million from the acquisition of the physical security service business in 2018 were significant in amount. In accordance with KIFRS 1036 *Impairment of Assets*, the Group shall test goodwill acquired in a business combination and intangible assets with indefinite useful lives for impairment annually. In consideration of the significance of management's assumptions and judgment used in estimating value in use related to impairment testing of goodwill and intangible assets with indefinite useful lives, we determined impairment testing of goodwill related to the acquisition of physical security service business and SK brand-related assets to be a key audit matter.



The major audit procedures we have performed in this regard were as follows:

- Obtained an understanding of assets subject to impairment testing and reviewed the Group's accounting policies related to impairment testing
- Assessed the qualification, experience and expertise of the Group's external valuers and checked their objectivity and independence
- Evaluated the impairment review report of the Group by involving internal valuers
- Compared the financial forecasts used in estimating value in use and those approved by management
- Compared the major assumptions used in the evaluation with the past financial performance, industry indicators and market data
- Evaluated the impact on the results of management's assessment due to changes in key assumptions from sensitivity analysis of discount rates and permanent growth rates that are used in estimating value in use

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

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

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

#### Auditor's responsibilities for the audit of the consolidated financial statements

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



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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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

The engagement partner on the audit resulting in this independent auditor's report is Yong-Soo Jung.

inst Joung Han Joung

March 11, 2022

This audit report is effective as of March 11, 2022, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditor's 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 Inc. and its subsidiaries

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

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

Tae-Won Chey, Dong-Hyun Jang, Sungha Park Chief Executive Officers SK Inc.

# SK Inc. and its subsidiaries Consolidated statements of financial position as of December 31, 2021 and 2020 (Korean won in millions and U.S. dollar in thousands)

			Korea	an we	'n		Translation i	nto l te 2)	
	Notes		2021		2020		2021	10 2)	2020
Assets									
Current assets:									
Cash and cash equivalents	6,35,37,38	₩	12,317,555	₩	10,096,940	\$	10,390,177	\$	8,517,031
Short-term financial instruments	6,35,37		6,124,750		4,483,815		5,166,385		3,782,214
Trade receivables, net	6,7,35,38		11,387,442		8,871,416		9,605,603		7,483,270
Other receivables, net	6,38		2,419,559		1,631,397		2,040,961		1,376,126
Inventories, net	8,38		10,680,704		6,179,497		9,009,451		5,212,566
Short-term investment securities	6,9,35,38		353,355		150,669		298,064		127,093
Other current assets	6,20,21,32,35,37,38		4,879,645		4,674,218		4,116,107		3,942,824
Assets held for sale	31		1,030,196		1,964,345		868,997		1,656,976
Total current assets	0.		49,193,206		38,052,297		41,495,745		32,098,100
Non-current assets:									
Long-term financial instruments	6,35,37		48,092		13,708		40,567		11,563
Long-term trade receivables, net	6,7,38		391,739		274,789		330,442		231,792
Long-term other receivables, net	6,38		318,884		341,099		268,987		287,726
Long-term investment securities	6,9,35,38		9,546,185		4,356,009		8,052,455		3,674,407
Investments in associates and joint ventures	10,35		26,050,445		21,018,963		21,974,226		17,730,040
Properties, plant and equipment, net	,								
	11,32,35		51,406,239		45,895,594		43,362,496		38,714,124
Right-of-use assets, net	12 13,35		5,034,316		6,178,480 569,156		4,246,576		5,211,708
Investment properties, net	13,35		967,128		4,454,730		815,798 4,739,360		480,098 3,757,680
Goodwill			5,618,511						
Intangible assets, net Deferred tax assets	15 27		12,681,890 765,000		12,041,277		10,697,503		10,157,129
	6,19,20,21,32,37,38		,		1,165,308		645,297		982,968
Other non-current assets	0,19,20,21,32,37,38		3,359,226		3,306,496		2,833,594		2,789,115
Total non-current assets		777	116,187,655		99,615,609		98,007,301	*	84,028,350
Total assets		₩	165,380,861	₩	137,667,906	\$	139,503,046	2	116,126,450
Liabilities and equity									
Liabilities									
Current liabilities:						<b>.</b>			
Short-term borrowings	6,7,16,33,35,38	₩	7,657,381	₩	6,201,430	\$	6,459,199	\$	5,231,067
Trade payables	6,38		9,519,544		6,061,576		8,029,982		5,113,097
Other payables	6,17,38		7,049,872		5,727,171		5,946,750		4,831,017
Provisions	18		530,049		634,979		447,110		535,621
Current portion of long-term debt	6,16,33,34,35,38		7,828,071		6,216,778		6,603,181		5,244,013
Other current liabilities	6,20,21,32,38		11,991,798		12,075,462		10,115,393		10,185,965
Liabilities held for sale	31		398,144		295,301		335,845		249,094
Total current liabilities			44,974,859		37,212,697	·	37,937,460		31,389,874
Non-current liabilities:									
Bonds payable and long-term borrowings	6,16,33,34,35,38		42,620,141		36,843,510		35,951,194		31,078,456
Long-term trade payables	6,38		-		712		-		601
Long-term other payables	6,17,33,34,38		1,854,343		1,168,784		1,564,186		985,900
Defined benefit liabilities	19		283,938		436,965		239,509		368,591
Provisions	18		706,452		302,422		595,911		255,101
Deferred tax liabilities	27		3,807,437		4,572,189		3,211,672		3,856,760
Other non-current liabilities	6,20,21,32,38		5,568,542		5,270,709		4,697,211		4,445,981
Total non-current liabilities		-	54,840,853		48,595,291		46,259,683		40,991,390
Total liabilities			99,815,712		85,807,988		84,197,143	_	72,381,264
Equity									
Equity attributable to owners of the parent:									
Issued capital	1,22		16,143		15,385		13,617		12,978
Other paid-in capital	22		6,445,296		5,250,146		5,436,774		4,428,634
Retained earnings	22		14,065,642		12,496,676		11,864,734		10,541,270
Other components of equity	22		721,262		(327,163)		608,403		(275,970)
Total equity attributable to owners of the parent			21,248,343	·	17,435,044	·	17,923,528	·	14,706,912
Non-controlling interests			44,316,806		34,424,874		37,382,375		29,038,274
Total equity			65,565,149		51,859,918		55,305,903	·	43,745,186
Total liabilities and equity		112	165,380,861	₩	137,667,906	¢	139,503,046	\$	116,126,450
iotai nasinties and equity		₩	100,000,001		101,001,300	\$	133,303,040	2	110,120,430

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

# SK Inc. and its subsidiaries Consolidated statements of comprehensive income (loss) for the years ended December 31, 2021 and 2020 (Korean won in millions and U.S. dollar in thousands, except for earnings per share)

			Korea	an wa	on		Translation in (No	nto l te 2)	
	Notes		2021		2020		2021	,	2020
Sales Cost of sales	4 26	₩	98,325,016 87,258,840	₩	80,818,755 75,442,024	\$	82,939,701 73,605,095	\$	68,172,716 63,637,304
Gross profit			11,066,176		5,376,731		9,334,606		4,535,412
Selling and administrative expenses	23,26		6,130,637		5,453,625		5,171,351		4,600,274
Operating profit (loss)	4		4,935,539		(76,894)		4,163,255		(64,862)
Finance income Finance costs Gain on investments in associates and joint ventures, net Other non-operating income Other non-operating expenses	6,24 6,24 10 6,25 6,25		3,583,466 5,035,174 1,924,360 2,549,603 1,930,960		4,996,045 5,877,886 799,698 1,828,987 1,638,206		3,022,747 4,247,300 1,623,248 2,150,656 1,628,815		4,214,294 4,958,149 674,566 1,542,798 1,381,869
Profit from continuing operations before income tax expense	4		6,026,834		31,744		5,083,791		26,778
Income tax expense from continuing operations	27		628,305		266,719		529,992		224,985
Profit (loss) for the year from continuing operations	4		5,398,529		(234,975)		4,553,799		(198,207)
Gain (loss) from discontinued operations	30		319,895		126,543		269,840	·	106,742
Profit (loss) for the year Attributable to: Owners of the parent Non-controlling interests		<u>₩</u>	<b>5,718,424</b> 1,970,204 3,748,220	<u>₩</u>	(108,432) 189,368 (297,800)	<u>\$</u>	<b>4,823,639</b> 1,661,918 3,161,721	<u>\$</u>	(91,465) 159,737 (251,202)
Other comprehensive income (loss): Items that will not be reclassified to profit or loss in subsequent periods (net of tax): Remeasurement gain (loss) on defined benefit plans Net gain on valuation of financial assets at FVOCI Items that may be reclassified to profit or loss in subsequent periods (net of tax): Equity adjustments of investments in associates and joint ventures Gain on valuation of derivative financial instruments Net gain (loss) on translation of foreign operations			15,153 968,949 449,875 152,878 <u>1,397,842</u> 2,984,697		(14,324) 721,423 (246,548) 7,753 (845,694) (377,390)		12,781 817,334 379,481 128,957 <u>1,179,115</u> 2,517,668		(12,083) 608,539 (207,970) 6,540 (713,364) (318,338)
Total comprehensive income (loss) for the year		₩	8,703,121	₩	(485,822)	\$	7,341,307	\$	(409,803)
Attributable to: Owners of the parent Non-controlling interests			3,018,428 5,684,693		(161,768) (324,054)		2,546,121 4,795,186		(136,455) (273,348)
Earnings per share (Korean won and U.S. dollar): Basic earnings per share Diluted earnings per share Basic earnings per share from continuing operations Diluted earnings per share from continuing operations	28	₩	37,408 37,332 34,754 34,683	₩	3,544 3,541 2,456 2,453	\$	32 31 29 29	\$	3 3 2 2

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

SK Inc. and its subsidiaries	Consolidated statements of changes in equity	for the years ended December 31, 2021 and 2020
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								Other	atti	Total equity attributable to				
	lssue	Issued capital	paic	Other paid-in capital		Retained earnings	о Со	components of equity	Ň	owners of the parent	Noi	Non-controlling interests	Tot	Total equity
As of January 1, 2020	₩	15,385	≱	4,074,176	₩	12,556,584	₩	37,624	₩	16,683,769	₩	35,492,263	₩	52,176,032
Total comprehensive income (loss):														
Profit (loss) for the year		'		ı		189,368		·		189,368		(297,800)		(108,432)
Remeasurement loss on defined benefit plans		•		'		(20,349)		•		(20,349)		6,025		(14,324)
Net gain on valuation of financial assets														
at FVOCI		•		•		34,000		201,513		235,513		485,910		721,423
Equity adjustments of investments in														
associates and joint ventures		•		'				(172,239)		(172,239)		(74,309)		(246,548)
Net gain on valuation of derivative														
financial instruments		•		ı		ı		18,951		18,951		(11,198)		7,753
Net loss on translation of foreign operations		'		ı		ı		(413,012)		(413,012)		(432,682)		(845,694)
Transaction with shareholders recognized directly to equity:														
Dividends				'		(264,372)		•		(264,372)		(942,181)		(1,206,553)
Equity transactions within the Group		•		1,178,099				•		1,178,099		305,019		1,483,118
Changes in the scope of consolidation		•		•				•		•		(105,915)		(105,915)
Others				(2,129)		1,445		'		(684)		(258)		(642)
As of December 31, 2020	₩	15,385	₩	5,250,146	₩	12,496,676	≱	(327,163)	₩	17,435,044	≱	34,424,874	₩	51,859,918
As of January 1, 2021	₩	15,385	₩	5,250,146	₩	12,496,676	₩	(327,163)	₩	17,435,044	₩	34,424,874	₩	51,859,918
Total comprehensive income (loss):														
Profit for the year		'		'		1,970,204				1,970,204		3,748,220		5,718,424
Remeasurement gain on defined benefit plans		•		'		5,212		•		5,212		9,941		15,153
Net gain (loss) on valuation of financial assets														
at FVOCI				•		(5,413)		132,261		126,848		842,101		968,949
Equity adjustments of investments in								1001				011 010		
associates and joint ventures		•		•		•		136,763		136,763		313,112		449,875
Net gain (loss) on valuation of derivative														
financial instruments		•		'		•		(11,510)		(11,510)		164,388		152,878
Net gain on translation of foreign operations				,		ı		790,911		790,911		606,931		1,397,842
Transaction with shareholders recognized directly to equity:														
Dividends		•		'		(396,563)		'		(396,563)		(986,617)		(1,383,180)
Paid-in capital increase		758		1,003,336		ı		ı		1,004,094		ı		1,004,094
Equity transactions within the Group		'		186,506		'		ı		186,506		5,195,959		5,382,465
Changes in the scope of consolidation		•		'				'		'		6,363		6,363
Others				5,308		(4,474)		'		834		(8,466)		(7,632)
As of December 31, 2021	≱	16,143	≱	6,445,296	≱	14,065,642	≱	721,262	≱	21,248,343	≱	44,316,806	≱	65,565,149

(Continued)

SK Inc. and its subsidiaries Consolidated statements of changes in equity for the years ended December 31, 2021 and 2020 (cont'd) (U.S. dollar in thousands)

					Other	Total equity attributable to		
	Issued capital	Other Daid-in capital	pital	Retained earnings	components of equity	owners of the parent	Non-controlling interests	Total equity
As of January 1, 2020	\$ 12,978	\$ 3,436,673	3,673 \$	10,591,804	\$ 31,737	\$ 14,073,192	\$ 29,938,644	\$ 44,011,836
Total comprehensive income (loss):								
Profit (loss) for the year	I		•	159,737	·	159,737	(251,202)	(91,465)
Remeasurement loss on defined benefit plans				(17,165)	- 00 001	(17,165)	5,082	(12,083) 608 520
net gain on valuation of infancial assets at FVOCI	ı			Z0,00U	108,801	130,001	403,070	000,003
Equity adjustments of investments in	·			•	(145,288)	(145,288)	(62,682)	(207,970)
associates and joint ventures								
Net gain on valuation of derivative	I		,	ı	15,986	15,986	(9,446)	6,540
financial instruments								
Net loss on translation of foreign operations	I				(348,386)	(348,386)	(364,978)	(713,364)
Transaction with shareholders recognized directly to equity:								
Dividends	•			(223,005)	•	(223,005)	(794,754)	(1,017,759)
Equity transactions within the Group	•	393	993,757	•	•	993,757	257,291	1,251,048
Changes in the scope of consolidation	•		•	•	•		(89,342)	(89,342)
Others	•	5	(1,796)	1,219		(277)	(217)	(194)
As of December 31, 2020	\$ 12,978	÷	4,428,634 \$	10,541,270	\$ (275,970)	\$ 14,706,912	\$ 29,038,274	\$ 43,745,186
As of January 1, 2021	\$ 12,978	\$	4,428,634 \$	10,541,270	\$ (275,970)	\$ 14,706,912	\$ 29,038,274	\$ 43,745,186
Total comprehensive income (loss):		1						
Profit for the year	ı			1,661,918		1,661,918	3,161,721	4,823,639
Remeasurement gain on defined benefit plans	I			4,396		4,396	8,385	12,781
Net gain (loss) on valuation of financial assets at FVOCI			·	(4,566)	111,566	107,000	710,334	817,334
Equity adjustments of investments in	·		,		115,363	115,363	264,118	379,481
associates and joint ventures								
Net gain (loss) on valuation of derivative					(6,709)	(6,709)	138,666	128,957
financial instruments								
Net gain on translation of foreign operations					667,153	667,153	511,962	1,179,115
Transaction with shareholders recognized directly to equity:								
Dividends				(334,511)	•	(334,511)	(832,237)	(1,166,748)
Paid-in capital increase	639		846,340			846,979		846,979
Equity transactions within the Group	•	157	157,323	•	•	157,323	4,382,926	4,540,249
Changes in the scope of consolidation							5,367	5,367
Others	•	4	4,477	(3,773)		704	(7,141)	(6,437)
As of December 31, 2021	\$ 13,617	Ŷ	5,436,774 \$	11,864,734	\$ 608,403	\$ 17,923,528	\$ 37,382,375	\$ 55,305,903

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

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# SK Inc. and its subsidiaries Consolidated statements of cash flows for the years ended December 31, 2021 and 2020 (Korean won in millions and U.S. dollar in thousands)

			Korea	an w	on		Translation in (No	nto U. te 2)	S. dollar
	Notes		2021		2020		2021		2020
Cash flows from operating activities:									
Profit (loss) for the year		₩	5,718,424	₩	(108,432)	\$	4,823,639	\$	(91,465)
Non-cash adjustments	33		7,472,183		8,504,582		6,302,980		7,173,836
Working capital adjustments	33		(4,101,511)		3,520,458		(3,459,731)		2,969,598
Interest received			183,838		172,418		155,072		145,439
Interest paid			(1,442,700)		(1,455,063)		(1,216,955)		(1,227,383)
Dividends received			303,314		303,677		255,853		256,159
Income tax paid			(2,008,378)		(1,243,029)		(1,694,119)		(1,048,527)
Net cash provided by operating activities			6,125,170		9,694,611		5,166,739		8,177,657
Cash flows from investing activities:									
Decrease (increase) in short-term and long-term									
financial instruments, net			(1,597,804)		(820,922)		(1,347,789)		(692,469)
Decrease (increase) in short-term and long-term loans, net			29,949		(81,463)		25,263		(68,716)
Decrease (increase) in short-term investment securities, net			(151,803)		31,025		(128,050)		26,170
Proceeds from disposal of long-term investment securities			555,038		324,789		468,189		273,968
Proceeds from disposal of investments in associates and			319,916		2,666,025		269,857		2,248,861
joint ventures									
Proceeds from disposal of property, plant and equipment			350,211		333,514		295,412		281,328
Proceeds from disposal of intangible assets			87,058		82,502		73,436		69,593
Proceeds from disposal of assets held for sale			642,999		-		542,386		-
Acquisition of long-term investment securities			(3,544,378)		(782,967)		(2,989,775)		(660,453)
Acquisition of investments in associates and joint ventures			(2,703,016)		(936,995)		(2,280,064)		(790,380)
Acquisition of property, plant and equipment			(8,749,665)		(9,238,751)		(7,380,569)		(7,793,126)
Acquisition of intangible assets			(722,584)		(517,999)		(609,518)		(436,946)
Net changes in cash due to changes			(1,509,843)		(1,640,273)		(1,273,592)		(1,383,613)
in the scope of consolidation			( ) /		( ) /		( , , , , , , , , , , , , , , , , , , ,		( ) = = ; = = ; ;
Acquisition of business			(39,877)		(1,043,212)		(33,637)		(879,976)
Transfer of business			-		1,277,027		-		1,077,205
Others, net			1,601,343		(71,235)		1,350,774		(60,089)
Net cash used in investing activities			(15,432,456)		(10,418,935)		(13,017,677)		(8,788,643)
Cash flows from financing activities:									
Increase in short-term borrowings, net			1,279,570		259,281		1,079,350		218,710
Increase in bonds payable and borrowings			13,616,204		13,599,288		11,485,621		11,471,352
Decrease in bonds payable and borrowings			(7,637,133)		(8,647,928)		(6,442,120)		(7,294,752)
Decrease in long-term other payables			(426,462)		(428,272)		(359,732)		(361,259)
Decrease in lease liabilities			(1,070,625)		(1,054,186)		(903,100)		(889,233)
Payment of dividends			(1,394,332)		(1,212,011)		(1,176,155)		(1,022,363)
Cash inflows from equity transactions within			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		( , , ,		(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		( , , ,
the Group			7,317,819		754,797		6,172,770		636,691
Others, net			(87,119)		(27,329)		(73,486)		(23,053)
Net cash provided by financing activities			11,597,922	<u> </u>	3,243,640		9,783,148		2,736,093
Net increase in cash and cash equivalents			2,290,636		2,519,316		1,932,210		2,125,107
Net foreign exchange effects			136,402		(303,812)		115,059		(256,272)
Cash and cash equivalents included in assets held for sale			(206,423)		(100,319)		(174,123)		(84,622)
Cash and cash equivalents at the beginning of the year			10,096,940		7,981,755		8,517,031		6,732,818
Cash and cash equivalents at the end of the year		₩	12,317,555	₩		\$	10,390,177	\$	8,517,031
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The accompanying notes are an integral part of the consolidated financial statements.

# 1. Corporate information

# 1.1 Parent Company

SK Inc. (the "Company" or "Parent Company") was established on April 13, 1991 and has been engaged in providing systems integration, software design and development, information processing and consulting services, 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 Inc. 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 of the acquisition date.

As of December 31, 2021, the issued capital of the Company amounts to #16,143 million (including #113 million of preferred shares). Major shareholders and their equity ownership are Tae-won Chey, National Pension Service and Ki-won Choi each holding 17.50%, 8.38%, and 6.50%, respectively, as of December 31, 2021.

# 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 of December 31, 2021 are as follows:

Equity

			<del>.</del>	ownership
Subsidiaries	Domicile	Principal business activity	The largest shareholders SK Inc.	<u>(*1)</u> 33,40%
SK Innovation Co., Ltd. (*2)	Korea Korea	Resource development	SK Inc. SK Innovation Co., Ltd.	33.40% 100.00%
SK Energy Co., Ltd. Netruck Co., Ltd.	Korea	Crude oil refining and sales Transportation and oil sales	SK Innovation Co., Ltd. SK Energy Co., Ltd.	100.00%
Jeju United FC Corporation	Korea	Sports association sponsoring	SK Energy Co., Ltd.	100.00%
Happy Didim Co., Ltd.	Korea	Service	SK Energy Co., Ltd.	100.00%
Green & Co. Asia Ltd.	Mvanmar	Manufacturing	SK Energy Co., Ltd.	80.00%
SK Energy Hong Kong Co., Ltd.	Hong Kong	Investment	SK Energy Co., Ltd.	100.00%
	Cayman	Investment		100.00%
SK Energy Road Investment Co., Ltd.			SK Energy Co., Ltd.	100.00%
SK Energy Road Investment (HK) Co., Ltd.	Hong Kong China	Investment	SK Energy Road Investment Co., Ltd. SK Energy Road Investment (HK) Co., Ltd.	100.00%
SK Asphalt (Shanghai) Co., Ltd. goodsFLOW Co., Ltd. (*2)	Korea	Logistics	SK Energy Co., Ltd.	41.00%
goodsCORE Co., Ltd.	Korea	Service Service	goodsFLOW Co., Ltd.	100.00%
goodsPOST Co., Ltd.	Korea	Transportation industry		100.00%
opengarden Co., Ltd.	Korea	Service	goodsFLOW Co., Ltd. goodsFLOW Co., Ltd.	100.00%
SK Geo Centric Co., Ltd. (formerly, 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 Geo Centric Co., Ltd.	100.00%
SK Geo Centric China, Ltd.	Hong Kong	Investment	SK Geo Centric Co., Ltd.	100.00%
(formerly, SK Global Chemical China Limited)	Hong Kong	Investment	SK Geo Centric Co., Ltd.	100.00%
Sino-Korea Green New Material (JiangSu) Ltd.	China	Petrochemicals sales	SK Geo Centric China, Ltd.	100.00%
Sino-Korea Green New Material (JiangSu) Ltd. SK Global Chemical International Trading (Shanghai) Co., Ltd.	China	Petrochemicals sales	SK Geo Centric China, Ltd. SK Geo Centric China, Ltd.	100.00%
SK Global Chemical International Trading (Shanghai) Co., Ltd. SK Global Chemical International Trading (Guangzhou) Co., Ltd.	China	Petrochemicals sales	SK Geo Centric China, Ltd.	100.00%
SK Global Chemical International Trading (Guangzhou) Co., Ltd. SK GC Americas. Inc.	USA	Petrochemicals sales	SK Geo Centric Co., Ltd.,	100.00%
SK GC Americas, Inc. 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 sales	SK Global Chemical Americas, Inc.	100.00%
	Brazil		SK Global Chemical Americas, Inc.	100.00%
SK Geo Centric Brazil LTDA SK Geo Centric Japan Co., Ltd.		Petrochemicals sales Petrochemicals sales		100.00%
(formerly, SK Global Chemical Japan Co., Ltd.)	Japan	Feulociternicais sales	SK Geo Centric Co., Ltd.	100.00 /6
SK Geo Centric Singapore Pte. Ltd.	Singapore	Petrochemicals sales	SK Geo Centric Co., Ltd.	100.00%
(formerly, SK Global Chemical Singapore Pte. Ltd.)	Singapore	Petrochemicals sales	SK Geo Centric Co., Ltd.	100.00%
SK Geo Centric Investment Hong Kong Ltd.	Hong Kong	Investment	SK Geo Centric Co., Ltd.	100.00%
(formerly, SK Global Chemical Investment Hong Kong Ltd.)	Hong Kong	Investment	SK Geo Centric Co., Ltd.	100.00%
Ningbo SK Performance Rubber Co., Ltd.	China	Synthetic rubber manufacturing	SK Geo Centric Investment Hong Kong Ltd.	80.00%
Happymoeum Co., Ltd.	Korea	Service	SK Geo Centric Investment hong Kong Etd.	100.00%
SK Functional Polymer, S.A.S	France	Petrochemicals sales	SK Geo Centric Co., Ltd.	100.00%
Green & Connect Capital, Inc.	USA	Investment	SK Geo Centric Co., Ltd.	100.00%
SK Incheon Petrochem Co., Ltd.	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%
SK Lubricants Co., Ltd.	Korea	Lubricants oil manufacturing and sales	SK Innovation Co., Ltd.	60.00%
Yubase Manufacturing Asia Corporation	Korea	Lubricants of manufacturing and sales	SK Lubricants Co., Ltd.	70.00%
SK Energy Lubricants (Tianjin) Co., Ltd.	China	Lubricants oil processing Lubricants oil manufacturing and sales	SK Lubricants Co., Ltd.	100.00%
SK Lubricants Americas, Inc.	USA	Lubricants of 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 Japan Co., Ltd. SK Lubricants & Oils India Pvt. Ltd.	India	Lubricants oil sales	SK Lubricants Co., Ltd.	100.00%
Iberian Lube Base Oils, S.A.	Spain			70.00%
SK Lubricants Russia. LLC	Russia	Lubricants oil manufacturing and sales Lubricants oil sales	SK Lubricants Co., Ltd. SK Lubricants Co., Ltd.	100.00%
SK Lubricants Russia, LLC SK ie technology Co., Ltd.	Kussia Korea	Plastic film manufacturing	SK Lubricants Co., Ltd. SK Innovation Co., Ltd.	100.00%
	China	Separation membrane for secondary		100.00%
SK Hi-tech Battery Materials(Jiang Su) Co., Ltd.		battery manufacturing	SK ie technology Co., Ltd.	
SK Hi-tech Battery Materials Poland Sp. Zo.o.	Poland	Separation membrane for secondary	SK ie technology Co., Ltd.	100.00%
SK Innovation Insurance (Bermuda), Ltd.	Bermuda	Insurance	SK Innovation Co., Ltd.	100.00%

				Equity ownership
Subsidiaries SK USA, Inc.	Domicile USA	Principal business activity Management consulting services	The largest shareholders SK Innovation Co., Ltd.	<u>(*1)</u> 100.00%
Blue Dragon Energy Co., Limited. Jiangsu SK Battery Certification Center	Hong Kong China	battery manufacturing Investment Lithium battery certification and	SK Innovation Co., Ltd. Blue Dragon Energy Co., Limited.	100.00% 100.00%
		evaluation		
Happy Kium Co., Ltd.	Korea China	Service	SK Innovation Co., Ltd. SK Innovation Co., Ltd.	100.00% 100.00%
SK Future Energy(Shanghai) Co., Ltd. SK E&P Company, Ltd.	USA	Battery sales Crude oil development	SK Innovation Co., Ltd.	100.00%
SK On Co., Ltd.	Korea	Lithium battery manufacturing	SK Innovation Co., Ltd.	100.00%
SK On Hungary Kft. (formerly, SK Battery Hungary Kft.)	Hungary	Lithium battery manufacturing	SK On Co., Ltd.	100.00%
SK On(Jiangsu) Co., Ltd. (formerly, SK Battery(Jiangsu) Co., Ltd.) SK On(Yancheng) Co., Ltd. (formerly, SK Battery(Yancheng) Co., Ltd.)	Hungary Hungary	Lithium battery manufacturing Lithium battery manufacturing	SK On Co., Ltd. SK On Co., Ltd.	70.01% 100.00%
SK Battery America, Inc.	USA	Lithium battery manufacturing	SK On Co., Ltd.	100.00%
SK Battery Manufacturing Kft.	Hungary	Lithium battery manufacturing	SK On Co., Ltd.	100.00%
SK Mobile Energy Co., Ltd. Yancheng Yandu District M Energy Consulting Limited Company	Korea China	Lithium battery manufacturing Service / manufacturing service	SK On Co., Ltd. SK Mobile Energy Co., Ltd.	100.00% 100.00%
Mobile Energy Battery America, LLC	USA	Lithium battery manufacturing	SK Mobile Energy Co., Ltd.	100.00%
Happy Mideum Co., Ltd. SK Earthon Co., Ltd.	Korea Korea	Service Crude and natural gas	SK On Co., Ltd. SK Innovation Co., Ltd.	100.00% 100.00%
SK Telecom Co., Ltd. (*2)	Korea	manufacturing Mobile telecommunications	SK Inc.	30.01%
SK Telink Co., Ltd.	Korea	International call and MVNO business	SK Telecom Co., Ltd.	100.00%
SK Broadband Co., Ltd.	Korea	Wire communications	SK Telecom Co., Ltd.	74.34%
Home&Service Co., Ltd.	Korea	Information and communication facilities management business	SK Broadband Co., Ltd.	100.00%
Media S Co., Ltd.	Korea	Broadcasting program production	SK Broadband Co., Ltd.	100.00%
Broadband Nowon Broadcasting Corporation	Korea	Broadcasting business	SK Telecom Co., Ltd.	100.00%
SK Stoa Co., Ltd. PS&Marketing Corp	Korea Korea	Other resale communication business Resale communication business	SK Telecom Co., Ltd. SK Telecom Co., Ltd.	100.00% 100.00%
Serviceace Co., Ltd.	Korea	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%
SK O&S Co., Ltd.	Korea	Maintenance management	SK Telecom Co., Ltd.	100.00%
SK Communications Co., Ltd.	Korea	Internet portal service	SK Telecom Co., Ltd.	100.00%
Quantum Innovation Private Equity Joint Venture	Korea	Investment	SK Telecom Co., Ltd.	59.90%
Panasia Semiconductor Materials, LLC	Korea	Investment	Quantum Innovation Private Equity Joint Venture	66.42%
SK Telecom China Holding Co., Ltd.	China Hana Kana	Holding company Investment	SK Telecom Co., Ltd. SK Telecom Co., Ltd.	100.00% 100.00%
SK Global Healthcare Business Group, Ltd. SKT Americas, Inc.	Hong Kong USA	Management consulting	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.	USA	Investment	Atlas Investment, Ltd.	100.00%
SK Telecom China Fund I L.P.	Cayman	Investment	Atlas Investment, Ltd.	100.00%
SK Telecom Japan Inc.	Japan	Management consulting and information gathering	SK Telecom Co., Ltd.	100.00%
SK Planet Japan, K. K.	Japan Korea	Digital contents sourcing and presenting	SK Telecom Japan Inc.	79.78%
Happy Hanool Co., Ltd. SK MENA Investment B.V.	Netherlands	Service Investment	SK Telecom Co., Ltd. SK Telecom Co., Ltd.	100.00% 100.00%
SK Latin America Investment S.A.	Spain	Investment	SK Telecom Co., Ltd.	100.00%
SK Technology Innovation Company	Cayman	Research and development	SK Telecom Co., Ltd.	96.88%
SK Square Co., Ltd. (*2,3)	Korea	Holding company	SK Inc.	30.56%
One store Co., Ltd. (*2,4)	Korea	Telecommunication service	SK Square Co., Ltd.	48.41%
Rokeu Media Co., Ltd.	Korea	Publication and telemarketing	One store Co., Ltd.	100.00%
11street Co., Ltd. (*5)	Korea	E-commerce	SK Square Co., Ltd.	98.10% 100.00%
SK Shieldus Co., Ltd. (formerly, ADT Caps Co., Ltd.) (*6) CAPSTEC Co., Ltd.	Korea Korea	Information security service and automatic security Manned security	SK Square Co., Ltd. SK Shieldus Co., Ltd.	100.00%
SK infosec Information Technology (Wuxi) Co., Ltd.	China	System software development and	SK Shieldus Co., Ltd.	100.00%
CAPS America Inc.	USA	supplying System software development and	SK Shieldus Co., Ltd.	100.00%
SK Planet Co., Ltd.	Korea	supplying Telecommunication service and system	SK Square Co., Ltd.	98.65%
SK M & Service Co., Ltd.	Korea	software development and supplying Internet website service	SK Planet Co., Ltd.	100.00%
SK Planet Global Holdings Pte, Ltd.	Singapore	Holding company	SK Planet Co., Ltd.	100.00%
SKP America, LLC	USA	Digital contents sourcing and presenting	SK Planet Co., Ltd.	100.00%
K-Net Culture & Contents Venture Fund	Korea	Investment fund and information gathering	SK Planet Co., Ltd.	59.00%
SK Square Americas, Inc (formerly, SK Telecom TMT investment Corp.)	USA	Investment	SK Square Co., Ltd.	100.00%
Dreamus Company Co., Ltd. (*2)	Korea	Video and audio equipment manufacturing	SK Square Co., Ltd.	41.78%
Iriver Enterprise Ltd.	Hong Kong	Chinese subsidiary management	Dreamus Company Co., Ltd.	100.00%
Iriver China Co., Ltd. Dongguan iriver Electronics Co., Ltd.	China China	MP3,4 production and sales Electronic book production and sales	Iriver Enterprise, Ltd. Iriver Enterprise, Ltd.	100.00% 100.00%
Life Design Company Japan Inc.	Japan	Japan goods sales	Dreamus Company Co., Ltd.	100.00%
Studio Dolphin Co., Ltd.	Korea	Publishing	Dreamus Company Co., Ltd.	100.00%
Id Quantique SA	Swiss	Quantum information and communication business	SK Square Co., Ltd.	69.30%
ld Quantique Ltd.	Korea	Quantum information and communication business	Id Quantique SA	100.00%
FSK L&S Co., Ltd.	Korea	Cargo transport shipment and logistics consulting project	SK Square Co., Ltd.	60.00%
FSK L&S (Shanghai) Co., Ltd.	China	Transportation industry	FSK L&S Co., Ltd.	100.00%
FSK L&S(Hungary) Co., Ltd.	Hungary	Transportation industry	FSK L&S Co., Ltd.	100.00%
FSK L&S Vietnam Co., Ltd. FSK L&S (Jiangsu) Co., Ltd.	Vietnam China	Transportation industry Transportation industry	FSK L&S Co., Ltd. FSK L&S Co., Ltd.	100.00% 100.00%
i on Luo (Jiangsu) ou., Liu.	Grima	manaportation industry	i on Lao CO., Llu.	100.00%

