

# **SK Advanced Co., Ltd.**

Financial statements  
for the years ended December 31, 2022 and 2021  
with the independent auditor's report

## Table of contents

Independent auditor's report	
Financial statements	Page
Statements of financial position	1
Statements of comprehensive income	2
Statements of changes in equity	3
Statements of cash flows	4
Notes to the financial statements	5
Independent auditor's review report on internal control over financial reporting	
Management's report on the operations of the internal control over financial reporting	

**Independent auditor's report**  
(English Translation of a Report Originally Issued in Korean)

**The Shareholders and Board of Directors**  
**SK Advanced Co., Ltd.**

**Opinion**

We have audited the financial statements of SK Advanced Co., Ltd. (the "Company"), which comprise the statements of financial position as of December 31, 2022 and 2021, and the statements of comprehensive income, statements of changes in equity and statements of cash flows for the years then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS").

**Basis for opinion**

We conducted our audit in accordance with Korean Standards on Auditing ("KSA"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audit of the 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.

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

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

In preparing the financial statements, management is responsible for assessing the Company'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 Company or to cease operations, or has no realistic alternative but to do so.

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

**Auditor's responsibilities for the audit of the financial statements**

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

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

- Identify and assess the risks of material misstatement of the 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 Company'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 Company'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 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 Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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.

*Ernst & Young Han Young*

March 17, 2023

This audit report is effective as of March 17, 2023, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the accompanying financial statements and may result in modifications to this report.

# **SK Advanced Co., Ltd.**

Financial statements  
for the years ended December 31, 2022 and 2021

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

Jin Seok Park  
Chief Executive Officer  
SK Advanced Co., Ltd.

**SK Advanced Co., Ltd.**  
**Statements of financial position**  
**as of December 31, 2022 and 2021**  
(In Korean won)

	Notes	2022	2021
<b>Assets</b>			
<b>Current assets:</b>			
Cash and cash equivalents	3, 25	₩ 9,680,163,518	₩ 12,977,958,551
Short-term financial instruments	3, 25	59,294,989,496	86,153,367,072
Trade and other receivables	3, 4, 25	95,734,192,032	80,072,604,129
Derivatives financial assets	3, 14, 25	143,345,852	2,125,021
Current tax assets	21	701,930,980	7,133,956,618
Short-term deposits	3, 25	3,226,114	7,991,324
Inventories	5	9,724,483,116	19,244,902,789
Other current assets	6	3,407,856,717	5,059,567,618
Total current assets		178,690,187,825	210,652,473,122
<b>Non-current assets:</b>			
Long-term financial instruments	3, 25	2,000,000	2,000,000
Long-term trade and other receivables	3, 4, 25	2,699,949,325	2,808,364,361
Derivatives financial assets	3, 14, 25	1,235,288,174	-
Investments in joint venture	7, 16	89,057,431,543	87,459,715,456
Property, plant and equipment	8	730,162,015,362	752,296,155,066
Right-of-use assets	9	288,953,665	311,697,291
Intangible assets	10	2,570,785,141	1,018,327,554
Long-term deposits	3, 25	123,007,500	79,196,210
Other non-current assets	6	946,169,385	936,094,989
Defined benefit assets	13	2,495,060,572	-
Total non-current assets		829,580,660,667	844,911,550,927
<b>Total assets</b>		<b>₩ 1,008,270,848,492</b>	<b>₩ 1,055,564,024,049</b>
<b>Liabilities and equity</b>			
<b>Liabilities</b>			
<b>Current liabilities:</b>			
Trade and other payables	3, 11, 24, 25	₩ 158,689,935,683	₩ 180,359,740,518
Derivatives financial liabilities	3, 14, 25	1,800,046	17,064,510
Short-term borrowings	3, 12, 14, 24, 25	89,010,000,000	18,010,000,000
Current portion of long-term liabilities	3, 12, 24, 25	-	149,844,808,609
Current portion of lease liabilities	3, 9, 24, 25	162,174,717	126,555,046
Other current liabilities		176,414,374	182,760,462
Total current liabilities		248,040,324,820	348,540,929,145
<b>Non-current liabilities:</b>			
Bonds payable	3, 12, 24, 25	207,402,452,796	35,264,315,905
Defined benefit liabilities	13	-	318,596,055
Long-term borrowings	3, 12, 14, 24, 25	40,000,000,000	-
Deferred tax liabilities	21	1,719,455,792	29,615,965,896
Other long-term employee benefit liabilities		320,765,612	205,342,846
Derivatives financial liabilities	3, 14, 25	-	412,638,411
Lease liabilities	3, 9, 25	148,033,907	195,248,463
Other non-current liabilities	3, 25	271,348,080	224,200,180
Total non-current liabilities		249,862,056,187	66,236,307,756
<b>Total liabilities</b>		<b>497,902,381,007</b>	<b>414,777,236,901</b>
<b>Equity:</b>			
Issued capital	17	34,006,600,000	34,006,600,000
Capital surplus	17	353,695,008,542	353,695,008,542
Accumulated other comprehensive loss	17	(13,365,663)	(13,365,663)
Retained earnings	17	122,680,224,606	253,098,544,269
<b>Total equity</b>		<b>510,368,467,485</b>	<b>640,786,787,148</b>
<b>Total liabilities and equity</b>		<b>₩ 1,008,270,848,492</b>	<b>₩ 1,055,564,024,049</b>

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

**SK Advanced Co., Ltd.**  
**Statements of comprehensive income**  
**for the years ended in December 31, 2022 and 2021**  
(In Korean won)

	<b>Notes</b>	<b>2022</b>	<b>2021</b>
Sales	18	₩ 726,697,023,939	₩ 896,651,038,695
Cost of sales	19	(847,052,847,135)	(856,424,554,355)
<b>Gross profit (loss)</b>		<b>(120,355,823,196)</b>	<b>40,226,484,340</b>
Selling and administrative expenses	19	(8,684,619,598)	(8,535,093,633)
<b>Operating profit (loss)</b>		<b>(129,040,442,794)</b>	<b>31,691,390,707</b>
Finance income	3, 20	13,426,055,848	5,910,198,583
Finance costs	3, 20	(20,503,956,332)	(10,248,345,589)
Other non-operating income	20	3,735,823,178	1,213,158,839
Other non-operating expenses	20	(752,591,731)	(1,357,081,557)
Loss on valuation of equity method	7	(23,178,344,895)	(12,389,849,447)
<b>Profit (loss) before income tax</b>		<b>(156,313,456,726)</b>	<b>14,819,471,536</b>
Income tax benefit (expense)	21	28,349,948,071	(3,051,900,884)
<b>Profit (loss) for the year</b>		<b>₩ (127,963,508,655)</b>	<b>₩ 11,767,570,652</b>
<b>Other comprehensive income (loss)</b>		1,081,875,392	(753,949,364)
<i>Items that will not be reclassified to profit or loss:</i>			
Re-measurement of defined benefit liabilities	13, 17	1,331,298,101	(660,762,882)
Changes in equity from equity method investee	17	(249,422,709)	(93,186,482)
<b>Total comprehensive income (loss)</b>		<b>₩ (126,881,633,263)</b>	<b>₩ 11,013,621,288</b>
Earnings (Loss) per share			
Basic and diluted	22	₩ (37,629)	₩ 3,460

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

SK Advanced Co., Ltd.  
**Statements of changes in equity**  
**for the years ended in December 31, 2022 and 2021**  
(In Korean won)

	Issued capital	Capital surplus	Accumulated other comprehensive loss	Retained earnings	Total equity
<b>As of January 1, 2021</b>	<b>₩ 34,006,600,000</b>	<b>₩ 353,695,008,542</b>	<b>₩ -</b>	<b>₩ 252,273,537,318</b>	<b>₩ 639,975,145,860</b>
Profit for the year	-	-	-	11,767,570,652	11,767,570,652
Other comprehensive loss:					
Re-measurement on defined benefit liabilities	-	-	-	(660,762,882)	(660,762,882)
Changes in equity from equity method investee	-	-	(13,365,663)	-	(13,365,663)
Changes in retained earnings from equity method investee	-	-	-	(79,820,819)	(79,820,819)
<b>Total comprehensive income</b>	<b>-</b>	<b>-</b>	<b>(13,365,663)</b>	<b>11,026,986,951</b>	<b>11,013,621,288</b>
Cash dividends	-	-	-	(10,201,980,000)	(10,201,980,000)
<b>As of December 31, 2021</b>	<b>₩ 34,006,600,000</b>	<b>₩ 353,695,008,542</b>	<b>₩ (13,365,663)</b>	<b>₩ 253,098,544,269</b>	<b>₩ 640,786,787,148</b>
<b>As of January 1, 2022</b>	<b>₩ 34,006,600,000</b>	<b>₩ 353,695,008,542</b>	<b>₩ (13,365,663)</b>	<b>₩ 253,098,544,269</b>	<b>₩ 640,786,787,148</b>
Loss for the year	-	-	-	(127,963,508,655)	(127,963,508,655)
Other comprehensive income:					
Re-measurement on defined benefit liabilities	-	-	-	1,331,298,101	1,331,298,101
Changes in retained earnings from equity method investee	-	-	-	(249,422,709)	(249,422,709)
<b>Total comprehensive loss</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(126,881,633,263)</b>	<b>(126,881,633,263)</b>
Cash dividends	-	-	-	(3,536,686,400)	(3,536,686,400)
<b>As of December 31, 2022</b>	<b>₩ 34,006,600,000</b>	<b>₩ 353,695,008,542</b>	<b>₩ (13,365,663)</b>	<b>₩ 122,680,224,606</b>	<b>₩ 510,368,467,485</b>

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

**SK Advanced Co., Ltd.**  
**Statements of cash flows**  
**for the years ended in December 31, 2022 and 2021**  
(In Korean won)

	<b>2022</b>	<b>2021</b>
<b>Operating activities</b>		
Profit (loss) for the year	₩ (127,963,508,655)	₩ 11,767,570,652
Adjustments to reconcile profit (loss) for the year to net cash flows:		
Provision for pension benefits	833,240,692	848,826,116
Depreciation of property, plant and equipment	50,724,210,377	54,380,856,735
Depreciation of right-of-use assets	164,573,497	253,668,114
Amortization of intangible assets	491,419,207	232,923,148
Interest income	(221,211,719)	(149,090,240)
Gain on valuation of financial assets at FVPL	(175,317,807)	(169,256,707)
Gain on transaction of financial assets at FVPL	(5,102,769,932)	(1,115,548,851)
Interest expense	9,893,075,716	5,280,523,725
Income tax expense (benefit)	(28,349,948,071)	3,051,900,884
(Reversal of) Loss on valuation of inventories	(1,642,850,341)	2,169,351,287
Gain on valuation of derivative instruments	(1,378,634,026)	(2,125,021)
Loss on valuation of derivative instruments	1,800,046	429,702,921
Gain on transaction of derivative instruments	(1,028,746,426)	(1,181,293,504)
Loss on transaction of derivative instruments	1,283,748,193	2,672,455,783
Gain on foreign currency translation	(189,103,980)	(28,237,514)
Loss on foreign currency translation	2,566,361,323	254,710,543
Loss on valuation of equity method	23,178,344,895	12,389,849,447
Gain on disposal of property, plant and equipment	-	(1,614,000)
Loss on disposal of property, plant and equipment	410,680,405	54,899,072
Gain on disposal of right-of-use assets	(498,918)	(835,938)
	<u>51,458,373,131</u>	<u>79,371,666,000</u>
Working capital adjustments:		
Trade receivables	(13,921,420,028)	(16,764,281,922)
Other receivables	(1,857,895,865)	(4,743,230,615)
Inventories	10,621,851,514	(12,040,422,285)
Other current assets	1,651,727,384	(2,085,370,060)
Other non-current assets	(10,074,396)	187,309,379
Trade payables	(20,915,560,207)	84,716,268,365
Other payables	1,171,903,739	(1,126,721,022)
Other current liabilities	(6,346,088)	19,583,786
Other non-current liabilities	47,147,900	317,716,246
Contribution to plan assets	(2,240,000,000)	(1,500,000,000)
Transfer to affiliate	334,424,765	37,531,613
Pension benefits paid	(97,906,868)	(73,435,053)
	<u>(25,222,148,150)</u>	<u>46,944,948,432</u>
Interest received	78,542,149	148,562,385
Income tax refund (paid)	6,429,133,488	(10,425,043,266)
<b>Net cash flows provided by (used in) operating activities</b>	<b><u>(95,219,608,037)</u></b>	<b><u>127,807,704,203</u></b>
<b>Investing activities</b>		
Net increase (decrease) in short-term financial instruments	32,136,465,315	(13,799,990,881)
Decrease in short-term deposits	5,000,000	-
Increase in other non-current assets	-	(34,171,420)
Increase in long-term deposits	(43,811,290)	(8,463,800)
Decrease in long-term deposits	-	102,775,490
Acquisition of investments in joint venture	(25,000,000,000)	(10,900,000,000)
Acquisition of property, plant and equipment	(30,973,178,211)	(9,024,122,915)
Proceeds from disposal of property, plant and equipment	-	1,615,000
Acquisition of intangible assets	(1,086,852,601)	(247,676,000)
Decrease in finance lease receivables	256,200,000	113,794,996
Decrease in long-term financial instruments	-	2,000,000
Proceeds from settlement of derivative instruments	(682,579,667)	(1,414,905,460)
<b>Net cash flows used in investing activities</b>	<b><u>(25,388,756,454)</u></b>	<b><u>(35,209,144,990)</u></b>
<b>Financing activities</b>		
Interest paid	(9,373,258,716)	(5,762,321,401)
Proceeds from short-term borrowings	119,000,000,000	62,000,000,000
Repayment of short-term borrowings	(48,000,000,000)	(62,000,000,000)
Proceeds from long-term borrowings	40,000,000,000	-
Issuance of bonds payable	169,383,788,400	35,010,547,400
Repayment of current portion of bonds payable	(150,000,000,000)	(100,000,000,000)
Repayment of lease liabilities	(163,273,826)	(249,479,508)
Dividends paid	(3,536,686,400)	(10,201,980,000)
<b>Net cash flows provided by (used in) financing activities</b>	<b><u>117,310,569,458</u></b>	<b><u>(81,203,233,509)</u></b>
Net increase (decrease) in cash and cash equivalents	(3,297,795,033)	11,395,325,704
Cash and cash equivalents at the beginning of the year	12,977,958,551	1,582,632,847
<b>Cash and cash equivalents at the end of the year</b>	<b><u>₩ 9,680,163,518</u></b>	<b><u>₩ 12,977,958,551</u></b>

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

## 1. Corporate information

SK Advanced Co., Ltd. (the “Company”) was incorporated on September 12, 2014 in accordance with the Commercial Act of the Republic of Korea through a spin-off from SK Gas Co., Ltd. (the “parent company”). The Company is engaged in the production and sales of propylene. The Company is headquartered in Yongyeon-ro, Nam-gu, Ulsan, Korea.