Subsidiaries	Domicile	Principal business activity	The largest shareholders	Owne
cross Co., Ltd. (*2)	Korea	Media agency	SK Square Co., Ltd.	34
fra Communications Co., Ltd.	Korea	Service operation business	Incross Co., Ltd.	100
indknock Co., Ltd.	Korea	Software development	Incross Co., Ltd.	100
map Mobility Co., Ltd. (*7)	Korea	Information and communication industry	SK Square Co., Ltd.	66
LP Inc.	Korea	Cargo transport shipment business	Tmap Mobility Co., Ltd.	100
ood service Co., Ltd.	Korea	Driving agency service	Tmap Mobility Co., Ltd.	100
K Networks Co., Ltd. (*2)	Korea	Distribution and trading business	SK Inc.	39
K Networks Service Co., Ltd.	Korea	Equipment repair service	SK Networks Co., Ltd.	86
K Magic Co., Ltd.	Korea	Household appliances manufacturing, sales and rent	SK Networks Co., Ltd.	100
K Magic Service Co., Ltd.	Korea	House appliances repair and others	SK Magic Co., Ltd.	100
K Magic Vietnam Company Limited	Vietnam	Household appliances sales and rent	SK Magic Co., Ltd.	100
K Networks Retails Malaysia Sdn. Bhd.	Malaysia	Household appliances sales and rent	SK Magic Co., Ltd.	100
KRent-a-Car Co., Ltd.	Korea	Car rental	SK Networks Co., Ltd.	72
KRent-a-Car Service Co., Ltd.	Korea	Business support services	SK Rent-a-Car Co., Ltd.	100
K Networks (China) Holdings Co., Ltd.	China	Holding company	SK Networks Co., Ltd.	100
DSK (Pinghu) Steel Processing Center Co., Ltd.	China	Steel processing and sales	SK Networks Co., Ltd.	80
Networks Japan Co., Ltd.	Japan	Trading business	SK Networks Co., Ltd.	100
Networks Deutschland GmbH	Germany	Trading business	SK Networks Co., Ltd.	100
BRASIL LTDA	Brazil	Trading business	SK Networks Co., Ltd.	100
Networks Trading Malaysia Sdn Bhd	Malaysia	Trading business	SK Networks Co., Ltd.	100
Networks America, Inc.	UŚA	Trading business	SK Networks Co., Ltd.	100
NETWORKS BRASIL INTERMEDIACAO DE NEGOCIOS LTDA.	Brazil	Trading business	SK Networks Co., Ltd.	100
tworks Tejarat Pars	Iran	Trading business	SK Networks Co., Ltd.	100
NTIT Co., Ltd.	Korea	Resale communication business	SK Networks Co., Ltd.	100
NTIT VINA	Vietnam	Resale communication business	MINTIT Co., Ltd.	100
nX Capital	USA	Investment	SK Networks Co., Ltd.	100
K Networks Hong Kong Ltd.	Hong Kong	Trading business	SK Networks Co., Ltd.	100
K Networks (Xiamen) Steel Processing Center Co., Ltd.	China	Steel processing and sales	SK Networks Hong Kong Ltd.	100
Networks Resources Australia (Wyong) Pty Ltd. (*8)	Australia	Resource development	SK Networks Co., Ltd.	10
K Networks Resources Pty Ltd. (*8)	Australia	Resource development	SK Networks Co., Ltd.	100
Networks (China) Holdings Co., Ltd. (*8)	China	Holding company	SK Networks Co., Ltd.	10
nenyang SK Bus Terminal Co., Ltd. (*8)	China	Bus terminal business	SK Networks (China) Holdings Co., Ltd.	7
K Networks (Dandong) Energy Co., Ltd. (*8)	China Korea	Petroleum sales E-commerce retail business	SK Networks (China) Holdings Co., Ltd.	100 100
artini Co., Ltd. KC Co., Ltd. (*2)	Korea	Petrochemicals manufacturing	SK Networks Co., Ltd. SK Inc.	40
oori Fine Chem Co., Ltd.	Korea	Petrochemicals manufacturing	SKC Co., Ltd.	100
(Telesys Co., Ltd.	Korea	Communications equipment manufacturing and sales	SKC Co., Ltd.	8
chdream Co., Ltd.	Hong Kong	Semiconductor component	SK Telesys Co., Ltd.	100
K Telesys Corp.	USA	Manufacturing	SK Telesys Co., Ltd.	100
KC Solmics Co., Ltd.	Korea	Semiconductor component manufacturing	SKC Co., Ltd.	100
olmics Taiwan Co., Ltd.	Taiwan	Semiconductor component distribution	SKC Solmics Co., Ltd.	100
olmics Shanghai Co., Ltd.	China	Semiconductor component distribution	SKC Solmics Co., Ltd.	100
KC Solmics Hong kong Co., Ltd.	Hong Kong	SPC	SKC Solmics Co., Ltd.	100
KC Semiconductor Materials (Wuxi) Co., Ltd.	China	Semiconductor material cleaning	SKC Solmics Hong kong Co., Ltd.	100
KC-ENF Electronic Materials Ltd.	Hong Kong	SPC	SKC Solmics Co., Ltd.	75
KC (Nantong) Semiconductor Materials Technology Co., Ltd. E (JIANGSU) Electronic Materials Co., Ltd.	China China	Electronic materials manufacturing Sales of raw chemical materials and chemical products related to	SKC-ENF Electronic Materials Ltd. SKC-ENF Electronic Materials Ltd.	100 100
		semiconductor		
KC (Jiangsu) High tech Plastics Co., Ltd.	China	Film manufacturing	SKC Co., Ltd.	100
KC, Inc.	USA	Manufacturing	SKC Co., Ltd.	100
KC Europe GmbH	Germany	Sales	SKC Co., Ltd.	100
KC Hi-Tech&Marketing Co., Ltd.	Korea	Film manufacturing	SKC Co., Ltd.	100
KC Hi-Tech&Marketing (Suzhou) Co., Ltd.	China	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	10
KC Hi-Tech&Marketing Polska SP.Z.O.O	Poland	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	10
KC Hi-Tech&Marketing USA, LLC	USA	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	10
KC Hi-Tech&Marketing Vina Co., Ltd.	Vietnam	Film manufacturing	SKC Hi-Tech&Marketing Co., Ltd.	100
KC PU Specialty Co., Ltd.	Hong Kong	SPC	SKC Co., Ltd.	10
KC (Nantong) PU Specialty Co., Ltd.	China	Electronic materials manufacturing	SKC PU Specialty Co., Ltd.	10
K PIC Global Co., Ltd.	Korea	Petrochemicals sales	SKC Co., Ltd.	5
KCFTH Co., Ltd.	Korea	Professional, scientific	SKC Co., Ltd.	10
	K	technology services		
K Nexilis Co., Ltd.	Korea	Manufacturing	SKCFTH Co., Ltd.	10
K Nexilis Malaysia Sdn. Bhd. exilis Management Malaysia Sdn. Bhd.	Malaysia Malaysia	Manufacturing SPC	SK Nexilis Co., Ltd. SK Nexilis Co., Ltd.	10 10
K Nexilis Poland sp.z o.o.	Poland	Manufacturing	SK Nexilis Co., Ltd. SK Nexilis Co., Ltd.	10
K TBMGEOSTONE Co., Ltd.	Korea	Manufacturing	SKC Co., Ltd.	5
Inewone Co., Ltd.	Korea	Other engineering service	SKC Co., Ltd.	10
covance Co. Ltd.	Korea	Manufacturing	SKC Co., Ltd.	100
KE&S Co., Ltd.	Korea	City gas business and power generation	SK Inc.	9
angwon City Gas Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd.	10
ongnam Energy Service Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd.	10
o-one Energy Service Co., Ltd. arae Energy Service Co., Ltd.	Korea Korea	City gas business Integrated energy service	SK E&S Co., Ltd. SK E&S Co., Ltd.	100 100
usan City Gas Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd. SK E&S Co., Ltd.	100
conbuk Energy Service Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd. SK E&S Co., Ltd.	100
nonnam City Gas Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd.	10
nungcheong Energy Service Co., Ltd.	Korea	City gas business	SK E&S Co., Ltd.	10
aju Energy Service Co., Ltd.	Korea	Energy business	SK E&S Co., Ltd.	5
oju Energy Service Co., Ltd.	Korea	Energy business	SK E&S Co., Ltd.	10
ninanjeungdo Sunlight Co., Ltd.	Korea	New regeneration project	SK E&S Co., Ltd.	10
K E&S Hong Kong Co., Ltd.	Hong Kong	City gas business	SK E&S Co., Ltd., Pusan City Gas Co., Ltd.	10
	Australia	Resource development	SK E&S Co., Ltd.	100
				100
K E&S Australia Pty. Ltd. K E&S Americas, Inc.	USA	Holding company	SK E&S Co., Ltd.	100
	USA USA USA	Holding company LNG business Resource development	SK E&S Co., Ltd. SK E&S Americas, Inc. SK E&S Americas, Inc.	100

Finally, Inc.         UBA         Non-segmenting product         Bit ESA Process, Inc.         1100000000000000000000000000000000000	Cubridiarias	Domicile	Principal business activity	The largest shareholders	Equity ownership (*1)
Jr.A. Amster.         Bit B. M. Person         Bit B. M. Person <th></th> <th></th> <th></th> <th></th> <th>100.00%</th>					100.00%
Old Statubar         USA         New Ageneration biology         Proc Product         UCA         Page           Cold Statubar         USA         Description         USA         Description         <	LNG Americas, Inc	USA	LNG business	SK E&S Americas, Inc.	100.00%
Max         Category Status         Old Status         I.C.         BBA           Cold Previous Status         USA         Enspy Status         Max         Max </td <td></td> <td></td> <td></td> <td></td> <td></td>					
Kole         Total         Hand         Energy states         App Capara Energy LLC         1000           Kole         Non-         Kale         Energy states         Kale         Non-					96.39%
KCE LAM Design, LLC         UBA         Ency states         Kc (c) description         Composition         Composition <thcomposition< th=""></thcomposition<>	KCE Global Holdings, LLC			Key Capture Energy, LLC	100.00%
KEE MY 1110         USA         Encign status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.10         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.10         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.10         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.10         USA         Freey status         Ky Captus Freey, 11.0         (10.000)           KEE MY 11.00         USA					
KCE MY 21 LC         UBA         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 41 LC         UD 44         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 41 LC         UD 44         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 41 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 11 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 11 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 11 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 14 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 14 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 14 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 14 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 14 LC         UD 45         Ensign within         Kry Debta Prog. LC         UD 075           KCE MY 14 LC         UD 45         Ensign within <td></td> <td></td> <td></td> <td></td> <td></td>					
KCE MY 5. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 10. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 10. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 10. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 10. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 11. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 11. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 11. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 11. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 11. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 11. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.005           KCE MY 11. LC         USA         Energy selection         Mon Calcular Energy. LCC         100.	KCE NY 2, LLC	USA	Energy solution	Key Capture Energy, LLC	100.00%
KCE MY 61.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 11.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 11.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 11.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 11.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 11.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 11.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 21.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 21.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 21.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 21.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 21.10         USA         Ensign before         Kr C Castine Frage LLC         100 DVS           KCE MY 21.10         U					
KCE MY 21.10         USA         Ensign before         Kr. Christin Errogi, LLG         100 DYA           KCE MY 11.10         USA         Ensign before         Kr. Christin Errogi, LLG         100 DYA           KCE MY 11.10         USA         Ensign before         Kr. Christin Errogi, LLG         100 DYA           KCE MY 11.10         USA         Ensign before         Kr. Christin Errogi, LLG         100 DYA           KCE MY 11.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA           KCE MY 11.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA           KCE MY 21.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA           KCE MY 21.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA           KCE MY 21.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA           KCE MY 21.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA           KCE MY 21.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA           KCE MY 21.10         USA         Errogi velocion         Kr. Christin Errogi, LLG         100 DYA					
KCE MY 11. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 14. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 14. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 14. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY 24. LIC         USA         Energy studien         Key Gapter Energy, LIC         100,00           KCE MY		USA			100.00%
MCE MY 12. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 18. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 18. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 18. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 18. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 28. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 28. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 28. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 28. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 28. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 28. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00           MCE MY 28. LLG         USA         Ensity station         Mol capture Ensity, LLG         100.00					
MCE MY 14, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000           MCE MY 31, LLC         USA         Energy subtom         Key Capitre Energy, LLC         100,000					
KCE MY 19. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC         USA         Energy subtom         Key Capture Ferry, LLC         10000           KCE MY 25. LLC <td< td=""><td></td><td></td><td></td><td></td><td>100.00%</td></td<>					100.00%
KCE HV 31. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 32. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 31. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 31. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 31. LLC         USA         Endry solution         Key Capter Endry, LLC         100 DW           KCE HV 31. LLC					100.00%
KCE WY 22, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 21, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 21, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00           KCE WY 31, LLC         USA         Energy solution         Ke <sup>2</sup> Galax Energy, LLC         100.00					
KCE W 72, LLC         USA         Energy subtom         Key Capture Enropy LLC         100,000           KCE W 72, LLC         USA         Energy subtom         Key Capture Enropy LLC         100,000           KCE W 73, LLC         USA         Energy subtom         Key Capture Enropy LLC         100,000           KCE W 73, LLC         USA         Energy subtom         Key Capture Enropy LLC         100,000           KCE W 73, LLC         USA         Energy subtom         Key Capture Enropy LLC         100,000           KCE W 73, LLC         USA         Enropy subtom         Key Capture Enropy LLC         100,000           KCE W 73, LLC         USA         Enropy subtom         Key Capture Enropy LLC         100,000           KCE W 73, LLC         USA         Enropy subtom         Key Capture Enropy LLC         100,000           KCE W 74, LLC         USA         Enropy subtom         Key Capture Enropy LLC         100,000           KCE W 74, LLC         USA         Enropy subtom         Key Capture Enropy LLC         100,000           KCE W 74, LLC         USA         Enropy subtom         Key Capture Enropy LLC         100,000           KCE W 74, LLC         USA         Enropy subtom         Key Capture Enropy LLC         100,000           KCE W 74, LLC					100.00%
KCE MY 21, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         00.000           KCE WY 31, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE WY 31, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE WY 31, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000           KCE TX 31, LLC         USA         Emergy solution         Key Gutter Emergy, LLC         100.000	KCE NY 25, LLC		Energy solution	Key Capture Energy, LLC	100.00%
KEE WY 24.11C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE WY 32.11C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE WY 32.11C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE WY 32.11C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE WY 32.11C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 12.1C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 12.1C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 12.1C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 12.1C         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 13.1LC         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 13.1LC         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 13.1LC         USA         Erreing subtom         Key Capture Enregy. LC         100.00           KCE XX 13.1LC					
KCE WY 32, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE WY 32, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 3, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 3, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC         USA         Emergy sublem         Key Guint Emergy, LLC         100, D00           KCE TX 1, LLC <td></td> <td></td> <td></td> <td></td> <td></td>					
KCE W13.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 7.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC         USA         Energy solution         Kry Capture Termy, LLC         100.0%           KCE TX 3.LLC	KCE NY 29, LLC	USA	Energy solution	Key Capture Energy, LLC	100.00%
KCE TX 2. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 1. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 2. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 2. LLC         USA         Energy solution         Key Capture Energy. LLC         100.00%					100.00%
KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%           KCE TX JL LC         USA         Energy solution         KryC Capture Energy, LC         100.00%					
KEE TX 8.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 8.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 12.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 13.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 13.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 14.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 14.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 15.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 21.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 21.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 23.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 24.LC         USA         Energy solution         Kry Capture Energy. LC         100.00%           KCE TX 24					100.00%
KGE TX 11, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 13, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 13, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 14, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 14, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%	KCE TX 8, LLC	USA	Energy solution	Key Capture Energy, LLC	100.00%
KGE TA 10, LLG         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 10, LLG         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 10, LLG         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 15, LLG         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 15, LLG         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 15, LLG         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 20, LLC         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 23, LLC         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 23, LLC         USA         Energy solution         Key Capture Energy, LLC         100, 00%           KGE TA 24, LLC         USA         Energy solution         Key Capture Energy, LLC         100,					
KGE TX 10. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 10. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KGE TX 21. LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%					
KCE TX 14, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 15, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 15, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 10, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 20, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 20, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 25, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 25, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 25, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LC         100.05%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LC         100.05%					100.00%
KCE TX 15. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 15. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 15. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 21. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 21. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 22. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 23. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 23. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 21. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE TX 12. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE CT 12. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%           KCE CT 12. LIC         USA         Energy solution         Key Capture Energy. LLC         100.00%					100.00%
KCE TX 15, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 15, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 15, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 24, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 24, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 24, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 24, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 71, LC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE TX 11, LC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE M 11, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%           KCE M 11, LLC         USA         Energy solution         Key Capture Energy, LLC         100.0%					
KCE TX 11, LC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 20, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 20, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 22, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 23, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 23, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 24, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 12, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 14, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE TX 14, LLC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE M 11, LC         USA         Emergy solution         Key Capture Emergy, LLC         100.00%           KCE M 11, LC         USA         Emergy solution         Key Capture Emergy, LLC         100.00% <td></td> <td></td> <td></td> <td></td> <td></td>					
KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 25, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 25, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 25, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 11, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 11, LC         USA         Energy solution         Key Capture Energy, LLC         100.00% <t< td=""><td>KCE TX 17, LLC</td><td>USA</td><td>Energy solution</td><td>Key Capture Energy, LLC</td><td>100.00%</td></t<>	KCE TX 17, LLC	USA	Energy solution	Key Capture Energy, LLC	100.00%
KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 11, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IX 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%					
KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 22, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE CT 2, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE CT 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE CT 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%					
KCE TX 25, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 27, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE CT 4, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IL 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IL 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IL 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%					100.00%
KCE TX 28, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 28, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 28, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 1.LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 1.LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IL 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IL 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IL 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IL 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%					100.00%
KCE TX 27, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 28, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE TX 21, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE N1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE N1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE N1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%					
KCE TX28, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE CT 1, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE CT 1, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE CT 1, LC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 2, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE M 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE II, 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE II, 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE KI, 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE KI, 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00% <tr< td=""><td></td><td></td><td></td><td></td><td></td></tr<>					
KCE C12, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE C14, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%           KCE KM3, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%		USA			100.00%
KCE C14, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE M1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE L1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE L1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE L1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE L1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE L2, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE CK 1, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)           KCE CK 3, LLC         USA         Energy solution         Key Capture Energy, LLC         (100.00%)					100.00%
KCE MD 1, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE M1 1, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE M3, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE M1, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE M2, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE M3, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE M3, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE OK 2, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE OK 3, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE OK 4, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE DK 4, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE Bushy Creek Holdings, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE DK 4, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE Bushy Creek Holdings, LLCUSAEnergy solutionKey Capture Energy, LLC100.00%KCE Bushy Creek Holdings, LLCUSAEnergy so					
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KCE 11, LLC         USA         Energy solution         Kei Capture Energy, LLC         100.00%           KCE IL 2, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IN 3, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE IN 3, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE OK 1, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE OK 2, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE OK 4, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE OK 4, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           KCE Brushy Creek Holdings, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           Roughneck Storage LLC DIA/A KCE TX 23, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           Goldbuild II, LLC         USA         Energy solution         Key Capture Energy, LLC         100.00%           Freas Holdings, LLC         USA         Energy solution         Key Capture En					
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Seosuwon Development Company (*2)         Korea         Real estate development and construction         SK Ecoplant Co., Ltd.         19.90%           SKEC Nanjing Co., Ltd.         China         Construction         SK Ecoplant Co., Ltd.         100.00%           Changzhou SKY New Energy Co., Ltd.         China         Investment         SKEC Nanjing Co., Ltd.         100.00%           SKEC (Thai), Ltd.         Thailand         Construction         SK Ecoplant Co., Ltd.         100.00%	SK Ecoplant Co., Ltd. (formerly,				44.48%
SKEC Nanjing Co., Ltd.     China     Construction     SK Ecoplant Co., Ltd.     100.00%       Changzhou SKY New Energy Co., Ltd.     China     Investment     SKEC Nanjing Co., Ltd.     100.00%       SKEC (Thai), Ltd.     Thailand     Construction     SK Ecoplant Co., Ltd.     100.00%		Karaa	Real estate development	SK Ecoplant Co. Ltd	10.000/
SKEC Nanjing Co., Ltd.         China         Construction         SK Ecoplant Co., Ltd.         100.00%           Changzhou SKY New Energy Co., Ltd.         China         Investment         SKEC Nanjing Co., Ltd.         100.00%           SKEC (Thin), Ltd.         Thailand         Construction         SK Ecoplant Co., Ltd.         100.00%	Could won Development Company ( 2)	NUIBA		Six Loopiani OU., Llu.	19.90%
SKEC (Thai), Ltd. Thailand Construction SK Ecoplant Co., Ltd. 100.00%			Construction		100.00%
					100.00%
				· · ··	

Subsidiaries	Domicile	Principal business activity	The largest shareholders	Equity ownership (*1)
SKEC Anadolu EC, LLC	Turkey	Construction	SK Ecoplant Co., Ltd.	100.00%
SK E&C Betek Corporation	USA	Real estate development and construction	SK Ecoplant Co., Ltd.	100.00%
Mesa Verde RE Ventures, LLC SKEC Consultores Ecquador, S.A	USA Ecuador	Real estate development Construction	SK E&C Betek Corporation SK Ecoplant Co., Ltd.	100.00% 100.00%
Sunlake Co., Ltd.	Canada	Construction and services	SK Ecoplant Co., Ltd.	100.00%
SK HOLDCO PTE. LTD.	Singapore	Holding company	SK Ecoplant Co., Ltd.	63.51%
Silvertown Investco Limited.	UK	Construction	SK Ecoplant Co., Ltd.	100.00%
Seongju Tech Co., Ltd. DDS Co., Ltd.	Korea Korea	Disposal of waste Disposal of waste	SK Ecoplant Co., Ltd. SK Ecoplant Co., Ltd.	100.00% 100.00%
Samwon ENT Co., Ltd.	Korea	Disposal of waste	SK Ecoplant Co., Ltd.	100.00%
Environment Management Corporation Co., Ltd.	Korea	Operation of sewage treatment plant	SK Ecoplant Co., Ltd.	100.00%
YS TEC Co., Ltd.	Korea	Waste incineration	Environment Management Corporation Co., Ltd.	100.00%
Seonam Environment Energy Co., Ltd. Honam Environmental Energy Co., Ltd.	Korea	Waste incineration Waste incineration	Environment Management Corporation Co., Ltd.	100.00% 100.00%
Green Hwasun Inc.	Korea Korea	Operation of sewage treatment plant	Environment Management Corporation Co., Ltd. Environment Management Corporation Co., Ltd.	100.00%
Green Sunchang Co., Ltd.	Korea	Operation of sewage treatment plant	Environment Management Corporation Co., Ltd.	100.00%
Gyeongsan Clear Mulgil Co., Ltd.	Korea	Operation of sewage treatment plant	Environment Management Corporation Co., Ltd.	100.00%
Dalseong Maleunmulgil Co., Ltd.	Korea	Operation of sewage treatment plant	Environment Management Corporation Co., Ltd.	100.00% 100.00%
Goksung Environment Co., Ltd. Chungcheong Environment Energy Co., Ltd.	Korea Korea	Operation of sewage treatment plant Waste incineration	Environment Management Corporation Co., Ltd. Environment Management Corporation Co., Ltd.	100.00%
Gyeonggi Environment Energy Co., Ltd.	Korea	Waste incineration	Environment Management Corporation Co., Ltd.	100.00%
Gyeongbuk Environment Energy Co., Ltd.	Korea	Waste incineration	Environment Management Corporation Co., Ltd.	100.00%
Gyeongin Environment Energy Company	Korea	Waste incineration	Environment Management Corporation Co., Ltd.	100.00%
Saehan Environment Co., Ltd. Daewon Green Energy Co., Ltd.	Korea Korea	Disposal of waste Disposal of waste	SK Ecoplant Co., Ltd. SK Ecoplant Co., Ltd.	100.00% 100.00%
Daewon Hi-Teck Co., Ltd.	Korea	Construction waste collection	Daewon Green Energy Co., Ltd.	100.00%
		and transportation		
KS Investment B.V.	Netherlands	Investment	SK Ecoplant Co., Ltd.	72.51%
SK Ecoengineering Co., Ltd. E-MEDI One Co., Ltd.	Korea Korea	Service Disposal of waste	SK Ecoplant Co., Ltd. SK Ecoplant Co., Ltd.	100.00% 100.00%
Emedione Logis Co., Ltd.	Korea	Designated waste collection	E-MEDI One Co., Ltd.	100.00%
<b>.</b>		and transportation		
City Environment Co., Ltd.	Korea	Disposal of waste	SK Ecoplant Co., Ltd.	100.00%
Green Environment Technology Co. ,Ltd. SK Materials Co., Ltd. (*9)	Korea Korea	Disposal of waste Special gas manufacturing and sales	SK Ecoplant Co., Ltd. SK Inc.	100.00% 100.00%
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 warehouse operation	SK Materials Co., Ltd.	100.00%
SK Materials (Shanghai) Co., Ltd.	China	Special gas salses	SK Inc.	100.00%
SK Tri Chem Co., Ltd.	Korea	Manufacturing and sales of	SK Inc.	65.00%
		precursors and others	214	
SK Showa Denko Co., Ltd.	Korea	Sales of raw chemical materials and chemical products related to semiconductor	SK Inc.	51.00%
Happy Companion Co,. Ltd.	Korea	Cleaning, laundry service	SK Inc.	100.00%
SK Materials Airplus Inc.	Korea	Industrial gas sales	SK Inc.	100.00%
SK Materials Renewtech Co., Ltd.	Korea	Manufacturing industrial gas	SK Inc.	80.00%
SK Materials Performance Co., Ltd.	Korea	Semiconductor materials manufacturing and selling	SK Inc.	100.00%
SK Materials JNC Co., Ltd.	Korea	Manufacturing of organic	SK Inc.	51.00%
		light emitting diode material		
SK JNC Japan Co,. Ltd. SK Materials Group14 Co., Ltd.	Japan Korea	Manufacturing of organic light emitting diode material Manufacturing	SK Materials JNC Co., Ltd. SK Inc.	100.00% 75.00%
SK Siltron Co., Ltd.	Korea	Silicon wafer for electronic industry manufacturing and sales	SK Inc.	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 Siltron Shanghai Co., Ltd. SK Siltron USA, Inc.	China USA	Silicon wafer for electronic industry Investment	SK Siltron Co., Ltd. SK Siltron Co., Ltd.	100.00% 100.00%
SK Siltron CSS, LLC	USA	Silicon wafer for electronic industry manufacturing and sales	SK Siltron USA, Inc.	100.00%
Happyfilling Co., Ltd.	Korea	Service	SK Siltron Co., Ltd.	100.00%
Teraon Co., Ltd. (*2)	Korea	Manufacturing and service	Individual	10.77%
SK Biopharmaceuticals Co., Ltd. (*10) SK Life Science. Inc.	Korea USA	Medicine and life science Life science	SK Inc. SK Biopharmaceuticals Co., Ltd.	64.02% 100.00%
SK Bio-Pharma Tech (Shanghai) Co., Ltd.	China	Life science	SK Biopharmaceuticals Co., Ltd.	100.00%
SK S.E.Asia Pte. Ltd.	Singapore	Investment	SK Inc.	100.00%
Essencore Limited	Hong Kong	Manufacturing and distribution of semiconductor modules	SK S.E.Asia Pte. Ltd.	100.00%
Essencore (ShenZhen) Limited SK China Company, Ltd.	China Hong Kong	Consulting for computer system integration Consulting and investment	Essencore Limited SK Inc.	100.00% 88.13%
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.	Hong Kong	Investment	SK China Company, Ltd.	100.00%
Shanghai SKY Real Estate Development Co., Ltd. Beijing Lizhi Weixin Technology Co., Ltd.	China China	Real estate investment Investment	SK Industrial Development China Co., Ltd. SK China Company, Ltd.	100.00% 100.00%
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 International Agro-Sideline Products Park Co., Ltd.	China	Agriculture product logistics	SK International Agro-Products Logistics Development Co., Ltd.	100.00%
SK Auto Service Hong Kong Co., Ltd. Skyline Auto Financial Leasing Co., Ltd.	Hong Kong Hong Kong	Holding company Investment	SK China Company, Ltd. SK Auto Service Hong Kong Co., Ltd.	100.00% 100.00%
Skyline Auto Financial Leasing Co., Ltd. SK Financial Leasing Co., Ltd.	China	Financial lease	SK Auto Service Hong Kong Co., Ltd. SK Auto Service Hong Kong Co., Ltd.	100.00%
SK China (Beijing) Co., Ltd.	China	Consulting	SK China Company, Ltd.	100.00%
SKY Property Management Ltd.	Virgin	Investment	SK China Company, Ltd.	100.00%
SK China Deal Estate C-	Islands	Deel estate investores	SKV Dreporty Mar	400 000
SK China Real Estate Co., Ltd.	Hong Kong China	Real estate investment Real estate management	SKY Property Management Ltd. SK China Company, Ltd.	100.00% 100.00%
SKY Investment Co., Ltd	Unit a			
SKY Investment Co., Ltd. SKY (Zhuhai Hengqin) Technology Co., Ltd.	China	Investment	SK China Company, Ltd.	100.00%
SKY (Zhuhai Hengqin) Technology Co., Ltd. SK Networks (Liaoning) Logistics Co., Ltd.	China	Logistics	SK China Company, Ltd.	100.00%
SKY (Zhuhai Hengqin) Technology Co., Ltd.				

Subsidiaries K C&C Chengdu Co., Ltd. K C&C India Pvt. Ltd. K C&C USA, Inc.	Domicile China	Principal business activity Consulting for computer	The largest shareholders SK C&C Beijing Co., Ltd.	(*1)
K C&C India Pvt. Ltd.	Offinia			100.00%
		system integration and others	Sit Gao beijing Co., Etd.	100.007
K C&C LISA Inc	India	Consulting for computer system integration and others	SK Inc.	100.00%
	USA	Consulting for computer	SK Inc.	100.00%
&G Technology	Saudi	system integration and others Consulting for computer	SK Inc.	51.00%
	Arabia	system integration and others		
aturn Agriculture Investment Co., Ltd.	Hong Kong	Investment	SK Inc.	81.00%
K Investment Management Co., Ltd.	Hong Kong	Investment	SK Inc.	100.00%
K Mobility Investments Company Limited	Hong Kong	Investment	SK Investment Management Co., Ltd.	100.00%
K Semiconductor Investments Co., Ltd. emini Partners Pte. Ltd.	Hong Kong Singapore	Investment management Consulting	SK Investment Management Co., Ltd. SK Inc., SK Innovation Co., Ltd., SK Telecom Co., Ltd., and SK E&S Co., Ltd.	100.00% 80.00%
olaris Partners Pte. Ltd.	Singapore	Consulting	Gemini Partners Pte. Ltd.	100.00%
olaris GEIF Investment	USA	Investment	Solaris Partners Pte. Ltd.	100.00%
K GI Management	Cayman	Investment	SK Inc.	100.00%
lutus Capital NY, Inc.	USA	Investment	SK Inc.	100.00%
udson Energy NY, LLC	USA	Investment	Plutus Capital NY, Inc.	50.13%
udson Energy NY II, LLC	USA	Investment	Plutus Capital NY, Inc.	50.00%
udson Energy NY III, LLC	USA	Investment	Plutus Capital NY, Inc.	50.50%
rove Energy Capital LLC	USA	Investment	Plutus Capital NY, Inc., Pnes Investments, LLC	100.00%
lutus Capital NY II, Inc	USA	Investment	SK Inc.	100.00%
rove Energy Capital II, LLC	USA	Investment	Plutus Capital NY II, Inc	100.00%
lutus Capital NY III, Inc	USA	Investment	SK Inc.	100.00%
rove Energy Capital III, LLC	USA	Investment	Plutus Capital NY III, Inc	50.10%
lutus Fashion NY, Inc.	USA	Fashion	SK Inc.	100.00%
/onderland NY, Inc.	USA	Investment	Plutus Fashion NY, Inc.	100.00%
tlas NY, LLC	USA	Investment	Plutus Fashion NY, Inc.	61.24%
K South East Asia Investment Pte. Ltd.	Singapore	Investment	SK Inc., SK Innovation Co., Ltd.,	80.00%
	•		SK Telecom Co., Ltd. and SK E&S Co., Ltd.	
K Investment Vina I Pte. Ltd.	Singapore	Investment	SK South East Asia Investment Pte. Ltd.	50.01%
K Investment Vina II Pte. Ltd.	Singapore	Investment	SK South East Asia Investment Pte. Ltd.	50.01%
K Investment Vina III Pte. Ltd.	Singapore	Investment	SK South East Asia Investment Pte. Ltd.	100.00%
ISN Investment Pte. Ltd.	Singapore	Investment	SK Investment Vina III Pte. Ltd.	100.00%
K Investment Vina V Pte. Ltd.	Singapore	Investment	SK South East Asia Investment Pte. Ltd.	100.00%
K Investment Vina VI Pte. Ltd.	Singapore	Investment	SK South East Asia Investment Pte. Ltd.	100.00%
K Investment Vina IV Pte. Ltd.	Singapore	Investment	SK South East Asia Investment Pte. Ltd.	100.00%
K Malaysia Investment I Pte. Ltd.	Singapore	Investment	SK South East Asia Investment Pte. Ltd.	100.00%
K Pharmteco Inc.	ŬŚA	Investment	SK Inc.	100.00%
K Biotek Co., Ltd.	Korea	Drug medicine	SK Pharmteco Inc.	100.00%
K BIOTEK IRELAND LIMITED	Ireland	Pharmaceutical manufacturing	SK Pharmteco Inc.	100.00%
K BIOTEK USA, Inc.	USA	Medicine and life science	SK Pharmteco Inc.	100.00%
rest Acquisition LLC	USA	Investment	SK Pharmteco Inc.	100.00%
poskesi, SAS	France	Medicine manufacturing	Crest Acquisition LLC	70.00%
brasax Investment Inc.	USA	Investment	SK Pharmteco Inc.	100.00%
ine Chemicals Holdings Corp.	USA	Investment	Abrasax Investment Inc.	100.00%
MPAC Fine Chemicals, LLC	USA	Drug medicine	Fine Chemicals Holdings Corp.	100.00%
MPAC Fine Chemicals Texas, LLC	USA	Drug medicine	AMPAC Fine Chemicals, LLC	100.00%
MPAC Fine Chemicals Virginia, LLC	USA	Drug medicine	AMPAC Fine Chemicals, LLC	100.00%
olden Pearl EV Solutions Limited	Hong Kong	Investment	SK Inc.	100.00%
	Malaysia		SK Inc.	83.51%
ocar Mobility Malaysia, Sdn. Bhd.		Car sharing service		100.00%
uture Mobility Solutions Sdn. Bhd. T Future Mobility Solutions	Malaysia Indonesia	Online brokerage services for car rental Online brokerage services for car rental	Socar Mobility Malaysia, Sdn. Bhd. Socar Mobility Malaysia, Sdn. Bhd.	100.00%
			Socar Mobility Malaysia, Sun. Bru.	100.00%
instein Cayman Limited	Cayman	Investment		
Cube Capital Inc.	USA USA	Investment Investment	SK Inc.	100.00% 100.00%
Cube Capital Hong Kong 1. LP Limited. ellus Investment Partners, Inc. (formerly, I Cube Capital II, Inc.)	USA	Investment	l Cube Capital Inc. SK Inc.	100.00%
rimero Protein, LLC	USA	Investment	Tellus Investment Partners, Inc.	67.55%
erra LLC				
	USA	Investment	Tellus Investment Partners, Inc.	100.00%
astanea Bioscience Inc.	USA	Investment	SK Inc.	100.00%
K Forest Co., Ltd.	Korea	Landscaping and planting business	SK Inc.	100.00%
weechan Co., Ltd.	Korea	Condo, resort operation	SK Inc.	100.00%
K Pinx Co., Ltd.	Korea	Golf club operating	Hweechan Co., Ltd.	100.00%
K REITs Co., Ltd. (*11)	Korea	Real estate developing and trading	SK Inc.	50.00%
lean Energy REITs Co., Ltd.	Korea	Real estate developing and trading	SK REITs Co., Ltd.	100.00%
K REITs Management Co., Ltd.	Korea	Real estate developing and trading	SK Inc.	100.00%
K Japan Investment Inc.	Japan	Investment	SK Inc., SKC Co., Ltd., SK Materials Co., Ltd., and SK Siltron Co., Ltd.	100.00%
IGNET EV Inc. (*12)	Korea	Electric vehicle charger manufacturing and selling	SK Inc.	0.00%
IGNET Energy Inc. IGNET EV America Inc.	Korea USA	Electric vehicle charger maintenance Electric vehicle charger maintenance and technical support	SIGNET EV Inc. SIGNET EV Inc.	100.00% 100.00%
uxo Capital Inc.	USA	Investment	SK Inc.	100.00%
K Global Development Advisors LLC	USA	Investment	Auxo Capital Inc.	100.00%
uxo Capital Managers LLC	USA	Investment	Auxo Capital Inc	100.00%
K Growth Opportunities Corporation	USA	Investment	Auxo Capital Managers LLC	100.00%
ellus (HONG KONG) Investment Co., Ltd.	Hong Kong	Investment	SK Inc.	100.00%
	USA	Investment	SK Inc.	100.00%
igital Center Capital Inc.				

- (\*1) The equity ownership is based on ordinary shares and includes indirect investments held by the consolidated subsidiaries.
- (\*2) SK Innovation Co., Ltd. and 11 other companies are included in the consolidated financial statements as the Group is able to exercise de facto control. The remaining voting rights of SK Innovation Co., Ltd. and 11 other companies are widely dispersed, so it is determined that the Group has voting rights to exercise de facto control.
- (\*3) During the current year, SK Telecom Co., Ltd., a subsidiary, established SK Square Co., Ltd. through a division of the management and investment sectors of its investee on November 1, 2021, and division of its personnel with existing business sectors such as wired and wireless communication.
- (\*4) Although the Group's equity interests for common stock in Onestore Co., Ltd. is 48.41%, as the preferred stocks with voting rights are issued, the equity interests with voting rights are 47.49%.
- (\*5) Although the Group's equity interests for common stock in 11 Street Co., Ltd. is 98.10%, as the preferred stocks with voting rights are issued, the equity interests with voting rights are 80.26%.
- (\*6) As of March 4, 2021, SK Infosec Co., Ltd., a subsidiary of the Group, merged with Life & Security Holdings Co., Ltd. Although the Group's equity interests for common stock in SK Infosec Co., Ltd. is 100%, as the preferred stocks with voting rights are issued, the equity interests with voting rights are 63.13%.
- (\*7) There was an unequal paid-in capital increase during the year ended December 31, 2021, resulting in a change in shareholding from 100% to 66.26%.
- (\*8) The assets and liabilities of SK Networks Resources Australia (Wyong) Pty Ltd. and 4 other companies are classified as assets and liabilities held for sale (see Note 31 assets and liabilities held for sale).
- (\*9) During the current year, formerly SK Materials Co., Ltd., a subsidiary, split the business sectors, including special gas, with December 1, 2021 as the split-off date, and established SK Materials Co., Ltd. and the holding company's business section was established as the surviving entity. After the split, the holding business division, Old, SK Materials Co., Ltd., merged with the Company, and the Group's stake in the new SK Materials Co., Ltd. is 100%.
- (\*10) During the current year, the shareholding decreased from 75.00% to 64.02% due to the sale of a portion of the shares.
- (\*11) During the current year, the shareholding decreased from 100% to 50% as a result of an unequal paid-in capital increase.
- (\*12) Signet EV Co., Ltd. has a 0% stake in common stocks, but preferred stocks with voting rights are issued, as a result the share of voting rights share amount to 53.38%.

# 1.3 Changes in consolidated subsidiaries

Changes in the consolidated subsidiaries for the year ended December 31, 2021 are as follows:

December 31, 2020	Inclusion	Exclusion	December 31, 2021
325	159	30	454

For the year ended December 31, 2021, subsidiaries newly included in consolidation are as follows:

Subsidiaries	Reasons for changes
Sino-Korea Green New Material (JiangSu) Ltd.	Establishment
SK Geo Centric Brazil LTDA	(57 companies)
Green & Connect Capital, Inc.	
SK On Co., Ltd.	
SK On(Yancheng) Co., Ltd.	
Yancheng Yandu District M Energy Consulting Limited Company	
Happy Mideum Co., Ltd.	
SK Earthon Co., Ltd	
Media S Co., Ltd.	
SK Square Co., Ltd.	
CAPS America Inc.	
FSK L&S(Jiangsu) Co., Ltd.	
Cartini Co., Ltd. SK Telesys Corp.	
SK Nexilis Malaysia Sdn. Bhd.	
SK TBMGEOSTONE Co., Ltd.	
Allnewone Co., Ltd.	
Ecovance Co., Ltd.	
Passkey, Inc.	
LNG Americas, Inc.	
Grid Solution II, LLC	
Pnes Investments, LLC	
Prism Darwin Pipeline Pty. Ltd.	
IGE Co., Ltd.	
New&Company Two Pte. Ltd.	
Dangjin Haengbok Solar Co., Ltd.	
Grid Solution, LLC.	
Changzhou SKY New Energy Co., Ltd.	
SK Ecoengineering Co., Ltd.	
SK JNC Japan Co,. Ltd.	
SK Materials Group14 Co., Ltd.	
SK C&C USA, Inc.	
SK Mobility Investments Company Limited	
Grove Energy Capital LLC Plutus Capital NY II, Inc	
Grove Energy Capital II, LLC	
Plutus Capital NY III, Inc.	
Grove Energy Capital III, LLC	
SK Investment Vina V Pte. Ltd.	
SK Investment Vina VI Pte. Ltd.	
MSN Investment Pte. Ltd.	
SK Investment Vina IV Pte. Ltd.	
SK Malaysia Investment I Pte. Ltd.	
I Cube Capital Hong Kong 1. LP Limited	
Terra LLC	
Castanea Bioscience Inc.	
Clean Energy REITs Co., Ltd.	
SK REITs Management Co., Ltd.	
SK Japan Investment Inc.	
SK Global Development Advisors LLC	
SK Growth Opportunities Corporation Martis Capital. LLC	
Jeonnam II Offshore Wind Power Co., Ltd.	
Jeonnam III Offshore Wind Power Co., Ltd.	
Storage Solution, LLC.	
SK REITs Co., Ltd.	
UT LLC	

#### 1.3 Changes in consolidated subsidiaries (cont'd)

Subsidiaries goodsFLOW Co., Ltd. goodsCORE Co., Ltd. goodsPOST Co., Ltd. opengarden Co., Ltd. Rok Media Co., Ltd. Studio Dolphin Co., Ltd. YLP Inc. Good service Co., Ltd. Nexilis Management Malaysia Sdn. Bhd. SK Nexilis Poland sp.z o.o. Busan Jungkwan Energy Co., Ltd. Key Capture Energy, LLC and 65 others Seongju tech Co., Ltd. DDS Co., Ltd. Samwon ENT Co., Ltd. YS TEC Co., Ltd. Saehan Environment Co., Ltd. Daewon Green Energy Co., Ltd. Daewon Hi-Teck Co., Ltd. KS Investment B.V. E-MEDI One Co., Ltd. Emedione Logis Co., Ltd. City Environment Co., Ltd. Green Environment Technology Co., Ltd. SK Materials Co., Ltd. Teraon Co., Ltd. SKY (Zhuhai Henggin) Technology Co., Ltd. Yposkesi, SAS SIGNET EV Inc. SIGNET Energy Inc. SIGNET EV America Inc. Auxo Capital Inc. Auxo Capital Managers LLC Tellus (HONG KONG) Investment Co., Ltd. Digital Center Capital Inc. Hana Land Chip PEF 33 O U Co., Ltd.