Details of the Company’s shareholders as of December 31, 2022 are as follows:

	Shares held	Equity ownership (%)
SK Gas Co., Ltd.	1,530,297	45.00
Advanced Global Investment Company	1,020,198	30.00
Petrochemical Industries Company K.S.C	850,165	25.00
	3,400,660	100.00

The issuance of the accompanying financial statements of the Company for the year ended December 31, 2022 was approved at the Board of Directors’ meeting held on February 14, 2023. The final approved of the accompanying financial statements is scheduled to be approved at the shareholders’ annual meeting to be held on March 29, 2023.

## 2. Basis of preparation and significant accounting policies

The accompanying financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the financial statements or the independent auditor’s report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

### 2.1 Basis of preparation

The financial statements have been prepared on a historical cost basis, except for financial instruments and when otherwise indicated, and are presented in Korean won with all values rounded to the nearest thousand, except when otherwise indicated.

### 2.2 Reference accounting standards

The financial statements of the Company have been prepared in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (“KIFRS”) enacted by *the Act on External Audit of Stock Companies*.

### 2.3 Current versus non-current classification

The Company presents assets and liabilities in the statement of financial position based on current/non-current classification.

An asset is current when it is:

- Expected to be realized or intended to be sold or consumed in the normal operating cycle
- Held primarily for the purpose of trading
- Expected to be realized within twelve months after the reporting period, or
- Cash or cash equivalents unless restricted from being exchanged or used to settle a liability for at least twelve months after the reporting period

All other assets are classified as non-current.

### **2.3 Current versus non-current classification (cont'd)**

A liability is current when:

- It is expected to be settled in the normal operating cycle
- It is held primarily for the purpose of trading
- It is due to be settled within twelve months after the reporting period, or
- There is no unconditional right to defer the settlement of the liability for at least twelve months after the reporting period

The Company classifies all other liabilities as non-current.

Deferred tax assets and liabilities are classified as non-current assets and liabilities.

### **2.4 Fair value measurement**

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

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Company.

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

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

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

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

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

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

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

## **2.5 Foreign currencies**

The Company's financial statements are presented in Korean won, which is also the Company's functional currency. Transactions in foreign currencies are initially recorded at their respective functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date. Differences arising on translation of monetary items are recognized in profit or loss.

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

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

## **2.6 Revenue from contracts with customers**

The Company is engaged in the production and sale of propylene and propane for the main purpose. Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The Company has generally concluded that it is the principal in its revenue arrangements because it typically controls the goods or services before transferring them to the customer.

### **Sales of propylene**

Revenue from sale of propylene is recognized at the point in time when control of the asset is transferred to the customer, generally on delivery of the propylene. The normal credit term is 30 to 90 days upon delivery.

The Company considers whether there are other promises in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated (e.g., warranties, customer loyalty points). In determining the transaction price for the sale of propylene, the Company considers the effects of variable consideration, the existence of significant financing components, noncash consideration, and consideration payable to the customer (if any).

#### **(1) Variable consideration**

If the consideration in a contract includes a variable amount, the Company estimates the amount of consideration to which it will be entitled in exchange for transferring the goods to the customer. The variable consideration is estimated at contract inception and constrained until it is highly probable that a significant revenue reversal in the amount of cumulative revenue recognised will not occur when the associated uncertainty with the variable consideration is subsequently resolved.

#### **(2) Significant financing component**

Using the practical expedient in KIFRS 1115, the Company does not adjust the promised amount of consideration for the effects of a significant financing component if it expects, at contract inception, that the period between the transfer of the promised good or service to the customer and when the customer pays for that good or service will be one year or less.

## **2.6 Revenue from contracts with customers (cont'd)**

### **Transportation services**

The Company is engaged in the transportation services with the transfer of propylene. Transportation services may be provided by third parties and do not significantly customize or modify the propylene. Contracts with both sales of goods and transportation services are composed of two performance obligations because the promises to transfer of propylene and transportation services are distinct and separately identifiable. Accordingly, the Company allocates the transaction price based on the relative stand-alone selling prices of the transfer of propylene and transportation services. The Company recognizes revenue from the transportation services over time because customers simultaneously receive and consume the benefits provided to them. Revenue from the sale of a good is recognized at a point in time, generally on delivery of the propylene.

### **Technical services**

The Company is engaged in the technical service based on the Company's know-how and technical knowledge. The Company recognizes revenue from technical services over time because customers simultaneously receive and consume the benefits provided to them. The Company uses a practical expedient in measuring progress of the technical services because there is a direct relationship between the Company's effort (i.e., based on the labor hours incurred) and the transfer of service to the customer.

#### **(3) Contract balances**

### **Contract assets**

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

### **Trade receivables**

A receivable represents the Company's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Refer to accounting policies of financial assets in the Note 2.9.

### **Contract liabilities**

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

## **2.7 Taxes**

#### **(1) Current income tax**

Current income tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted at the reporting date in the countries where the Company operates and generates taxable income.

Current income tax relating to items recognized directly in equity is recognized in equity and not in the statement of comprehensive income. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

## **2.7 Taxes (cont'd)**

### (2) Deferred tax

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

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

- When the deferred tax liability arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future

Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

- When the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

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

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

The Company offsets deferred tax assets and deferred tax liabilities if and only if it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities.

## **2.8 Pension benefits and other post-employment benefits**

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognized immediately in the statement of financial position with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to profit or loss in subsequent periods.

Past service costs are recognized in profit or loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognizes related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Company recognizes service costs and net interest expense or income of net defined benefit liability under 'cost of sales' and 'selling and administrative expenses' in the statement of comprehensive income.

## **2.9 Financial instruments – initial recognition and subsequent measurement**

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

### (1) Financial assets

#### **Initial recognition and measurement**

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

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Company's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient, the Company initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Company has applied the practical expedient are measured at the transaction price determined under KIFRS 1115.

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

The Company's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognized on the trade date, i.e., the date that the Company commits to purchase or sell the asset.