Reasons for changes Acquisition and others (102 companies)

For the year ended December 31, 2021, subsidiaries excluded from consolidation are as follows:

Subsidiaries	Reasons for changes
Ningbo SK Baoying Asphalt Storage Co., Ltd.	Disposal
Hefei SK Baoying Asphalt Co., Ltd.	(12 companies)
Chongqing SK Asphalt Co., Ltd.	
O U Co., Ltd.	
SKC-Eco Solutions Co., Ltd.	
SK TNS Co., Ltd.	
SKC INFRA SERVICE Co., Ltd.	
SK (Shenyang) auto rental Co., Ltd. SK (Beijing) auto rental Co., Ltd.	
SK Rent-A-Car (Qingdao) Co., Ltd.	
Shenyang SK Networks Energy Co., Ltd.	
SK (Guangzhou) Metal Co., Ltd.	
SK Networks Middle East FZE	Liquidation
SKC Hi-Tech&Marketing Taiwan Co., Ltd.	(9 companies)
SK Permian, LLC	
Hana Land Chip PEF 33	
Super Seed NY, LLC	
SK E&P America, Inc.	
SK Plymouth, LLC	
SK E&P Operations America, LLC	
SK Nemaha, LLC	
Formerly, ADT Caps Co., Ltd.	Merger within
Storage Solution, LLC.	Group
The Eco Platform Co., Ltd.	(6 companies)

# 1.3 Changes in consolidated subsidiaries (cont'd)

Subsidiaries Maeripji Management Co., Ltd. Environment Energy Company Co., Ltd. Formerly, SK Materials Co., Ltd. UT LLC Jeonnam II Offshore Wind Power Co., Ltd. Jeonnam III Offshore Wind Power Co., Ltd

Change to Equity Method (3 companies)

Reasons for changes

# 1.4 Condensed financial information of significant consolidated subsidiaries

Details of condensed financial information of the significant subsidiaries as of and for the year ended December 31, 2021 are as follows (Korean won in millions):

	Total	Total		Net income
Subsidiaries	assets	liabilities	Sales	(loss)
SK Innovation Co., Ltd.	₩18,467,372	₩ 2,998,966	₩ 3,986,068	₩ 1,317,007
SK Energy Co., Ltd.	14,837,329	10,900,003	26,491,681	480,107
SK Geo Centric Co., Ltd.	5,848,933	2,820,385	9,459,951	136,094
SK Incheon Petrochem Co., Ltd.	5,232,595	3,586,475	6,094,183	76,300
SK Trading International Co., Ltd.	1,431,186	811,521	8,139,319	293,992
SK Lubricants Co., Ltd.	2,792,868	1,593,088	3,456,354	712,502
SK ie technology Co., Ltd.	2,605,217	437,161	394,855	45,725
SK On Co., Ltd.	6,583,683	2,589,560	1,040,368	(175,344)
SK Global Chemical International Trading (Shanghai) Co., Ltd.	179,111	102,921	1,415,981	27,011
SK Hi-Tech Battery Materials (Jiang Su) Co., Ltd.	936,777	546,715	229,738	65,341
SK Energy International Pte. Ltd.	1,955,437	1,347,771	20,733,007	31,482
SK Energy America, Inc.	615,592	532,048	3,828,868	(2,804)
SK Energy Europe, Ltd.	88,467	4,769	2,784,025	(3,527)
SK Telecom Co., Ltd.	26,389,065	15,526,209	12,102,830	1,073,823
SK Broadband Co., Ltd.	5,971,505	3,091,837	4,058,997	213,468
PS&Marketing Corp.	478,745	263,457	1,445,540	3,179
SK Square Co., Ltd.	7,096,262	180,744	-	(12,529)
SK Shieldus Co., Ltd. (formerly, ADT Caps Co., Ltd.) (*1)	3,265,177	2,888,994	1,549,714	16,912
11street. Co., Ltd.	944,078	579,249	561,433	(66,888)
SK Planet Co., Ltd.	510,256	182,479	280,630	6,003
SK Networks Co., Ltd.	5,680,546	3,634,725	8,152,467	55,843
SK Magic Co., Ltd.	1,194,079	828,507	1,056,136	58,797
SK Rent-a-Car Co., Ltd.	2,858,295	2,372,999	1,037,038	24,607
SKC Co., Ltd.	3,217,745	1,260,909	552,607	16,767
SK PIC Global Co., Ltd.	771,507	385,383	1,105,299	241,549
SK E&S Co., Ltd.	8,733,688	3,543,868	828,668	309,695
Yeongnam Energy Service Co., Ltd.	485,340	253,730	699,148	26,239
Ko-one Energy Service Co., Ltd.	798,855	463,837	1,033,771	6,457
Pusan City Gas Co., Ltd.	1,204,739	430,020	950,483	20,274
Chungcheong Energy Service Co., Ltd.	368,178	233,145	548,319	21,173
Paju Energy Service Co., Ltd.	1,726,039	1,056,413	1,160,469	75,303
Narae Energy Service Co., Ltd.	1,372,708	878,110	659,347	31,535
SK Ecoplant Co., Ltd.	6,737,227	5,786,007	5,388,219	144,677
SK Siltron Co., Ltd. (*2)	3,506,501	2,253,627	1,849,635	172,996
SK Biopharmaceuticals Co., Ltd.	635,569	167,356	455,255	111,277
SK REITs Co., Ltd.	1,404,619	632,366	24,148	10,705

(\*1) The summary of financial information of SK Shieldus Co., Ltd. (formerly, ADT Caps Co., Ltd.) is consolidated financial information, and it includes profit and loss prior to the merger with ADT Caps Co., Ltd.

(\*2) The subsidairy's financial information is consolidated financial information.

# 1.5 Disclosure of significant non-controlling interests in subsidiaries

Information about significant non-controlling interests in subsidiaries as of and for the year ended December 31, 2021 is as follows (Korean won in millions):

	December 31, 2021						
							SK
	SK Innovation		SK Square	SK Networks	SKC	SK E&S	Ecoplant
	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.
Percentage of the non-controlling ownership	63.25%	69.82%	69.80%	55.57%	57.10%	10.00%	54.99%
Current assets	₩ 21,481,685	6,352,665	₩ 2,967,163	₩ 3,047,155	₩ 1,820,031 ₩	₩ 3,999,812 ₩	4,062,198
Non-Current assets	28,075,756	24,558,612	19,671,977	6,363,761	4,360,102	11,477,487	4,051,772
Current liabilities	14,512,449	6,960,435	2,517,365	3,897,565	1,720,045	3,205,208	4,153,078
Non-current liabilities	15,411,798	11,615,704	3,266,481	3,124,356	2,177,727	6,001,108	2,755,121
Net assets	19,633,194	12,335,138	16,855,294	2,388,995	2,282,361	6,270,983	1,205,771
Book value of the non-controlling interests	13,234,435	7,731,655	11,761,727	1,394,127	1,429,128	3,888,961	795,326
Sales	46,842,929	16,748,585	1,146,414	11,018,140	3,396,057	7,854,638	6,220,443
Net income	501,008	2,418,989	363,156	103,540	342,340	388,816	211,077
Total comprehensive income	1,169,277	3,781,181	371,718	178,881	365,613	466,032	298,860
Net income of the non- controlling interests	205,353	1,381,019	1,245,626	41,184	246,141	106,100	125,143
Total comprehensive income of the non-controlling interests	535,272	2,301,410	1,248,205	85,035	258,963	93,501	223,446
Net cash flows from operating activities	(482,983	3) 5,031,279	103,379	461,461	282,513	921,103	21,975
Net cash flows from investing activities	(4,123,229	9) (3,486,189)	) (142,515)	40,017	(260,885)	(3,175,711)	(826,553)
Net cash flows from financing activities before dividends paid to the non- controlling interests	5,054,903	8 (1,312,921)	) 54,634	17,923	308,397	2,685,970	1,165,200
Dividends paid to the non- controlling interests	(25,197	(740,690)	) -	(14,579)	(44,861)	(79,343)	(10,964)
Net increase (decrease) in cash and cash equivalents	423,494	(508,521)	) 15,498	504,822	285,164	352,019	349,658

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

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

The Group prepares statutory financial statements in Korean in accordance with Korean International Financial Reporting Standards ("KIFRS") enacted by the Act on External Audit of Stock Companies. The accompanying consolidated financial statements have been translated into English from Korean financial statements. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, Korean version, which is used for regulatory reporting purposes, shall prevail.

The 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 W1,185.50 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, 2021. 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 of and for the year ended December 31, 2021, are the same as the accounting policies adopted for the preparation of consolidated financial statements as of and for the year ended December 31, 2020, 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 9, 2022.

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, 2021.

# KIFRS 1109 Financial Instruments, KIFRS 1039 Financial Instruments: Recognition and Measurement, KIFRS 1107 Financial Instruments: Disclosures, KIFRS 1104 Insurance Contracts and KIFRS 1116 Leases (Amended)

The amendments provide exception not to recognize gains or losses on remeasurement of financial instruments when the replacement of interest rate benchmark for financial instruments measured at amortized cost meets certain requirements that do not change their economic substance. It also includes exceptions to hedge accounting when certain conditions are met if replacements to interest rate benchmark occur in the hedging relationship. The amendments do not have any material impact on the Group's financial position or management performance.

# 2.1.2 New and revised KIFRS issued, but not yet effective

# KIFRS 1001 Presentation of Financial Statements (Amended)

The amendments affect only the presentation of liabilities in the statement of financial position and clarify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period and clarify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability. The amendments explain that the right exists if the borrowing arrangement is complied with at the end of the reporting period and clarify that settlement refers to the transfer of cash, equity instruments, other assets or services to the counterparty. The Group plans to apply the standard for annual reporting period beginning on or after January 1, 2023, with earlier application permitted.

# KIFRS 1001 Presentation of Financial Statements (Amended)

The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures. The amendments to KIFRS 1001 are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted.

# 2.1.2 New and revised KIFRS issued, but not yet effective (cont'd)

# KIFRS 1008 Accounting policies, changes in accounting estimates, and errors (Amended)

The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted as long as this fact is disclosed.

# KIFRS 1012 Income Taxes (Amended)

The amendments require companies to recognise deferred tax on particular transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary Paragraphs 15 and 24 of KIFRS 1012 were amended to include an additional condition where the initial recognition exemption is not applied. According to the amended guidance, a temporary difference that arises on initial recognition of an asset or liability is not subject to the initial recognition exemption if that transaction gave rise to equal amounts of taxable and deductible temporary differences. The amendments to KIFRS 1001 are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted.

# KIFRS 1016 Property, Plant and Equipment (Amended)

The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the cost of producing those items, in profit or loss. The Group plans to apply the standard for annual reporting period beginning on or after January 1, 2022 and an entity should applies the amendments retrospectively to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after the beginning of the earliest period presented in the financial statements.

#### KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets (Amended)

The amendments clarify that the costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. The Group plans to apply the standard for annual reporting period beginning on or after January 1, 2022, with earlier application permitted.

# KIFRS 1103 Business combinations (Amended)

The amendments update a reference of definition of assets and liabilities qualifying for recognition in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of KIFRS 1037 Provisions, Contingent Liabilities and Contingent Assets, and KIFRS 2121 Levies. The amendments also confirm that contingent assets should not be recognized at the acquisition date. The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively.

#### KIFRS 1116 Leases (Amended)

The application of the practical expedient, which provides relief to lessees from applying KIFRS 1116 guidance on lease modification accounting for rent concessions arising as a direct consequence of the COVID-19 pandemic has been extended to lease reductions affecting the lease payments before June 30, 2022. A lessee should consistently apply practical expedients to similar contracts with similar characteristics. The Group plans to apply the other amendments for annual reporting period beginning on or after April 1, 2021, with earlier application permitted.

# 2.1.2 New and revised KIFRS issued, but not yet effective (cont'd)

# 2018-2020 Annual improvements to KIFRS

The annual improvements include some amendments to KIFRS 1101 'First-time Adoption of KIFRS', KIFRS 1109 'Financial Instruments', KIFRS 1116 'Leases' and KIFRS 1041 'Agriculture'. The amendments to KIFRS 1116 are relevant only to illustrative examples and thus the effective date for the amendment was not specified. The Group plans to apply the other amendments for annual reporting period beginning on or after January 1, 2022, with earlier application permitted.

The Group is assessing the potential impact of the amendments listed above on the consolidated financial statements.

# 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 Group 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 Group 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 Group 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 Group considers all relevant facts and circumstances in assessing whether or not the Group's voting rights in an investee are sufficient to give it power, including:

- The size of the Group's holding of voting rights relative to the size and dispersion of holdings of the other vote holders;
- > Potential voting rights held by the Group, other vote holders or other parties;
- Rights arising from other contractual arrangements; and
- Any additional facts and circumstances that indicate that the Group 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.

# 2.2 Basis of consolidation (cont'd)

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.

In a business combination achieved in stages, the Group remeasures its entire previously held interests in the acquiree at fair value, and any gain or loss from the remeasurement is recognized in profit or loss or, if appropriate, in other comprehensive income. Changes in the carrying amount of previously held interests in the acquiree that are recognized in other comprehensive income is recognized in the same manner as if those interests were disposed of directly.

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 Classification of current or non-current

The Group presents assets and liabilities as current and non-current in the statement of financial position.

Assets are classified as current assets in the following cases:

- a. It is expected to be realized within the normal operating cycle, or is intended to be sold or consumed within the normal operating cycle.
- b. It is mainly held for short-term trading purposes.
- c. It is expected to be realized within 12 months after the reporting period.
- d. As cash or cash equivalents, the limit for use for exchange or debt repayment purposes is not more than 12 months after the reporting period.

All other assets are classified as non-current assets.

Liabilities are classified as current liabilities in the following cases:

- a. It is expected to be settled within the normal operating cycle.
- b. It is mainly held for short-term trading purposes.
- c. Payment is due within 12 months after the reporting period.
- d. It does not have the unconditional right to defer settlement of the debt for more than 12 months after the reporting period.

All other liabilities are classified as non-current liabilities.

Deferred tax assets (liabilities) are classified as non-current assets (liabilities).

# 2.5 Functional currencies and 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

# 2.5 Functional currencies and foreign currencies (cont'd)

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.

# 2.6 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.

# 2.7 Financial assets

# 2.7.1 Classification

The Group classifies its financial assets in the following measurement categories:

- ▶ Financial assets measured at fair value through profit or loss (FVTPL)
- > Financial assets measured at fair value through other comprehensive income (FVOCI)
- > Financial assets measured at amortized cost

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For financial assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. The Group reclassifies debt investments when, and only when its business model for managing those assets changes.

For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income.

# 2.7.2 Measurement

Financial assets are initially measured at fair value, and transaction costs that are directly attributable to the acquisition of financial assets (other than financial assets at fair value through profit or loss) 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 are recognized immediately in profit or loss.

The Group considers the hybrid contract which contains embedded derivatives as the entire hybrid contract for the purpose of assessing whether the contractual cashflows represent solely payments of principal and interest on the principal amount outstanding.

# 2.7.2 Measurement (cont'd)

# (1) Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. The Group classifies its debt instruments into one of the following three measurement categories:

# 1) Financial assets measured at amortized cost

Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in 'finance income' using the effective interest rate method.

# 2) Financial assets measured at FVOCI

Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment loss (reversal of impairment loss), interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Interest income from these financial assets is included in 'finance income' using the effective interest rate method. Foreign exchange gains and losses are presented in 'finance income or costs' and impairment losses are presented in 'finance costs'.

# 3) Financial assets measured at FVTPL

Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. A gain or loss on a debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognized in profit or loss and presented net in the statement of comprehensive income within 'finance income or costs' in the year in which it arises.

# (2) Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments, which held for long-term investment or strategic purpose, in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividend income from such investments continue to be recognized in profit or loss as 'other non-operating income' when the right to receive payments is established. But if a portion of the cost of a financial asset is recovered and profit is earned, it is recognized in other comprehensive income.

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'finance income and expenses' in the statement of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

# 2.7.3 Impairment

The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables and lease receivables, the Group applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables.

# 2.7.4 Recognition and derecognition

Regular way purchases and sales of financial assets are recognized or derecognized on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Group has retained substantially all the risks and rewards of ownership of the transferred asset, the Group continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received.

# 2.7.5 Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the statements of financial position where there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

# 2.8 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.

# 2.9 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.

# 2.9 Investments in associates and joint ventures (cont'd)

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.

# 2.10 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.

# 2.11 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
Operating lease assets	3 ~ 5	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.

# 2.12 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.

# 2.13 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 -related assets are not amortized as there is no foreseeable limit to the period over which the asset is expected to use.

Description	Useful lives (years)	Description	Useful lives (years)
Development costs	3 ~ 10	Developed technology	5 ~ 14
Customer-related assets	3 ~ 30	Others	2 ~ 50
Right to use facilities	10, 20	Frequency usage rights	2.9 ~ 10
Industrial property rights	5 ~ 10		

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.

# 2.13.1 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.

# 2.13.2 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.

# 2.13.3 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.

# 2.14 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.

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

# 2.15 Investment properties

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:

Description	Useful lives (years)	Description	Useful lives (years)
Buildings	10 ~ 60	Structures	4 ~ 50

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.

#### 2.16 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.

# 2.17 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.

# 2.18 Non-current assets held for sale and discontinued operation

The Group classifies non-current assets (or disposal group) as held for sale if their carrying amounts will be recovered principally through a sale or distribution rather than through continuing use. Such noncurrent assets and disposal group classified as held for sale or as held for distribution are measured at the lower of their carrying amount and fair value less costs to sell or to distribute. Costs to distribute are the incremental costs directly attributable to the disposal of an asset (or disposal group), excluding the finance costs and income tax expense.

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

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

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

A disposal group qualifies as discontinued operation if it is a component of an entity that either has been disposed of, or is classified as held for sale, and:

- > Represents a separate major line of business or geographical area of operations
- Is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations, or
- > Is a subsidiary acquired exclusively with a view to resale

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the statement of profit or loss and other comprehensive income. Additional disclosures are provided in Note 30. All other notes to the financial statements include amounts for continuing operations, unless otherwise mentioned.

# 2.19 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.

# 2.20 Leases

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

# 2.20.1 The Group as a lessee

The Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognizes a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments.

# (1) Right-of use assets

The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any re-measurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received.

Depreciation of right-of-use asset is computed using the straight-line method based on the shorter of the lease term and the estimated useful lives of the assets as follows:

Description	Useful lives (years)	Description	Useful lives (years)
Land and buildings	1 ~ 60	Tank	1 ~ 10
Ships and vessels	10 ~ 20	Vehicles	1 ~ 5
Others	1 ~ 10		

Unless the Group is reasonably certain to obtain ownership of the leased asset at the end of the lease term, the recognized right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term. Right-of-use assets are subject to impairment.

#### (2) Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in- substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating a lease, if the lease term reflects the Group exercising the option to terminate. The variable lease payments that do not depend on an index or a rate are recognized as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the in-substance fixed lease payments or a change in the assessment to purchase the underlying asset.

The Group included lease liabilities as financial liabilities.

## 2.20.1 The Group as a lessee (cont'd)

#### (3) Short-term lease and leases of low-value assets

The Group applies the short-term lease recognition exemption to its short-term leases of land, buildings, vehicles and others (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value (i.e., below \$5,000). Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

## 2.20.2 The Group as a lessor

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.

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 using the effective interest rate method 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.

## 2.21 Financial liabilities and equity instruments

## 2.21.1 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.

## 2.21.2 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.

## 2.21.3 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 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.

## 2.21.4 Financial liabilities

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

## 2.21.4.1 Financial liabilities at FVTPL

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

A financial liability is classified as held for trading if:

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

## 2.21.4.1 Financial liabilities at FVTPL (cont'd)

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

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

Financial liabilities at FVTPL are measured at fair value, with any gains or losses arising on changes in fair value recognized in profit or loss to the extent that they are not part of a designated hedging relationship.

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

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

## 2.21.4.2 Financial liabilities measured at amortized cost

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

## 2.21.5 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 loss allowance determined in accordance with KIFRS 1109 (see financial assets above); and
- The amount recognized initially less, where appropriate, cumulative amortization recognized in accordance with the revenue recognition policies set out above

## 2.21.6 Derecognition of financial liabilities

Financial liabilities are removed from the statement of financial position when it is extinguished; for example, when the obligation specified in the contract is discharged or cancelled or expired or when the terms of an existing financial liability are substantially modified. The difference between the carrying amount of a financial liability extinguished or transferred to another party and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

## 2.22 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 consolidated 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.

## 2.23 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.

## 2.24 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.

## 2.24.1 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.

## 2.24.2 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 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.

## 2.24.3 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.

## 2.24.4 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.

## 2.24.5 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.

## 2.24.6 Accounting treatment related to the emission rights cap and trade scheme

The group accounts for greenhouse gas emission rights and emission liabilities arising under the "Act on the Allocation and Transaction of Greenhouse Gas Emission Rights" as follows.

## 1) Greenhouse gas emission rights

Greenhouse gas emission rights consist of emission rights allocated free of charge by the government and emission rights purchased for free. The free allocation emission right is measured and recognized as zero, and the purchase emission right is recognized as the acquisition cost by adding other normally incurred costs directly related to the acquisition cost. The Group classifies the greenhouse gas emission rights held to fulfill the obligations stipulated in the relevant system as intangible assets, measures the total amount of damage deducted from the cost, and classifies the portion to be submitted to the government within one year from the end of the reporting period. Greenhouse gas emission rights held to obtain short-term trading gains are classified as floating assets and measured at fair value at the end of each reporting period, and changes in fair value are recognized in profit or loss. Greenhouse gas emission rights are removed when they are no longer available for submission or sale to the government, or when future economic benefits are no longer expected.

#### 2) Emission liabilities

Emission liabilities are the current obligation to emit greenhouse gases and submit emission rights to the government, and are recognized when resources are likely to be leaked to fulfill the obligation and the amount required to fulfill the obligation can be reliably estimated. Emission liabilities are measured by adding the carrying amount of emission rights held for the relevant performance year to be submitted to the government and the expenditure expected to take to fulfill the obligations for emissions exceeding the amount of emission rights held. Emission liabilities are removed when submitted to the government.

#### 2.25 Derivative financial instruments

The Group enters into foreign exchange forward contracts, interest swaps, currency swaps, and so forth to manage its exposure to foreign exchange rate risk and foreign currency 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.

## 2.25.1 Embedded derivatives

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

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

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

## 2.25.2 Hedge accounting

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

At the inception of the hedge relationship, the Group documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions.

Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is effective in offsetting changes in fair values or cash flows of the hedged item attributable to the hedged risk, which is when the hedging relationships meet all of the following hedge effectiveness requirements:

- > There is an economic relationship between the hedged item and the hedging instrument;
- The effect of credit risk does not dominate the value changes that result from that economic relationship; and
- The hedge ratio of the hedging relationship is the same as that resulting from the quantity of the hedged item that the Group actually hedges and the quantity of the hedging instrument that the Group actually uses to hedge that quantity of hedged item

#### 2.25.3 Fair value hedges

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

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

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

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

## 2.25.4 Cash flow hedges

The effective portion of changes in the fair value of derivatives and other qualifying hedging instruments that are designated and qualify as cash flow hedges is recognized in other comprehensive income limited to the cumulative change in fair value of the hedged item from inception of the hedge. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss.

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

#### 2.26 Revenue recognition

The Group has applied KIFRS 1115 *Revenue from Contracts with Customers*. The Group operates oil refining, telecommunications, wholesale and retail businesses, chemical products, and construction. When control of a good or service is transferred to the customer, the Group recognizes revenue considering the variable consideration, such as return and discount, from the fair value of the consideration to which it expects to be entitled in exchange for the good or service.

#### 2.26.1 Sale of goods

Revenue from the sale of goods is generally recognized at the time when control of the goods is transferred to the customer, i.e. at the time of delivery of the goods.

#### 2.26.2 Rendering of services

The Group provides services such as construction contracts and system construction services. For construction contracts and system construction services, revenue is recognized over time at the rate of progress under the input method because the Group has no alternative use for completing the obligation for the assets created by the Group that have completed the performance so far, and because the Group has a enforceable right to payment for the completed performance.

In the case of providing other services, the Group is obliged to provide the customer with the related services during the contract period, so the transaction price allocated to the performance obligation is recognized as revenue over the period where the services are provided.

#### 2.26.3 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.

#### 2.26.4 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.

## 2.26.5 Contract assets and liabilities

A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional.

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

#### 2.27 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.

#### 2.27.1 Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated 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.

#### 2.27.2 Deferred tax

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

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

Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized and they are expected to reverse in the foreseeable future. The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent 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.

## 2.27.2 Deferred tax (cont'd)

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.

## 2.27.3 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.

#### 2.28 Earnings per share

Basic earnings per share are calculated by dividing the profit or loss attributable to ordinary equity holders of the Company by the weighted-average number of ordinary shares outstanding during the period, adjusted for own shares held. Diluted earnings per share are determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted-average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares.

#### 2.29 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 consolidated 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 1116 *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 fair value, derived from 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 fair value, derived from unobservable inputs for the asset or liability

## 3. Significant accounting judgments, 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 nonfinancial 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, investment securities and others 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 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, plant 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 liabilities 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.

## 3.7 COVID-19 related matters

In order to prevent the spread of COVID-19, various prevention and control measures including restrictions on movement are being implemented worldwide, and as a result, the global economy is widely affected. The Group invests in companies operating in various industries, including petroleum refining, telecommunications, wholesale and retail, chemicals, construction and others, and is exposed to market uncertainties due to the influence of COVID-19. This can negatively affect productivity, sales decline or delay, collection of existing receivables, discount rates and indicators used for various estimates, which can negatively affect the Group's financial position and financial performance. The Group prepared financial statements by reasonably estimating the impact of COVID-19 on the Group. However, there is significant uncertainty in estimating the impact of COVID-19 on the Group.

## 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. Details of segment operations of each segment are as follows:

Operating segments	Business
SK Innovation Co., Ltd.	Petroleum refining, chemical, lubricating oil, battery and resources development
SK Telecom Co., Ltd.	Wireless and wired telecommunication
SK Square Co., Ltd.	Semiconductor and New ICT
SK Networks Co., Ltd.	Information communication, rental and trade
SKC Co., Ltd.	Chemical, industrial materials and mobility material
SK E&S Co., Ltd.	Gas and energy
SK Ecoplant Co., Ltd.	Civil engineering, housing, plant and others
Others	IT services, special gas manufacturing and sale, medicine and life science and others

(2) Details of financial information for each operating segment as of and for the years ended December 31, 2021 and 2020 are as follows (Korean won in billions):

				As of and for t	he year endeo	December 3	1, 2021			
	SK	SK	SK	SK			SK		nsolidation	<u> </u>
	Innovation	Telecom	Square	Networks	SKC	SK E&S	Ecoplant	ad	justments	
	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Others	(*1)	Total
Total sales	₩ 46,843	₩ 19,132 ₩	∀ 1,146	₩ 11,018	₩ 3,396	₩ 7,855	₩ 6,221 ₩	8,812 ₩	(6,098)	₩ 98,325
Internal sales	(503)	(365)	(602)	(1,284)	(325)	(271)	(303)	(2,445)	6,098	-
Net sales	46,340	18,767	`544´	9,734	3,071	7,584	5,918	6,367	-	98,325
Profit (loss) from	831	3,071	366	107	425	663	202	4,530	(4,168)	6,027
continuing operations before income tax expense										
Profit (loss) for the year from continuing operations	457	2,419	363	61	313	389	7	3,809	(2,419)	5,399
Total assets	49,557	30,911	22,639	9,411	6,180	15,477	8,114	54,682	(31,590)	165,381
Total liabilities	29,924	18,576	5,784	7,022	3,898	9,206	6,908	19,793	(1,295)	99,816
Depreciation	1,408	3,103	46	828	178	507	80	612	(62)	6,700
Amortization	105	1,011	17	24	31	7	50	113	330	1,688

#### 4. **Operating segments (cont'd)**

				As of and for	the year end	led December 31, 2	2020		
	SK	SK	SK				Co	nsolidation	
	Innovation	Telecom	Networks	SKC	SK E&S	SK Ecoplant	ad		
	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Others	(*1)	Total
Total sales	₩ 34,550	₩ 18,625	₩ 10,626	₩ 2,466	₩ 5,750	₩ 7,124	₩ 8,213 ₩	(6,535)	₩ 80,819
Internal sales	(547)	(336)	(1,378)	) (263)	(172)	(974)	) (2,865)	6,535	-
Net sales	34,003	18,289	9,248	2,203	5,578	6,150	5,348	-	80,819
Profit (loss) from	(2,758)	1,877	107	232	1,248	66	2,395	(3,135)	32
continuing operations before income tax expense									
Profit (loss) for the year from continuing operations	(2,161)	1,501	22	150	862	(5)	) 1,962	(2,566)	(235)
Total assets	38,498	47,907	8,773	5,409	11,000	6,625	42,130	(22,674)	137,668
Total liabilities	23,040	23,511	6,528	3,491	7,149	5,755	14,576	1,758	85,808
Depreciation	1,239	3,151	801	179	396	64	584	(64)	6,350
Amortization	127	1,019	21	30	5	6	94	333	1,635

(\*1) Consolidation adjustments of the Parent Company, excluding consolidation adjustments of each subsidiary.

(3) Details of financial information by geographical location as of and for the years ended December 31, 2021 and 2020 are as follows (Korean won in billions):

				As of	and fo	r the y	ear	ended Dec	ember 31.	202	1	
							1	North		Cor	solidation	
		Korea		Asia	Euro	ppe	Ar	<u>merica</u>	Others	ad	ustments	Total
Total sales	₩	114,780	₩	29,503	₩	6,063	₩	7,323 ₩	≠ 428	3₩	(59,772)₩	98,325
Operating profit (loss)		6,707		140		118		(52)	19	1	(2,168)	4,936
Profit (loss) from continuing operations before income tax expense		10,998		799		171		(118)	1,27	7	(7,100)	6,027
Profit (loss) for the year from continuing operations		8,347		756		103		(71)	1,024	1	(4,760)	5,399
Total assets		186,850		18,548		6,082		20,990	1,59	5	(68,684)	165,381
Total liabilities		92,035		6,158		2,900		5,960	52	1	(7,758)	99,816
	As of and for the year ended December 31, 2020											
	_						N	North		Cor	solidation	

					Consolidation			
		Korea	Asia	Europe	America	Others	adjustments	Total
Total sales	₩	97,748 ₩	21,347	₩ 3,565	₩ 4,773	₩ 57	7 ₩ (46,671)₩	80,819
Operating profit (loss)		3,511	184	111	(47)	42	2 (3,878)	(77)
Profit (loss) from continuing operations		4,901	350	131	(785)	(6	6) (4,559)	32
before income tax expense								
Profit (loss) for the year from continuing operations		4,438	279	102	(808)	(4	4) (4,242)	(235)
Total assets		155,288	13,804	4,164	9,837	1,468	3 (46,893)	137,668
Total liabilities		77,508	3,961	2,068	2,925	140	) (794)	85,808

## 4. Operating segments (cont'd)

(4) Details of financial information by revenue from contracts with customers for the years ended December 31, 2021 and 2020 are as follows (Korean won in billions):

				For t	he year ended	December 31	, 2021			
	SK	SK	SK	SK			SK			
	Innovation	Telecom	Square	Networks	SKC	SK E&S	Ecoplant	Co	onsolidation	
	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Others a	djustments	Total
1. Total sales	₩ 46,843	₩ 19,132 ₩	₩ 1,146	₩ 11,018	₩ 3,396	₩ 7,855	₩ 6,221 ₩	8,812 ₩	(6,098)	₩ 98,325
<ol><li>Revenue from</li></ol>	46,812	19,132	704	9,134	3,396	7,848	6,209	7,998	(4,865)	96,368
contracts with									,	
customers										
Categories:										
Service sales	277	17,746	501	365	-	-	6,176	2,838	(2,166)	25,737
Finished goods sales	44,187	28	14	462	3,081	3,194	-	4,097	(1,114)	53,949
Merchandise sales	1,264	1,267	139	8,305	269	4,559	19	1,039	(1,545)	15,316
Other sales	1,084	91	50	2	46	95	14	24	(40)	1,366
	46,812	19,132	704	9,134	3,396	7,848	6,209	7,998	(4,865)	96,368
Timing of revenue										
recognition:										
Recognition at a	46,535	1,434	203	8,769	3,396	1,069	33	5,160	(2,699)	63,900
point in time										
Recognition over a										
period of time	277	17,698	501	365		6,779	6,176	2,838	(2,166)	32,468
	46,812	19,132	704	9,134	3,396	7,848	6,209	7,998	(4,865)	96,368
3. Revenue from	31	-	442	1,884	-	7	12	814	(1,233)	1,957
other sources										

				For the	year ended [	December 31, 2020	1		
	SK	SK	SK						
	Innovation	Telecom	Networks	SKC	SK E&S	SK Ecoplant	Co	nsolidation	
	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Co., Ltd.	Others ac	djustments	Total
1. Total sales	₩ 34,550	₩ 18,625	₩ 10,626	₩ 2,466	₩ 5,750	₩ 7,124	₩ 8,213 ₩	(6,535) ₩	80,819
2. Revenue from	34,134	18,625	8,868	2,466	5,743	7,108	6,681	(5,048)	78,962
contracts with									
customers									
Categories:									
Service sales	277	16,534	396	-	-	7,084	2,391	(2,550)	24,132
Finished goods	33,032	38	518	2,186	2,046	-	3,505	(883)	40,442
sales								. ,	
Merchandise sales	490	1,548	7,952	243	3,591	24	333	(1,460)	12,721
Other sales	720	505	2	37	106		452	(155)	1,667
	34,519	18,625	8,868	2,466	5,743	7,108	6,681	(5,048)	78,962
Timing of revenue									
recognition:									
Recognition at a	34,242	2,091	8,473	2,466	298	24	4,290	(2,498)	49,386
point in time									
Recognition over a									
period of time	277	16,534	395		5,445	7,084	2,391	(2,550)	29,576
-	34,519	18,625	8,868	2,466	5,743	7,108	6,681	(5,048)	78,962
3. Revenue from	31	-	1,758	-	7	16	1,532	(1,487)	1,857
other courses									

other sources

## 5. Acquisitions and disposals of subsidiaries and non-controlling interests

## 5.1 Acquisitions of significant subsidiaries

Significant acquisitions of subsidiaries during the current reporting period are listed in Note 39.

#### 5.2 Disposal of investments in subsidiaries

1) Disposal of equity interests in SK TNS Co., Ltd. On April 30, 2021, the Group sold all of SK TNS Co., Ltd.'s shares (160,000 shares, 100% stake) to Network Infra Holdings LLC. As a result, SK TNS Co., Ltd. has been excluded from subsidiaries of the Group.

2) Disposal of equity interests in SKC Eco-solutions Co., Ltd.

On May 31, 2021, the Group sold all of SKC Eco-solutions Co., Ltd.'s shares (2,000,000 shares, 100% stake). As a result, SKC Eco-solutions Co., Ltd. has been excluded from subsidiaries of the Group.

## 5.3 Other significant equity transactions

#### 1) Sale of some shares in SK Biopharmaceuticals Co., Ltd.

On February 24, 2021, the Parent Company sold 8,600,000 shares of SK Biopharmaceuticals Co., Ltd., by Block Deal method and the disposal amount is W1,116,280 million. As a result, the Group's stake in SK Biopharmaceuticals Co., Ltd. decreased from 75% to 64.02%, and the non-controlling interest of the Group increased by W39,281 million.

#### 2) SK ie technology Co., Ltd.'s listing and sale of old shares

On May 11, 2021, SK ie technology Co., Ltd., a subsidiary, a subsidiary, was listed on the securities market through recruitment of new shares (8,556,000 shares) and sales of old shares (12,834,000 shares). As a result, the Group's stake in SK ie technology Co., Ltd. fell from 90% to 61.2%, and the non-controlling interest of the Group increased by  $\mathbb{W}1,466,641$  million.

#### 3) SK REIT Co., Ltd.'s capital increase by issuing new stocks

SK REIT Co., Ltd., a subsidiary, conducted a paid-in capital increase (107,910,266 shares) through shareholder allocation and third-party allocation in July 2021 and a paid-in capital increase (46,510,266 shares) through corporate disclosure in September 2021. As a result, the Group's stake in SK consignment management real estate investment company decreased from 100% to 50%, and the non-controlling interest of the Group increased by W382,236 million.

#### 4) Partial stake sale of SK Lubricants Co., Ltd.

On July 30, 2021, the Group disposed of 16,000,000 shares held by its subsidiary SK Lubricants Co., Ltd. (disposal amount of KRW 1,119,468 million). As a result, the Group's stake in SK Lubricants Co., Ltd. decreased from 100% to 60%, and the non-controlling interest of the Group increased by T10,813 million.

#### 5) SK E&S Co., Ltd.'s redeemable convertible preferred stock issuance

On November 5, 2021, SK E&S Co., Ltd., a subsidiary, issued 4,094,293 redeemable preferred shares with no voting rights. As a result, the non-controlling interest of the Group increased by #2,377,669 million.

6) Merger of the former SK Materials Co., Ltd.

The former SK Materials Co., Ltd., a subsidiary, established SK Materials Co., Ltd. by physically dividing all of its business sectors, including special gas, on December 1, 2021, and its surviving subsidiary, the former SK Materials Co., Ltd. was merged with the Parent Company. As part of the transfer consideration for mergers and acquisitions, the Parent Company's ownership stake of #1,004,094 million increased and the non-controlling stake of #314,495 million decreased, equivalent to 50.9% of the Group's former SK Materials Co., Ltd.

## 6. Financial instruments

#### 6.1 Financial assets

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

		December 31, 2021											
	Financial assets measured at FVTPL	Financial assets measured at FVOCI	Financial assets measured at amortized cost	Financial assets designated as hedging instruments	Total								
Current assets													
Cash and cash equivalents	₩ 2,800,214	₩ -	₩ 9,517,341	₩ - ₩	12,317,555								
Short-term financial instruments	5,240,060	-	884,690	-	6,124,750								
Trade receivables (*1)	52,088	-	10,598,250	-	10,650,338								
Other receivables	203,029	-	2,216,530	-	2,419,559								
Short-term loans	-	-	94,031	-	94,031								
Accrued income	-	-	114,924	-	114,924								
Short-term investment securities	353,310	-	45	-	353,355								
Guarantee deposits	-	-	276,658	-	276,658								
Derivative financial assets	92,402	-	-	39,229	131,631								
Lease receivables			19,016		19,016								
	8,741,103		23,721,485	39,229	32,501,817								
Non-current assets													
Long-term financial instruments	18,078	-	30,014	-	48,092								
Long-term trade receivables	-	-	391,739	-	391,739								
Long-term other receivables	256,930	-	61,954	-	318,884								
Long-term loans	-	-	411,711	-	411,711								
Long-term investment securities	1,972,522	7,572,640	1,023	-	9,546,185								
Guarantee deposits	-	-	711,104	-	711,104								
Derivative financial assets	516,067	-	-	224,550	740,617								
Lease receivables	-	-	36,175	<u> </u>	36,175								
	2,763,597	7,572,640	1,643,720	224,550	12,204,507								
	<u>₩ 11,504,700</u>	₩ 7,572,640	₩ 25,365,205	<u>₩ 263,779</u> <u>₩</u>	44,706,324								

(\*1) Contract assets (unbilled receivables) amounting to ₩737,104 million as of December 31, 2021 are not included in the financial assets.

# 6.1 Financial assets (cont'd)

		December 31, 2020										
	Financial assets measured at FVTPL	Financial assets measured at FVOCI	Financial assets measured at amortized cost	Financial assets designated as hedging instruments	Total							
Current assets												
Cash and cash equivalents	₩ 1,625,890	₩ -	₩ 8,471,050	₩ - ₩	₩ 10,096,940							
Short-term financial instruments	2,120,910	-	2,362,905	-	4,483,815							
Trade receivables (*1)	140,357	-	7,765,586	-	7,905,943							
Other receivables	211,476	-	1,419,921	-	1,631,397							
Short-term loans	-	-	193,526	-	193,526							
Accrued income	-	-	154,932	-	154,932							
Short-term investment securities	150,624	-	45	-	150,669							
Guarantee deposits	-	-	356,573	-	356,573							
Derivative financial assets	75,022	-	-	54,799	129,821							
Lease receivables	-	-	56,838	-	56,838							
	4,324,279		20,781,376	54,799	25,160,454							
Non-current assets												
Long-term financial instruments	4,315	-	9,393	-	13,708							
Long-term trade receivables	-	-	274,789	-	274,789							
Long-term other receivables	305,699	-	35,400	-	341,099							
Long-term loans	-	-	416,482	-	416,482							
Long-term investment securities	987,981	3,366,930	1,098	-	4,356,009							
Guarantee deposits	-	-	574,946	-	574,946							
Derivative financial assets	524,082	-	-	72,133	596,215							
Lease receivables			25,079		25,079							
	1,822,077	3,366,930	1,337,187	72,133	6,598,327							
	₩ 6,146,356	₩ 3,366,930	<u>₩ 22,118,563</u>	₩ 126,932 ₩	¥ <u>31,758,781</u>							

(\*1) Contract assets (unbilled receivables) amounting to ₩965,473 million as of December 31, 2020 are not included in the financial assets.

## 6.2 Financial liabilities

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

			Decem	ber 3	1, 2021		
	Financi liabilitie measure	s	Other financial		Financial liabilities designated as hedging		
	FVTPI		liabilities		instruments		Total
Current liabilities:							Total
Short-term borrowings	₩	- 4	₩ 7,657,38	81 ₩	-	₩	7,657,381
Trade payables		-	9,519,54		-		9,519,544
Other payables		34,133	7,015,73		-		7,049,872
Current portion of long-term debt		-	7,828,07		-		7,828,071
Accrued expenses		-	4,845,94		-		4,845,940
Dividends payable		-	.,0.10,0		-		887
Leasehold deposits received		-	198,77		-		198,776
Derivative financial liabilities		270,712		-	50,858		321,570
Lease liabilities	-	-	1,250,89	91	-		1,250,891
Finance guarantee liabilities		-	64		-		642
Financial liabilities at fair value			-	-			•
through profit or loss	1	60,528		-	-		160,528
		65,373	38,317,87	71	50,858		38,834,102
Non-current liabilities:					· · · ·		
Bonds payable and long-term		-	42,620,14	1	-		42,620,141
borrowings							, ,
Long-term other payables		-	1,854,34	13	-		1,854,343
Long-term accrued expenses		-	34,03	35	-		34,035
Leasehold deposits received		-	298,47	78	-		298,478
Derivative financial liabilities	2	37,512		-	1,723		439,235
Lease liabilities		-	3,803,99	99	-		3,803,999
Financial guarantee liabilities		-	16,91	0	-		16,910
Financial liabilities at fair value							
through profit or loss		59,123		-			59,123
	2	96,635	48,627,90	)6	1,723		49,126,264
	₩ 9	62,008	₩ 86,945,77	7 ₩	52,581	₩	87,960,366
			Decem	ber 3	1, 2020		
					Financial		
	Financi				liabilities		
	liabilitie		Other financial		designated as		
		measured at			hedging		
	FVTPI		liabilities		instruments	Total	

	m	leasured at	Oth	er financial		hedging		
		FVTPL		iabilities		instruments		Total
Current liabilities:								
Short-term borrowings	₩	-	₩	6,201,430	₩	-	₩	6,201,430
Trade payables		-		6,061,576		-		6,061,576
Other payables		36,573		5,690,598		-		5,727,171
Current portion of long-term debt		-		6,216,778		-		6,216,778
Accrued expenses		-		3,964,534		-		3,964,534
Dividends payable		-		840		-		840
Leasehold deposits received		-		210,035		-		210,035
Derivative financial liabilities		46,736		-		49,684		96,420
Lease liabilities		-		2,244,201		-		2,244,201
Finance guarantee liabilities				832		-		832
		83,309		30,590,824		49,684		30,723,817
Non-current liabilities:								
Bonds payable and long-term borrowings		-		36,843,510		-		36,843,510
Long-term trade payables		-		712		-		712
Long-term other payables		3,392		1,165,392		-		1,168,784
Long-term accrued expenses		-		10,610		-		10,610
Leasehold deposits received		-		262,079		-		262,079
Derivative financial liabilities		567,874		-		166,351		734,225
Lease liabilities		-		3,421,750		-		3,421,750
Financial guarantee liabilities		-		21,447		-		21,447
		571,266		41,725,500		166,351		42,463,117
	₩	654,575	₩	72,316,324	₩	216,035	₩	73,186,934

## 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, 2021 and 2020 are as follows (Korean won in millions):

					For the yea	r e	nded Decem	ber 31, 2021		
	-	ividends income		nterest ncome	Interest expense		Gain (loss) on foreign currency	Gain (loss) on derivatives instruments	Others	Total
Financial assets measured at FVTPL	₩	22,972	₩	30,659	₩	- 1	₩ 30	₩ 910,267 ₩	295,139 ₩	1,259,067
Financial assets measured at FVOCI		40,860		336		-	122	-	970,560	1,011,878
Financial assets measured at amortized cost		-		143,007		-	907,031	-	82,139	1,132,177
Financial assets designated as hedging instruments		-		-		-	-	291,759	-	291,759
Financial liabilities measured at FVTPL		-		-		-	(2,796)	(1,509,348)	(25,788)	(1,537,932)
Other financial liabilities Financial liabilities designated as		-		-	(1,435,026	5)	(1,167,629)	) -	-	(2,602,655)
hedging instruments	W	- 63.832	₩	174 002	₩ (1.435.026	-	<u>-</u> ₩ (263.242)	(22,798) ₩ (330,120)₩	1.322.050 ₩	(22,798) (468,504)
		00,002		174,002	<u> </u>	≤/ =	<u>(200,242</u> )	<u> (000,120) (1</u>	1,022,000 11	(+00,00+)

				For the year e	nded Decemb	er 31, 2020		
		vidends ncome	Interest income	Interest expense	Gain (loss) on foreign currency	Gain (loss) on derivatives instruments	Others	Total
Financial assets measured at FVTPL	₩	5,310 ₹	₩ 45,913	₩ - \	₩ (6)	₩ 2,054,134 ₩	(68,851)₩	2,036,500
Financial assets measured at FVOCI		13,717	910	-	(514)	-	721,930	736,043
Financial assets measured at amortized cost		-	141,233	-	(37,041)	-	29,784	133,976
Financial assets designated as hedging instruments		-	-	-	-	34,064	-	34,064
Financial liabilities measured at FVTPL		-	-	-	676	(1,747,675)	(2,610)	(1,749,609)
Other financial liabilities Financial liabilities designated as		-	-	(1,394,257)	114,845	-	-	(1,279,412)
hedging instruments	₩	 19,027 ∀	 ∀188,056	₩ (1,394,257)	<u>-</u> ₩ 77,960	(54,297) ₩ 286,226 ₩	<u>-</u> 680,253 ₩	<u>(54,297)</u> (142,735)

## 6.4 Fair values of financial instruments by hierarchy level

1) Fair values and book values of financial instruments as of December 31, 2021 and 2020 are as follows (Korean won in millions):

		December 37	1, 2021	December 31, 2020			
		Book value	Fair value		Book value	Fair value	
Bonds payable	₩	34,856,002 ₩	34,967,026	₩	31,167,494	₩ 31,259,176	
Borrowings		23,249,591	23,196,353		18,094,224	18,273,146	

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  $(1.22\% \sim 4.50\%)$  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 of December 31, 2021 and 2020 are as follows (Korean won in millions):

			Decembe	r 31	, 2021		
		Level 1	Level 2		Level 3		Total
Financial assets:							_
Financial assets measured at FVTPL	₩	8,502,805 ₩	2,356,504	₩	36,922	₩	10,896,231
Financial assets measured at FVOCI		5,260,168	-		2,312,472		7,572,640
Derivative financial assets		7,219	417,876		447,153		872,248
	₩	13,770,192 ₩	2,774,380	₩	2,796,547	₩	<u>19,341,119</u>
Financial liabilities:							
Financial liabilities measured at FVTPL	₩	- ₩	-	₩	253,784	₩	253,784
Derivative financial liabilities		600	96,891		663,314		760,805
	₩	600 ₩	96,891	₩	917,098	₩	1,014,589
			Decembe	r 31	, 2020		
		Level 1	Level 2		Level 3		Total
Financial assets:							
Financial assets measured at FVTPL	₩	3,746,800 ₩	731,883	₩	1,068,569	₩	5,547,252
Financial assets measured at FVOCI		1,633,968	-		1,732,962		3,366,930
Derivative financial assets		4,552	721,484				726,036
	₩	<u>5,385,320</u> ₩	1,453,367	₩	2,801,531	₩	9,640,218
Financial liabilities:							
Financial liabilities measured at FVTPL	₩	- ₩	-	₩	39,965	₩	39,965
Derivative financial liabilities		329	271,262		559,054		830,645
	₩	329 ₩	271,262	₩	599,019	₩	870,610

## 3) Valuation techniques and inputs

The description of the valuation techniques and inputs used to measure the fair value of financial instruments using fair value measurements as of the end of the current term and the end of the prior term, in which the Group is classified as Level 2 or Level 3 is as follows:

#### A. Currency forward and currency swap

The fair value of the currency forward and the currency swap was measured in principle based on the forward exchange rate disclosed in the market as of the end of the current term for the period consistent with the remaining period of the currency swap. If the forward exchange rate for a period consistent with the remaining period of the currency forward and the currency swap is not disclosed in the market, the forward exchange was measured by estimating the forward exchange rate for a period similar to the remaining period of the currency swap by applying interpolation to each period. The discount rate used to measure the fair value of the currency forward and the currency swap was determined using the yield curve derived from the rate quoted in the market as of the end of the current term.

## B. Commodity swap

In principle, the fair value of the commodity swap was measured on the basis of the spot transaction price disclosed in the market as of the end of the current term for the period consistent with the remaining period of the spot swap being measured. In addition, the discount rate used to measure the fair value of the spot swap was determined using the yield curve derived from the rate quoted in the market as of the end of the reporting period.

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

#### C. Interest rate swap

The fair value of the interest rate swap was measured in principle based on the interest rate swap rate disclosed in the market as of the end of the current term for the period consistent with the remaining period of the interest rate swap. If the interest rate swap for a period consistent with the remaining period of the interest rate swap is not disclosed in the market, the interest rate swap rate was measured by estimating the interest rate swap rate for a period similar to the remaining period of the interest rate swap rate for a period similar to the remaining period of the interest rate swap is not disclosed.

#### D. Debt securities

The fair value of debt securities is measured by discounting the future cash flows of debt securities by applying the market interest rate applied to companies with similar creditworthiness as the issuer of debt securities.

#### E. Unlisted stocks

The fair value of unlisted stocks is measured by using a cash flow discount model and some assumptions are used that are not based on observable market prices or ratios, such as assumptions or estimates of sales growth, pre-tax operating profit rates, weighted average capital costs, etc. to estimate future cash flows. The weighted average capital expense used to discount future cash flows was determined by applying CAPM. The Group determined that the effect of the major assumptions and estimates that is mentioned above on the fair value of unlisted stocks was significant, so the fair value measurement of unlisted stock was categorized within Level 3 of the fair value hierarchy.

#### F. Convertible debt securities

The fair value of convertible debt securities was measured by adding the fair value of the ordinary bond component that does not include conversion rights and the fair value of the conversion right, which is an embedded derivative (purchase call option). The fair value of the non-convertible general bond component was measured by discounting the future cash flows of the bond using the market interest rate applied to entities with similar creditworthiness as the issuer of the convertible bond, and the fair value of the conversion right was measured using an option pricing model. Stock price volatility, a significant input used to measure the fair value of conversion rights, was estimated based on past stock price changes. The Group considered that the fair value of the right to convert was a significant proportion of the total fair value of the convertible debt securities and classified the fair value measurement of the entire convertible debt securities into Level 3 of the fair value hierarchy.

#### G. Contingent consideration

The fair value of the contingent consideration is estimated by the net profit before subtracting interest and corporate tax by scenarios, and based on these estimates, the Group measures the present value of the expected future receivables weighted on the probability of each scenario.

#### H. Total return swap agreement

The fair value of the total return swap agreement is based on Monte-Carlo Simulation. It generates the discrete path of the future interest rate, estimates the point of time when the buyout option is exercised, calculates the present value, and repeatedly executes it to calculate the fair value as the average value of the calculated value. On the other hand, unlisted shares subject to the purchase option were measured in accordance with the fair value assessment method of unlisted shares, and the fair value measurement of inter-share contracts was classified as Level 3 in the fair value hierarchy as the main assumptions and estimates used to assess the fair value of unlisted shares were considered to have a significant effect on their fair value.

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

The valuation techniques and input variables used for major financial instruments classified as Level 3 are as follows (Korean won in millions):

		Valuation amount		Valuation techniques	Level 3 inputs	Input variations
SK Shipping Co., Ltd.	Assets	${\mathbb W}$	223,682	DCF model	Permanent growth rate	1.0%
					WACC	10.7%
Total return swap agreement	Liabilities	$\mathbb{W}$	219,337	Monte-Carlo simulation	Term structure of interest rate	1.8% ~ 1.9%
-					WACC	10.7%

Among the inputs used to measure the fair value of a financial instrument, If the permanent growth rate increase (decrease), the fair value increases (decreases) and if the weighted average cost of capital increases (decrease), the fair value decreases (increases). There is no change in valuation techniques used to measure fair value of financial instruments classified as Level 2 and Level 3.

#### 7. Trade receivables

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

	Decem	per 31, 2021	December 31, 2020				
	Current	Non-current	Current	Non-current			
Trade receivables:							
Trade receivables (*1)	₩ 11,182,015	5 ₩ 407,641	₩ 8,502,117	₩ 294,879			
Contract assets (unbilled receivables)	737,104		965,473	-			
Loss allowance:							
Trade receivables	(531,677	<u>(15,902)</u>	<u>(596,174</u> )	<u>(20,090</u> )			
	<u>₩ 11,387,442</u>	<u>₩ 391,739</u>	<u>₩ 8,871,416</u>	₩ 274,789			

(\*1) Includes the net investment amount of the finance lease provided by the Group as a manufacturer or seller.

## 7. Trade receivables (cont'd)

(2) Details of contract assets and liabilities related to the contract with the customer as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	December 31, 2021 December					
Contract assets: (*1) Construction business	₩	572,283	₩	838.273		
Telecommunication business		118,278		148,281		
Others		200,349		127,294		
	₩	890,910	₩	1,113,848		
Contract liabilities: (*2)	Decer	mber 31, 2021	Decer	<u>mber 31, 2020</u>		
Construction business	${\mathbb W}$	973,020	₩	1,118,684		
Telecommunication business		202,967		260,596		
Others		890,405		868,660		
	₩	2,066,392	₩	2,247,940		

(\*1) Contract assets are included in trade receivables and other assets.

(\*2) Contract liabilities are included in trade payables, advances received and other liabilities. The amount recognized as revenue in the current period in relation to the contract liabilities in the end of the prior period is ₩1,265,039 million, and there is no revenue recognized in the current period in relation to the performance obligation satisfied in the prior period.

(3) Details of construction profit variation by changes of accounting estimates related to construction contracts as of December 31, 2021 are as follows (Korean won in millions):

				De	ecembe	er 31, 2021				
	Change in estimated construction <u>revenue</u>		Change in estimated cost		currer	act on nt period oss	Impact on future period profit			Change in unbilled (overbilled) receivables
SK Ecoplant Co., Ltd. and its subsidiaries	₩	2,003,459	₩ 1,937,1	63 4	₩	13,252	₩	53,044	₩	13,252
Others		1,356	4	48		889		19		889
	₩	2,004,815	₩ 1,937,6	11	₩	14,141	₩	53,063	₩	14,141

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 of 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 of December 31, 2021 are as follows (Korean won in millions):

					Unbilled receivables		Trade rece		eivables (*1)		
						Allowance	Э			Allowance	;
	Contract	Completion	Percentage			for doubtfu	I			for doubtfu	ıl
Project	date	date	(%)		Amount	accounts		Amount	t	accounts	
RRE Project	2009.12	2016.05	99.9	₩	-	₩	-	₩	-	₩	-
Goseong High	2014.07	2022.01	97.6		16,145		-		-		-
Fire power											
	RRE Project Goseong High	Project         date           RRE Project         2009.12           Goseong High         2014.07           Fire power         Fire power	ProjectdatedateRRE Project2009.122016.05Goseong High2014.072022.01Fire powerFire powerFire power	Project         date         date         (%)           RRE Project         2009.12         2016.05         99.9           Goseong High         2014.07         2022.01         97.6           Fire power         Fire power         Fire power         Fire power	Project         date         date         (%)           RRE Project         2009.12         2016.05         99.9         ₩           Goseong High         2014.07         2022.01         97.6           Fire power         Fire power         Fire power         Fire power	ProjectContract dateCompletion datePercentage (%)AmountRRE Project2009.122016.0599.9₩-Goseong High 	Project     Contract date     Completion date     Percentage (%)     Allowance for doubtfu (%)     Amount     Allowance for doubtfu accounts       RRE Project     2009.12     2016.05     99.9     ₩     ₩       Goseong High Fire power     2014.07     2022.01     97.6     16,145	Project     Contract date     Completion date     Percentage (%)     Allowance for doubtful accounts       RRE Project     2009.12     2016.05     99.9     ₩     -       Goseong High Fire power     2014.07     2022.01     97.6     16,145     -	Project     Contract     Completion     Percentage     Allowance       RRE Project     2009.12     2016.05     99.9     ₩     -     ₩     -       Goseong High     2014.07     2022.01     97.6     16,145     -     -	Project     Contract     Completion     Percentage     Allowance       Project     date     date     (%)     Amount     accounts       RRE Project     2009.12     2016.05     99.9     \veetarrow     -     \veetarrow       Goseong High     2014.07     2022.01     97.6     16,145     -     -	Project     Contract     Completion     Percentage     Allowance     Allowance       Project     date     date     (%)     Amount     accounts     Amount     accounts       RRE Project     2009.12     2016.05     99.9     ₩     -     ₩     -     ₩       Goseong High     2014.07     2022.01     97.6     16,145     -     -

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

(5) The amount includes the carrying amount of trade receivables accounted for as secured borrowings (\$89,423 million as of December 31, 2021 and \$188,155 million as of December 31, 2020) 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 of December 31, 2021 and 2020 are as follows (Korean won in millions):

		De		nber 31, 202	1		December 31, 2020				
			<u>۱</u>	/aluation			Valuation				
		Cost	а	llowance	Book value		Cost	allowance	Book value		
Merchandise	₩	1,031,635	₩	(36,524)∛	₩ 995,11 <sup>-</sup>	1₩	864,806 ₩	∀ (45,647)	₩ 819,159		
Finished goods		2,997,935		(151,075)	2,846,860	)	1,563,756	(59,899)	1,503,857		
Semifinished goods and work in progress		1,388,745		(118,721)	1,270,024	1	845,458	(47,258)	798,200		
Raw materials and sub-materials		2,327,476		(89,613)	2,237,863	3	1,354,419	(24,761)	1,329,658		
Materials in transit		2,765,034		-	2,765,034	1	1,354,400	-	1,354,400		
Supplies		538,897		(4,033)	534,864	1	311,475	(4,074)	307,401		
Uncompleted contracts		17,415		-	17,415	5	57,673	-	57,673		
Others		13,533		-	13,533	3	9,476	(327)	9,149		
	₩	11,080,670	₩	(399,966)	<u>₩ 10,680,70</u> 4	1 ₩	<u>6,361,463</u> ₩	<u>∀ (181,966</u> )	₩ 6,179,497		

#### 9. Investment securities

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

		Financial assets measured at FVTPL	Financial assets measured at FVOCI (*1)	Financial assets measured at amortized cost		Total
Equity instruments:				amonized cost		Total
Marketable equity instruments	₩	462,531	₩ 5,260,168	₩ -	₩	5,722,699
Non-marketable equity instruments		170,478	2,304,673			2,475,151
		633,009	7,564,841			8,197,850
Bond instruments:						
Beneficiary securities and others		716,254	663	-		716,917
Debt securities		976,569	7,136	1,068		<u>984,773</u>
		1,692,823	7,799	1,068		1,701,690
	₩	2,325,832	₩ 7,572,640	<u>₩ 1,068</u>	₩	9,899,540
Current investment securities	₩	353,310	₩ -	₩ 45	₩	353,355
Non-current investment securities		1,972,522	7,572,640	1,023		9,546,185

				December 3	<u>31, 2020</u>		
		Financial		Financial	Financial		
		assets		assets	assets		
		measured at		measured at	measured at		
		FVTPL		FVOCI (*1)	amortized cost		Total
Equity instruments:							
Marketable equity instruments	₩	-	₩	1,633,968	₩ -	₩	1,633,968
Non-marketable equity instruments		87,275		1,720,055			1,807,330
		87,275		3,354,023			3,441,298
Bond instruments:							
Beneficiary securities and others		572,689		662	-		573,351
Debt securities		478,641		12,245	1,143		492,029
		1,051,330		12,907	1,143		1,065,380
	₩	1,138,605	₩	3,366,930	₩ 1,143	₩	4,506,678
Current investment securities	₩	150,624	₩	-	₩ 45	₩	150,669
Non-current investment securities		987,981		3,366,930	1,098		4,356,009

(\*1) The Group has applied the irrevocable option to designate the equity instruments held for strategic investment, not for held-for-trading purpose, at the date of initial application, as items measured at FVOCI.

#### (1) Investments in associates and joint ventures

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

	-		)21	December 31, 2020	
Company	Domicile	Equity ownership <u>(*1)</u>	Acquisition cost	Book value	Book value
Associates:					
SK Hynix Inc.	Korea	20.1%	₩ 5,420,310	₩13,746,931	₩ 11,750,425
Vingroup Joint Stock Company (*2)	Vietnam	6.1%	957,882	984,778	851,300
Eureka Midstream Holdings	USA	40.0%	465,582	523,829	465,917
VCM Services And Trading Development Joint Stock Company (*2,3)	Vietnam	16.0%	465,019	454,794	-
Masan Group Corporation (*2)	Vietnam	9.3%	457,718	419,935	367,832
Darwin LNG Pty Ltd. (*3)	Australia	25.0%	419,675	438,090	-
Shenzhen Londian Wason	China	26.0%	383,369	443,661	383,049
Holdings Group. Co., Ltd.					
The CrownX Corporation (*2,3)	Vietnam	4.9%	348,648	361,163	-
FR BR Aggregator	USA	39.0%	350,718	301,159	283,933
Huizhou EVE United Energy Co., Ltd.	China	49.0%	344,465	430,164	353,815
Peru LNG Company, LLC	USA	20.0%	331,144	258,037	243,456
Daehan Oil Pipeline Corporation	Korea	41.0%	311,372	317,050	311,015
NHIP II Bison Holdings, LLC	USA	24.5%	297,511	265,634	244,325
Hana Card Co., Ltd. (*2)	Korea	15.0%	253,707	349,866	314,930
Yemen LNG Company Ltd. (*2,4)	Yemen	6.9%	252,813	-	-
Canakkale Highway And Bridge	Turkey	25.0%	272,028	276,853	208,272
Korea IT Fund (*5)	Korea	63.3%	242,170	339,976	323,294
Center For Breakthrough Medicines Holdings, LLC (*3)	USA	27.6%	229,055	237,277	-
ProteoVant Sciences, Inc. (*3)	USA	40.0%	222,370	212,874	-
Joyvio (*2)	China	14.0%	213.793	240.006	197,974
Content Wavve Corp (*6)	Korea	36.4%	165,341	141,142	75,803
Parkingcloud Corp (*3)	Korea	47.1%	160.038	160,038	
Best Oil Company Limited	Myanmar	35.0%	153,024	132,430	159,557
TBM Co., Ltd. (*2,3)	Japan	10.1%	141,971	138,602	-
ENN (Zhoushan) LNG Co., Ltd. (*2)	China	10.0%	133,234	130,473	133,164
Others	•		,	1,734,285	1,243,830
				23,039,047	17,911,891
Joint ventures (*7):					
Sinopec-SK (Wuhan) Petrochemical Co., Ltd.	China	35.0%	676.332	1.140.152	942.775
Mitsui Chemicals & SKC Polyurethanes Co., Ltd.	Korea	50.0%	349.942	397.417	419.404
Beijing BESK Technology Co., Ltd	China	49.0%	247,427	261,564	235,604
ZETA CAYMAN Limited	Cayman	50.0%	178,774	108,562	163,720
Ignis Therapeutics (*8)	Cayman	49.7%	177,525	93,980	-
Eurasia Tunnel	Turkey	50.0%	174,215	323,192	254,324
Boryeong LNG Terminal Co., Ltd.	Korea	50.0%	133,323	146,686	
SABIC SK Nexlene Company Pte. Ltd.	Singapore	50.0%	112,670	125,952	93,915
Hana Land Chip PEF 33 (*9)	Korea	-	112,070	120,002	262,881
Others	Noica	-	-	413.893	587.881
Outors				3.011.398	3,107,072
					₩ 21,018,963
				<u> vv 20,030,443</u>	<u>vv Z1,010,903</u>

- (\*1) Equity ownership includes indirect investments held by the consolidated subsidiaries.
- (\*2) The Group retains significant influence on the associate despite having less than 20% equity interests.
- (\*3) It was newly acquired during the current period.
- (\*4) Impairment losses on investments in associates were fully recognized as there was an indication of impairment prior to the current period.
- (\*5) These companies were not included as consolidated subsidiaries as the Group does not have control over more than half of the voting rights by agreements.
- (\*6) The Group acquired 435,431 common shares of Content Wavve Corp. for ₩100,000 million cash payment through an unequal paid-in capital increase during the current period, increasing the Group's stake from 30% to 36.4%.
- (\*7) 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.
- (\*8) As of November 24, 2021, the Group established the right to commercialize six CNS new drug pipelines, including Senobamate (XCOPRI®), in-kind investment in Ignis Therapetics (China, Hong Kong, Macau, and Taiwan), with 49.7% (investment amount USD150,000).
- (\*9) During the current year, the Group acquired additional 34.80% shares of Hana Land Chip PEF 33 and obtained control. Accordingly, the Group reclassified it from investment in joint ventures to investment in subsidiaries, and it was liquidated during the year ended December 31, 2021.

#### (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, 2021 and 2020 are as follows (Korean won in millions):

	For the year ended December 31, 2021								
				Equity profit	Other				
	Beginning balance	Acquisitions	Disposals	or losses on investments	capital movements	Dividends received	Others (*1)	Ending balance	
Associates:	Dalance	Acquisitions	Disposais	invesiments	movements	Teceiveu	<u> </u>	Dalance	
SK Hynix Inc.	₩ 11,750,425	₩ -	₩ -	₩ 1,921,010	₩ 226.952	₩ (170,937) ₩	19.481 ₩	13,746,931	
Vingroup Joint Stock Company	851.300			(29,190)	85.610	- (110,001)	77.058	984.778	
Eureka Midstream Holdings	465,917	-		18,461		(2,861)	42,312	523,829	
VCM Services And Trading	400,011	465.019	-	(3,754)	127	(2,001)	(6,598)	454,794	
Development Joint		100,010		(0,101)			(0,000)	101,101	
Stock Company									
Masan Group Corporation	367.832	-	-	(28,952)	55.691	(6,565)	31.929	419.935	
Darwin LNG Pty Ltd.		419,675	-	4,780		(10,776)	24,411	438,090	
Shenzhen Londian	383,049	-	-	23,650	8,975	(17,407)	45,394	443,661	
Wason Holdings					- /	( , - )	- /		
Group. Co., Ltd.									
The CrownX Corporation	-	348,648	-	-	-	-	12,515	361,163	
FR BR Aggregator	283,933	-	-	(5,704)	-	(2,230)	25,160	301,159	
Huizhou EVE United Energy	353,815	-	-	38,282	38,067	-	-	430,164	
Co., Ltd.									
Peru LNG Company, LLC	243,456	-	-	(6,988)	21,569	-	-	258,037	
Daehan Oil Pipeline Corporation	311,015	-	-	9,672	750	(4,387)	-	317,050	
NHIP II Bison Holdings, LLC	244,325	-	-	(565)	-	-	21,874	265,634	
Hana Card Co., Ltd.	314,930	-	-	35,057	(121)	-	-	349,866	
Canakkale Highway And Bridge	208,272	56,312	-	(7,327)	19,596	-	-	276,853	
Korea IT Fund	323,294	-	-	31,734	(4,336)	(10,716)	-	339,976	
Center For Breakthrough	-	229,055	-	-	-	-	8,222	237,277	
Medicines Holdings, LLC									
ProteoVant Sciences, Inc.	-	222,370	-	(14,506)	5,010	-	-	212,874	
Joyvio	197,974	-	-	4,991	18,457	-	18,584	240,006	
Content Wavve Corp	75,803	100,000	-	(34,592)	(69)	-	-	141,142	
Parkingcloud Corp	-	160,038	-	-	-	-	-	160,038	
Best Oil Company Limited	159,557	-	-	2,633	(36,194)	-	6,434	132,430	
TBM Co., Ltd.	-	141,945	-	(1,863)	-	-	(1,480)	138,602	
ENN (Zhoushan) LNG Co., Ltd.	133,164	600	-	9,388	10,134	-	(22,813)	130,473	
Others	1,243,830	552,530	(72,028)	(99,148)	12,095	(45,485)	142,491	1,734,285	
	17,911,891	2,696,192	(72,028)	1,867,069	462,313	(271,364)	444,974	23,039,047	
Joint ventures:									
Sinopec-SK (Wuhan)	942,775	-	-	86,880	110,497	-	-	1,140,152	
Petrochemical Co., Ltd.									
Mitsui Chemicals & SKC	419,404	-	-	(9,672)	(10,039)	-	(2,276)	397,417	
Polyurethanes Co., Ltd.									
Beijing BESK Technology Co., Ltd.	235,604	-	-	(1,148)	27,108	-		261,564	
ZETA CAYMAN Limited	163,720	870	-	(865)	(67,416)	-	12,253	108,562	
Ignis Therapeutics		177,525	-	(83,813)	268	-		93,980	
Eurasia Tunnel	254,324	-	-	30,007	13,747	-	25,114	323,192	
Boryeong LNG Terminal Co., Ltd.	146,568	-	-	12,880	38	(12,800)	-	146,686	
SABIC SK Nexlene Company	93,915	-	-	41,005	(8,968)	-	-	125,952	
Pte. Ltd.	000.004						(000 004)		
Hana Land Chip PEF 33	262,881	-	-	-	-	-	(262,881)	-	
Others	<u>587,881</u> 3,107,072	41,618	(32,410)	(17,983) 57,291	<u>13,294</u> 78,529	(10.022)	(168,485) (396,275)	<u>413,893</u> 3.011,398	
	₩ 21,018,963	₩ 2,916,205	₩ (104,438)	₩ 1,924,360	₩ 540,842	₩ (294,186) ₩	₩ 48,699	26,050,445	

		For the year ended December 31, 2020									
					Equity profit	Other					
		Beginning			or losses on	capital	Dividends	Others	Ending		
A		balance	Acquisition	s Disposals	investments	movements	received	(*1)	balance		
Associates:	117	44 000 700	337	117	MI 000.00	A 117 (00 404)	W. (440 400) W		44 750 405		
SK Hynix Inc.	₩	11,028,722	Ŵ		- ₩ 890,284	( , ,	( , ,		11,750,425		
China Gas Holdings Ltd.		1,548,020		- (1,563,892			(9,332)	(107,375)			
Vingroup Joint Stock Company		1,172,259		-	- (35,75		-	(251,783)	851,300		
Eureka Midstream Holdings		487,160		-	- 8,814		-	(30,057)	465,917		
Masan Group Corporation		483,950		-	- (10,749		(5,617)	(68,144)	367,832		
Shenzhen Londian		294,126	98,7	67 .	- 16,91	1 -	-	(26,755)	383,049		
Electrics Co., Ltd.											
ESR Cayman Limited		684,714		- (270,537			-	(411,249)	-		
FR BR Aggregator		331,310			- (28,26	3) -	(1,458)	(17,656)	283,933		
Huizhou EVE United Energy		-			- 9,350	) -	-	344,465	353,815		
Co., Ltd.											
Peru LNG Company, LLC		286,727			- (28,18)	3) (15,088)	-	-	243,456		
Daehan Oil Pipeline Corporation		341,754			- 12,45	7 988	(44,184)	-	311,015		
NHIP II Bison Holdings, LLC		343,985			- (85,60	1) -	-	(14,059)	244,325		
Hana Card Co., Ltd.		294,756			- 20.67	í (497)	-	-	314,930		
Canakkale Highway And Bridge		140,849	62,3	69	- 16,619	) (11,565)	-	-	208,272		
Korea IT Fund		311,553			- 23,18		(17,557)	-	323,294		
Joyvio		212,353			- (1,579		-	(12,669)	197,974		
Best Oil Company Limited		153,524			- (57		-	(5,455)	159,557		
ENN (Zhoushan) LNG Co., Ltd.			132,9	38	- 5,078		-	(3,133)	133,164		
Socar Co., Ltd.		68,156	.02,0	-	- (8,95)		-	20,076	80,033		
Others		999,616	293,2	20 (71,123			(27,835)	135,674	1,239,600		
Guidio		19,183,534	587,2				(252,083)	(448,120)	17,911,891		
Joint ventures:		1011001001			.)	(00,001)	(202,000)	(110(120)			
Sinopec-SK (Wuhan)		1,003,159		-	- (69,04)	3) 8,664			942,775		
Petrochemical Co., Ltd.		1,000,100			(00,04	0,004			042,770		
Mitsui Chemicals & SKC		455,225			- (35,68	7) (2,451)	(3,815)	6.132	419.404		
Polyurethanes Co., Ltd.		433,223		-	- (55,00	(2,431)	(3,013)	0,132	419,404		
ZETA CAYMAN Limited			177.9	04	- (33)	2)		(13,852)	163.720		
Beijing BESK		233,244	177,3	04	- 678		-	(13,032)	235,604		
Technology Co., Ltd.		233,244			- 0/0	1,002	-	-	233,004		
		050.000			04.00	(44.007)		(47.044)	054.004		
Eurasia Tunnel		250,963		-	- 31,83		-	(17,244)	254,324 146,568		
Boryeong LNG Terminal Co., Ltd.		152,812		-	- 8,850		(15,060)	-			
SABIC SK Nexlene Company		81,182		-	- 4,113	8 8,620	-	-	93,915		
Pte. Ltd.		004 005			45.40		(10.10.1)	(150)	000.004		
Hana Land Chip PEF 33		264,395			- 15,100		(16,164)	(456)	262,881		
Others		270,202	216.0				(4.899)	155,588	587,881		
		2,711,182	393,9				(39,938)	130,168	3,107,072		
	₩	21,894,716	₩ 981,2	<u>45</u> <u>₩(1,953,903</u>	<u>8) ₩ 799,69</u>	<u>3 ₩ (92,820</u> )	₩ (292,021) ₩	<u>(317,952)</u> ₩	21,018,963		

(\*1) Others include the effects of changes in scope of consolidation, net foreign currency differences and others.