#### **Subsequent measurement**

For purposes of subsequent measurement, financial assets are classified in four categories:

- Financial assets at amortized cost (debt instruments)
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

#### **Financial assets at amortized cost (debt instruments)**

The Company measures financial assets at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

Financial assets at amortized cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

## **2.9 Financial instruments – initial recognition and subsequent measurement (cont'd)**

### **Financial assets at fair value through OCI (debt instruments)**

The Company measures debt instruments at fair value through OCI if both of the following conditions are met:

- The financial asset is held within a business model with the objective of both holding to collect contractual cash flows and selling, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

For debt instruments at fair value through OCI, interest income, foreign exchange revaluation and impairment losses or reversals are recognized in the statement of profit or loss and computed in the same manner as for financial assets measured at amortised cost. The remaining fair value changes are recognized in OCI. Upon derecognition, the cumulative fair value change recognized in OCI is recycled to profit or loss.

The Company's debt instruments at fair value through OCI includes investments in quoted debt instruments included under other non-current financial assets.

### **Financial assets designated at fair value through OCI (equity instruments)**

Upon initial recognition, the Company can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under KIFRS 1032 *Financial Instruments: Presentation* and are not held for trading. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other non-operating income in the statement of comprehensive income when the right of payment has been established, except when the Company benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

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

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

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

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

Financial assets at fair value through profit or loss includes listed equity instruments with the irrevocable election to reflect the changes in derivatives and fair value of financial assets into OCI. Dividends on the listed equity instruments are recognized in profit or loss at the time the right of dividend is fixed and determinable.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

## **2.9 Financial instruments – initial recognition and subsequent measurement (cont'd)**

### **Derecognition**

A financial asset (or, where applicable, a part of a financial asset or part of a company of similar financial assets) is primarily derecognized (i.e., removed from the Company's statement of financial position) when:

- The rights to receive cash flows from the asset have expired, or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset

When the Company has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Company continues to recognize the transferred asset to the extent of its continuing involvement. In that case, the Company also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Company has retained.

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

### **Impairment of financial assets**

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

- Disclosures for significant assumptions
- Debt instruments at fair value through OCI
- Trade receivables, including contract assets

The Company recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Company expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

For trade receivables and contract assets, the Company applies a simplified approach in calculating ECLs. Therefore, the Company does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date. The Company has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

For debt instruments at fair value through OCI, the Company applies the low credit risk simplification. At every reporting date, the Company evaluates whether the debt instrument is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Company reassesses the internal credit rating of the debt instrument.

## **2.9 Financial instruments – initial recognition and subsequent measurement (cont'd)**

The Company's debt instruments at fair value through OCI comprise solely of quoted bonds that are graded in the top investment category by the credit rating agency and, therefore, are considered to be low credit risk investments. It is the Company's policy to measure ECLs on such instruments on a 12-month basis. However, when there has been a significant increase in credit risk since origination, the allowance will be based on the lifetime ECL. The Company uses the ratings from the credit rating agency both to determine whether the debt instrument has significantly increased in credit risk and to estimate ECLs.

The Company considers a financial asset in default when contractual payments are 90 days past due. However, in certain cases, the Company may also consider a financial asset to be in default when internal or external information indicates that the Company is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Company. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

### **(2) Financial liabilities**

#### **Initial recognition and measurement**

Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs.

The Company's financial liabilities include trade and other payables, bonds payable, loans and borrowings including bank overdrafts, and derivative financial instruments.

#### **Subsequent measurement**

The measurement of financial liabilities depends on their classification, as described below:

#### **Financial liabilities at fair value through profit or loss**

Financial liabilities at fair value through profit or loss include financial liabilities held for trading and financial liabilities designated upon initial recognition as of fair value through profit or loss.

Financial liabilities are classified as held for trading if they are incurred for the purpose of repurchasing in the near term. This category also includes derivative financial instruments entered into by the Company that are not designated as hedging instruments in hedge relationships as defined by KIFRS 1109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments.

Gains or losses on liabilities held for trading are recognized in profit or loss.

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

#### **Loans and borrowings**

This is the category most relevant to the Company. After initial recognition, interest-bearing loans and borrowings are subsequently measured at amortized cost using the EIR method. Gains and losses are recognized in profit or loss when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR.

This category generally applies to interest-bearing loans and borrowings. For more information, refer to Note 3.

## **2.9 Financial instruments – initial recognition and subsequent measurement (cont’d)**

### **Derecognition**

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in profit or loss.

### **Offsetting of financial instruments**

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

## **2.10 Derivative financial instruments**

The Company uses derivative financial instruments, such as forward currency contracts and interest rate swaps, to hedge its foreign currency risks and interest rate risks, respectively. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

## **2.11 Cash and cash equivalents**

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

## **2.12 Inventories**

Inventories are valued at the lower of cost and net realizable value.

Costs incurred in bringing each product to its present location and condition are accounted for, as follows:

- Raw materials: purchase cost on a first-in, first-out basis
- Finished goods and work in progress: cost of direct materials and labor and a proportion of manufacturing overheads based on the normal operating capacity, but excluding borrowing costs.

The unit cost of inventories is determined by the weighted-average method. Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and the estimated costs necessary to make the sale.

## **2.13 Property, plant and equipment**

Property, plant and equipment is stated at cost, net of accumulated depreciation and accumulated impairment losses, if any. Such cost includes the cost of replacing part of the plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. Likewise, when a major inspection is performed, its cost is recognized in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied. All other repair and maintenance costs are recognized in profit or loss as incurred.

Depreciation of property, plant and equipment is provided using the straight-line method (except for other properties) over the estimated useful life of the assets as follows:

	Useful lives (Years)
Buildings	30
Structures	30
Storage tanks	30
Machinery	20 - 30
Vehicles	4
Tools, furnitures and fixtures	4
Other properties (catalyst)	Unit of production method, 12

### **2.13 Property, plant and equipment (cont'd)**

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

The Company reviews the estimated residual values and expected useful lives of assets at least annually. In particular, the Company considers the impact of health, safety and environmental legislation in its assessment of expected useful lives and estimated residual values.

The residual values, useful lives and methods of depreciation of property, plant and equipment are reviewed at each financial year end, and adjusted prospectively, if appropriate.

### **2.14 Borrowing costs**

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period in which they incur.

### **2.15 Leases**

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

#### **Company as a lessee**

The Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Company recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

#### **i) Right-of-use assets**

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

- Buildings – 10 years
- Vehicles – 2 to 3 years

If ownership of the leased asset transfers to the Company at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset. The right-of-use assets are also subject to impairment.

Refer to the accounting policies in Note 2.17 *Impairment of non-financial assets*.

#### **ii) Lease liabilities**

At the commencement date of the lease, the Company 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 Company and payments of penalties for terminating the lease, if the lease term reflects the Company exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

## **2.15 Leases (cont'd)**

In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

### **iii) Short-term leases and leases of low-value assets**

The Company applies the short-term lease recognition exemption to its short-term leases of buildings and equipment (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 to be low value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

### **Determining the lease term of contracts with renewal options**

The Company determines the lease term as the non-cancellable term of the lease, together with any periods covered by an option to extend the lease if it is reasonably certain to be exercised, or any periods covered by an option to terminate the lease, if it is reasonably certain not to be exercised. The Company has several lease contracts that include extension and termination options. The Company applies judgement in evaluating whether it is reasonably certain whether or not to exercise the option to renew or terminate the lease.

That is, it considers all relevant factors that create an economic incentive for it to exercise either the renewal or termination. After the commencement date, the Company reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise or not to exercise the option to renew or to terminate.

The renewal options for leases of motor vehicles are not included as part of the lease term because the Company typically leases motor vehicles for not more than five years and, hence, is not exercising any renewal options.

### **Company as a lessor**

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

## **2.16 Intangible assets**

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangibles, excluding capitalized development costs, are not capitalized and related expenditure is reflected in the statements of comprehensive income in the period in which the expenditure is incurred.

The useful life of intangible assets is assessed as either finite or indefinite. Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life is reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to the amortization period or method, as appropriate, and are treated as changes in accounting estimates. Amortization of intangible assets is recognized in profit or loss as an expense item consistent with the function of the intangible asset.

## **2.16 Intangible assets (cont'd)**

Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually, either individually or at the CGU level. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

An intangible asset is derecognized upon disposal (i.e., at the date the recipient obtains control) or when no future economic benefits are expected from its use or disposal. Any gain or loss arising upon derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of profit or loss.

## **2.17 Impairment of non-financial assets**

The Company assesses at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or a group of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. Fair value is determined using an appropriate valuation model using stock prices of subsidiaries traded in the open market or other available fair value measurement indicators.

The Company bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Company's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

Impairment losses are recognized in profit or loss in expense categories consistent with the function of the impaired asset, except for properties previously revalued with the revaluation taken to other comprehensive income.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Company estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years.

## **2.18 Provisions**

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Company expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the statement of comprehensive income net of any reimbursement.

If the effect of the time value of money is material, the provision is recognized at the present value of the expenditures expected to be required to settle the obligation. The discount rate used in assessing the present value is the pre-tax rate reflecting the current market valuation of the specific risk of the debt and the time value of the currency.

## **2.19 Investments in joint venture**

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

The Company's investments in its joint venture are accounted for using the equity method. Under the equity method, the investment in a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Company's share of net assets of the joint venture since the acquisition date. Goodwill relating to the joint venture is included in the carrying amount of the investment and is not tested for impairment separately.

The statement of comprehensive income reflects the Company's share of the results of operations of the joint venture. Any change in OCI of those investees is presented as part of the Company's OCI. In addition, when there has been a change recognized directly in the equity of the joint venture, the Company recognizes its share of any changes, when applicable, in the statement of changes in equity. Unrealized gains and losses resulting from transactions between the Company and the joint venture are eliminated to the extent of the interest in the joint venture.

The aggregate of the Company's share of profit or loss of a joint venture is shown on the face of the statement of comprehensive income outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the joint venture.

The financial statements of the joint venture are prepared for the same reporting period as the Company. When necessary, adjustments are made to bring the accounting policies in line with those of the Company.

After application of the equity method, the Company determines whether it is necessary to recognize an impairment loss on its investment in its joint venture. At each reporting date, the Company determines whether there is objective evidence that the investment in the joint venture is impaired. If there is such evidence, the Company calculates the amount of impairment as the difference between the recoverable amount of the joint venture and its carrying value, and then recognizes the loss as 'gain or loss on valuation of equity method' in the statement of comprehensive income.

Upon loss of significant influence over the joint venture, the Company measures and recognizes any retained investment at its fair value. Any difference between the carrying amount of the joint venture upon loss of significant influence or joint control and the fair value of the retained investment and proceeds from disposal is recognized in profit or loss.

## **2.20 Cash dividend**

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

## 2.21 New and amended standards and interpretations

The Company applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2022. The Company has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

### **Amendments to KIFRS 1037: Onerous Contracts – Costs of Fulfilling a Contract**

An onerous contract is a contract under which the unavoidable of meeting the obligations under the contract costs (i.e., the costs that the entity cannot avoid because it has the contract) exceed the economic benefits expected to be received under it. The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The Company applies the amendments to contracts for which it has not yet fulfilled all of its obligations, at the beginning of the annual reporting period in which it first applies the amendments (the date of initial application). Before the application of the amendment, the Company did not distinguish onerous contract one by one as the contract fulfillment costs, which are unavoidable costs, were only composed of incremental costs which is directly related to the contract activities. To follow this amendment, the Company has included other various costs, which are directly related to the contract activities, into the contract fulfillment costs. These amendments had no impact on the financial statements of the Company as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.

### **Amendments to KIFRS 1103: Reference to the Conceptual Framework**

The amendments replace a reference to a previous version of the International Accounting Standards Board (IASB)'s Conceptual Framework with a reference to the current version issued in March 2018 without significantly changing its requirements. The amendments add an exception to the recognition principle of KIFRS 1103 *Business Combinations* to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of KIFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets* or KIFRS Interpretation 2121 *Levies*, if incurred separately. The exception requires entities to apply the criteria in KIFRS 1037 or KIFRS Interpretation 2121, respectively, instead of the Conceptual Framework, to determine whether a present obligation exists at the acquisition date. The amendments also add a new paragraph to KIFRS 1103 to clarify that contingent assets do not qualify for recognition at the acquisition date. In accordance with the transitional provisions, the Company applies the amendments prospectively, i.e., to business combinations occurring after the beginning of the annual reporting period in which it first applies the amendments (the date of initial application). These amendments had no impact on the financial statements of the Company as there were no contingent assets, liabilities or contingent liabilities within the scope of these amendments that arose during the period.

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

The amendment prohibits entities from deducting from the cost of an item of property, plant and equipment ("PP&E"), any proceeds of the sale of items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognises the proceeds from selling such items, and the costs of producing those items, in profit or loss. In accordance with the transitional provisions, the Company applies the amendments retrospectively only to items of PP&E made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment (the date of initial application). These amendments had no impact on the financial statements of the Company as there were no sales of such items produced by property, plant and equipment made available for use on or after the beginning of the earliest period presented.

### **KIFRS 1101 First-time Adoption of International Financial Reporting Standards: Subsidiary as a first-time adopter**

The amendment permits a subsidiary that elects to apply paragraph D16(1) of KIFRS 1101 to measure cumulative translation differences using the amounts reported in the parent's consolidated financial statements, based on the parent's date of transition to KIFRS, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101. These amendments had no impact on the financial statements of the Company as the Company has no subsidiary.

## 2.21 New and amended standards and interpretations (cont'd)

### **KIFRS 1109 Financial Instruments – Fees in the '10 percent' test for derecognition of financial liabilities**

The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. There is no similar amendment proposed for KIFRS 1039 *Financial Instruments: Recognition and Measurement*. In accordance with the transitional provisions, the Company applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment (the date of initial application). These amendments had no impact on the financial statements of the Company as there were no modifications of the Company's financial instruments during the period.

## 2.22 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Company's financial statements are disclosed below.

### **Amendments to KIFRS 1001: Classification of Liabilities as Current or Non-current**

The amendments to paragraphs 69 to 76 of KIFRS 1001 specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement
- That a right to defer must exist at the end of the reporting period
- That classification is unaffected by the likelihood that an entity will exercise its deferral right
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and must be applied retrospectively. The Company is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation.