(3) Details of unrecognized changes in equity method caused by discontinuing the application of equity method as of December 31, 2021 are as follows (Korean won in millions):

	Beginning balance		Changes		E	nding balance
Pentaport Development Co., Ltd.	₩	79,238	₩	109	₩	79,347
Korea Consortium Kazakh B.V.		186,473		(10,779)		175,694
Yemen LNG Company Ltd. and others		45,279		29,889		75,168

(4) Details of reconciliation from net assets of investments in associates and joint ventures to book value of investments in associates and joint ventures as of December 31, 2021 are as follows (Korean won in millions):

			December	31, 2021		
		Equity	Net assets attributable to the ownership	Cost-book value	Intercompany transactions	
A	Net assets	ownership	interests	differentials	and others	Book value
Associates:	W 00 440 540	00.40/	117 40 005 040	117 704.050	III (100 0 10)	
	₩ 62,149,516	20.1%	₩ 13,205,019		₩ (183,040)	₩ 13,746,931
Vingroup Joint Stock Company	6,661,963	6.1%	416,373	568,405	-	984,778
Eureka Midstream Holdings	689,808	40.0%	275,923	247,906	-	523,829
VCM Services And Trading	89,554	16.0%	14,284	440,510	-	454,794
Development Joint Stock Company		0.00/				
Masan Group Corporation	1,002,290	9.3%	93,313	326,622	-	419,935
Darwin LNG Pty Ltd.	104,128	25.0%	26,032	412,058	-	438,090
Shenzhen Londian Wason Holdings Group. Co., Ltd.	846,363	26.0%	220,054	223,607	-	443,661
The CrownX Corporation	735,248	4.9%	36,027	325,136	-	361,163
FR BR Aggregator	772,763	39.0%	301,146	13	-	301,159
Huizhou EVE United Energy Co., Ltd	d. 894,441	49.0%	438,276	-	(8,112)	430,164
Peru LNG Company, LLC	1,290,407	20.0%	258,081	-	(44)	258,037
Daehan Oil Pipeline Corporation	737,196	41.0%	302,263	22,878	(8,091)	317,050
NHIP II Bison Holdings, LLC	1,072,235	24.5%	262,483	3,151	-	265,634
Hana Card Co., Ltd.	2,029,007	15.0%	304,351	45,515	-	349,866
Canakkale Highway And Bridge	1,107,410	25.0%	276,853	-	-	276,853
Korea IT Fund	536,804	63.3%	339,976	-	-	339,976
Center For Breakthrough Medicines Holdings, LLC	186,199	27.6%	51,479	185,798	-	237,277
ProteoVant Sciences, Inc.	187,671	40.0%	75,068	137,806	-	212,874
Joyvio	1,373,458	14.0%	192,009	47,997	-	240,006
Content Wavve Corp	(34,948)	36.4%	(12,708)		-	141,142
Parkingcloud Corp	118,915	47.1%	56,009	104,029	-	160,038
Best Oil Company Limited	215,662	35.0%	75,482	57,072	(124)	132,430
TBM Co., Ltd.	139,634	10.1%	14,103	124,499	-	138,602
ENN (Zhoushan) LNG Co., Ltd.	526,412	10.0%	52,641	77,832	-	130,473
Joint ventures:						
Sinopec-SK (Wuhan) Petrochemical Co., Ltd.	3,036,599	35.0%	1,062,810	77,342	-	1,140,152
Mitsui Chemicals & SKC Polyurethanes Co., Ltd.	800,423	50.0%	400,212	-	(2,795)	397,417
Beijing BESK Technology Co., Ltd.	533,288	49.0%	261,311	253	-	261,564
ZETA CAYMAN Limited	217,123	50.0%	108,562	-	-	108,562
Ignis Therapeutics	299,759	49.7%	148,946	26,463	(81,429)	93,980
Eurasia Tunnel	628,781	50.0%	314,391	17,209	(8,408)	323,192
Boryeong LNG Terminal Co., Ltd.	269,897	50.0%	134,949	28,736	(16,999)	146,686
Sabic SK Nexlene Company	326,387	50.0%	163,193		(37,241)	125,952
Pte. Ltd.	,		,		(,)	,

(\*1) The equity ownership presented is the ownership in respect to the number of shares issued by the investee, and the effective equity ratio of 21.25% was applied to the equity method valuation.

(5) Condensed financial information's of significant investments in associates and joint ventures as of December 31, 2021 are as follows (Korean won in millions).

	As of and for the year ended December 31, 2021										
	Current assets	N	lon-current assets		Current liabilities	Non-current liabilities		Sales	Net income (loss)	com	Total prehensive income (loss)
Associates:											
SK Hynix Inc.	₩ 26,870,451	₩	69,516,023	₩	14,769,356	₩ 19,426,060	₩	42,997,256	₩ 9,671,329	₩	10,746,226
Vingroup Joint Stock Company	8,510,579		13,752,998		7,525,581	6,446,459		6,256,496	(375,375	)	(375,375)
Eureka Midstream Holdings	36,105		1,008,038		19,542	334,793		141,976	65,158		65,158
VCM Services And Trading Development Joint Stock	466,448		389,669		492,852	244,102		1,541,934	(33,320)	)	(33,320)
Company											
Masan Group Corporation	2,273,132		4,296,338		1,799,942	2,563,788		4,480,602	504,059		504,059
Darwin LNG Pty Ltd.	611,426		31,896		515,083	24,111		2,391,203	99,598		99,598
Shenzhen Londian Wason Holdings Group Co., Ltd.	1,038,424		932,118		943,965	179,969		1,106,757	92,263		92,263
The CrownX Corporation	1,212,174		1,334,879		1,111,651	478,865		2,069,459	98,834		98,834
FR BR Aggregator	3,510		1,331,543		4,674	557,615		-	(23,386	)	(23,386)
Huizhou EVE United Energy Co., Ltd.	706,479		676,176		394,166	94,048		1,156,517	88,515		88,515
Peru LNG Company, LLC	344,281		2,504,325		320,570	1,237,629		1,822,623	(40,015	)	(40,015)
Daehan Oil Pipeline Corporation	115,637		921,646		39,561	260,526		180,276	25,313		27,141
NHIP II Bison Holdings, LLC	21,797		1,051,447		1,009	-		-	(1,451)	)	(1,451)
Hana Card Co., Ltd.	9,130,044		465,333		1,281,783	6,284,587		1,270,568	250,484		251,393
Canakkale Highway And Bridge	89,744		4,010,436		96,024	2,896,746		767,500	8,484		8,418
Korea IT Fund	117,172		419,632		-	-		58,741	50,107		43,260
Center For Breakthrough Medicines Holdings, LLC	206,958		56,245		31,277	45,727		2,584	(30,322)		(30,322)
ProteoVant Sciences, Inc.	203,287		560		12,150	4,026		-	(20,363		(20,363)
Joyvio	1,904,358		2,604,087		1,384,884	1,393,941		2,472,467	105,581		105,247
Content Wavve Corp	251,782		140,537		82,030	326,074		230,147	(90,396		(90,396)
Parkingcloud Corp	137,344		68,811		49,320	37,920		74,954	(12,704		(12,704)
Best Oil Company Limited	269,698		202,373		241,334	15,075		659,727	17,523		17,523
TBM Co., Ltd.	138,397		61,634		7,419	52,978		18,067	(28,074		(28,074)
ENN (Zhoushan) LNG Co., Ltd.	29,436		1,016,137		36,133	483,028		195,491	97,698		97,698
Joint ventures:											
Sinopec-SK (Wuhan) Petrochemical Co., Ltd.	1,264,770		4,683,811		1,512,768	1,399,214		8,908,430	247,160		247,160
Mitsui Chemicals & SKC Polyurethanes Co., Ltd.	237,293		815,714		186,336	66,248		756,578	(12,304	)	(32,382)
Beijing BESK Technology Co., Lto	d. 413,849		482,364		354,111	8,814		597,911	(1,093		(1,093)
ZETA CAYMAN Limited	1,598		215,979		454	-		-	(1,730	)	(136,535)
Ignis Therapeutics	123,219		178,820		1,727	553		-	(4,798		(4,798)
Eurasia Tunnel	157,530		1,498,760		207,513	819,996		12,632	49,719		77,213
Boryeong LNG Terminal Co., Ltd.			1,553,067		87,880	1,319,636		193,772	27,245		27,321
SABIC SK Nexlene Company	266,153		504,256		94,208	349,814		476,715	75,951		32,818
Pte. Ltd.											

#### 11. Property, plant and equipment

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

	Dece	mber 31, 2021	December 31, 2020
Acquisition cost	${\mathbb W}$	73,873,413	₩ 65,059,292
Accumulated depreciation			
and accumulated impairment loss		<u>(22,467,174</u> )	(19,163,698)
	$\overline{W}$	51,406,239	₩ 45,895,594

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

	For the year ended December 31, 2021								
	Beginning	Business					Ending		
	balance	combination	Acquisitions	Disposals D	Depreciation	Others (*1)	balance		
Land	₩ 8,514,509	₩ 857,667	₩ 79,474 ₩	₩ (243,129)₩	¥ - <del>\</del>	₩ 85,727	₩ 9,294,248		
Buildings	4,567,149	241,018	20,264	(21,772)	(213,984)	1,410,985	6,003,660		
Structures	1,660,194	48,975	22,391	(30,241)	(131,765)	417,237	1,986,791		
Machinery and equipment	20,261,529	134,761	644,866	(161,153)	(3,949,965)	3,917,730	20,847,768		
Vehicles	199,411	1,684	7,583	(1,299)	(34,219)	7,434	180,594		
Operating lease asset	1,786,789	-	861,956	(29,304)	(442,502)	(234,620)	1,942,319		
Others	3,382,742	32,207	1,417,158	(11,781)	(820,957)	448,104	4,447,473		
Construction-in-progress	5,523,271	388,084	6,536,550	(7,226)		(5,737,293)	6,703,386		
	<u>₩ 45,895,594</u>	₩ 1,704,396	₩ 9,590,242	₩ (505,905)₩	<u>∛ (5,593,392</u> )	₩ 315,304	₩ 51,406,239		

		For the year ended December 31, 2020								
	Beginning	Business			Ending					
	balance of	combination	Acquisitions [	Disposals De	epreciation	Others (*1)	balance			
Land	₩ 8,787,048 ₩	₩ 79,007	₩ 41,345 ₩	(333,331)₩	- 4	₩ (59,560)	₩ 8,514,509			
Buildings	4,271,484	56,791	10,248	(36,115)	(189,513)	454,254	4,567,149			
Structures	1,518,777	7,654	9,370	(27,277)	(115,384)	267,054	1,660,194			
Machinery and equipment	18,582,898	356,632	630,682	(50,251)	(3,793,451)	4,535,019	20,261,529			
Vehicles	185,700	3,547	6,230	(1,244)	(32,663)	37,841	199,411			
Operating lease asset	1,746,356	-	810,272	(29,537)	(433,593)	(306,709)	1,786,789			
Others	3,537,088	27,753	1,159,336	(27,855)	(701,456)	(612,124)	3,382,742			
Construction-in-progress	4,198,976	152,374	7,046,971	(33,449)	_	(5,841,601)	5,523,271			
	₩ 42,828,327 ₩	₩ <u>683,758</u>	₩ 9,714,454 ₩	(539,059)₩	(5,266,060)	₩(1,525,826)	¥ 45,895,594			

- (\*1) Other changes include exclusion from the scope of consolidation, impairment losses, transfer of construction-in-progress to depreciable assets and investment properties, net translation differences and others.
- (3) Capitalized borrowing costs

Capitalized borrowing costs and capitalization rates for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dec	ember 31, 2021	December 31, 2020		
Property, plant and equipment and intangible assets	₩	77,241	₩ 47,130		
Capitalization rate		1.3% ~ 4.6%	1.3% ~ 5.4%		

#### 12. Right-of-use assets and lease liabilities

(1) Details of right-of-use assets as of December 31, 2021 and December 31, 2020 are as follows (Korean won in millions):

	Decer	mber 31, 2021	December 31, 2020
Acquisition cost	$\overline{W}$	7,234,373	₩ 7,879,536
Accumulated depreciation			
and accumulated impairment losses		(2,200,057)	<u>(1,701,056</u> )
	$\overline{W}$	5,034,316	₩ 6,178,480

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

		For the year ended December 31, 2021								
	Beginning	Business					Ending			
	balance	combination	Increase	Decrease	Depreciation	Others (*1)	balance			
Land and buildings	₩ 3,230,719	₩ 28,165	₩ 964,605	₩ (390,837)	₩ (522,480)	₩ (1,109,863) ₩	2,200,309			
Tank	217,252	-	11,355	(1,143)	61,864)	7,018	172,618			
Ships and vessels	1,013,186	-	286,424	-	(97,223)	31,804	1,234,191			
Vehicles	1,264,696	1,312	379,707	(239,548)	(276,808)	37,951	1,167,310			
Others	452,627	188	95,605	(22,503)	(131,014)	(135,015)	259,888			
	₩ 6,178,480	₩ 29,665	₩ 1,737,696	<u>₩ (654,031</u> )	<u>₩ (1,089,389</u> )	<u>₩ (1,168,105</u> ) <u>₩</u>	5,034,316			
			For the	e vear ended De	ecember 31 2020	)				

	Beginning	Business		•			Ending	
	balance	combination	Increase	Increase Decrease		Others (*1)	balance	
Land and buildings	₩ 1,912,68	1 ₩ 73,137	7 ₩ 880,354	₩ (208,489)	₩ (474,287)	₩ 1,047,323	₩ 3,230,719	
Tank	266,19	5.	- 21,563	(3,185)	(67,412)	91	217,252	
Ships and vessels	1,065,528	3.	- 60,548	-	(89,013)	(23,877)	1,013,186	
Vehicles	1,424,084	4 3,223	361,575	(232,888)	(285,747)	(5,551)	1,264,696	
Others	492,29	3,245	5 115,964	(14,934)	(158,954)	15,016	452,627	
	₩ 5,160,778	3 <u>₩ 79.605</u>	5 ₩ 1.440.004	₩ (459,496)	₩ (1.075.413)	₩ 1.033.002	₩ 6,178,480	

(\*1) The amounts include net foreign exchange differences and others.

(3) Changes in lease liabilities for the year ended December 31, 2021 and 2020 are as follows (Korean won in millions):

				For the year en	ded December 31,	2021		
	Beginning	Business		Interest				Ending
	balance	combination	Increase	expenses	Decrease	Transfer	Others (*1)	balance
Lease liabilities	₩ 5,665,951	₩ 29,476	₩ 1,633,969	₩ 110,475	₩ (1,181,100) ₩	(64,521)	₩ (1,139,360)	₩5,054,890
				For the year en	ded December 31,	2020		
	Beginning	Business		Interest				Ending
	balance	combination	Increase	expenses	Decrease	Transfer	Others (*1)	balance
Lease liabilities	₩ 4,647,511	₩ 79,778	₩ 1,392,811	₩ 122,975	₩ (1,177,161) ₩	1,152	₩ 598,885	₩5,665,951

(\*1) The amounts include net foreign exchange differences and others.

The Group recognized lease payments of %164,901 million (%151,965 million as of December 31, 2020) in relation to short-term lease, %10,584 million (%10,484 million as of December 31, 2020) in relation to leases of low-value assets, and %157,456 million (%164,059 million as of December 31, 2020) in relation to variable lease payments in cost of sales and selling and administrative expenses during the year ended December 31, 2021. The total cash outflow of leases during the year ended December 31, 2021. The total cash outflow of leases during the year ended December 31, 2021 is %1,514,041 million (%1,503,669 million as of December 31, 2020).

#### 13. Investment properties

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

	Decer	mber 31, 2021	December 31, 2020
Acquisition cost Accumulated depreciation	$\mathbb{W}$	1,125,221	₩ 699,720
and accumulated impairment loss		(158,093)	<u>(130,564</u> )
	$\overline{W}$	967,128	₩ 569,156

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

				Fo	r the	year ended Dec	emb	er 31, 2021			
	E	Beginning				•					Ending
		balance		Acquisition		Disposal	De	preciation	Others (*	1)	balance
Land	₩	501,528	₩	-	₩	(131,201)	₩	-	₩ 174,2	257 ₩	544,584
Buildings		63,800		44,268		(111,308)		(17,058)	437,8	343	417,545
Structures		3,828		452				(72)		791	4,999
	₩	569,156	₩	44,720	₩	(242,509)	₩	(17,130)	₩ 612,8	<u>391</u> ₩	967,128
				Fo	r the	year ended Dec	emb	er 31, 2020			
	E	Beginning									Ending
		balance		Acquisition		Disposal	De	preciation	Others (*	1)	balance
Land	₩	241,383	₩	111	₩	(6,527)	₩	-	₩ 266,	561 ₩	501,528
Buildings		245,891		313		(84,660)		(8,253)	(89,4	191)	63,800
Structures		484		-				<u>(81</u> )	3,4	<u>125</u>	3,828
	₩	487,758	₩	424	₩	(91,187)	₩	(8,334)	₩ 180,4	195 ₩	569,156

(\*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, 2021 and 2020 with regards to investment properties are as follows (Korean won in millions):

		December 31, 2021	December 31, 2020
Rental revenue	H	₩ 67,248	₩ 15,338
Depreciation		(17,130)	(8,334)
	H	∀50,118	₩ 7,004

The Group does not distinguish operating expenses related to rental revenue.

(4) As of December 31, 2021, the fair value of investment properties is W1,312,219 million.

## 14. Goodwill

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

		For the years ended				
	Dece	mber 31, 2021	December 31, 2020			
Beginning balance	$\overline{W}$	4,454,730	₩	2,598,464		
Business combination (*See note 39)		1,028,547		2,011,610		
Others (*1)		135,234		(155,344)		
Ending balance	₩	5,618,511	₩	4,454,730		

- (\*1) Others include net translation differences, retroactive adjustment amount of identifiable net assets in accordance with past business combination.
- (2) Impairment testing of goodwill

1) Goodwill of each operating segment for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the years ended				
	December 31, 2021	December 31, 2020			
SK Inc. and others	₩ 1,328,934	1 ₩ 926,504			
Group of SK Innovation Co., Ltd.	297,664	248,421			
Group of SK Telecom Co., Ltd.	405,639	1,647,388			
Group of SK Square Co., Ltd.	1,359,816	) -			
Group of SK Networks Co., Ltd.	443,522	2 443,755			
Group of SKC Co., Ltd.	775,088	3 774,526			
Group of SK Ecoplant Co., Ltd.	1,007,848	<u>414,136</u>			
	<u>₩ 5,618,51</u> 2	₩ 4,454,730			

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 December 31, 2021 are as follows:

	Recoverable		
	amount	Growth rate (*1)	Discount rate (*2)
SK Inc. and others	Value in use	1.0%	8.7% ~ 16.9%
Group of SK Innovation Co., Ltd.	Value in use	0.0% ~ 2.0%	7.7% ~ 11.5%
Group of SK Telecom Co., Ltd.	Value in use	1.0%	7.1%
Group of SK Square Co., Ltd.	Value in use	1.0%	8.4%
Group of SK Networks Co., Ltd.	Value in use	1.0%	11.0% ~ 17.5%
Group of SKC Co., Ltd.	Value in use	0.0% ~ 1.0%	9.5% ~ 12.7%
Group of SK Ecoplant Co., Ltd.	Value in use	0.0% ~ 1.0%	8.0% ~ 10.0%

- (\*1) Future cash flows for additional periods after the estimated period are estimated using a fixed growth rate.
- (\*2) The discount rate used to determine the recoverable amount of each operating segment is based on the weighted-average cost of capital.

#### 15. Intangible assets

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

	For the year ended December 31, 2021						
	Beginning	Business					Ending
	balance	combination	Acquisitions	Disposals	Amortization	Others (*2)	balance
Development costs	₩ 219,1	6 ₩ 1,383	₩ 61,448	₩ (1,742)	₩ (65,102)₩	76,938	₩ 292,091
Facility usage rights	55,6	71 -	1,817	(21)	(8,135)	2,395	51,727
Industrial property rights	87,0	19 37,730	20,719	(2,629)	(11,084)	(9,266)	122,489
Frequency usage rights	1,932,7	65 -	1,146,000	-	(519,075)	-	2,559,690
Customer-related assets	2,999,3	19 63,688	69,825	(506)	(266,281)	49,479	2,915,524
Membership (*1)	284,8	35 -	32,968	(16,302)	-	7,189	308,690
Development costs for petroleum resource	1,149,0	11 -	59,407	-	(35,517)	(38,694)	1,134,207
Brand-related assets (*1)	2,631,3	93 10	-	-	-	2,741	2,634,144
Developed technology	989,5	37 -	18,010	-	(156,179)	18,999	870,417
Others (*3)	1,692,5	<u>11</u> <u>280,694</u>	207,440	(7,435)	(626,430)	246,131	1,792,911
	₩ 12,041,2	<u>77</u> <u>₩ 383,505</u>	₩ 1,617,634	₩ (28,635)	₩ (1,687,803)₩	355,912	₩ 12,681,890

	For the year ended December 31, 2020						
	Beginning	Business					Ending
	balance	combination	Acquisitions	Disposals	Amortization	Others (*2)	balance
Development costs	₩ 151,82	1 ₩ 466	₩ 90,473	₩ (641)	₩ (46,165)₩	23,209 ₩	219,166
Facility usage rights	48,30	) 12,166	3,415	(49)	(7,170)	(991)	55,671
Industrial property rights	74,65	- (	2,710	(546)	(6,602)	16,798	87,019
Frequency usage rights	2,647,50	1 -	-	-	(516,348)	(198,388)	1,932,765
Customer-related assets	2,221,36	5 915,003	8,893	(7,649)	(246,321)	108,028	2,999,319
Membership (*1)	237,66	2 50,361	39,256	(48,109)	-	5,665	284,835
Development costs for petroleum resource	1,492,03	1 -	127,660	-	(81,180)	(389,500)	1,149,011
Brand-related assets (*1)	2,596,64	3 20,306	-	-	-	14,444	2,631,393
Developed technology	941,53	4 240,738	-	(12,746)	(158,465)	(21,474)	989,587
Others (*3)	1,656,26	7 178,521	263,132	(16,712)	(572,304)	183,607	1,692,511
	₩ 12,067,78	<u>₩ 1,417,561</u>	₩ 535,539	₩ (86,452)	₩ (1,634,555)₩	<sup>≠</sup> (258,602) ₩	<sup>z</sup> 12,041,277

- (\*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-related assets as of December 31, 2021 are as follows:

	Growth rate (*1)	Discount rate (*2)
Value in use	1.0%	8.7% ~ 16.9%

- (\*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-related assets, the carrying amount does not exceed the recoverable amount, so there is no impairment loss recognized during the current reporting period.

#### 16. Borrowings and bonds payable

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

	December 31, 2021				December 31, 2020		
		Current	Non-current		Current	Non-current	
Short-term borrowings (*1)	₩	7,657,381	₩ -	₩	6,201,430	₩ -	
Bonds and long-term borrowings:							
Bonds payable		5,613,715	29,242,287		4,767,907	26,399,587	
Long-term borrowings (*1)		2,214,356	13,377,854		1,448,871	10,443,923	
		7,828,071	42,620,141		6,216,778	36,843,510	
	$\mathbb{W}$	15,485,452	₩ 42,620,141	₩	12,418,208	₩ <u>36,843,510</u>	

(\*1) It includes borrowings collaterized for trade receivables of ₩89,423 million and ₩188,155 million as of December 31, 2021 and 2020, respectively, which were transferred but not derecognized.

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

	December 31, 2021	December 31, 2020
SK Inc.	₩ 6,735,000	₩ 6,400,000
SK Innovation Co., Ltd.	1,252,750	1,604,000
SK Energy Co., Ltd.	3,360,000	3,300,000
SK Geo Centric Co., Ltd.	1,750,000	1,610,000
SK Incheon Petrochem Co., Ltd.	2,110,000	1,870,000
SK Lubricants Co., Ltd.	720,000	840,000
SK Battery America, Inc.	1,185,500	-
SK On Co., Ltd.	700,000	-
SK Earthon Co., Ltd.	150,000	-
SK Telecom Co., Ltd.	6,822,600	6,895,600
SK Broadband Co., Ltd.	1,625,650	1,686,400
SK Shieldus Co., Ltd.	297,823	24,782
SK Networks Co., Ltd.	1,040,000	1,030,000
SK Magic Co., Ltd.	360,000	280,000
SK Rent-a-Car Co., Ltd.	720,000	375,000
SKC Co., Ltd.	398,807	312,943
SKC Solmics Co., Ltd.	-	41,760
SK Telesys Co., Ltd.	30,000	30,000
SKC Hightech & Marketing Co., Ltd.	10,000	59,376
SK E&S Co., Ltd.	1,380,000	1,020,000
Paju Energy Service Co., Ltd.	730,000	730,000
Narae Energy Service Co., Ltd.	360,000	420,000
Yeoju Energy Service Co., Ltd.	200,000	200,000
SK Ecoplant Co., Ltd.	1,558,000	1,008,000
SK Materials Co., Ltd.	460,000	-
Formerly, SK Materials Co., Ltd.	-	455,000
SK Materials Airplus Incorporated.	100,000	-
SK Siltron Co., Ltd.	779,000	924,000
Teraon Co., Ltd.	10	-
SIGNET EV Inc.	2,800	
	34,837,940	31,116,861
Addition: premium on bonds payable	18,062	50,633
Less: current portion	(5,613,715)	<u>(4,767,907</u> )
	₩ 29,242,287	₩ 26,399,587

# 16. Borrowings and bonds payable (cont'd)

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

Financial institution	Description	Interest rate (%)	December 31, 2021	December 31, 2020
Korea Development Bank and others	General		₩ 7,062,438	
Korea Development Bank and others	Fund for facility	0.00 ~ 4.90	4,300,193	2,925,741
Standard Chartered Bank and others	Foreign borrowings	0.00 ~ 8.00	2,463,366	1,374,882
Korea Energy Agency (*1)	Fund for mine exploration	0.00 ~ 8.80	61,804	83,853
Econg 1st Co., Ltd. and others	Callable preferred share	2.70 ~ 2.95	100,420	100,000
Korea Development Bank and others	Fund for operation	0.00 ~ 2.78	252,276	97,650
Kookmin Bank and others	Fund for supply pipeline	-	-	7,602
KEB Hana Bank	Fund for reasonable energy consumption	1.75	3,477	3,660
NH Bank	Fund for safety management	-	-	261
Korea Development Bank and others (*2)	Takeover	LIBOR(3M) + 1.60	165,970	152,320
Mizuho Bank and others (*3)	Takeover	EURIBOR(3M) + 0.70	216,117	215,457
MD Prime 1st Co., Ltd. and others	Others	3.07, 3.20	1,007,818	909,976
			15,633,879	11,922,158
Addition (less): premium (discount)			(41,669)	(29,364)
Less: current portion			(2,214,356)	(1,448,871)
		-	₩ 13,377,854	₩ 10,443,923

- (\*1) As of December 31, 2021, the Group holds a loan amounting to ₩53,420 million and ₩53,191 million 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.
- (\*2) SK Geo Centric Co., Ltd., one of the subsidiaries, has a repayment obligation for borrowings of SK Global 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 and intangible assets.
- (\*3) SK Geo Centric Co., Ltd., one of the subsidiaries, has a repayment obligation for borrowings of SK Functional Polymer S.A.S in the event of default. The purpose of the borrowings of SK Functional Polymer S.A.S was to acquire high-functional polymer business and the related tangible and 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 35.

# 17. Long-term other payables

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

		Decem	ber 31, 2021	
		Discount		Long-term
		on long-term		other
	Nominal value	other payables	Current portion	payables
Frequency usage right	₩ 2,090,715	₩ (80,882)	)₩ (398,823)₩	1,611,010
Others	243,333			243,333
	₩ 2,334,048	₩ (80,882)	) <u>₩ (398,823)</u> <u>₩</u>	1,854,343
		Deceml	ber 31, 2020	
		Discount		Long-term
		on long-term		other
	Nominal value	other payables	Current portion	payables
Frequency usage right	₩ 1,626,040	₩ (59,717)	)₩ (424,600) ₩	1,141,723
Others	27,084	(23)		27,061
	<u>₩ 1,653,124</u>	₩ (59,740)	) <u>₩ (424,600</u> ) <u>₩</u>	1,168,784

### 18. Provisions

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

	For the year ended December 31, 2021										
		Beginning					Ending				Non-
		balance	Inc	crease	D	ecrease	balance		Current	C	urrent
Provision for sale warranties	₩	91,319 <sup>-</sup>	₩	48,088	₩	(7,990)₩	131,4	7 ₩	4,910	₩	126,507
Provision for service / construction warranties		101,415		21,791		(23,840)	99,36	66	99,366		-
Provision for restoration		166,855		426,452		(12,150)	581,1	57	60,840		520,317
Provision for onerous contracts		353,075		23,290		(120,175)	256,19	90	223,103		33,087
Other provisions (*1)	-	224,737		188,514		(244,880)	168,3	71	141,830		26,541
	₩	937,401	₩	708,135	₩	<u>(409,035)</u>	1,236,50	01 ₩	£ 530,049	₩	706,452

(\*1) Other provisions include greenhouse gas emissions provision of ₩18,402 million, and the provision is recognized only when actual emissions exceed the emission rights granted and still held. Permitted greenhouse gas emissions were 22,641,552 KAU, and estimated greenhouse gas emissions were 21,841,349 KAU in 2021.

	For the year ended December 31, 2020									
		Beginning					Ending		I	Non-
		balance	Inc	rease	D	ecrease	balance	Current	С	urrent
Provision for sale warranties	₩	75,025	₩	25,504	₩	(9,210)₩	91,319 \	∀ 4,971	₩	86,348
Provision for service / construction warranties		93,034		29,332		(20,951)	101,415	100,980		435
Provision for restoration		160,170		25,349		(18,664)	166,855	43,506		123,349
Provision for onerous contracts		152,857	2	242,836		(42,618)	353,075	274,373		78,702
Other provisions (*1)		335,545		239,322		(350,130)	224,737	211,149		13,588
	₩	816,631	₩	562,343	₩	<u>(441,573)</u> ₩	937,401	₩ 634,979	₩	302,422

(\*1) Other provisions include greenhouse gas emissions provision of ₩42,382 million, and the provision is recognized only when actual emissions exceed the emission rights granted and still held. Permitted greenhouse gas emissions were 14,614,115 KAU, and estimated greenhouse gas emissions were 19,527,716 KAU in 2020.

# 19. Defined benefit liabilities

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

	Decer	December 31, 2021		ember 31, 2020
Present value of defined benefit obligation	$\mathbb{W}$	3,609,349	₩	3,491,805
Fair value of plan assets (*1)		<u>(3,381,561</u> )		<u>(3,054,840</u> )
Total	₩	227,788	₩	436,965

(\*1) The Group has recognized ₩56,150 million as defined benefit assets as of December 31, 2021.

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

	For the year ended December 31, 2021					
	Ρ	resent value				
		of defined				
		benefit	Fair value of			
		obligation	plan assets	Total		
Beginning balance	₩	3,491,805	₩ (3,054,840) ₩	436,965		
Business combination		3,182	-	3,182		
Provision for pension benefits:						
Current service cost		450,854	-	450,854		
Past service cost		164	-	164		
Net interest expense (income)		83,124	(74,100)	9,024		
Remeasurement:						
Return on plan assets		-	19,943	19,943		
(excluding amounts included in net interest expenses	)					
Actuarial changes arising from changes	-	(29,458)	-	(29,458)		
in financial assumptions and others						
Contributions by employer directly to plan assets		-	(588,275)	(588,275)		
Benefit paid		(339,058)	313,145	(25,913)		
Others		(51,264)	2,566	(48,698)		
Ending balance	₩	3,609,349	<u>₩ (3,381,561</u> ) <u>₩</u>	227,788		

# 19. Defined benefit liabilities (cont'd)

	For the year ended December 31, 2020					
	Present value					
		of defined				
		benefit	Fair value of			
		obligation	plan assets	Total		
Beginning balance	₩	3,171,225	₩ (2,763,924) ₩	407,301		
Business combination		62,200	(57,670)	4,530		
Provision for pension benefits:						
Current service cost		438,923	-	438,923		
Past service cost		1,077	-	1,077		
Net interest expense (income)		70,840	(62,785)	8,055		
Remeasurement:						
Return on plan assets		-	5,071	5,071		
(excluding amounts included in net interest expense)						
Actuarial changes arising from changes		24,126	-	24,126		
in financial assumptions and others						
Contributions by employer directly to plan assets		-	(447,307)	(447,307)		
Benefit paid		(261,201)	237,146	(24,055)		
Others		(15,385)	34,629	19,244		
Ending balance	₩	3,491,805	₩ (3,054,840)	436,965		

(3) As of December 31, 2021 and 2020, 62.96% and 64.85% of the plan assets, respectively, consist of cash and cash equivalents and debt instruments.

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

	December 31, 2021	December 31, 2020
Discount rate for defined benefit obligation	2.30% ~ 3.69%	1.41% ~ 3.14%
Expected rate of salary increase	1.00% ~ 8.00%	1.00% ~ 6.00%

(5) The sensitivity analysis for significant actuarial assumptions as of December 31, 2021 is as follows (Korean won in millions):

	Impact on the defined benefit liabilities							
	Sensitivity level		Increase		Decrease			
Discount rate for defined benefit obligation	0.5% point	₩	(201,030)	₩	233,818			
Expected rate of salary increase	0.5% point		223,682		(194,288)			

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.

### 20. Other assets and liabilities

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

	December 31, 2021	December 31, 2020
Current assets:		
Short-term loans	₩ 94,031	₩ 193,526
Accrued income	114,924	154,932
Advanced payments	1,280,959	830,073
Prepaid expenses	2,695,879	2,730,042
Guarantee deposits	276,658	356,573
Derivative financial assets	131,631	129,821
Lease receivables	19,016	56,838
Other contract assets	112,226	100,700
Others	154,321	121,713
	₩ 4,879,645	<u>₩ 4,674,218</u>
Non-current assets:		
Long-term prepaid expenses	₩ 1,187,057	₩ 1,428,210
Long-term loans	411,711	416,482
Guarantee deposits	711,104	574,946
Derivative financial assets	740,617	596,215
Long-term lease receivables	36,175	25,079
Other long-term contract assets	41,580	47,675
Others	230,982	217,889
	₩ 3,359,226	₩ 3,306,496

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

	Decemb	<u>er 31, 2021</u>	December 31, 2020
Current liabilities:			
Accrued expenses	₩	4,845,940	₩ 3,964,534
Dividends payable		887	840
Advances received		1,464,756	1,779,351
Unearned revenue		99,749	62,879
Withholdings		2,061,187	2,238,208
Leasehold deposits received		198,776	210,035
Income tax payable		1,244,891	1,161,735
Derivative financial liabilities		321,570	96,420
Lease liabilities		1,250,891	2,244,201
Finance guarantee liabilities		642	832
Financial liabilities at fair value		160,528	-
through profit or loss			
Other contract liabilities		293,715	297,350
Others		48,266	19,077
	₩	<u>11,991,798</u>	₩ 12,075,462
Non-current liabilities:			
Long-term accrued expenses	₩	34,035	₩ 10,610
Long-term unearned revenue		640,133	571,257
Leasehold deposits received		298,478	262,079
Derivative financial liabilities		439,235	734,225
Long-term lease liabilities		3,803,999	3,421,750
Financial guarantee liabilities		16,910	21,447
Financial liabilities at fair value		59,123	-
through profit or loss			
Other long-term contract liabilities		51,220	40,011
Others (*1)		225,409	209,330
	₩	5,568,542	₩ 5,270,709

(\*1) Includes long-term employee benefit liabilities amounting to ₩125,102 million and ₩117,973 million as of December 31, 2021 and 2020, respectively.

# 20. Other assets and liabilities (cont'd)

(3) Details of incremental costs of obtaining a contract as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Dece	mber 31, 2021	Dec	ember 31, 2020
Current incremental costs of obtaining a contract	$\mathbb{W}$	1,886,680	₩	2,016,570
Non-current incremental costs of obtaining a contract		977,236		982,952
-	₩	2.863.916	₩	2.999.522

The Group pays fees to its dealers based on the performance of customer recruitment and contract renewal relating to mobile telephone services, etc., and among these fees, costs that would not have been incurred if there were no contracts with the customer is recognized as prepaid expenses. In the prior period, such costs were expensed when incurred. The asset is amortized on a straight-line basis over the estimated contract period with the related customer. On the other hand, the amount of incremental cost of obtaining a contract recognized as an asset which was expensed as commission expense and others in the consolidated statement of comprehensive income for the current period is W2,634,134 million.

### 21. Derivative financial assets and liabilities

(1) Details of derivative financial assets and liabilities as of December 31, 2021 and 2020 are as follows (Korean won in millions):

		December	31, 2021	December 31, 2020		
	(	Current	Non-current	Current	Non-current	
Firm contracts	₩	20,966	₩ (92,236)	₩ (25,226)	₩ 5,488	
Swap contracts		(218,791)	(53,910)	27,906	(640,075)	
Forward contracts		9,007	11,170	10,036	2,008	
Futures contracts		8,794	-	4,608	1,673	
Options contracts		<u>(9,915)</u>	436,358	16,077	492,896	
	₩	(189,939)	₩ <u>301,382</u>	₩ 33,401	<u>₩ (138,010</u> )	
Derivative financial assets	₩	131,631	₩ 740,617	₩ 129,821	₩ 596,215	
Derivative financial liabilities		(321,570)	(439,235)	(96,420)	(734,225)	

(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 of December 31, 2021, 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 Inc.	Hedge of foreign currency exchange risk of foreign currency denominated contract and others	Foreign exchange forwards and total revenue swap agreement	KEB Hana Bank and others
SK Innovation Co., Ltd.	Cash flow hedge of forecasted sales of products and the risk of changes in market interest rates	Merchandise derivative and interest swaps and others	BOA, Credit Agricole and others
SK Telecom Co., Ltd.	Hedge of foreign currency exchange risk of foreign currency denominated bond, hedge of currency exchange, interest rate risk of floating rate foreign currency denominated bond and the risk of changes in market interest rates and others	Foreign exchange swaps and interest swaps and others	Korea Development Bank, Citi Bank and others
SK Networks Co., Ltd.	Hedge of foreign currency exchange risk of foreign currency denominated debt and bond and others	Foreign exchange forwards and interest swaps 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 and others	Foreign exchange forwards and interest rate swaps	KEB Hana Bank, Woori Bank, Shinhan Bank 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. Price change hedge of natural gas purchase contract	Foreign exchange forwards and interest rate swaps Merchandise swaps	Korea Development Bank Woori Bank, NH Bank, Kookmin Bank and others J.ARON&COMPANY(SINGAPORE) PTF and others
SK Ecoplant Co., Ltd	Hedge of changes in revenue from construction contract denominated in foreign currency	Foreign exchange forwards	KEB Hana Bank, Credit Suisse, Standard Chartered Bank and others
	Hedge of changes in construction cost of construction contract denominated in foreign currency Held-for-trading	Foreign exchange forwards Foreign exchange forwards	KEB Hana Bank, Korea Development Bank, HSBC and others Standard Chartered Bank, HSBC and others

# 22. Equity

(1) Details of issued capital as of December 31, 2021 and 2020 are as follows (Korean won in millions, except for number of shares):

	Dece	ember 31, 2021	December 31, 2020
Number of shares authorized for issue		400,000,000	400,000,000
Per share (Korean won)	$\mathbb{W}$	200	₩ 200
Number of shares issued:			
Ordinary share		74,149,329	70,360,297
Preferred share		566,135	566,135
Issued capital:			
Ordinary share	₩	16,030	₩ 15,272
Preferred share		113	113
	$\overline{W}$	16,143	₩ 15,385

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

	Deceml	<u>per 31, 2021 De</u>	<u>cember 31, 2020</u>
Additional paid-in capital (*1)	$\overline{W}$	6,609,167 ₩	5,605,831
Treasury shares (*2)		(1,812,774)	(1,811,454)
Others		1,648,903	1,455,769
	$\overline{\mathbb{W}}$	<u>6,445,296</u> ₩	5,250,146

- (\*1) During the year ended December 31, 2015, the Company repurchased treasury shares of ₩3,369,395 million from merger with the former SK Inc., which was recognized as a contraequity account on additional paid-in capital.
- (\*2) For the period ended December 31, 2021, treasury shares consist of those acquired to increase the enterprise value and to stabilize share price (7,033,831 ordinary shares) and those acquired from repurchase of shares from dissenting shareholders on business combination and shares arising from odd lot shares (11,024,731 ordinary shares and 1,787 preferred shares) during the year 2015.