### **Amendments to KIFRS 1008: Definition of Accounting Estimates**

The amendments clarify the distinction between changes in accounting estimates and changes in accounting policies and the correction of errors. Also, they clarify how entities use measurement techniques and inputs to develop accounting estimates. The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and apply to changes in accounting policies and changes in accounting estimates that occur on or after the start of that period. Earlier application is permitted as long as this fact is disclosed. The amendments are not expected to have a material impact on the Company.

### **Amendments to KIFRS 1001: Disclosure of Accounting Policies**

The amendments provide guidance and examples to help entities apply materiality judgements to accounting policy disclosures. The amendments aim to help entities provide accounting policy disclosures that are more useful by replacing the requirement for entities to disclose their 'significant' accounting policies with a requirement to disclose their 'material' accounting policies and adding guidance on how entities apply the concept of materiality in making decisions about accounting policy disclosures. The amendments are applicable for annual periods beginning on or after January 1, 2023 with earlier application permitted. The Company is currently assessing the impact of the amendments to determine the impact they will have on the Company's accounting policy disclosures.

## **2.22 Standards issued but not yet effective (cont'd)**

### **Amendments to KIFRS 1012 “Income Taxes”: *Narrowing the scope of the initial recognition exception of deferred income taxes***

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

## **2.23 Significant accounting judgments, estimates and assumptions**

The preparation of the Company's financial statement requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the accompanying disclosures, and the disclosure of contingent liabilities. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

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

### **(1) Impairment of non-financial assets**

The Company assesses, at each reporting date, whether there is an indication that all non-financial assets may be impaired. Goodwill and other intangible assets with indefinite useful life are tested for impairment annually or when any indication exists. Other non-financial assets are tested for impairment if there is any indication that the carrying value may not be recoverable. In assessing value in use, the management is required to estimate the future cash flows from an asset or CGU and determine an appropriate discount rate to calculate the present value of such estimated future cash flows.

### **(2) Pension benefits**

The present value of the pension obligation is determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

### **(3) Fair value measurement of financial instruments**

When the fair values of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the discounted cash flow (DCF) model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgment is required in establishing fair values. Judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions relating to these factors could affect the reported fair value of financial instruments.

## **2.23 Significant accounting judgments, estimates and assumptions (cont'd)**

### **(4) Provision for expected credit losses of trade receivables**

The Company uses a provision matrix to calculate ECLs for trade receivables. The provision rates are based on days past due for groupings of various customer segments that have similar loss patterns (i.e., by geography, product type, customer type and rating, and coverage by letters of credit and other forms of credit insurance).

The provision matrix is initially based on the Company's historical observed default rates. The Company will calibrate the matrix to adjust the historical credit loss experience with forward-looking information. For instance, if forecast economic conditions (i.e., gross domestic product) are expected to deteriorate over the next year which can lead to an increased number of defaults in the manufacturing sector, the historical default rates are adjusted. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analyzed. The assessment of the correlation between historical observed default rates, forecast economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast economic conditions. The Company's historical credit loss experience and forecast of economic conditions may also not be representative of customer's actual default in the future.

### **(5) Leases - Estimating the incremental borrowing rate**

The Company cannot readily determine the interest rate implicit in the lease, therefore, it uses its incremental borrowing rate (IBR) to measure lease liabilities. The IBR is the rate of interest that the Company would have to pay to borrow over a similar term, and with a similar security, the funds necessary to obtain an asset of a similar value to the right-of-use asset in a similar economic environment. The IBR therefore reflects what the Company 'would have to pay', which requires estimation when no observable rates are available or when they need to be adjusted to reflect the terms and conditions of the lease. The Company estimates the IBR using observable inputs (such as market interest rates) when available.

### **(6) Deferred Tax**

Deferred tax assets and liabilities are recognized and measured on the basis of management's judgment. In particular, deferred tax assets are recognized to the extent estimated by assumptions on future circumstances and management's judgment. The Company's management determines the amount of deferred tax assets to be recognized considering whether applicable tax regulations may affect its tax position in the future and when and to which extent a taxable income may incur.



### 3. Financial assets and liabilities (cont'd)

#### Financial liabilities

Financial liabilities as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		
	Financial liabilities at fair value through profit or loss	Financial liabilities at amortized cost	Total
Current liabilities:			
Trade and other payables	₩ -	158,689,936	158,689,936
Derivatives financial liabilities	1,800	-	1,800
Short-term borrowings	-	89,010,000	89,010,000
Current portion of lease liabilities	-	162,175	162,175
Sub-total	1,800	247,862,111	247,863,911
Non-current liabilities:			
Bonds payable	-	207,402,453	207,402,453
Long-term borrowings	-	40,000,000	40,000,000
Lease liabilities	-	148,034	148,034
Other non-current liabilities	-	271,348	271,348
Sub-total	-	247,821,835	247,821,835
Total	₩ 1,800	495,683,946	495,685,746

	2021		
	Financial liabilities at fair value through profit or loss	Financial liabilities at amortized cost	Total
Current liabilities:			
Trade and other payables	₩ -	₩ 180,359,741	₩ 180,359,741
Derivatives financial liabilities	17,065	-	17,065
Short-term borrowings	-	18,010,000	18,010,000
Current portion of long-term liabilities	-	149,844,809	149,844,809
Current portion of lease liabilities	-	126,555	126,555
Sub-total	17,065	348,341,105	348,358,170
Non-current liabilities:			
Bonds payable	-	35,264,316	35,264,316
Derivatives financial liabilities	412,638	-	412,638
Lease liabilities	-	195,248	195,248
Other non-current liabilities	-	224,200	224,200
Sub-total	412,638	35,683,764	36,096,402
Total	₩ 429,703	₩ 384,024,869	₩ 384,454,572

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**3. Financial assets and liabilities (cont'd)**

**Gain and loss of financial instruments by category**

Details of gain and loss of financial instruments by category for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022					Total
	Financial assets at fair value through profit or loss	Financial assets at amortized cost	Financial liabilities at fair value through profit or loss	Financial liabilities at amortized cost		
Interest income (expense)	₩ -	221,212	-	(9,893,076)		(9,671,864)
Gain on valuation of financial assets at FVPL	175,318	-	-	-		175,318
Gain on transation of financial assets at FVPL	5,102,770	-	-	-		5,102,770
Gain (loss) on foreign currency translation	-	(112,361)	-	(2,264,896)		(2,377,257)
Gain (loss) on foreign currency transaction	-	(66,669)	-	(1,362,030)		(1,428,699)
Gain (loss) on valuation of derivative instruments	1,378,634	-	(1,800)	-		1,376,834
Gain (loss) on transaction of derivative instruments	(255,002)	-	-	-		(255,002)
	<u>₩ 6,401,720</u>	<u>42,182</u>	<u>(1,800)</u>	<u>(13,520,002)</u>		<u>(7,077,900)</u>
	2021					
	Financial assets at fair value through profit or loss	Financial assets at amortized cost	Financial liabilities at fair value through profit or loss	Financial liabilities at amortized cost		Total
Interest income (expense)	₩ -	₩ 149,090	₩ -	₩ (5,280,524)	₩	(5,131,434)
Gain on valuation of financial assets at FVPL	169,257	-	-	-		169,257
Gain on transation of financial assets at FVPL	1,115,549	-	-	-		1,115,549
Gain (loss) on foreign currency translation	-	23,859	-	(250,332)		(226,473)
Gain (loss) on foreign currency transaction	-	1,877,249	-	(223,555)		1,653,694
Gain (loss) on valuation of derivative instruments	2,125	-	(429,703)	-		(427,578)
Gain (loss) on transaction of derivative instruments	(1,491,162)	-	-	-		(1,491,162)
	<u>₩ (204,231)</u>	<u>₩ 2,050,198</u>	<u>₩ (429,703)</u>	<u>₩ (5,754,411)</u>	₩	<u>(4,338,147)</u>

**Restricted deposits**

Details of restricted bank deposits as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

Account	Financial institution	2022	2021	Description
Long-term financial instruments	Hana Bank	₩ 2,000	₩ 2,000	Deposit for checking account

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**4. Trade and other receivables**

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

	2022	2021
Current assets :		
Trade receivables (*)	₩ 81,486,791	₩ 67,609,377
Non-trade receivables	13,996,568	12,207,027
Finance lease receivables	250,833	256,200
Non-current assets :		
Finance lease receivables	2,699,949	2,808,364
	<u>₩ 98,434,141</u>	<u>₩ 82,880,968</u>

(\*) As of December 31, 2022, trade receivables that were transferred but have not matured yet amount to ₩ 6,960 million (2021: ₩ 7,920 million). The transaction has been accounted for disposal of trade receivables as the risks and rewards of holding those receivables were transferred at all, substantially.

As of December 31, 2022, the Company has no trade and other receivables past due or impaired.

**5. Inventories**

Inventories as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Finished goods	₩ 2,822,788	₩ 7,656,055
Merchandise	-	975,149
Merchandise-in-transit	-	5,809,680
Supplies	5,500,092	3,030,808
Raw materials	1,401,603	1,773,212
	<u>₩ 9,724,483</u>	<u>₩ 19,244,903</u>

Meanwhile, a reversal of loss on valuation of inventories reflected in cost of sales for the year ended December 31, 2022 was ₩1,642,850 thousand, and a loss on valuation of inventories was ₩2,169,351 thousand for the year ended December 31, 2021.

**6. Other current assets**

Other current assets and non-current assets as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Other current assets :		
Prepaid expenses	₩ 547,029	₩ 715,207
Prepaid value-added tax	2,860,828	4,344,361
Other non-current assets :		
Long-term advanced payments	652,245	488,656
Long-term prepaid expenses	293,924	447,439
	<u>₩ 4,354,026</u>	<u>₩ 5,995,663</u>

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**7. Investments in joint venture**

The current status and book value of investments in joint venture as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

Joint venture	Location	2022		2021	
		Equity rate (%)	Book value (KRW)	Equity rate (%)	Book value (KRW)
Ulsan PP Co., Ltd. (*1, 2)	Korea (Ulsan)	50.00	89,057,432	50.00	87,459,715

(\*1) The joint arrangement with joint control is structured through a separate vehicle, and it was classified as a joint venture because the Company determined that a party that has joint control has the right to net assets of the joint arrangement. The Company participated in capital increase of Ulsan PP Co., Ltd., and the book value increased by ₩25,000,000 thousand and ₩10,900,000 thousand as of December 31, 2022 and 2021, respectively.

(\*2) The Ulsan PP Co., Ltd. applies Accounting Standards for Non-Public Entities in the Republic of Korea (KGAAP).

Changes in the book value of investments in joint venture for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

Remarks	2022				
	Beginning balance	Addition	Changes in equity	Loss on valuation of equity method	Ending balance
Joint venture	87,459,715	25,000,000	(223,939)	(23,178,345)	89,057,432

  

Remarks	2021				
	Beginning balance	Addition	Changes in equity	Loss on valuation of equity method	Ending balance
Joint venture	89,068,235	10,900,000	(118,670)	(12,389,850)	87,459,715

Summary of financial information as of and for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022 (*1)	2021 (*1)
Assets	₩ 563,751,283	₩ 620,906,547
Liabilities	393,768,248	444,724,292
Equity	169,983,035	176,182,255
Sales	321,277,744	273,741,576
Loss for the year	(56,912,870)	(23,517,723)

(\*1) The summary of financial information (\*1) considers the effect of converting to KIFRS as Ulsan PP Co., Ltd. applies KGAAP.

Reconciliation between financial information of the joint venture and book value of share of its net assets as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

2022					
Joint venture	Net assets	Ratio (%)	Share of net assets	Investment difference.	Ending balance
Ulsan PP Co., Ltd	169,983,035	50%	84,991,518	4,065,914	89,057,432

  

2021					
Joint venture	Net assets	Ratio (%)	Share of net assets	Investment difference.	Ending balance
Ulsan PP Co., Ltd	176,182,255	50%	88,090,957	(631,242)	87,459,715

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**8. Property, plant and equipment**

Details of property, plant and equipment as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		
	Acquisition cost	Accumulated depreciation	Net book value
Land	₩ 45,689,960	₩ -	₩ 45,689,960
Buildings	43,184,392	(9,602,360)	33,582,032
Structures	268,137,386	(59,346,140)	208,791,246
Storage tanks	44,682,854	(10,670,967)	34,011,887
Machinery	538,264,528	(174,622,211)	363,642,317
Vehicles	18,940	(18,939)	1
Tools, furnitures and fixtures	11,751,515	(10,829,736)	921,779
Other properties	48,700,550	(31,790,470)	16,910,080
Construction-in-progress	26,612,713	-	26,612,713
	<u>₩ 1,027,042,838</u>	<u>₩ (296,880,823)</u>	<u>₩ 730,162,015</u>

	2021		
	Acquisition cost	Accumulated depreciation	Net book value
Land	₩ 45,689,960	₩ -	₩ 45,689,960
Buildings	43,184,392	(8,162,197)	35,022,195
Structures	268,137,385	(50,395,808)	217,741,577
Storage tanks	44,244,854	(8,746,915)	35,497,939
Machinery	526,957,882	(145,011,798)	381,946,084
Vehicles	18,940	(18,939)	1
Tools, furnitures and fixtures	11,448,748	(10,415,261)	1,033,487
Other properties	48,104,769	(23,578,228)	24,526,541
Construction-in-progress	10,838,371	-	10,838,371
	<u>₩ 998,625,301</u>	<u>₩ (246,329,146)</u>	<u>₩ 752,296,155</u>

Changes in the book value of property, plant and equipment for the years ended in December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022					
	Beginning balance	Additions	Disposals	Transfers(*1)	Depreciation	Ending balance
Land	₩ 45,689,960	₩ -	₩ -	₩ -	₩ -	₩ 45,689,960
Buildings	35,022,195	-	-	-	(1,440,163)	33,582,032
Structures	217,741,577	-	-	-	(8,950,331)	208,791,246
Storage tanks	35,497,939	-	-	438,000	(1,924,052)	34,011,887
Machinery	381,946,084	3,554,641	(410,680)	8,335,220	(29,782,948)	363,642,317
Vehicles	1	-	-	-	-	1
Tools, furnitures and fixtures	1,033,487	85,900	-	216,867	(414,475)	921,779
Other properties	24,526,541	-	-	595,780	(8,212,241)	16,910,080
Construction-in-progress	10,838,371	25,775,816	-	(10,001,474)	-	26,612,713
	<u>₩ 752,296,155</u>	<u>₩ 29,416,357</u>	<u>₩ (410,680)</u>	<u>₩ (415,607)</u>	<u>₩ (50,724,210)</u>	<u>₩ 730,162,015</u>

(\*1) Transfers to intangible assets and from supplies are included.