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

	Decen	nber 31, 2021	Dece	ember 31, 2020
Legal reserve (*1)	$\mathbb{W}$	7,693	₩	7,693
Voluntary reserve		62,897		62,897
Unappropriated retained earnings		13,995,052		12,426,086
	$\overline{W}$	14,065,642	₩	12,496,676

<sup>(\*1)</sup> 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) Dividends

1) Details of dividends proposed for approval at the annual ordinary shareholders' meeting for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	_	For the years ended							
		December 31, 2021				December 31, 2020			
	Ordi	Ordinary share Preferred share			Or	dinary share	Pre	eferred share	
Number of shares (*1)		56,090,767		564,348		52,306,892		564,348	
Par value per share (Korean won)	₩	200	₩	200	₩	200	₩	200	
Dividend rate		3,250%		3,275%		3,000%		3,025%	
Dividends	₩	364,590	₩	3,696	₩	313,842	₩	3,414	

(\*1) The total number of shares was calculated from the number of issued shares excluding treasury shares.

2) Details of Interim dividends proposed for approval at board of directors for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the years ended							
	December 3	1, 2021	December 31, 2020					
	Ordinary share	Preferred share	Ordinary share	Preferred share				
Number of shares (*1)	52,307,337	564,348	52,304,347	564,317				
Par value per share (Korean won)	₩ 200	₩ 200	₩ 200	₩ 200				
Dividend rate	750%	750%	500%	500%				
Dividends	₩ 78,461	₩ 847	₩ 52,304	₩ 565				

(\*1) The total number of shares was calculated from the number of issued shares excluding treasury shares.

(5) Details of other components of equity as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	Decer	mber 31, 2021 Dec	ember 31, 2020
Net gain on valuation of financial assets measured at FVOCI	₩	284,085 ₩	151,824
Equity adjustments of investments in associates and joint ventures		(27,047)	(163,810)
Net gain on valuation of derivative instruments		13,388	24,898
Net gain (loss) on translation of foreign operation		450,836	(340,075)
	₩	<u>721,262</u> ₩	(327,163)

(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 Inc.

I) SK IIIC.								
	1-1	1-2	1-3	2				
Grant date	2017-03-24			2020-03-25				
Type of shares to be issued	Ordinary shares							
Grant method	Reissue of treasury	shares, but if the sto	ock option's exercise p	price is lower than the				
		stock's real price (evaluated based on exercise date), the Company may settle th						
	difference in cash or	r with treasury share o	equivalent to the differ	rence amount.				
Number of shares (shares)	41,429	41,430	41,431	214,038				
Exercise price (Korean won)	) ₩ 226,290	₩ 244,400	₩ 263,950	₩ 153,450				
Contractual life of options	2019.03.25	2020.03.25	2021.03.25	2023.03.26				
	~2022.03.24	~2023.03.24	~2024.03.24	~2027.03.25				
Vesting conditions 2	2 years service	3 years service	4 years service	2 years service				
	from the	from the	from the	from the				
	grant date	grant date	grant date	grant date				

Share compensation expense recognized during the current reporting period is W661 million (total : W5,324 million), and the remaining share compensation expense to be recognized in later periods is W724 million. On the other hand, apart from the above stock options, we have signed a stock grant to pay free treasury stocks to executives and employees. In the case of the Stock Grant, there are no additional vesting conditions, and transfer is not possible within the service period. As of the end of the current year, the stock compensation cost recognized for the Stock Grant is W119 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		2
Risk-free interest rate		1.86%		1.95%		2.07%		1.61%
Option life		5 years		6 years		7 years		7 years
Expected price (Closing price on the preceding day in Korean won)	₩	236,000	₩	236,000	₩	236,000	₩	134,000
Expected volatility		16.78%		16.78%		16.78%		15.35%
Rate of returns		1.60%		1.60%		1.60%		1.55%
Exercise price (Korean won)	₩	226,290	₩	244,400	₩	263,950	₩	154,450
Fair value per share (Korean won)	₩	38,317	₩	34,200	₩	30,962	₩	8,226

On December 1, 2021, the Company merged with the former SK Materials Co., Ltd. on the date of the merger, and succeeded the stock options granted to executives and employees of the merged corporation. The main details of our stock options are as follows.

Grant date Type of shares to be issued	1 2018-03-29 Ordinary shares	2	<u>1</u> 2020-03-31	2		
Grant method	Reissue of treasury	shares	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 Company may settle the difference in cash or with treasury share equivalent to the difference amount.			
Number of shares (shares) (*1)	18,607	18,607	39,098	19,551		
Exercise price (Korean won) (*1)	₩ 100,884	₩ 108,959	₩ 89,204	₩ 89,204		
Contractual life of options	2020.03.29 ~2023.03.28	2021.03.29 ~2024.03.28	2023.03.31 ~2027.03.30	2023.03.31 ~2027.03.30		
Vesting conditions	2 years service from the grant date	3 years service from the grant date	2 years service from the grant date	3 years service from the grant date		

(\*1)The total number of shares and the exercise price were recalculated in consideration of the merger ratio.

Accumulated share compensation expense recognized is W801 million and the remaining share compensation expense to be recognized in subsequent periods is W187 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		2		1		2	
Risk-free interest rate		2.44%		2.44%		1.48%		1.48%	
Option life		5 years		6 years		7 years		7 years	
Expected price (Closing price on the preceding day in Korean won)(*1)	₩	94,116	₩	94,116	₩	85,687	₩	85,687	
Expected volatility Rate of returns		23.5% 2.39%		23.5% 2.39%		13.15% 2.70%		13.15% 2.70%	
Exercise price (Korean won) (*1)	₩	100,884	₩	108,959	₩	89,204	₩	89,204	
Fair value per share(*1) (Korean won)	₩	15,587	₩	14,797	₩	7,206	₩	7,205	

(\*1) The total number of shares and the exercise price were recalculated in consideration of the merger ratio.

2) Subsidiaries of the Company established a stock option program that entitles key management personnel an option to purchase ordinary shares. Share-based compensation expenses recognized under the share option program are as follows (Korean won in millions):

		Current	Accumulated	Remaining	Total
Group of SK Innovation Co., Ltd.	₩	2,328	₩ 4,204	₩ 4,380	₩ 8,584
Group of SK Telecom Co., Ltd.		87,622	95,211	75,318	170,529
Group of SK Square Co., Ltd.		14,067	14,067	32,311	46,378
Group of SK Networks Co., Ltd.		944	1,672	1,543	3,215
Group of SKC Co., Ltd.		2,032	3,326	5,993	9,319
Group of SK E&S Co., Ltd.		-	496	i 14	510
Others		1,341	2,233	1,701	3,934
	₩	108,334	₩ 121,209	₩ 121,260	₩ 242,469

### 23. Selling and administrative expenses

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

	For the years ended				
	December 31, 2021	December 31, 2020			
Salaries	₩ 1,695,013	₩ 1,338,586			
Provision for pension benefits	126,033	176,024			
Employee welfare benefits	313,601	262,354			
Travel	48,379	38,579			
Bad debt expenses	58,651	78,517			
Communications	9,016	4,413			
Utilities	30,940	32,139			
Taxes and dues	171,520	96,787			
Supplies	36,911	39,642			
Rents	146,040	169,181			
Depreciation	451,888	462,183			
Amortization	308,953	263,629			
Repairs	27,847	30,804			
Insurance	57,486	40,253			
Advertising	681,755	611,235			
Research and development	577,748	381,239			
Education and examination	72,446	60,898			
Outsourcing technology services	792,261	891,535			
Transport	383,370	314,882			
Others	140,779	160,745			
	₩ 6,130,637	₩ 5,453,625			

# 24. Finance income and costs

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

	For the years ended			
	Decer	mber 31, 2021	December 31, 2020	
Finance income:				
Interest income	₩	174,002	₩ 188,056	
Gain on foreign currency transactions		1,074,665	1,460,297	
Gain on foreign currency translation		275,719	557,136	
Gain on transactions of derivatives		1,249,877	2,332,418	
Gain on valuation of derivatives		329,696	418,026	
Others		479,507	40,112	
	₩	3,583,466	₩ 4,996,045	
		For the ye	ars ended	
	Decer	For the year mber 31, 2021		
Finance costs:	Decer			
Finance costs: Interest expenses	Decer		December 31, 2020	
		mber 31, 2021	December 31, 2020	
Interest expenses		mber 31, 2021 1,435,026	December 31, 2020           ₩         1,394,257	
Interest expenses Loss on foreign currency transactions		mber <u>31, 2021</u> 1,435,026 1,223,000	December 31, 2020           ₩         1,394,257           1,535,427	
Interest expenses Loss on foreign currency transactions Loss on foreign currency translation		mber 31, 2021 1,435,026 1,223,000 390,626	December 31, 2020           ₩         1,394,257           1,535,427           404,046	
Interest expenses Loss on foreign currency transactions Loss on foreign currency translation Loss on transactions of derivatives		mber 31, 2021 1,435,026 1,223,000 390,626 1,483,392	December 31, 2020 ₩ 1,394,257 1,535,427 404,046 2,248,507	
Interest expenses Loss on foreign currency transactions Loss on foreign currency translation Loss on transactions of derivatives Loss on valuation of derivatives		mber 31, 2021 1,435,026 1,223,000 390,626 1,483,392 426,301	December 31, 2020 ₩ 1,394,257 1,535,427 404,046 2,248,507 215,711	

# 25. Other non-operating income and expenses

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

	For the years ended				
	Dece	mber 31, 2021	December 31, 2020		
Other non-operation income:					
Dividend income	₩	63,832	₩ 19,027		
Rental income		1,220	1,051		
Gain on disposal of trade receivables		32,633	22,605		
Gain on disposal of investments in subsidiaries and associates		483,812	1,354,808		
Gain on disposal of property, plant and equipment		269,218	69,237		
Gain on disposal of intangible assets		145,231	11,703		
Others		1,553,657	350,556		
	₩	2,549,603	₩ 1,828,987		

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

	For the years ended				
	December 31, 2021 December 31, 202				
Other non-operation expenses:					
Loss on disposal of trade receivables	₩	19,478	₩ 16,313		
Loss on impairment of investments in associates and joint ventures		35,166	434		
Loss on disposal of property, plant and equipment		94,551	276,885		
Loss on impairment of property, plant and equipment		64,836	317,969		
Loss on disposal of intangible assets		5,241	10,647		
Loss on impairment of intangible assets		131,512	304,272		
Donations		110,069	152,078		
Others		1,470,107	559,608		
	₩	1,930,960	₩ 1,638,206		

#### 26. Expense classified based on nature of expense

Details of classification based on nature of expenses for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the years ended				
	December 31, 2021	December 31, 2020			
Employee benefits	₩ 8,434,944	₩ 7,090,034			
Depreciation and amortization	8,370,584	7,972,106			
Network connection	854,292	858,853			
Transport	876,908	601,267			
Advertising	856,137	630,745			
Lease payments and rents	461,169	413,744			
Others	17,272,067	16,451,116			
Use of raw materials and purchase of finished goods and merchandise	58,413,613	45,762,928			
Changes in finished goods and semi-finished goods	(2,150,237)	1,114,856			
	₩ 93,389,477	₩ 80,895,649			

# 27. Income taxes

(1) Components of income tax expense for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the years ended				
	December 31, 2021 December			ember 31, 2020	
Current income tax	₩	1,311,152	₩	1,766,699	
Adjustments in respect of current income tax of prior year		(24,747)		29,454	
Origination and reversal of temporary difference		(356,176)		(1,431,673)	
Income tax recognized directly to equity		(216,392)		(346,963)	
Others		17,889		18,235	
Income tax expense	₩	731,726	₩	35,752	
Income tax expense from continuing operations	₩	628,305	₩	266,719	
Income tax expense (benefits) from discontinued operations		103,421		(230,967)	

(2) Details of income tax recognized directly to equity for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the years ended				
	Decen	nber 31, 2021	December 31, 2020		
Remeasurement loss on defined benefit plan	₩	(2,819)	₩ 707		
Net gain (loss) on valuation of financial instruments measured at FVOCI		(173,626)	(185,832)		
Equity adjustments of investments in associates and joint ventures		(14,591)	(20,453)		
Net gain on valuation of derivative instruments		(26,501)	(2,819)		
Others		1,145	<u>(138,566</u> )		
	₩	(216,392)	₩ (346,963)		

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

	For the years ended				
	Dece	mber 31, 2021	December 31, 2020		
Profit (loss) before income tax expense	₩	6,450,150	₩ (72,680)		
Profit before income tax expense from continuing operations		6,026,834	31,744		
Profit (loss) before income tax expense from discontinued operations		423,316	(104,424)		
Applied tax rates (*1)		27.50%	24.20%		
Income tax at statutory tax rate		1,773,791	(17,589)		
Non-taxable income		(19,872)	(70,698)		
Non-deductible expenses		45,433	136,864		
Tax credit		(64,430)	(34,096)		
Unrecognized deferred taxes		467,289	70,292		
Effect of changes in tax rates		(39,592)	24,878		
Others		<u>(1,430,893</u> )	<u>(73,899</u> )		
Income tax expense	₩	731,726	₩ 35,752		
Income tax expense from continuing operations	₩	628,305	₩ 266,719		
Income tax expense (benefits) from discontinued operations		103,421	(230,967)		
Effective tax rate (*2)		11.34%	-		

### 27. Income taxes (cont'd)

- (\*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, 2020, the difference between the Korean tax burdens and the foreign tax burdens on foreign subsidiaries is included in others.
- (\*2) Net loss before income tax for the year ended December 31, 2020 was incurred and the effective tax rate was not presented.

(4) Significant changes in deferred tax assets (liabilities) for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the year ended December 31, 2021					
			Recognized			
			directly	Recognized		
	Beginning	Business	in profit	directly		Ending
	balance	combination	or loss	in equity	Others	balance
Temporary differences	₩(4,551,845)	₩ (43,522) ₩	₩ 734,592	₩ (216,392)	₩ 43,747 ₩	(4,033,420)
Tax loss carryforward	1,059,098	-	(254,944)	-	318	804,472
Tax credits carryforward	85,866		92,920		7,725	186,511
	<u>₩(3,406,881</u> )	₩ (43,522)	<u>₩ 572,568</u>	<u>₩ (216,392</u> )	<u>₩ 51,790</u> <u>₩</u>	(3,042,437)
Deferred tax assets (*1)	₩ 1,165,308				$\overline{W}$	765,000
Deferred tax liabilities (*1	) (4,572,189)					(3,807,437)
		For the	year ended [	December 31, 2	2020	

	For the year ended December 51, 2020					
			Recognized			
			directly	Recognized		
	Beginning	Business	in profit	directly		Ending
	balance	combination	or loss	in equity	Others	balance
Temporary differences	₩(5,028,704)	₩ (125,296)	₩ 978,195	₩ (346,963)	₩ (29,077)₩	(4,551,845)
Tax loss carryforward	282,009	-	781,843	-	(4,754)	1,059,098
Tax credits carryforward	54,002		18,598		13,266	85,866
	<u>₩(4,692,693</u> )	<u>₩ (125,296</u> )	<u>₩ 1,778,636</u>	<u>₩ (346,963</u> )	<u>₩ (20,565)</u> <u>₩</u>	<u>(3,406,881</u> )
Deferred tax assets (*1)	₩ 798,454				W	1,165,308
Deferred tax liabilities (*1	) (5,491,147)					(4,572,189)

(\*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 of December 31, 2021 is as follows (Korean won in millions):

		Tax loss carryforward	Tax credits carryforward	
1 year or less	$\mathbb{W}$	104,941	₩ -	
1 year ~ 2 years		107,083	-	
2 years ~ 3 years		181,230	-	
More than 3 years		2,286,470	7,352	
	$\overline{W}$	2,679,724	₩ 7,352	

### 28. Earnings per share

### (1) Basic and diluted earnings

1) Basic earnings per share for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions, except per share and weighted-average number of ordinary shares outstanding):

	For the years ended				
		December 31, 2021		December 31, 2020	
Profit for the year attributable to owners of the parent	₩	1,970,204	₩	189,368	
Less: preferred share dividends		(4,543)		(3,979)	
Profit for the year attributable to ordinary share owners of the parent	₩	1,965,661	₩	185,389	
Weighted-average number of ordinary share outstanding (*1)		52,545,906		52,305,477	
Basic earnings per share (in Korean won)	₩	37,408	₩	3,544	

(\*1) The weighted-average number of ordinary 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 ordinary shares outstanding.

The basis of calculating weighted-average number of ordinary shares for the years ended December 31, 2021 and 2020 is as follows:

	For the years ended				
	December 31, 2021 December 31, 20				
Weighted-average number of issued shares outstanding	70,599,058	70,360,297			
Weighted-average number of treasury shares	(18,053,152)	(18,054,820)			
Weighted-average number of ordinary shares outstanding	52,545,906	52,305,477			

2) Diluted earnings per share for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions, except per share and weighted-average number of ordinary shares outstanding):

	For the years ended				
	Dece	mber 31, 2021	Dece	ember 31, 2020	
Diluted profits	₩	1,965,661	₩	185,389	
Weighted-average number of treasury shares		52,653,523		52,362,298	
diluted ordinary share outstanding					
Diluted earnings per share	₩	37,332	₩	3,541	

The basis of calculating weighted-average number of diluted ordinary shares for the years ended December 31, 2021 and 2020 is as follows:

	For the years ended			
	December 31, 2021 December 31, 20			
Weighted-average number of ordinary shares outstanding	52,545,906	52,305,477		
Effect of exercising stock options	107,617	56,821		
Weighted-average number of treasury shares	52,653,523	52,362,298		
diluted ordinary share outstanding				

### 28. Earnings per share (cont'd)

(2) Basic and diluted earnings per share from continuing operations

1) Basic earnings per share from continuing operations for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions, except basic earnings per share and weighted-average number of ordinary shares outstanding):

	For the years ended				
	December 31, 2021 December 31, 2				
Profit for the year attributable to owners of the parent	₩	1,965,661	₩	185,389	
Less: gain from discontinued operations		139,493		56,944	
Profit for the year from continuing operations attributable to owners of the parent	₩	1,826,168	₩	128,445	
Weighted-average number of ordinary shares outstanding		<u>52,545,906</u>		52,305,477	
Basic earnings per share from continuing operations					
(in Korean won)	₩	34,754	₩	2,456	

2) Diluted earnings per share from continuing operations for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions, except basic earnings per share and weighted-average number of ordinary shares outstanding):

	For the years ended					
	December 31, 2021 December 31,					
Profit for the year from continuing operations attributable to owners of the parent	₩ 1,826,168	₩ 128,445				
Weighted-average number of diluted ordinary share outstanding	52,653,523	52,362,298				
Diluted earnings per share from continuing operations						
(in Korean won)	₩ 34,683	₩ 2,453				

(3) Basic and diluted earnings per share from discontinued operations

1) Basic earnings per share from discontinued operations for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions, except basic losses per share and weighted-average number of ordinary shares outstanding):

	For the years ended					
	Dece	mber 31, 2021	Decer	mber 31, 2020		
Gain from discontinued operations attributable to	₩	139,493	₩	56,944		
owners of the parent Weighted-average number of ordinary shares outstanding		52,545,906		52,305,477		
Basic earnings per share from discontinued						
operations (in Korean won)	₩	2,654	₩	1,088		

2) Diluted earnings per share from discontinued operations for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions, except basic losses per share and weighted-average number of ordinary shares outstanding):

	For the years ended				
	Dece	ember 31, 2021	Dece	mber 31, 2020	
Gain from discontinued operations attributable to owners of the parent	₩	139,493	₩	56,944	
Weighted-average number of ordinary shares outstanding Diluted earnings per share from discontinued		52,653,523		52,362,298	
operations (in Korean won)	₩	2,649	₩	1,088	

### 29. Transactions with related parties

Balances on transactions arising from intercompany transactions within the Group were eliminated in preparing the consolidated financial statements as of and for the years ended December 31, 2021 and 2020.

(1) Details of significant transactions with the related parties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

		December 31, 2021			
	Company name		Sales and others	Expenses and others	
Other related parties	Daehan Oil Pipeline Corporation	₩	5,991	₩ 63,312	
	SABIC SK Nexlene Company Pte. Ltd.		4,439	232,204	
	Korea Nexlene Company		187,460	761	
	Best Oil Company Limited		699,150	956	
	Asia Bitumen Trading Pte. Ltd.		6,751	21,662	
	Sinopec-SK(Wuhan) Petrochemical Co., Ltd.		1,326	677,730	
	Baic Electronics SK(Jiangsu) Technology Co.,	Ltd.	70,451	508,954	
	Xinglu (HongKong) Ltd.		99,471	4,191	
	Peru LNG Company, LLC		216,343	-	
	Ignis Therapeutics		163,878	-	
	F&U Credit Information Co., Ltd.		3,990	51,528	
	Wave City Development Co., Ltd.		13,078	-	
	SK Hynix Inc.		3,486,379	20,966	
	SK Hynix Semiconductor (China) Ltd.		357,375	1,645	
	SK Hynix Semiconductor (Chongqing) Ltd.		33,636	-	
	SK Hynix Semiconductor HK Ltd.		80	824,182	
	SK Hynix System IC Co., Ltd.		37,301	33	
	Happynarae Co., Ltd.		30,671	417,226	
	SKC Evonik Peroxide Korea Co., Ltd.		3,910	46,909	
	Mitsui Chemicals & SKC Polyurethanes, Inc.		279,117	15,126	
	Boryeong LNG Terminal Co., Ltd.		59,212	101,876	
	Darwin LNG Pty Ltd.		456,086	-	
	Huizhou EVE United Energy Co., Ltd.		127,836	686,690	
	Daewon Green Energy Co., Ltd.		115,218	-	
	Goseong Green Power Co., Ltd.		104,953	-	
	Eurasia Tunnel		2,894	-	
	Xe-Pian Xe-Namnoy Power Company		8,090	-	
	Others		516,889	228,335	
Others (*2)	Ulsan Aromatics Co., Ltd.		70,563	74,869	
	SK D&D Co., Ltd.		92,953	5,283	
	SK Chemicals Co., Ltd.		83,918	25,520	
	SK Gas Co., Ltd.		114,471	200,852	
	Ubins Co., Ltd.		1,431	94,240	
	Others		214,159	79,007	
		₩	7,669,470	₩ 4,384,057	

# 29. Transactions with related parties (cont'd)

		December 31, 2020				
	Company name		Sales and others	Expenses and others		
Other related parties	Daehan Oil Pipeline Corporation	₩	46,966	₩ 66,429		
	SABIC SK Nexlene Company Pte. Ltd.		4,636	163,747		
	Korea Nexlene Company		152,632	117		
	Best Oil Company Limited		470,231	1,230		
	Asia Bitumen Trading Pte. Ltd.		40,847	1,982		
	Hana Land Chip PEF 33(*1)		16,165	35,660		
	Sinopec-SK(Wuhan) Petrochemical Co., Ltd.		1,504	419,516		
	Baic Electronics SK(Jiangsu) Technology Co.,	Ltd.	32,863	194,797		
	Xinglu (HongKong) Ltd.		85,780	-		
	Peru LNG Company, LLC		22,842	-		
	F&U Credit Information Co., Ltd.		3,484	51,370		
	Wave City Development Co., Ltd.		44,554	138		
	SK Hynix Inc.		3,633,934	32,335		
	SK Hynix Semiconductor (China) Ltd.		354,984	1,740		
	SK Hynix Semiconductor (Chongqing) Ltd.		22,944	-		
	SK Hynix Semiconductor HK Ltd.		-	675,915		
	SK Hynix System IC Co., Ltd.		72,271	43		
	Happynarae Co., Ltd.		44,440	428,037		
	SKC Evonik Peroxide Korea Co., Ltd.		3,674	43,369		
	Mitsui Chemicals & SKC Polyurethanes, Inc.		193,153	15,297		
	Boryeong LNG Terminal Co., Ltd.		101,846	73,933		
	Huizhou EVE United Energy Co., Ltd.		53,623	166,613		
	Eurasia Tunnel		3,095	-		
	Xe-Pian Xe-Namnoy Power Company		15,413	-		
	Others		139,247	162,593		
Others (*2)	Ulsan Aromatics Co., Ltd.		50,686	68,840		
	SK Chemicals Co., Ltd.		95,286	61,072		
	SK Gas Co., Ltd.		35,702	243,139		
	Ubins Co., Ltd.		1,498	100,579		
	Others		48,860	102,799		
		₩	5,793,160	₩ 3,111,290		

(\*1) During the current year, the Parent Company acquired an additional 34.80% stake in Hana Land Chip PEF 33 and liquidated it after gaining control. As a result, It was excluded from other special officials.

(\*2) Although, not designated as related parties as defined in KIFRS 1024, the entity belongs to the same conglomerate affiliates under *Monopoly Regulation and Fair Trade Act*.

# 29. Transactions with related parties (cont'd)

(2) Details of significant outstanding balances of receivables and payables with the related parties as of December 31, 2021 and 2020 are as follows (Korean won in millions):

		December 31, 2021			December 31, 2020			
		Re	ceivables		Receivables			
	Company name		(*1)	Payables	(*1)	Payables		
Other	Daehan Oil Pipeline Corporation	₩	75 ∜	₩ 9,443	₩ 332	₩ 8,094		
related	SABIC SK Nexlene Company Pte. Ltd.		5,127	58,538	7,329	29,817		
parties	Korea Nexlene Company		19,941	146	13,112	156		
	Best Oil Company Limited		145,233	33,455	93,789	37,647		
	Hana Land Chip PEF 33 (*2)		-	-	5,983	8,579		
	Sinopec-SK(Wuhan) Petrochemical Co., Ltd.		363	10,883	417	11		
	Baic Electronics SK(Jiangsu) Technology Co., Ltd.		5,514	174,332	6,211	59,562		
	Xinglu (HongKong) Ltd.		19,097	-	36,866	-		
	Korea Consortium Kazakh B.V. (*3)		111,520	-	146,170	-		
	F&U Credit Information Co., Ltd.		65	5,265	43	4,699		
	HanaCard Co., Ltd.		529	48,020	352	145,328		
	Wave City Development Co., Ltd.		5,753	-	42,562	19		
	SK Hynix Inc.		694,254	66,600	681,053	119,197		
	SK Hynix Semiconductor (China) Ltd.		57,369	853	35,687	314		
	SK Hynix Semiconductor (Chongqing) Ltd.		5,084	138	12,660	-		
	SK Hynix Semiconductor HK Ltd.		-	60,528	-	55,500		
	SK Hynix System IC Co., Ltd.		5,474	99	15,906	29		
	Happynarae Co., Ltd.		9,344	73,563	3,817	40,622		
	SKC Evonik Peroxide Korea Co., Ltd.		-	6,353	-	4,819		
	Mitsui Chemicals & SKC Polyurethanes, Inc.		28,385	2,466	12,117	2,815		
	Boryeong LNG Terminal Co., Ltd.		5,345	7,577	4,921	2,141		
	Darwin LNG Pty Ltd.		120,235	-	-	-		
	Pentaport Development Co., Ltd.		71,679	-	74,238	-		
	Huizhou EVE United Energy Co., Ltd.		36,143	179,264	19	72,276		
	Eurasia Tunnel		25,823	-	35,619	-		
	SK E&C JURONG Investment Singapore		59,914	-	59,914	-		
	Pte. Ltd. (*3)							
	Xe-Pian Xe-Namnoy Power Company		113,282	26,004	139,128	26,004		
	Goseong Green Power Co., Ltd.		1,873	13,416	-	-		
	Godeok Clean Energy Co., Ltd.		-	62,136	-	-		
	Others		199,726	118,451	51,042			
Others (*4)	Ulsan Aromatics Co., Ltd.		3,841	9,958	3,942	6,415		
	SK Chemicals Co., Ltd.		22,563	1,465	14,567	2,266		
	SK Gas Co., Ltd.		23,965	227,816	12,655			
	Ubins Co., Ltd.		199	14,977	535	-		
	Others		1,332	23,655	16,251	22,067		
		₩	1,799,047	<u>₩ 1,235,401</u>	<u>₩ 1,527,237</u>	<u>₩ 927,542</u>		

- (\*1) The Company recognized bad debt expense and reversal of bad debt each amounting to ₩7,202 million and ₩15,880 million for the years ended December 31, 2021 and 2020 respectively: bad debt expense of ₩1,792 million, write-off and others of ₩(-)4,486 million). The Company recognized the allowance for doubtful accounts amounting to ₩334,633 million and ₩311,551 million as of December 31, 2021 and 2020, respectively.
- (\*2) During the current term, the Parent Company acquired an additional 34.80% stake in Hana Land Chip PEF 33 and liquidated it after gaining control. As a result, I was excluded from other special officials.
- (\*3) As of December 31, 2021 and 2020, the Group recognized loss allowances in full amount of corresponding receivables.
- (\*4) Although, not designated as related parties as defined in KIFRS 1024, the entity belongs to the same conglomerate affiliates under *Monopoly Regulation and the Fair Trade Act.*

### 29. Transactions with related parties (cont'd)

(3) Details of significant financial transactions with related-parties for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions and foreign currencies in thousands):

		December	31, 2021	December 3	31, 2020
Company	Currency	Loans	Collection	Loans	Collection
Halio, Inc.	USD	-	-	-	2,483
Yemen LNG Company Ltd.	KRW	6,452	-	7,683	-
Huizhou EVE United Energy Co., Ltd.	KRW	-	-	64,573	-
Zhejiang Shenxin SK Packaging Co., Ltd.	KRW	-	-	8	862
Peru LNG Company, LLC	KRW	6,996	-	-	-
Eurasia Tunnel	KRW	-	11,243	11,554	15,853
Xe-Pian Xe-Namnoy Power Company	KRW	30,385	-	-	-
Yongin Industrial Complex Development	KRW	5,072	5,072	-	-
Co., Ltd.					
PT REGAS ENERGITAMA	KRW	5,604	-	-	-
INFRASTRUKTUR					

(4) There were additional capital contribution transactions for investments in associates and joint ventures for the years ended December 31, 2021 and 2020 (see Note 10 'Investments in associates and joint ventures').

(5) Compensation for key management personnel of the Company.

Key management personnel consists 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, 2021 and 2020 are as follows (Korean won in millions):

		For the years ended					
		December 31, 2021	December 31, 2020				
Salaries	₩	20,643	₩ 15,952				
Provision for pension benefits		8,397	6,687				
Share-based payment expenses		780	880				
	$\overline{W}$	29,820	₩ 23,519				

### **30.** Discontinued operations

### (1) Details of discontinued operations

SK Innovation Co., Ltd., a subsidiary of the Group, decided to suspend operations in North American petroleum development (E&P) businesses during the prior period, and is in the process of selling and withdrawing related assets as of December 31, 2021, and profit or loss arising from the relevant business units are classified as profit or loss for the period from discontinued operations. The purpose of the sale of oil development (E&P) businesses in North America and Peru is in line with the long-term policy of subsidiaries to focus their capabilities on core businesses (see Note 40).

SK Networks Co., Ltd., a subsidiary of the Group, decided to discontinue operations with the sale of its resource business to clean up non-core businesses, strengthen its financial soundness and secure investment funds, during the prior period. Meanwhile, the oil retail business, which had been classified as discontinued operations due to the decision to sell it during the previous year, was sold in June 2020.

SKC Co., Ltd., a subsidiary of the Group, finalized its plan to sell all of its shares in SK Bioland Co., Ltd. in August 2020 which operated the BHC sector and sold it to Hyundai HCN Co., Ltd. in October 2020. The Group confirmed a plan to sell SKC Eco Solutions Co., Ltd. in December 2020 in order to promote the Exit strategy of EVA and Back Sheet solar power business and PVDF business for construction. In addition, during June 2021, the facilities related to the telecommunication equipment division of Techdream Co., Ltd., are determined to be sold with SKC Infra Services Co., Ltd., a subsidiary. The facilities were sold to Pantech C&I Engineering CO., LTD. in August 2021.

SK Ecoplant Co., Ltd., a subsidiary of the Group, decided to sell its entire stake in SK TNS Co., Ltd., a subsidiary of the Group, to Network Infra Holdings LLC, for the purpose of converting a portfolio focused on eco-friendly and new energy through a resolution of the board of directors on January 7, 2021. The sale was completed in April 2021. In addition, after the merger and acquisition of the K-Solutions Business Group, P-Solutions Business Group, Gas&Power Business Group, Battery Business Group, and Industrial Business Group, the division and succession company SK Eco Engineering Co., Ltd. are being sold.

(2) Gain and loss from the discontinued operation for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the year ended December 31, 2021								
	Pe	troleum	R	esource					
	Deve	elopment	b	usiness		SKC			
	busi	ness in	and	l others in	EVA solar	Infra Service		SK TNS	
		novation	SK	Networks	business in	Co., Ltd.		Co., Ltd.	
	Cc	o., Ltd.	C	o., Ltd.	SKC Co., Ltd.	and others		and others	Total
Revenue	₩	75,021	₩	126,881	₩ 3,411	₩ 198,74	5₩	2,066,433 ₩	2,470,491
Expenses		14,114		67,991	1,638	166,52	1	1,796,908	2,047,175
Profit before income tax expense		60,907		58,890	1,773	32,22	1	269,525	423,316
Income tax expense		17,158		16,788		4,29	3	65,182	103,421
Profit for the period from discontinued operations	₩	43,749	₩	42,102	₩ 1,773	₩ 27,92	8 ₩	<u>204,343</u> ₩	319,895
Attributable to:							_		
Owners of the parent		16,076		18,707	761	11,98	)	91,969	139,493
Non-controlling interests		27,673		23,395	1,012	15,94	3	112,374	180,402

# 30. Discontinued operations (cont'd)

						F	or the ye	ear ended	Dece	mber 31, 20	020					
	Petrol Develop busine SK inno Co.,	oment ss in ovation	busir SK Ne	retail ness in etworks , Ltd.	bu and SK N	source isiness others in Networks o., Ltd.	busin	solar ess in Co., Ltd	Infra C	SKC Service o., Ltd. d others		Bioland	C	K TNS o., Ltd. d others		Total
Revenue	₩	40,929	₩	545,782	₩	35,315	₩	10,982	₩	237,809	₩	139,305	₩1,	753,965	₩	2,764,087
Expenses	3	09,774		410,996		102,149		76,411		262,874		66,656	1,	639,651		2,868,511
Profit (loss) before income tax expense	(20	68,845)		134,786		(66,834)		(65,429)		(25,065)		72,649		114,314		(104,424)
Income tax expense (benefit) Profit (loss) for the period from discontinued	(2)	<u>82.360</u> )		24,879		<u>(9,104</u> )		<u> </u>		5,022		566		30,030		<u>(230,967</u> )
operations	₩	13,515	₩	109,907	₩	(57,730)	₩	<u>(65,429</u> )	₩	(30,087)	₩	72,083	₩	84,284	₩	126,543
Attributable to: Owners of the parent		4,994		48,832		(25,649)		(28,429)		(13,073)		31,320		38,949		56,944
Non-controlling interests		8,521		61,075		(32,081)		(37,000)		(17,014)		40,763		45,335		69,599

(3) Details of cash flows relating to discontinued operations for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

			For the year ended December 31, 2021						
			Petroleur						
			Developme	ent business		SKC			
			business i	n and others	in EVA solar	Infra Service	SK TNS		
			SK innovat	on SK Network	s business in	Co., Ltd.	Co., Ltd.		
			Co., Ltd.	Co., Ltd.	SKC Co., Lt	d. and others	and others	Total	
Cash flows from o	perating activities		₩ (6,	909) ₩ (9,6	97)₩ 26	60 ₩ (9,533) <sup>3</sup>	₩ 511,488 ₩	485,609	
Cash flows from ir			47.	879 94,4	95 (47	70) 65.388	364,468	571,760	
Cash flows from fi				109) 5,2		68) (181)	147,020	71,939	
								,	
For the year ended December 31, 2020									
	Petroleum		Resource			020			
	Development	Oil retail	business		SKC				
	business in	business in	and others in	EVA solar	Infra Service		SK TNS		
	SK innovation	SK Networks	SK Networks	business in	Co., Ltd.		Co., Ltd.		
	Co., Ltd.	Co., Ltd.	Co., Ltd.	SKC Co., Ltd.	and others		ind others	Total	
Cash flows from		₩ (87,163)	₩ (50,366)	₩ (26)	₩ 1,356	₩ 6,341 ₩	351,536 ₩	234,035	
operating activitie									
Cash flows from	(4,993)	1,269,922	64,572	(1,446)	(1,860)	(6,668)	225,676	1,545,203	
investing activitie	S								
Cash flows from	-	-	(41,437)	(1,931)	(3,421)	(2,486)	125,860	76,585	
financing activitie	S								

### 31. Assets and liabilities held for sale

Details of assets and liabilities held for sale as of December 31, 2021 are as follows (Korean won in millions):

		December 31, 2021		
			Assets	Liabilities
Investment securities	ESR Cayman Limited (*1)	₩	392,645 ₩	-
Business segment	China business segment (*2)		89,769	21,689
	Resources business segment (*2)		17,467	11,987
	K-Solutions Business Group (*3)		510,468	364,468
Associates	Zhejiang Shenxin SK Packaging Co., Ltd.		6,777	-
	Carrot Co., Ltd.		8,734	-
Property, plant and equipment	Back Sheet, EVA, PVDF and others		4,336	-
		₩	<u>1,030,196</u> ₩	398,144

- (\*1) As the Group decided to sell all of its investments in associates during the year ended December 31, 2020, it classified the investments as held-for-sale and measured them at the lower of their carrying amounts and fair value less costs to sell. The Group has sold some of the shares during the year ended December 31, 2021 and 2020, and the sale of remaining shares is underway as of December 31, 2021.
- (\*2) SK Networks Co., Ltd., a subsidiary, decided to sell the China and resource business sector. The Group classified related assets and liabilities as held-for-sale and measured them at the lower of their carrying amounts and fair value less costs to sell.
- (\*3) SK Ecoplant Co., Ltd., a subsidiary, decided to split K-Solutions Business Group, P-Solutions Business Group, Gas&Power Business group, battery business group and industrial business group to be merged by SK Ecoengineering Co., Ltd., division succession company. The Group classified related assets and liabilities as held-for-sale and measured them at the lower of their carrying amounts and fair value less costs to sell.

#### 32. Lessor

(1) Details of gross investment amount and net investment amount in finance leases as of December 31, 2021 and 2020 are as follows (Korean won in millions):

	C	ecember 3	1, 202	1	December 31, 2020			
	Gross in	Gross investment		<u>nvestment</u>	Gross	<u>investment</u>	Net in	<u>vestment</u>
1 year or less	₩	188,312	₩	184,949	₩	129,202	₩	126,537
1 year ~ 2 years		166,112		159,314		104,250		103,989
2 year ~ 3 years		149,165		140,115		87,902		82,241
3 year ~ 4 years		103,241		94,808		71,943		65,754
4 year ~ 5 years		50,789		46,568		32,472		29,006
More than 5 years		43,475		35,848		15,233		<u>12,356</u>
	₩	701,094	₩	661,602	₩	441,002	₩	419,883

(2) Details of unrealized interest income of finance leases for the year ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	Decer	December 31, 2020		
Gross investment	$\overline{W}$	701,094	₩	441,002
Net investment		661,602		419,883
Unrealized interest income		39,492		21,119

# 33. Cash flow information

(1) Details of non-cash adjustments for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the years ended				
	December 31, 2021	December 31, 2020			
Provision for pension benefits	₩ 460,042	₩ 448,055			
Depreciation	6,699,911	6,349,807			
Amortization	1,687,803	1,634,555			
Bad debt expenses	93,158	95,203			
(Reversal of)Valuation loss on inventories	218,000	(16,014)			
Interest expenses	1,444,113	1,429,329			
Loss on foreign currency translation	390,626	405,750			
Loss on valuation of derivatives	426,301	221,583			
Loss on disposal of trade receivables	19,478	17,183			
Loss on impairment of investments in associates and joint ventures	35,166	434			
Loss on disposal of property, plant and equipment	94,551	284,376			
Loss on impairment of property, plant and equipment	64,836	328,018			
Loss on disposal of intangible assets	8,418	11,216			
Loss on impairment of intangible assets	133,965	540,191			
Income tax expense	731,726	35,751			
Share of profit of subsidiaries and associates	(1,924,360)	( , , ,			
Interest income	(195,473)				
Gain on foreign currency translation	(275,719)				
Gain on valuation of derivatives	(329,733)	( , , ,			
Dividend income	(63,832)	( , , ,			
Gain on disposal of trade receivables	(32,633)				
Gain on disposal of investments in associates and joint ventures	(550,239)	· · · · · · · · · · · · · · · · · · ·			
Gain on disposal of property, plant and equipment	(269,703)	( , , ,			
Gain on disposal of intangible assets	(147,092)				
Others	(1,247,127)	172,288			
	₩ 7,472,183	₩ 8,504,582			

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

	For the years ended					
	Decer	nber 31, 2021	December 31, 2020			
Inventories	$\overline{W}$	(4,719,207)	₩ 2,974,879			
Trade receivables		(2,120,245)	1,186,864			
Other receivables		(380,299)	403,518			
Trade payables		4,369,497	(1,710,777)			
Other payables		81,556	1,655,842			
Advances received		(17,094)	(208,096)			
Defined benefit obligation		(390,322)	(276,586)			
Plan assets		(272,564)	(175,532)			
Others		<u>(652,833)</u>	(329,654)			
	$\overline{W}$	<u>(4,101,511</u> )	₩ 3,520,458			

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

	For the years ended				
	Decemb	er 31, 2021	D	ecember 31, 2020	
Increase in other payables due to	$\mathbf{W}$	883,091	₩	(260,187)	
acquisition of property, plant and equipment and others					
Conversion of long-term loans to investments in associates		-		344,465	

# 33. Cash flow information (cont'd)

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

		For the year ended December 31, 2021								
		Non-cash transaction								
		Cash flows		Changes						
	Beginning	from financing	Changes	in exchange		Ending				
	balance	activities	in fair value	rate	Others	balance				
Short-term borrowings	₩ 6,201,430	₩ 1,279,570	₩ -	₩ 28,680	₩ 147,701	₩ 7,657,381				
Bonds payable and long-term borrowings	43,060,288	5,979,071	-	328,920	1,079,933	50,448,212				
Long-term trade payables	1,168,784	(426,462)	-	-	1,112,021	1,854,343				
Lease liabilities	5,665,951	(1,070,625)	-	4,352	455,212	5,054,890				
Dividends payable	840	(1,394,332)			1,394,379	887				
	<u>₩ 56,097,293</u>	₩ 4,367,222	₩ -	₩ 361,952	₩ 4,189,246	₩ 65,015,713				

		For the year ended December 31, 2020								
			N	on-cash transactio	on					
		Cash flows		Changes						
	Beginning	from financing	Changes	in exchange		Ending				
	balance	activities	in fair value	rate	Others	balance				
Short-term borrowings	₩ 5,888,357	₩ 259,281	₩ -	₩ (37,414)	₩ 91,206 ₩	6,201,430				
Bonds payable and long-term borrowings	38,403,883	4,951,360	299	(234,470)	(60,784)	43,060,288				
Long-term trade payables	1,565,043	(428,272)	-	-	32,013	1,168,784				
Lease liabilities	4,647,511	(1,054,186)	-	(6,971)	2,079,597	5,665,951				
Dividends payable	1,323	(1,212,011)			1,211,528	840				
	₩ 50.506.117	₩ 2.516.172	₩ 299	₩ (278.855)	₩ 3.353.560 ₩	56.097.293				

# 34. Commitments and contingencies

(1) Guarantees provided for the Group as of December 31, 2021 are as follows (Korean won in millions and foreign currencies in thousands):

Guarantee	Guarantor	Currency	Amount	Description of guarantee
SK Inc.	Korea Software Financial	KRW		Performance guarantees for contract and others
Six inc.	Corporation		443,717	r enormance guarances for contract and others
	Seoul Guarantee Insurance	KRW	15 515	Performance guarantees for contract and others
Netruck Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance insurances for warranties and others
SK Telink Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract
,			,	5
SK Planet Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract and others
SK Broadband Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of warranties contract
	Korea Content Financial	KRW	31,817	Guarantee of warranties contract
T MILIT O III	Cooperative		4.40	
Tmap Mobility Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees
	Korea Technology Finance	KRW	900	Guarantee of debt
	Corporation		0.400	
	ACE American Fire and Marine	KRW	3,186	Liability for information protection
	Insurance Company Korea Branch		450 444	
SK Shieldus Co., Ltd.	Korea Software Financial	KRW	156,114	Guarantee of bid payment and others
	Cooperative			
SK M & Service Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of payment and others
PS&Marketing Corp.	Seoul Guarantee Insurance	KRW		Performance guarantees
Dreamus company Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract
One store Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee for E-commerce and others
	KEB Hana Bank	KRW	100	Guarantees for prepayment method
				and payment of Korean won
Home&Service Co., Ltd.	Seoul Guarantee Insurance	KRW	2	Specific debt guarantee
SK Store Co., Ltd.	Kookmin Bank	KRW		Performance guarantees and others
11 street Co., Ltd.	KEB Hana Bank	KRW		Performance guarantees and others
	Seoul Guarantee Insurance	KRW	27,136	Guarantee of deposit on lease and others
FSK L&S Co., Ltd.	Seoul Guarantee Insurance	KRW	2,570	Performance guarantees for contract and others
Service Top Co., Ltd.	Seoul Guarantee Insurance	KRW	15	Performance guarantees for contract
SK Networks Co., Ltd.	KEB Hana Bank	KRW	2,000	Guarantee of payment for goods
	Seoul Guarantee Insurance	KRW	10,798	Performance guarantees for contract
	Korea Trade Insurance	KRW	6,693	Guarantee of debt
	Corporation			
SK Networks Service	Seoul Guarantee Insurance	KRW	15,729	Performance guarantees for sales contract
Co., Ltd.	KEB Hana Bank	KRW	1,200	Performance guarantees for contract
SK Magic Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance insurances for warranties and others
0	Machinery Financial Cooperative	KRW	241	Performance insurances for warranties and others
SK Magic Service Co., Ltd.	Seoul Guarantee Insurance	KRW	651	Guarantee of payment for home shopping
SK Rent-a-Car Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract
MINTIT Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract
SK Nexilis Co., Ltd.	Seoul Guarantee Insurance	KRW		Guarantee of payment
SK E&S Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract and others
011 200 001, 210	Kookmin Bank	USD		Guarantee of debt
	Shinhan Bank	USD	,	Guarantee of debt
Yeongnam Energy Service	Seoul Guarantee Insurance	KRW		Guarantee of warranties and approval
Co., Ltd.			1,110	
Chonnam Energy Service	Seoul Guarantee Insurance	KRW	717	Guarantee of warranties and payment
Co., Ltd.			, , , ,	oudiance of warrances and payment
Pusan City Gas Co., Ltd.	Seoul Guarantee Insurance	KRW	2 044	Guarantee of seizure contract and others
Jeonbuk Energy Service	Seoul Guarantee Insurance	KRW	, -	Performance guarantees and warranties
Co., Ltd.	Seoul Guarantee insurance	IXIXVV	244	Performance guarantees and warranties
Chungcheong Energy	Seoul Guarantee Insurance	KRW	883	Performance guarantees and others
Service Co., Ltd.	Seoul Guarantee insurance	IXIXVV	005	Penomiance guarantees and others
	Seoul Guarantee Insurance	KRW	2 710	Derformence guerantese for contract
Ko-one Energy Service	Seour Guarantee insurance		2,710	Performance guarantees for contract
Co., Ltd.	Secul Cuerentes Insurance		400	Derformence guerentees for entroyal and others
Paju Energy Service	Seoul Guarantee Insurance	KRW	420	Performance guarantees for approval and others
Co., Ltd.			5 500	Our set of the set of
Narae Energy Service	Seoul Guarantee Insurance	KRW	5,508	Guarantee of license to use state property
Co., Ltd.				and others
	KEB Hana Bank	KRW		Guarantee of heat piping construction
Kangwon City Gas Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract and approval
Yeoju Energy Service	Seoul Guarantee Insurance	KRW	1,297	Performance guarantees for deposit on approval
Co., Ltd.				
Prism Energy International.	KEB Hana Bank Beijing Branch	USD	30,000	Guarantee of Terminal fee
Zhoushan Limited				
BU12 Australia Pty. Ltd.,	ANZ Bank	USD	261,950	BU gas field restoration costs
BU13 Australia Pty. Ltd.				

Guarantee	Guarantor	Currency	Amount	Description of guarantee
SK Ecoplant Co., Ltd.	HSBC and others	KRW	726	Performance guarantees for overseas construction and others
		USD	697,589	Performance guarantees for overseas construction and others
		EUR	94,339	Performance guarantees for overseas construction and others
		KWD	89,748	Performance guarantees for overseas construction and others
		QAR	396,605	Performance guarantees
		TRY	30,703	for overseas construction and others Performance guarantees for overseas construction and others
		SAR	8,117	Performance guarantees
		THB	278,254	for overseas construction and others Performance guarantees
		KZT	7,568,929	for overseas construction and others Performance guarantees
		VND	655,882,822	for overseas construction and others Performance guarantees
		HKD	20,061	for overseas construction and others Performance guarantees
		IQD	2,600,000	for overseas construction and others Performance guarantees
		AED	88,149	for overseas construction and others Performance guarantees
		PLN	8,316	for overseas construction and others Performance guarantees
	KEB Hana Bank	USD	180,565	for overseas construction and others Performance guarantees
		GBP	18,900	for overseas construction and others Performance guarantees
		EUR	88,885	for overseas construction and others Performance guarantees
		SAR	182,198	for overseas construction and others Performance guarantees for overseas construction and others
	Korea Eximbank	USD	91,369	Performance guarantees for overseas construction and others
		EUR	60,750	Performance guarantees for overseas construction and others
	Korea Housing Guarantee Co., Ltd. Seoul Guarantee Insurance	KRW KRW		Housing guarantees and others Performance guarantees for domestic construction
	Engineering Financial Cooperative	KRW	992 377	and others Domestic construction contract
	Construction Guarantee Cooperative	KRW	,	Performance guarantees for domestic construction and others
	Korea Trade Insurance Corporation	KRW	113,335	Insurance of overseas investment
Environment Management Corporation Co., Ltd.	Construction Guarantee Cooperative	KRW	26,183	Performance guarantees for business, construction, warranties and others
	Seoul Guarantee Insurance	KRW	34,494	Performance guarantees for contract, payment, construction, advance payment and others
	Engineering Financial Cooperative	KRW	69,429	Guarantees for contract, advance payment, warranties and others
SK Materials Co., Ltd.	Seoul Guarantee Insurance	KRW	344	Performance guarantees
SIGNET EV Inc.	Seoul Guarantee Insurance	KRW		Performance guarantees for contract, payment, warranties and deposits
SK Pinx Co., Ltd.	Seoul Guarantee Insurance	KRW		Performance guarantees for sales contract
SK Siltron Co., Ltd.	Shinhan Bank	USD		Guarantee of foreign currencies
Hweechan Co., Ltd.	Seoul Guarantee Insurance	KRW	66	Guarantee of supply and others

(2) Guarantees provided to others as of December 31, 2021 are as follows (Korean won in millions and foreign currencies in thousands):

Guarantee	Guarantor	Currency	Amount	Description of guarantee
SK Innovation Co., Ltd.	Petro Peru and others	USD	9,000	Performance guarantees for mandatory work and others
SK Geo Centric Co., Ltd.	Sabic SK Nexlene Company Pte. Ltd.	USD	220,000	Guarantee of debt
Iberian Lube Base Oils S.A.	Puertos del Estado	EUR	863	Guarantees for construction
	Railway Administration and others	EUR	269	Guarantee for installing facilities and others
SK Telink Co., Ltd.	IOT Wave Co., Ltd. and others	KRW	1,007	Performance guarantees for insurance and others
SK Communications Co., Ltd.	Green umbrella	KRW	40	Performance guarantees for contract
	Purchaser or right holder of electronic payment method	KRW	650	Protection of user funds from electronic financiers
Dreamus Company Co., Ltd.	Youngkwang Precision Industry Co., Ltd.	KRW	264	Performance guarantees for contract
SKC Co., Ltd.	PI Advanced Materials Co., Ltd.	USD	7,836	Guarantee for litigation
SK E&S Co., Ltd.	Boryeong LNG Terminal Co., Ltd.	KRW	320,000	Guarantee of debt
Environment Management Corporation Co., Ltd.	Dongbugwon Puleunmul Co., Ltd. and others	KRW	33,727	Guarantee of debt
	Geochang Malgunmool Sarang Co., Ltd. and others	KRW	33,650	Guarantee for loan agreement
	Gyeongsan Pure Water Co. Ltd. and others	KRW	1,816	Performance guarantees for business
SK Ecoplant Co., Ltd.	SBC General Trading & Contracting Co. WLL and others	KWD	6,282	Performance guarantees for contract and others
	Pohang Clean Water Co., Ltd. and others	KRW	736,228	Cash deficiency support agreement
	Gweonseon District 6 redevelopment maintenance business association and others	KRW	195,131	Guarantees for reconstruction project financing
	Customers of Gwanggyo SK view	KRW	844,654	Guarantee of debt
	Lu 1 City SK leaders view and others	s KRW	3,050,460	Guarantee of completion
	Callable preferred share investor	KRW	130,000	Cash deficiency support agreement
	Fuel cell power generation project	KRW		Performance assurance related to long-term maintenance contracts
	Contractor issuing guarantee for sale	e KRW	2,538,473	Joint surety

In addition, SK Ecoplant Co., Ltd., a subsidiary of the Group, provides other construction companies with performance guarantees for domestic construction, and the amount of the guarantees is W819,974 million as of December 31, 2021.

### (3) Pending litigations

The Group's significant pending litigations as of December 31, 2021, in which the Group is a plaintiff are as follows (Korean won in millions and foreign currencies in thousands):

Plaintiff	Defendant	Description	С	laim	Status
SK Shieldus Co., Ltd.	Individual and others	Claim for injuction to ban of	KRW		Third trial in progress
		transfer and others			and others
PS&Marketing Corp.	Individual and others	Claim for payment and others	KRW	3,983	First trial in progress and others
SK Networks Co., Ltd.	Individual and others	Claim for payment and others	KRW	3,570	First trial in progress and others
SK Magic Co., Ltd.	Namdaemun Tax Office Chief and others	Claim for cancellation the imposition of corporate tax and others	KRW	2,640	Second trial in progress and others
SK Rent-a-Car Co., Ltd.	Individual and others	Claim for payment and others	KRW	12	First trial in progress and others
SK Telesys Co., Ltd.	YOOJIN21 Co., Ltd. and others	Claim for construction payment and others	KRW	1,161	First trial in progress and others
SK E&S Co., Ltd.	Governor of JeollaNamdo	Claim for cancellation of warning disposition and others	KRW	2	First trial in progress
Narae Energy Service Co., Ltd.	Hanam City Hall	Claim for cancellation of the imposition of the contributio to the water supply cause	KRW n	2,073	Third trial in progress and others
CAILIP Gas Marketing, LLC	ChevronU.S.A.Inc	Claim for compensation for loss of natural gas supply	USD	84,531	First trial in progress
SK E&S LNG, LLC	Hidalgo Wind FarmII,LLC and 2 others	Claim for compensation for electricity purchase settlement	USD	11,774	First trial in progress
SK Ecoplant Co., Ltd.	Korea Rail Network Authority	Claim for payment of construction and others	KRW	4,168	Second trial in progress
	Korea Specialty Contractor Financial Cooperative	Claim for deposit of construction performance and others	KRW	3,296	First trial in progress
	Plant & Mechanical Contractors Financial Cooperative and other	Claim for payment and others	KRW	5,403	Third trial in progress
	Korea National Oil Corporation	Claim for payment of construction	KRW	11,753	First trial in progress
	Korea Land & Housing Corporation	Claim for payment of construction	KRW	44	First trial in progress
	Individual and others	Claim related to performance guarantee and others	KRW	116,981	First trial in progress and others
	Legal manager of Seobon Construction Co., Ltd.	A final and conclusive bond investigation trial of KNPCCFP	KRW	1,942	First trial in progress
Environment Management Corporation Co., Ltd.	Siheung City and others	Claim related to settlement of operating and management expenses and others	KRW	8,082	First trial in progress
	Da Moa Machinery	Claim related to balance Of machine sales	KRW	40	Second trial in progress

The Group's significant pending litigations as of December 31, 2021, in which the Group is a defendant are as follows (Korean won in millions):

Plaintiff	Defendant	Description	С	laim	Status
SIGNET EV Inc.	World Factory CO., Ltd.	Claim for service charge	KRW	68	Second trial in progress
SK Shieldus Co., Ltd.	Individual and others	Claim for damages and others	KRW	1,505	First trial in progress and others
PS & Marketing Corp.	Individual	Litigation for affirmation of non-existence of debt	KRW	44	Second trial in progress
SK Networks Co., Ltd.	Individual and others	Claim for damages and others	KRW	5,651	First trial in progress and others
SK Magic Co., Ltd.	Piltech Korea Co., Ltd. and others	Claim for confirmation of the scope of trademark rights and others	KRW	332	First trial in progress and others
SK Rent-a-Car Co., Ltd.	Individual and others	Claim for compensation and others	KRW	612	First trial in progress and others
SK Telesys Co., Ltd.	Ubins Co., Ltd.	Claim for service charge	KRW	1,249	First trial in progress
SK Nexilis Co., Ltd.	Individual and others	Claim for damages	KRW		First trial in progress
Ko-one Energy Service Co., Ltd.	Korea Land & Housing corporation	Claim for cancellation of allotted charges	KRW	323	Second trial in progress
Chungcheong energy Service Co., Ltd.	Korea Land & Housing corporation	Claim for cancellation of allotted charges	KRW	1,104	Second trial in progress
Narae energy service Co., Ltd.	Korea Electric Power Corporation	Claim for Contract amount reduction confirmation	KRW	2,694	First trial in progress
SK Ecoplant Co., Ltd.	K-Water Resources Corporation	Claim for design compensation cost return and others	KRW	300	Third trial in progress and others
	Incheon Metropolitan City	Claim for design compensation cost return and others	KRW	7,804	Third trial in progress and others
	Hanwha Engineering & Construction Corp.	Claim for cost share	KRW	5,087	First trial in progress
	Woori Bank	Claim for payment of construction	KRW	12,096	First trial in progress
	Suwon Sky View resident's representative and others	Claim for damages and others	KRW	26,598	First trial in progress and others
	Korea Rural Community Corporation	Claim for damages	KRW	8,036	Second trial in progress
	Individual and others	Claim for apartment	KRW	214,598	First trial in progress and others
	Korea Gas Corporation	Claim for damages and others	KRW	47,295	First trial in progress and others
	Republic of Korea	Claim for damages and others	KRW	6,045	Second trial in progress and others
	Busan Transportation Corporation	Claim for design compensation cost return and others	KRW	519	Third trial in progress
Environment Management Corporation Co., Ltd	Siheung City and others	Claim for cost share and others	KRW	850	First trial in progress and others

On April 29, 2019, LG Chem Ltd. and its newly established subsidiary through physical division, LG Energy Solution Ltd. (collectively, "LGC") filed their complaints with the U.S. International Trade Commission ("ITC") against SK Innovation Co., Ltd. and SK Battery America, Inc. (collectively, "SKI"), subsidiaries of the Group, alleging SKI's infringement of LGC's trade secrets and seeking a ban on SKI's importation of certain lithium ion batteries, battery cells and etc. into the United States. LGC filed an additional complaint with the ITC against SKI seeking an import ban as remediation for SKI's alleged infringement of LGC's patents on September 26, 2019. In addition, LGC filed a complaint with US District Court of Delaware against SKI for the misappropriation of trade secrets on April 29, 2019 and also filed a complaint with US District Court of Delaware against SKI for the infringement on the patents on September 26, 2019.

On May 4, 2020, the Attorney General Office of California, USA, filed a civil lawsuit in the California District Court located in San Francisco against Vitol Inc., SK Trading International Co., Ltd. and SK Energy Americas Inc., the subsidiaries of the Group, for manipulating the market price of gasoline products and anti-competitive and unfair practices during the refinery explosion in 2015. The case is currently in progress, and the duration and final outcome are not estimable at the moment. Since May 6, 2020, end-users of gasoline have filed a number of collective lawsuits in California federal court. The duration and final outcome thereof are also not estimable at the moment.

E&P business in 8<sup>th</sup> block of Peru, a subsidiary of SK Innovation Co., has been suspended due to the liquidation of operator (Pluspetrol Norte S.A.) and the business is in progress of closing. The Perupetro S.A., a Peruvian state-owned oil company and mining rights management agency, received an injunction from the local judiciary to suspend the liquidation procedure of the operator for the period ended December 31, 2021 and the Peruvian Environmental Assessment and Supervision Authority (OEFA) granted a fine to the operator related to the restoration of the workplace and environmental pollution charge for period ended December 31, 2021. Accordingly, SK Innovation Co., Ltd. paid expenses of W1,527 million at the request of the operator and the amount was reflected as non-operating expenses for period ended December 31, 2021.

The Perupetro S.A. has filed international proceedings with the International Chamber of Commerce against the parties to the mining contract, including SK Innovation Co., Ltd., in accordance with the dispute settlement clause in the mine contract to the effect that the mining right contract is not terminated only by the initiation of liquidation of the operator. The status of the arbitration is currently pending, and the final outcomes of the arbitration cannot be predicted at the moment.

As of the end of the current year, there is one civil mediation application ( $\mathbb{W}12,754$  million) with its subsidiary SK Incheon Petrochemical Co., Ltd., as the respondent. In relation to this mediation, the legal reserve debt of  $\mathbb{W}2,000$  million is recorded, and the final result cannot be reasonably predicted at this stage.

SKC Co., Ltd., a subsidiary of the Group, guarantees 50% of claim amounts related to the patent litigation filed by Kaneka Corporation against PI Advanced Materials Co., Ltd. As of December 31, 2021, the appeal of the lawsuit in the U.S. was rejected and the jury's verdict determined damages, but the final ruling was not made because some of the compensation for damages were not confirmed. Meanwhile, during the prior period, Kaneka Corporation filed a lawsuit against PI Advanced Materials Co., Ltd. in Korea based on a portion of final judgment on the U.S. jury's verdict. Accordingly, the Group paid PI Advanced Materials Co., Ltd. USD 7,836 thousand which is 50% of USD 15,671 thousand in damages. Based on the final results of litigation, the Group may have to pay more according to the ratio as specified by the payment arrangement. As of December 31 2021, the final result of trial 1 and the timing of payment of compensation for damage are not estimable.

# (4) Commitments

- 1) In accordance with the Commercial Code of the Republic of Korea, the Company, SK Innovation Co., Ltd., SK Energy Co., Ltd., SK Global Chemical Co., Ltd., SK Lubricants Co., Ltd., SK Incheon Petrochem Co., Ltd., SK Trading International Co., Ltd., SK ie technology Co., Ltd., SK On Co., Ltd, and SK Earthon Co., Ltd. are collectively responsible for any obligations of the Company arising before the spin-off. The Company and SK Biopharmaceuticals Co., Ltd. are collectively responsible for any obligations of the Company that occurred before the spin-off on April 1, 2011.
- 2) The Company has signed a lease contract for the head office building from SK REIT Co., Ltd. The lease contract period under this lease contract is until July 5, 2026, and we have the option of extending the lease contract by five years before the end of the contract. On the other hand, we have been granted preferential purchase rights for landlords to purchase at fair prices when selling the building.
- 3) The Company holds IT outsourcing and IT system maintenance agreements to provide hardware and information systems maintenance and development service entered into between the Company and SK Group companies and others.
- 4) The Company entered into a contract with Gyeonggi province on May 31, 2011 to purchase land located in 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. Should there be non-compliance, the contract may be terminated or cancelled.
- 5) The Company has total return swap contracts in regards to 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 1 <sup>st</sup> 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 mak	e a cash settlement of the amount that			
	deducts the issue price from the net s	elling 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	he sale is not complete, the selling price			
	of the shares is considered to be nil.				
Premium	The Company pays to the investor the	e amount equivalent to 3.14% of the total			
shares held by the investor annually. When the investor receives of					
	on the shares held, the amount is pa	id to the Company.			
Call option		se the shares held by the investor at the			
	issued price of the ordinary shares w	ith certain level of additional charges.			

6) The Group entered into total return swap contracts with ordinary shareholders of SK Siltron Co., Ltd., one of the subsidiaries. Details are as follows:

	Total return swap			
Investor	Warmachine Sixth Co., Ltd. and others			
Number of shares	13,140,440			
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 of December 31, 2021, the value of the agreements amounting to  $\forall 169,131$  million is recognized in current portion of long-term borrowings (see Note 16).

7) The Group entered into total return swap contracts with ordinary shareholders of SK E&S Co., Ltd., one of the subsidiaries. Details are as follows:

	Total return swap
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 of December 31, 2021, the value of the agreements amounting to  $\oplus 677,775$  million is recognized in current portion of long-term borrowings (see Note 16).

8) 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) The Company entered into a cash deficiency support agreement with Abrasax Investment Inc., a subsidiary of SK Pharmteco Inc. (formerly, Alchemy Acquisition Corp.), to lend funds for the shortfall of payment for loans and credit of up to USD 315,000 thousand.
- 10) The Company has a shareholder-to-share agreement with Showa Denko K.K. in relation to the investment of subsidiary SK Showa Denko Co., Ltd., and Showa Denko K.K. has the right to sell 630,000 shares (15%) of SK Showa Denko Co., Ltd. at ₩ 5,000 per share in the event of a specific case of this agreement.
- 11) The Company have signed a contract between shareholders that allows certain shareholders to sell their shares to us for ₩50,000 per share if certain conditions are met for shares held by certain shareholders of its subsidiary Signet EV Co., Ltd.
- 12) As of December 31, 2021, Prism Energy International Pte., Ltd., a subsidiary, provides LOU (Letter of Understanding) to ship owners HHIENS1 Shipholding S.A., HHIENS2 Shipholding S.A. and HHIENS3 Shipholding S.A. in connection with LNG carriers. Accordingly, if SK Shipping Co., Ltd. fails to fulfill the contract (BBCHP) signed with the shipping company, SK E&S Co., Ltd. will assume all obligations related to the execution of the contract.
- 13) SK E&S LNG, LLC, one of the subsidiaries, is scheduled to be provided with liquefaction service for 20 years from FLNG Liquefaction 3, LLC, which plans to operate natural gas liquefaction plants in Texas starting from 2019. As of December 31, 2021, SK E&S Co., Ltd., one of the subsidiaries, is responsible for performance guarantee in case of SK E&S LNG, LLC's inability to make payments for service or for claims against breach of obligation. In regard to this, the Company provides performance guarantee for SK E&S Co., Ltd.'s guarantee.
- 14) As of December 31, 2021, details of contracts of the subsidiaries of SK E&S Co., Ltd. are as follows:

Contracting parties	Description of contract	Counterparty	Term of contract
Kangwon City Gas Co., Ltd.	Contract for the supply of long-term.	Korea Gas Corporation	-
and 7 subsidiaries	natural gas (*1)	Co., Ltd.	
SK E&S Co., Ltd.	Contract of supply for natural gas	Tangguh PSC Contractor Parties	2006.1 ~ 2026.7
	Contract for the repair and	GE International Inc.	2004.6 ~ 2026.12
	maintenance of gas turbine		(estimated)
	Contract for the storage and vaporization service of natural gas	POSCO ENERGY Co., Ltd.	2005.6 ~ 2025.12 2020.7 ~ 2040.12
	Rental contract of the plant and tower site	POSCO Co., Ltd.	2003.8 ~ 2028.12
	Contract for the REC trading	Godeok Green Energy Co., Ltd. and others	20 years from contract (estimated)
Paju Energy Service Co., Ltd.	Contract for the long-term maintenance program	Siemens AG and others	2014.6 ~ 2031.6 (estimated)
	Contract for the REC trading	GeoGeum Solar Park Co., Ltd. and others	15 years from 2018
	Contract for LTSA	Doosan Fuelcell Co., Ltd.	10 years from performance warranty date
Narae Energy Service Co., Ltd.	Contract for the long-term maintenance program	Siemens AG and others	2015.1 ~ 2032.1 (estimated)
	Contract for the long-term maintenance program	Doosan Heavy Industries & Construction Co., Ltd.	12 years from 2012
	Contract for the operation and Maintenance program	Jeonbuk Group Energy Co., Ltd. and Gimcheon Energy Service Co., Ltd.	2015.1 ~ 2025.1
	Contract for the supply of long-term natural gas	Korea Gas Corporation Co., Ltd.	20 years from 2015.5
	Contract for the REC trading	K Solar E Ho Co., Ltd. and others	20 years from contract
Narae Energy Service Co., Ltd. and Paju Energy Service Co., Ltd.	Contract for the use plumbing system	Korea Gas Corporation Co., Ltd.	20 years from 2017
SK E&S Co., Ltd. and Narae Energy Service Co., Ltd. and Paju Energy Service Co., Ltd.	Contract for the storage and vaporization service of natural gas	Boryeong LNG Terminal Co., Ltd.	20 years from 2017

Contracting parties	Description of contract	Counterparty	Term of contract
Yeoju Energy Service Co., Ltd.	Contract for LTSA	Siemens Gas & Power Gmbh Siemens Energy Ltd.	2019.12 ~ 2047.12 (estimated)
Pusan City Gas Co., Ltd.	Rental contract	Megamart Co., Ltd. and others	Until 2022
SK E&S LNG, LLC	Contract for the liquefaction and storage of natural gas	FLNG Liquefaction 3, LLC	20 years from 2020
	Contract for the use pipeline of natural gas	Kinder Morgan, Inc.	20 years from 2020
Prism Energy International Pte. Ltd.	Contract of supply for natural gas	Chevron Australia Pty. Ltd. and others	2017.1 ~ 2022.3
	Contract of supply for natural gas	PETRONAS LNG LTD.	2019.6 ~ 2023.12
	Contract of supply for LNG	Generadora San Felipe Limited Partnership	10 years from commencement date
	Time charter contract	SK Shipping Co., Ltd.	20 years from ship delivery date
SK E&S Australia Pty. Ltd.	Contract for FPSO	BW Offshore Singapore Pte. Ltd. (Australia Branch)	15 years from service date
	Contract for the liquefaction	Darwin LNG Pty. Ltd.	2020.12 (contract)
	service of natural gas	and others	15 years from service date (estimated)
Prism Energy International Zhoushan Limited	Contract for the storage and vaporization service of natural gas	ENN (Zhoushan) LNG Co., Ltd.	2020.7 ~ 2030.7

(\*1) The Company has signed a contract with Korea Gas Corporation for natural gas supply for 20 years.

15) As of December 31, 2021, 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	A	mount
Contract for heat piping and others	Narae Energy Service Co., Ltd.	Eulmyo general construction Co., Ltd. and others	2020.11 ~ 2022.06	₩	11,127
Contract for Yeoju natural gas power plant 154kV connection facility construction	Yeoju Energy Service Co., Ltd.	Korea Electric Power Corporation	2019.12 ~ 2022.06	₩	18,160

16) As of December 31, 2021, details of material contracts of resource development by the subsidiaries of SK E&S Co., Ltd. are as follows:

Description of contract	Name of subsidiaries	Counterparty	Equity ownership
Barossa-Caldita, Australia	SK E&S Australia Pty. Ltd.	Santos NA Barossa Pty. Ltd.	37.5%
Woodford, USA	Dew Blaine Energy, LLC	Continental Resources, Inc.	49.9%
East Timor Bayu-Undan gas field and pipeline asset	BU12 Australia Pty. Ltd. BU13 Australia Pty. Ltd. SK E&S Australia Pty. Ltd.	Santos NA Darwin Pipeline Pty. Ltd. and others	25.0%
00001	Prism DLNG Pte. Ltd.		

17) SK Energy Co., Ltd., SK Incheon Perochemical Co., Ltd. and SK On Co., Ltd., subsidiaries of the Group, pay electricity bills and tariffs through B2B corporate purchase agreement contracts and national tax cards signed with some financial institutions, and pay the bill to the credit card company at the end of the credit donation period under the agreement. As of December 31, 2021, the related amount payable is ₩1,110,257 million.

18) SK Energy Co., Ltd., a subsidiary of the Group, signed an option contract regarding the shares of ordinary stocks held by non-controlling shareholders of goodsFLOW Co., Ltd. The terms of the contract for this option are as follows:

	Put option	Call option	Call option		
Purpose of Contract	Acquisition of equity				
Option rights holder Option obligor	Tae-jin Jung, Byung-wook Oh and others SK Energy Co., Ltd.	SK Energy Co., Ltd. Tae-jin Jung, Byung-wook Oh and others	SK Energy Co., Ltd. Hanyu Energy Co., Ltd. and others		
Payment method	Cash				
Object of exercise		of 1,014,362 shares (43.83%) of goodsFLOW Co., Ltd.'s shares held e-jin Jung, Byung-wook Oh, shareholders of goodsFLOW Co., Ltd.			
Time of exercise	The date on which three years have elapse or the date agreed between the parties, w				
Price of exercise	Price per share ₩33,553		Fair value at the time of exercise of the call option.		

- 19) SK Innovation Co., Ltd., a subsidiary of the Group, sold its holdings (40%) of SK Lubricants Co., Ltd., a subsidiary of SK Innovation Co., Ltd., to Eco Solution Holdings Co., Ltd. (the "investor") on July 30, 2021. The shareholder agreement between the Investor and the Group, the largest shareholder of SK Lubricants Co., Ltd., in event of selling the stake, includes the following key terms:
  - Investor's Tag-along right and Co-Sale Process
  - Investor's right to make decisions on dividend policies, under certain conditions
  - The largest shareholder's right to request for sale of shares and Investor's right to demand the purchase of shares, under certain conditions
  - Restriction on disposal of shares of the largest shareholder and investor under certain conditions, etc.

# Details of rights granted to investor are as follows.

Description	Conditions	Rights
Tag-Along Right	The largest shareholder sells shares when accomplishing certain conditions	The right to sell Investor's shares on the same conditions as the largest shareholder
Co-Sale Process	Failure of Initial Public Offering ("IPO") within the agreed period (8 years) and the total amounts of available for dividend are less than 2.5% of the annual interest rates based on IRR	The right to sell shares held by the largest shareholder along with shares held by
Dividend policy decision-making right	Failure of IPO within the agreed period (5 years)	The right to make decisions on dividend policies within
Default Put Option	In the event of a serious violation of a specific obligation clause agreed with Investor for a deliberate and malicious purpose	The right to sell the investors shares to the largest shareholder at an amount amount calculated by applying 10% annual interest rate based on IRR for the investment principal ( $\%$ 1,091,948 million).

SK Battery America Inc., a subsidiary, has signed a project agreement with Jackson County Industrial Development Authority and the Georgia Department of Economic Development (hereinafter referred to as "contract") to provide incentives such as property tax reduction. Under the contract, SK Battery America, Inc. transferred legal ownership of assets subject to property tax reduction to state agencies and received bonds issued by state agencies. The Group recognized the bonds and financial liabilities generated in the transaction as net amounts as they meet the offsetting criteria of KIFRS 1032, and the amount of bonds and financial liabilities set off as of the end of the current year is USD 2,160 million, and the book value after offset is W0.

- 20) 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 of the end of the current reporting period is ₩493,277 million which is recorded as other receivables and long-term other receivables.
- 21) In relation to the merger and acquisition of SK Broadband Co., Ltd., a subsidiary, accrued during the year end December 31, 2020, SK Telecom Co., Ltd. has entered into an agreement with the shareholders of the merged company. If certain requirements are not met after a business combination, shareholders of the merged company can exercise the drag along right of common shares of SK Broadband Co., Ltd., held by the Parent Company, and SK Telecom Co., Ltd. may exercise the right to purchase shares. As of December 31, 2021, SK Telecom Co., Ltd. has recognized a total of \#321,025 million of derivative financial liabilities for the rights included in the agreement above.
- 22) SK Siltron Co., Ltd., a subsidiary, has entered into an agreement between its existing shareholders and shareholders regarding the acquisition of shares in Teraon Co., Ltd., a related company investment during the period ended December 31, 2021. Under the agreement, SK Siltron Co., Ltd., a subsidiary, has a call option to hold 75.28% of Teraon Co., Ltd.'s shares and can be exercised between October 1, 2021 and September 30, 2022.
- 23) SK Ecoplant Co., Ltd., a subsidiary, entered into a share subscription agreement in order to acquire Sam Kang M&T Co., Ltd. The details are as follows (Korean won in millions):

	Expected date of acquisition	Estimated acquisition share (%)	Estimated acquisition	
Sam Kang M&T Co., Ltd.	March, 2022	32%	₩ 3,426	

24) In February 2019, SK Biopharmaceuticals Co., Ltd., a subsidiary, signed a technology transfer contract with the European-based entity, Arvelle Therapeutics International GmbH (formerly Arvelle Therapeutics GmbH), in order to grant the exclusive rights of Cenobamate, an epilepsy treatment, in Europe. At the time of signing the technology transfer contract, SK Biopharmaceuticals Co., Ltd. received an Upfront Payment of USD 100,000,000 and recognized as a profit at the time of the receipt. In addition, in March 2021, the Milestone Payment of USD 110,000,000 was recognized as a profit at the time of notification of the permit in accordance with the marketing permission of European regulators (March 30, 2021). When the terms under the agreement are fulfilled in future periods, additional Milestone Payment of up to USD 320,000,000 will be recognized.

In February 2021, SK Biopharmaceuticals Co., Ltd., a subsidiary, sold all of its 12% ownership of Arvelle Therapeutics B.V.'s common shares to Angelini Pharma S.p.A. and received USD 31,766,890 in return for the closing of the transaction. The amount was recognized as non-operating income at the time of receipt. In addition, in March 2021, the Approval Payment of USD 13,220,625 was recognized as non-operating income at the time of notification of the permit (March 30, 2021). When the terms under the agreement are fulfilled in future periods, up to USD 9,252,177 can be additionally recognized as non-operating income. However, the amount of non-operating income that can be received may change depending on certain conditions.

In October 2020, SK Biopharmaceuticals Co., Ltd. signed a technology transfer contract with Ono Pharmaceutical Co., Ltd., an entity located in Japan, in order to grant the exclusive rights of Cenobamate in Japan and received an upfront payment of JPY 5,000,000,000. The upfront payment is recognized as a profit by allocating the amount in a reasonable way according to the contract. When the rights are approved by the Japanese regulator and succeed in commercializing in the future, SK Biopharmaceuticals Co., Ltd. will recognize the Milestone Payments of up to JPY 48,100,000,000 as a profit.

25) During November 2021, SK Biopharm Co., Ltd., a subsidiary, signed a license agreement to grant commercialization rights for six new drugs, including Ignis Theraputics and Senobamate in the Cayman Islands (China, Hong Kong, Macau, Taiwan), and received USD 20,000,000 in cash and 150 million preferred shares (USD 150,000,000). In the case of the down payment, the intellectual property license transfer fee and the clinical trial obligation were allocated, and the intellectual property license recognizes revenue at once with the license, and the completion of the service over the expected period of service. In the event licensing and commercialization is acheived, up to USD 10,000,000 Milestone Payment and Royalty Payment may be recognized.

In addition, during December 2021, a technology transfer agreement with Endo Ventures Limited was entered into in Canada to grant Senobamate exclusive rights in Canada and a down payment of USD 20,000,000 was received. The down payment was recognized as revenueat the same time as the right to use intellectual property rights, and the maximum amount of milestone payment of CAD 21,000,000 may be recognized as revenue under the permission and commercialization of Canadian regulators in the future.

(5) Hybrid bonds

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

					Fo	or the yea	ars ended
			Maturity date	Interest	Decem	ber 31,	December 31,
Issue segment	Description	Issue date	(*1)	rate (%) (*2)	20	21	2020
Group of SK Innovation	1st private equity bond type	2019.03.15	2049.03.15	4.20	₩	600,000	₩ 600,000
Group of SK Telecom	2-1 private equity bond type	2018.06.07	2078.06.07	3.70	:	300,000	300,000
	2-2 private equity bond type	2018.06.07	2078.06.07	3.65		100,000	100,000
Group of SK E&S	2nd Korean currency type	2019.10.11	2049.10.11	3.30		330,000	330,000
	3rd Korean currency type	2020.07.14	2050.07.14	3.60		400,000	400,000

(\*1) The issuing company may decide on early repayment and extension of maturity date when certain period is lapsed.

(\*2) After a certain period from the issue date, the interest rate will fluctuate in accordance with the contract.

### (6) Others

As of December 31, 2021, 43 notes (including 40 blank notes) and 82 checks (including 81 blank checks) are provided to financial institutions as collateral for borrowings.

### 35. Pledged assets

The following assets were pledged as collateral for the Group's borrowings and others as of December 31, 2021 (Korean won in millions and foreign currencies in thousands):

			Collatoralized		
Company	Asset	Currency	Collateralized amount (*1)	Provided to	Description
SK Innovation Co., Ltd.	Investments in associates	KRW	-	Yemen LNG Company	Collateral for project
	5	KDW	4 500	and others	financing
Netruck Co., Ltd. SK Broadband Co., Ltd.	Property, plant and equipment Property, plant and equipment	KRW KRW	4,500 1,513	Shinhan Bank Lessor	Collateral for borrowing Restricted real rights for
or broadband oo., Etd.	rioperty, plant and equipment	TO W	1,010	20300	office lease
Incross Co., Ltd.	Financial instruction	KRW	24,848	Naver Co., Ltd. and others	Performance guarantees for contract
One store Co., Ltd.	Investment property and others	KRW	612	Shinhan Bank	Collateral for borrowing
SK Networks Co., Ltd.	Property, plant and equipment	KRW	390,968	Korea Development Bank	Collateral for sales
SK Magic Co., Ltd.	and others Property, plant and equipment	KRW	96,000	and others Korea Development Bank	and others Collateral for borrowing
SK Rent-a-Car Co., Ltd.	Property, plant and equipment	KRW	377.815	Korea Development Bank	Collateral for borrowing
				and others	g
Shenyang SK Bus Terminal Co., Ltd.	Property, plant and equipment	KRW	46,715	Aisikai Industrial Hong Kong Co., Ltd. and others	Collateral for borrowing
SKC Solmics Co., Ltd.	Property, plant and equipment	KRW	91,100	Korea Development Bank and others	Collateral for borrowing
Woori Fine Chem Co., Ltd.	Property, plant and equipment	KRW	6,480	Shinhan Bank	Collateral for borrowing
SKCFTH Co., Ltd.	Investment subsidiaries	KRW	690,000	Korea Development Bank and others	Collateral for borrowing
SK Nexilis Co., Ltd.	Property, plant and equipment	KRW	396,000	Korea Development Bank	Collateral for borrowing
				and others	-
SK PIC Global Co., Ltd.	Property, plant and equipment	KRW	33,600	Korea Development Bank	Collateral for borrowing
SKC, Inc. SK E&S Co., Ltd.	Property, plant and equipment Investments in subsidiaries	USD KRW	70,000 300,000	Standard Chartered Bank Korea Development Bank	Collateral for borrowing Collateral for PF
SK E&S CO., LIU.	investments in subsidiaries		300,000	and others	
	Investments in joint ventures	KRW	179,646	Korea Development Bank and others	Collateral for PF
		USD	14,000	BANGKOK BANK PUBLIC COMPANY LIMITED	Collateral for PF
	Investments in associates	KRW	18,621	Industrial Bank of Korea and others	Collateral for PF
Ko-one energy service Co., Ltd.	Investments in associates	KRW	2,711	Kookmin Bank and others	Collateral for PF
Pusan City Gas Co., Ltd.	Investments in associates	KRW	5,153	Shinhan Bank and others	Collateral for PF
Paju Energy Service Co., Ltd.	Investment property Property, plant and equipment	KRW KRW	3,990 360,000	Megamart Co., Ltd. and others Kookmin Bank and others	Leasehold deposits Collateral for borrowing
Chonnam City Gas Co., Ltd.	Property, plant and equipment	KRW	81	LG Hello Vision Co., Ltd.	Collateral for deposits received
Narae Energy Service Co., Ltd.	Property, plant and equipment and others	KRW	589,000	Korea Development Bank and others	Collateral for borrowing
Yeoju Energy Service Co., Ltd.	Property, plant and equipment	KRW	601,200	Korea Development Bank and others	Collateral for PF
Busan Jungkwan	Property, plant and equipment	KRW	100,800	NH Bank and others	Collateral for PF
Energy Co., Ltd. IGE Co., Ltd.	Property, plant and equipment	KRW	24.000	Korea Development Bank	Collateral for PF
Key Capture Energy, LLC.	Financial instruction	KRW	11,432	RABOBANK and others	Collateral for
1.69 Captaro 2.10.99, 220.			,		service use
SK Ecoplant Co., Ltd.	Investment securities and others	KRW	592,143	Woori Bank and others	Collateral for borrowing
	Investment property	KRW	385,252	Co., Ltd. and others Kookmin Bank	and others Collateral for borrowing
Seongju Tech Co., Ltd.	Property, plant and equipment	KRW	365,252	Hyundai Capital Services, Inc.	Collateral for vehicle installment
DDS Co., Ltd.	Property, plant and equipment	KRW	3,000	Korea Development Bank	Collateral for borrowing
Samwon ENT Co., Ltd.	Others	KRW	700	KB Securities	Collateral for borrowing
Daewon Green Energy Co., Ltd.		KRW	5,280	Korea Development Bank	Collateral for borrowing
Environment Management	Property, plant and equipment	KRW	33,973	KEB Hana Bank and others	Collateral for borrowing
Corporation Co., Ltd	Investments in subsidiaries	KRW	529,311	Korea Development Bank and others	Collateral for borrowing
	Investment securities and others	KRW	6,005	Woori Bank and others	Collateral for borrowing
	Others	KRW	962,922	KEB Hana Bank and others	Establishing pledge and others
SK Industrial Development China Co., Ltd.	Others	CNY	2,000,000	Bank of China communications	Collateral for borrowing
SK Materials Co., Ltd.	Property, plant and equipment	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
		KRW	1,668	Yeongju city and Gyeongsang Buk-do	Government subsidy
SK Materials Japan Co., Ltd.	Property, plant and equipment	JPY	315,000	MUFG Bank	Collateral for borrowing
SK Materials Airplus Inc.	Property, plant and equipment	KRW	752,900	Kyungnam Bank and others	Collateral for borrowing
SK Showa Denko Co., Ltd.	Property, plant and equipment	KRW	30,000	Korea Development Bank	Collateral for borrowing

# 35. Pledged assets (cont'd)

			Collateralized		
Company	Asset	Currency	amount (*1)	Provided to	Description
SK Siltron Co., Ltd.	Property, plant and equipment	KRW	524,723	Korea Development Bank and others	Collateral for borrowing
SK Biotek Co., Ltd.	Property, plant and equipment	KRW	120,000	Korea Development Bank	Collateral for borrowing
Hweechan Co., Ltd.	Property, plant and equipment	KRW	13,440	KEB Hana Bank	Collateral for borrowing
SK REITs Co., Ltd.	Investment property	KRW	722,160	The lender and the lessor	Collateral for borrowing
Clean Energy REITs Co., Ltd.	Investment property	KRW	540,120	The lender and the lessor	Collateral for borrowing
Signet EV Inc.	Property, plant and equipment and others	KRW	10,800	Woori Bank	Collateral for borrowing

(\*1) The carrying amount of securities provided as collaterals for PF loans and facility borrowings are included.

SK Sheildus Co., Ltd., a subsidiary, provides its shares in Capstec Co., Ltd. as collateral for its long-term borrowing of W1,713,291 million.

#### 36. Guarantees provided among the Group entities

Guarantees provided among the Group entities as of December 31, 2021 are as follows (Korean won in millions and foreign currencies in thousands):

Guarantor	Guarantee	Currency	Amount	Description of guarantee
SK Inc.	Abrasax Investment Inc.	USD	315,000	Cash deficiency support of debt
	Hudson Energy NY, LLC	USD	226,000	Cash deficiency support of debt
SK Innovation Co., Ltd.	SK Battery America, Inc.	USD	1,680,000	Guarantee of debt
- /	SK On Hungary Kft.	USD	250,000	Guarantee of debt
	SK Hi-tech Battery Materials	USD	50.000	Guarantee of debt
	(Jiangsu) Co., Ltd.	CNY	500,000	Guarantee of debt
	SK Hi-Tech Battery Materials Poland	USD	130,000	Guarantee of debt
	Sp. Zo.o.	030	130,000	Guarantee of debt
	SK Battery Manufacturing Kft.	USD	500,000	Guarantee of debt
SK Innovation Co. 1 td. and		HUF		
SK Innovation Co., Ltd. and SK On Co., Ltd.	SK On Hungary Kft.	HUF	9,810,000	Guarantee of local factory construction
	OK Nimmher Deufermannen Dutch an Ostalati	USD	44.000	
SK Geo Centric Co., Ltd.	SK Ningbo Performance Rubber Co., Ltd.		14,000	Guarantee of payment for license agreement
	SK Global Chemical Americas, Inc.	USD	160,000	
	SK Functional Polymer, S.A.S	EUR	216,000	Guarantee of payment for principal of debt
SK ie technology Co., Ltd.	SK Hi-Tech Battery Materials(Jiang Su)	CNY	700,000	Guarantee of financial obligation
	Co., Ltd.			
SK Networks Co., Ltd.	SK Networks Deutschland GmbH	EUR	1,000	Standing surety for investee
	SK Networks Hong Kong Ltd.	USD	102,600	Standing surety for investee
	SK Networks (Shanghai) Co., Ltd.	USD	62,500	Standing surety for investee
		CNY	54,000	Standing surety for investee
	SK Networks America, Inc.	USD	10,000	Standing surety for investee
	SK Networks (Xiamen) Steel Processing Center	r CNY	68,000	Standing surety for investee
	Co., Ltd.			0,
	SK Networks Resources Australia Pty. Ltd.	AUD	8.000	Standing surety for investee
SKC Co., Ltd.	SKC, Inc.	USD	109.000	Guarantee of payment
	SKC (Jiangsu) High Tech Plastics Co., Ltd.	USD	69,725	Guarantee of payment
		CNY	270.000	Guarantee of payment
	SK Telesys Co., Ltd.	KRW	30,000	Guarantee of financial obligation
	SKC (Natong) PU Specialty Co., Ltd.	CNY	144,256	Guarantee of payment
	one (Natong) i o opecially co., Etc.	USD	7,000	Guarantee of payment
	SKC (Natong) Semiconductor Materials	USD	5,200	Guarantee of payment
	Technology Co., Ltd.	030	5,200	Guarantee of payment
		USD	230,000	Cuerentes for derivative hodge and others
SK E&S Co., Ltd.	Cailip GAS Marketing, LLC			Guarantee for derivative hedge and others
	Paju Energy Service Co., Ltd.	KRW	500,000	Guarantee of debt and others
	Narae Energy Service Co., Ltd.	KRW	290,000	Guarantee of debt and others
	Yeoju Energy Service Co., Ltd.	KRW	200,000	Guarantee of payment for principal of debt
	Prism Energy International Pte. Ltd.	USD	641,000	Guarantee for derivative hedge and others
	SK E&S LNG, LLC	USD	63,000	Guarantee for derivative hedge and others
SK E&S Americas, Inc.	SK E&S LNG, LLC	USD	9,342	
	Cailip Gas Marketing, LLC	USD	40,000	Performance guarantee for purchase contract of Feed Gas
SK Ecoplant Co., Ltd.	SKEC Anadolu, LLC	EUR	65,702	Performance guarantees for contract and others
	Silvertown Investco Limited.	GBP	10,671	Guarantee of financial obligation
	Sunlake Co., Ltd.	CAD	6,000	Guarantee of financial obligation
	SK E&C Betek Corporation	USD	28,500	Guarantee of financial obligation
	Environment Management	KRW	67.531	Fund supplement agreement for loan agreement
	Corporation Co., Ltd.			
Environment Management	Gyeounbuk Environment Energy Co., Ltd.	KRW	2,500	Guarantee of debt and others
Corporation Co., Ltd	Gyeongsan Clean Water Way Co., Ltd.	KRW	6,156	
Corporation Co., Eta	Dalseong Maleunmulgil Co., Ltd.	KRW	447	
	Honam Environment Energey Co., Ltd.	KRW	8,000	Guarantee of debt and others
SK Materials Co., Ltd.	SK Materials Jiangsu Co., Ltd.	USD	29.000	
Six materials CO., LIU.		USD	29,000	Guarantee of debt
	SK Materials Taiwan Co., Ltd.			
	SK Materials Japan Co., Ltd.	JPY	276,000	Guarantee of debt
SK Biotek Co., Ltd.	SK Biotek Ireland Limited.	USD	30,000	Guarantee for credit limit
		EUR	10,000	Performance guarantees
SK Siltron Co., Ltd.	SK Siltron CSS, LLC	USD	55,000	Guarantee of debt

### 37. Deposits restricted in use

Deposits restricted in use as of December 31, 2021 and 2020 are as follows (Korean won in millions):

Account	Classification	Institution	De	ecember 31, 2021	De	ecember 31, 2020	Description of restriction
Cash and cash equivalents	Borrowing-related pledge establishment and others	KB Securities and others	₩	2,017	₩	678	Pledged on collateral and others
Short-term financial instruments	Charitable fund and others	Industrial Bank of Korea and others		189,146		166,823	Money on deposits and others
Long-term financial instruments	CO2 emission allowances fund and others	Samsung Securities and others		38,548		9,136	Money on deposits and others
Others	Refund guarantee and others	Korea Software Financial Cooperative and others	₩	<u>3,853</u> 233,564	₩	<u>3,803</u> 180,440	Deposits and others

#### 38. 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.

#### 38.1 Financial risk management

#### 38.1.1 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.

#### 38.1.2 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 of December 31, 2021 and 2020 is as follows (Korean won in millions):

		December 31, 2021	De	cember 31, 2020
Financial assets measured at FVTPL	₩	10,871,691	₩	6,059,081
Financial assets measured at FVOCI		7,799		12,907
Financial assets measured at amortized cost		25,365,205		22,118,563
Derivatives designated as hedging instruments		263,779		126,932
	₩	36,508,474	₩	28,317,483

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 34).

### 38.1.2.1 Trade and other receivables

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.

The Group applies a simplification method that recognizes lifetime expected credit losses as a loss allowance for trade and other receivables. To measure expected credit losses, sales receivables and contract assets were divided based on credit risk characteristics and past due dates.

As of December 31, 2021 and 2020, the aging of trade receivables and other receivables for which a loss allowance has not been accrued, 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	r 31, 2021	December 31, 2020			
	Trade receivables	Other receivables	Trade receivables	Other receivables		
Less than one month	₩ 296,524	₩ 42,096	₩ 508,281	₩ 95,999		
One~three months	220,408	42,640	315,688	63,870		
Three~six months	97,056	42,822	180,427	31,039		
More than six months	263,456	372,119	400,203	365,545		
	₩ 877,444	₩ 499,677	₩ 1,404,599	₩ 556,453		

Changes in the loss allowance on trade receivables and others for the years ended December 31, 2021 and 2020 are as follows (Korean won in millions):

	For the years ended							
		December 31, 2021	December 31, 2020					
Beginning balance	₩	902,777	₩		893,479			
Bad debt expense		93,158			95,090			
Write-off		(211,319)	)		(69,460)			
Others (*1)		132,263			(16,332)			
Ending balance	₩	916,879	₩		902,777			

(\*1) Others include net foreign currency translation differences, changes in the scope of consolidation and others.

### 38.1.2.2 Guarantee

SK Ecoplant Co., Ltd., one of the subsidiaries, offers payment guarantees for loans of project financing. The financing liabilities related to the payment guarantees recognized are W15,921 million as of December 31, 2021. The Group recognizes the financial guarantee liabilities related to the payment guarantees contracted with the Group, such as SK Ecoplant Co., Ltd., as of December 31, 2021 (Korean won in millions):

	December 31, 2021			December 31, 2020		
SK Innovation Co., Ltd.	$\mathbb{W}$	1,137	₩	1,790		
SK Ecoplant Co., Ltd.		15,921		20,169		
SK Biotek Co., Ltd.		472		320		
SK Showa Denko Co., Ltd.		22		<u> </u>		
	$\overline{W}$	17,552	₩	22,279		

In addition, the Group has provided payment guarantees for others, including subsidiaries and others. (See Notes 34 and 36).

## 38.1.2.3 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.

## 38.1.3 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 of December 31, 2021 is as follows. Amounts include interests paid and presented at gross amounts (Korean won in millions):

	Book value	Contractual cash flow	Less than 3 months	3 ~ 12 months   1	~ 5 years	More than 5 years
Borrowings	₩ 23,249,591 ₩	₹ 24,312,874 ₩	4,827,671 ₩	5,389,017 ₩	12,975,530 ₩	1,120,656
Bonds	34,856,002	37,882,782	1,806,881	4,521,975	24,096,684	7,457,242
Derivative financial liabilities	s 415,394	420,277	231,327	81,957	105,914	1,079
Trade payables	9,519,544	9,519,544	9,233,421	286,123	-	-
Lease liabilities	5,054,890	5,489,612	117,976	1,172,762	2,385,239	1,813,635
Other liabilities	14,426,388	14,750,774	9,865,714	2,612,318	1,982,374	290,368
	₩ 87,521,809 ₩	<u> </u>	<u>26,082,990</u> ₩	<u>14,064,152</u> ₩	41,545,741 ₩	10,682,980

# 38.1.4 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.

### 38.1.4.1 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 of December 31, 2021 and 2020 are as follows (Korean won in millions and foreign currencies in thousands):

		December 31, 2021			Decembe	r 31,	2020
		Foreign	K	orean won	Foreign		Korean won
	Currency	currencies	e	quivalent	currencies		equivalent
Assets	USD	7,542,986	₩	8,942,210	4,399,956	₩	4,787,152
	JPY	16,318,984		168,125	16,926,984		178,454
	CNY	2,468,361		459,757	2,995,196		500,078
	EUR	400,449		537,539	352,292		471,451
	Others			912,134			437,237
			₩	11,019,765		₩	6,374,372
Liabilities	USD	11,908,339	₩	14,117,336	6,966,664	₩	7,579,730
	JPY	10,970,493		113,022	12,517,757		131,970
	CNY	1,024,139		190,756	2,773,350		463,039
	EUR	167,922		225,408	376,452		503,783
	Others			531,211			559,060
			₩	15,177,733		₩	9,237,582

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

			Decembe	er 31, 2021	December 31, 2020				
	Currency	Increase by 10%		Increase by 10% Decrease by 10%		Increase by 10%		Decrease by 10%	
USD		₩	(517,513)	₩ 517,51	3₩ (2	279,258) 🗄	₩ 2	79,258	
JPY			5,510	(5,51	0)	4,648		(4,648)	
CNY			26,900	(26,90	D)	3,704		(3,704)	
EUR			31,213	(31,21	3)	(3,233)		3,233	

The Group is hedging currency risk by using derivative financial instruments such as currency swaps, currency forwards and others (See Note 21).

#### 38.1.4.2 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 of December 31, 2021, floating-rate bonds payable and floating-rate borrowings are W8,562,981 million (December 31, 2020: W6,170,314 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 21).

When all other variables are fixed and the interest rates are changed for the years ended December 31, 2021 and 2020, the effects of interest expense by fluctuated interest-bearing loan are as follows (Korean won in millions):

	For the years ended							
	December 31, 2021			December 31, 2020				
Interest expenses	100 basis point increase	₩	85,630	100 basis point increase	₩	61,703		

## 38.1.4.3 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.

## 38.1.5 Enforceable master netting agreement or similar agreement

Carrying amount of financial instruments recognized for which offset agreements are applicable as of December 31, 2021 and 2020 is as follows (Korean won in millions):

	December 31, 2021								
	Gross financial instruments recognized				Gross financial instruments offset		Net financial instruments presented in the consolidated statement of financial position		
Financial assets: Trade receivables and other receivables Financial liabilities:	₩			368,869 ₩	(21	4,549)₩		154,320	
Other payables and other liabilities	₩			341,738 ₩	(21	4,549)₩		127,189	
				December	31 2020				
	Gross fir instrum recogn	ients	Gross offset financial instruments recognized	Net financial instruments presented in the consolidated statement of financial position	Relevant amo in the consolida <u>of financia</u> Financial instruments	ited statement	-	t amount	
Financial assets:	recogn	1200	recognized	Inditional position	Instruments	Teochica			
Trade receivables and other receivables	₩ 3	817,332 ₩	(203,403)	₩ 113,929	₩ -	₩	- ₩	113,929	
Derivatives (*1)		8,015		8,015	(453	)		7,562	
	$\mathbb{W}$ 3	825,347 ₩	£ (203,403)	₩ 121,944	₩ (453	) <u>₩</u>	- ₩	121,491	
Financial liabilities: Other payables and other liabilities	₩ 3	801,996 \	(203,403)	,		₩	- ₩	98,593	
Derivatives (*1)		453	-	453	(453		<u> </u>		
	₩ 3	<u>802,449</u> ₩	(203,403)	₩ 99,046	₩ (453	<u>)</u> ₩	- <u>₩</u>	98,593	

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

## 38.2 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 152.2% as of December 31, 2021. The maturity of the debt is dispersed in the long term; so, debt-repayments are not demanding.

The Group's debt ratio as of December 31, 2021 and 2020 is as follows (Korean won in millions):

_	December 31, 2021	December 31, 2020
Total liabilities	99,815,712	₩ 85,807,988
Total equity	65,565,149	51,859,918
Debt ratio	152.2%	165.5%

#### **39.** Business combination

As of December 31, 2021, details of business combination are as follows.

#### (1) General information

The Group acquired 103,000 million third-party shares (35%) of Hana Land Chip PEF 33, as of January 1, 2021, as the deemed acquisition date. Hana Land Chip PEF 33 has been reclassified from investment in joint ventures to investment in subsidiaries, and it was liquidated for the period ended December 31, 2021

Maeripji Management Co., Ltd., a subsidiary of the Group, acquired an additional 30% of the voting shares of YS TEC Co., Ltd., an unlisted company that primarily engages in the activity of landfill waste on January 15, 2021. Accordingly, YS TEC Co., Ltd. has been reclassified from investment in joint ventures to investment in subsidiaries.

SK E&S Co., Ltd., a subsidiary of the Group, gained control by acquiring 100% of the shares in Busan Jungkwan Energy Co., Ltd. on January 1, 2021, as the deemed acquisition date. Busan Jungkwan Energy Co., Ltd. started commercial operation of 2 power generation facilities with a capacity of 50MW in October 2008 and January 2012, respectively, and produces and supplies heat and electricity in Busan Jungkwan District in a stable manner.

Crest Acquisition LLC, a subsidiary of the Group, acquired 70% of shares and gained control in Yposkesi, SAS, a French gene and cell therapy (GCT) drug consignment production (CMO) company, on March 31, 2021, as the deemed acquisition date to strengthen global drug consignment production business.

SK Ecoplant Co., Ltd., a subsidiary of the Company, gained control by acquiring a stake in eight waste disposal companies during the nine-month period ended December 31, 2021.

Name of company	Major business activities	Acquisition date	Rate of stake acquisition
Seongju Tech Co.,	Designated waste disposal business	2021.04.28	50%
DDS Co., Ltd.	Intermediate disposal of medical waste business	2021.06.24	100%
Samwon ENT Co., Ltd.	Non-designated waste collection and transportation business	2021.06.30	100%
Daewon Green Energy Co., Ltd.	Waste incineration	2021.08.27	100%
Saehan Environment Co., Ltd.	Waste incineration	2021.08.06	100%
Green Environmental Technology Co., Ltd.	Intermediate waste disposal business	2021.10.15	100%
City Environment Co., Ltd.	Intermediate medical waste disposal business	2021.10.15	100%
E-Medi One Co., Ltd.	Intermediate medical waste disposal business	2021.10.15	100%

Tmap Mobility Co., Ltd., a subsidiary of the Company, acquired 100% shares of YLP Inc. (168,012 shares) and gained control. Out of the total cost of business combination amount 79,000 million, 55,598 million was paid in cash and acquired 70.4% stake (118,242 shares). In addition, 29.6% (49,770 shares) of Tmap Mobility Co., Ltd. owned by YLP Inc. was transferred on June 29, 2021, and 267,700 shares (23,402 million) were issued to shareholders in exchange for shares.

On August 12, 2021, in order to expand the business portfolio related to the electric car charging business, which is high-growth field, the Group acquired 5,920,000 new convertible preferred shares of Signet EV Inc. and 1,620,087 old convertible preferred shares from the existing shareholders through a third-party allocation paid-in capital increases and obtained a control over the entity by acquiring 53.4% of voting rights.

Grid Solution, LLC, a subsidiary, gained control on December 2, 2021 by acquiring a 96.39% stake in Key Capture Energy, an American Grid Solution company.

#### **39.** Business combination (cont'd)

The above business combinations occurred for the year ended December 31, 2021, were accounted for using the acquisition method, and the consolidated financial statements include the financial performance of the acquiree from the acquisition date to December 31, 2021.

### (2) Identifiable assets acquired and liabilities assumed

Identifiable assets acquired and liabilities assumed due to merger are as follows (Korean won in millions):

	Hana Land Chip PEF 33	YS TEC Co., Ltd.	Busan Jungkwan Energy Co., Ltd.	Yoskesi, SAS	8 waste disposal companies	YLP Inc.	Signet EV Inc.	Key Capture Energy, LLC
Assets: ∟								
Cash and cash	₩ 6,98	9 ₩ 26,900	₩ 1,673	₩ 12,097	₩ 22,976	₩ 1,897	₩ 226,611	₩ 24,226
equivalents								
Trade and other	32	3 3,971	6,958	7,640	13,288	4,480	7,895	9,285
receivables								
Inventories	4 000 00			19,034	110	-	15,626	-
Property, plant and	1,003,00	0 27,802	136,343	18,537	100,624	122	9,854	408,114
equipment Right-of-use assets		- 73	47	25,250	920	309	482	2,584
Intangible assets		- 129,359		105,668	47,554	3,595	77,204	494
Deferred tax assets		- 125,558	8,419	3,224	47,004	3,333	11,204	434
Other assets		- 980		5,350	2,347	4,325	11,155	13,912
	1,010,31			196,800	187,819	14,728	348,827	458,615
Liabilities:								
Trade and other	7,59	4,599	4,006	7,499	7,737	3,542	9,424	97,966
payables	1		,	,	, .			
Borrowing liabilities	308,50			20,568	58,513	1,000	14,233	15,275
Lease liabilities		- 75		25,251	940	327	486	2,352
Defined benefit liabilities			1,201	1,339	562	-	-	-
Deferred tax liabilities		- 31,148		-	9,281	327	14,409	-
Other liabilities	-	- 7,761		21,542	1,918	48	82,253	2,095
	316,09	43,583	160,889	76,199	78,951	5,244	120,805	117,688
Fair value of identifiable Net assets	₩ 694,21	9 ₩ 145,502	2 ₩ 17.136	₩ 120.601	₩ 108.868	₩ 9.484	₩ 228.022	₩ 340.927
iver assels	<u>vv</u> 094,2	<u>9 w 145,502</u>	<u>vv 17,130</u>	<u>120,001</u>	<u>vv</u> 100,000	<u>yv 9,404</u>	<u>vv</u> 226,022	<u>vv</u> <u>340,927</u>

As of December 31, 2021, the fair value of the assets acquired and liabilities assumed was determined tentatively because independent valuation was not completed.

## (3) Goodwill

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

a. The total consideration \#	Hana Land Chip PEF 33 694,805	<u>YS TEC Co., Ltd.</u> ₩ 402,645	Busan Jungkwan <u>Energy Co., Ltd.</u> ₩ 19,998	Yoskesi, SAS ₩ 240.307	8 waste disposal <u>companies</u> W 445.011	<u>YLP Inc.</u> ₩ 79.000		Key Capture Energy, LLC W 378,799
	094,003	402,045	19,990	W 240,307	10 445,011	19,000	vv 272,300	w 370,799
transferred (*1) b. Fair value of proportionate share								
of acquired net assets:								
Fair value of the net Identifiable assets	694,219	145,502	17,136	120,601	108,868	9,484	228,022	340,927
Non-controlling								
Interests (*2)	-	-		(44,713)	(307)		(106,298)	(8,835)
c. Goodwill(c=a-b) ₩	<u>694,219</u> 586	<u>145,502</u> ₩ 257,143	<u>17,136</u> ₩ 2,862	<u>75,888</u> ₩ <u>164,419</u>	<u>108,561</u> ₩ <u>336,450</u>	9,484 ₩ 69,516	<u>121,724</u> ₩ <u>150,864</u>	<u>332,092</u> ₩ 46,707

(\*1) It includes the fair value of interests of investments in associates and joint ventures held before the business combination.

(\*2) Non-controlling interests arising from the merger are measured in proportion to the non-controlling interests in identifiable net assets of the merged company.

As of December 31, 2020, details of business combination are as follows.

#### (1) General information

SKC Co., Ltd., a subsidiary of the Group, gained control by acquiring 100% of shares in SK Nexilis Co., Ltd. on January 1, 2020 as deemed acquisition date through SKCFT Holdings Co., Ltd. With control of SK Nexilis Co., Ltd., the Group expects to be able to enter and expand into a scalable mobility business.

#### 39. Business combination (cont'd)

SK Siltron Co., Ltd., a subsidiary of the Group, decided to purchase the SiC Wafer business unit of DDP Specialty Electronic Materials US 9, LLC, a subsidiary of DuPont de Nemour Inc., on September 10, 2019 to strengthen its business portfolio through new advancement into the material industry, and completed the transfer of its business unit on February 29, 2020.

SK Geo Centric Co., Ltd. a subsidiary of the Group, decided to acquire the France based functional polymer businesses and tangible and intangible assets held by Arcema FranceSA in accordance with the resolution of the board of directors on October 14, 2019, and the acquisition was completed during the current period. The Group expects to enter the functional polymer business and diversify its business portfolio into high value-added packaging.

On April 30, 2020, SK Broadband Co., Ltd. merged with Tbroad Co., Ltd., Tbroad Dongdaemun Broadcasting Co., Ltd. and Korea Digital Cable Media Center Co., Ltd. to improve competitiveness and synergy as a comprehensive media business. The consideration transferred for the business combination was calculated at fair value as of the merger base date of the shares granted according to the merger ratio.

SK Telecom Co., Ltd., a subsidiary of the Group, gained control by acquiring 55% (627,000 shares) of Tbroad Nowon Broadcasting Co., Ltd. and changed its name from Tbroad Nowon Broadcasting Co., Ltd. to Broadband Nowon Broadcasting Co., Ltd. The consideration transferred for the business combination of W10,421 million was all paid in cash, and the difference between the identifiable net asset fair value and the consideration transferred of W733 million was fully recognized as gain on bargain purchase.

SK Ecoplant Co., Ltd., a subsidiary of the Group, acquired a 100% stake in Environment Management Corporation for the purpose of growing its new business. In preparation of the consolidated financial statements, the Group has deemed the acquisition date to be December 31, 2020, and accordingly, the accompanying consolidated financial statements for the year ended December 31, 2020 do not include sales and net profit related to additional projects created by Environment Management Corporation.

#### (2) Identifiable assets acquired and liabilities assumed

Identifiable assets acquired and liabilities assumed due to merger are as follows (Korean won in millions):

	SKN	lexilis Co., Ltd.	SiC Wafer Business	Arkema France SA functional polymer Business	T Broad and others	T Broad Nowon Broadcasting Corporation	Environment Management Corporation Co., Ltd.
Assets:							
Cash and cash equivalents	₩	33,943 ₹	∀ -	₩ -	₩ 110,644	₩ 18,106	₩ 21,753
Trade and other receivables		57,445	-	3,785	66,241	1,122	59,662
Inventories		40,938	7,421	58,992	-	-	1,459
Property, plant and equipment		250,175	37,929	68,793	237,348	1,705	87,808
Right-of-use assets		1,252	67,517	-	8,306	79	2,451
Intangible assets		390,409	218,011	169,091	423,515	360	216,175
Other assets		6,795			73,500	595	289,248
		780,957	330,878	300,661	919,554	21,967	678,556
Liabilities:							
Trade and other payables		64,837	-	-	105,179	1,351	39,342
Borrowed liabilities		176,295	-	-	-	-	308,976
Lease liabilities		1,383	67,517	-	8,307	71	2,500
Current tax liabilities		6,738	-	-	18,065	-	5,806
Deferred tax liabilities		89,990	-	-	(1,296)	) -	36,602
Defined benefit liabilities		1,371	-	2,959	30	-	170
Other liabilities		1,938		3,296	11,777	265	27,706
		342,552	67,517	6,255	142,062	1,687	421,102
Fair value of identifiable							
net assets	₩	<u>438,405 </u> \therefore \	£ 263,361	₩ 294,406	₩ 777,492	₩ 20,280	₩ 257,454

# 39. Business combination (cont'd)

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

	SK Nexilis Co., Ltd.		SiC Wafer Business		Arkema France SA functional polymer Business		T Broad and others		T Broad Nowon Broadcasting Corporation		Environment Management Corporation Co., Ltd.	
a. The total consideration transferred	₩	1,190,000	₩	549,250	₩	448,757	₩	1,183,131	₩	10,421	₩	670,384
b. Fair value of proportionate share of acquired net assets:												
Fair value of the net		438,405		263,361		294,406		777,492		20,280		257,454
Identifiable assets		-		-		-		-		(9,126)		(1,206)
Non-controlling interests		438,405		263,361		294,406		777,492		11,154		256,248
c. Goodwill(c=a-b)	₩	438,405	₩	263,361	₩	294,406	₩	777,492	₩	20,280	₩	257,454

(4) Details of assets and liabilities of the Group retroactively adjusted due to the business combination as of December 31, 2020 are as follows (Korean won in millions):

	Amount before adjustment	Retroactive adjustment	Amount after adjustment
Assets:		· ·	<b>,</b>
Investments in associates and joint ventures	20,809,118	209,845	21,018,963
Lands	8,527,871	(13,362)	8,514,509
Buildings	4,568,817	(1,668)	4,567,149
Investment properties	570,554	(1,398)	569,156
Goodwill	4,755,455	(300,725)	4,454,730
Facility usage rights	66,014	(10,343)	55,671
Customer-related assets	2,842,553	156,766	2,999,319
Other intangible assets	1,702,097	(9,586)	1,692,511
Liabilities:			
Deferred tax liabilities	4,542,659	29,530	4,572,189

## 40. Subsequent events

### 40.1 Cancellation of mining contract of SK Innovation Co., Ltd.

On September 27, 2019, the Group signed a sale agreement with its transacting party, Pluspetrol, (17.6% shareholding each) on the premise of the Peruvian government's approval to adjust its E&P business portfolio and transform its business model. This contract is subject to the Peruvian government's approval of the sale within the final deadline agreed by both parties, but the contract was terminated on January 4, 2022 due to the Peruvian government's inability to approve the sale within that period.

### 40.2 Acquisition of a stake in TES-Envirop Pte. Ltd. in SK Ecoplant Co., Ltd.

In accordance with the resolution of the board of directors held on February 18, 2022, the Group signed a contract to purchase a 100% stake in TES-Envirocorp Pte. Ltd. for W1,242,903 million.

### 40.3 Physical division of SK Ecoplant Co., Ltd.

According to the resolution of the board of directors on October 28, 2021, the merger was carried out on February 1, 2022 by physically dividing the K-Solutions Business Group, P-Solutions Business Group, Gas&Power Business Group, Battery Business Group, and Industrial Business Group into SK Eco Engineering Co., Ltd. In addition, the Group decided to sell all redeemable convertible preferred stocks of SK Eco Engineering Co., Ltd. (7,551,258 shares, stock ratio 50.001%) to a private equity investment company (PEF) for approximately W 450 billion in accordance with the board's resolution on October 28, 2021. On February 16, 2022, the sale was completed, and after the sale, the Group's stake in SK Eco Engineering Co., Ltd. changed from 100% to 49.999%.