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**8. Property, plant and equipment (cont'd)**

	2021					
	Beginning balance	Additions	Disposals	Transfers (*1)	Depreciation	Ending balance
Land	₩ 45,689,960	₩ -	₩ -	₩ -	₩ -	₩ 45,689,960
Buildings	36,462,358	-	-	-	(1,440,163)	35,022,195
Structures	226,573,105	-	-	118,047	(8,949,575)	217,741,577
Storage tanks	37,330,740	-	-	-	(1,832,801)	35,497,939
Machinery	410,915,765	27,980	-	205,922	(29,203,583)	381,946,084
Vehicles	1	-	-	-	-	1
Tools, furnishings and fixtures	522,354	832,945	(18)	46,437	(368,231)	1,033,487
Other properties	36,565,080	462,044	(54,882)	140,803	(12,856,504)	24,526,541
Construction-in progress	2,645,382	9,153,339	-	(960,350)	-	10,838,371
	₩ 796,704,745	₩ 10,476,308	₩ (54,900)	₩ (449,141)	₩ (54,380,857)	₩ 752,296,155

(\*1) Transfers to intangible assets and transfers from supplies are included.

**Insured assets**

The Company carries comprehensive insurance on its property, plant and equipment against fire and other casualty losses for up to ₩1,258,302,883 thousand and ₩1,227,592,314 thousand as of December 31, 2022 and 2021, respectively.

**9. Company as a lessee or lessor**

Details of right-of-use assets as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		
	Beginning balance	Accumulated depreciation	Ending balance
Vehicles	₩ 73,240	₩ (43,481)	₩ 29,759
Buildings	919,916	(660,721)	256,195
	₩ 993,156	₩ (704,202)	₩ 288,954

  

	2021		
	Beginning balance	Accumulated depreciation	Ending balance
Vehicles	₩ 143,688	₩ (82,196)	₩ 61,492
Buildings	796,169	(545,964)	250,205
	₩ 939,857	₩ (628,160)	₩ 311,697

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**9. Company as a lessee or lessor (cont'd)**

Changes in the book value of right-of-use assets and lease liabilities for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022			
	Right-of-use assets			Lease liabilities
	Vehicles	Buildings	Total	
Beginning balance	₩ 61,492	₩ 250,205	₩ 311,697	₩ 321,803
Addition	37,741	-	37,741	37,741
Disposal	(19,658)	-	(19,658)	(20,156)
Depreciation	(49,816)	(114,757)	(164,573)	-
Interest expense	-	-	-	10,348
Lease payments	-	-	-	(163,274)
Others (*1)	-	123,747	123,747	123,747
Ending balance	₩ 29,759	₩ 259,195	₩ 288,954	₩ 310,209

(\*1) Changes due to lease contract changes.

	2021			
	Right-of-use assets			Lease liabilities
	Vehicles	Buildings	Total	
Beginning balance	₩ 110,946	₩ 809,813	₩ 920,759	₩ 927,512
Addition	38,805	-	38,805	38,805
Disposal	(36,060)	-	(36,060)	(36,896)
Depreciation	(52,199)	(201,469)	(253,668)	-
Interest expense	-	-	-	11,490
Lease payments	-	-	-	(260,969)
Others (*1)	-	(358,139)	(358,139)	(358,139)
Ending balance	₩ 61,492	₩ 250,205	₩ 311,697	₩ 321,803

(\*1) Changes due to lease contract changes.

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**9. Company as a lessee or lessor (cont'd)**

Future minimum lease payables as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022			2021	
	Minimum			Present value	
Less than 1 year	₩	165,511	₩	162,175	
1 to 5 years		156,702		148,034	
	₩	322,213	₩	310,209	
Less than 1 year	₩	146,583	₩	126,555	
1 to 5 years		209,747		195,248	
	₩	356,330	₩	321,803	

The table below summarizes the maturity profile of the lease liabilities as of December 31, 2022 and 2021 (Korean won in thousands):

	2022		
	Less than 1 year	1 to 5 years	Total
Vehicles	₩ 17,902	₩ 21,394	₩ 39,296
Buildings	147,609	135,308	282,917
	₩ 165,511	₩ 156,702	₩ 322,213
	2021		
	Less than 1 year	1 to 5 years	Total
Vehicles	₩ 51,547	₩ 27,596	₩ 79,143
Buildings	95,036	182,151	277,187
	₩ 146,583	₩ 209,747	₩ 356,330

Income and expense from lease contracts for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
<b>Revenue</b>		
Interest income of lease receivables	₩ 130,145	₩ 147,772
<b>Cost</b>		
Depreciation of right-of-use assets	(164,573)	(253,668)
Interest expense of lease liabilities	(10,348)	(11,490)
Lease payments (leases of low-value and short-term)	(55,999)	(44,235)
	₩ (100,775)	₩ (161,621)

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**9. Company as a lessee or lessor (cont'd)**

The table below summarizes the maturity profile of the undiscounted lease receivables (Korean won in thousands):

	2022		2021	
Less than 1 year	₩	250,833	₩	256,200
1 to 5 years		949,667		971,133
Over 5 years		3,577,000		3,806,367
	₩	4,777,500	₩	5,033,700

**10. Intangible assets**

Changes in the book value of intangible assets for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022				
	Beginning balance	Additions	Transfer (*1)	Amortization	Ending balance
Memberships	₩ 262,812	₩ -	₩ -	₩ -	₩ 262,812
Software	755,516	1,086,853	957,023	(491,419)	2,307,973
	₩ 1,018,328	₩ 1,086,853	₩ 957,023	₩ (491,419)	₩ 2,570,785

(\*1) Transfer from construction-in-progress is included.

	2021				
	Beginning balance	Additions	Transfer (*1)	Amortization	Ending balance
Memberships	₩ 262,812	₩ -	₩ -	₩ -	₩ 262,812
Software	291,622	247,676	449,141	(232,923)	755,516
	₩ 554,434	₩ 247,676	₩ 449,141	₩ (232,923)	₩ 1,018,328

(\*1) Transfer from construction-in-progress is included.

As of December 31, 2022, the Company had no impairment loss on its intangible assets.

**11. Trade and other payables**

Trade and other payables as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		2021	
Trade payables	₩	141,559,486	₩	162,600,015
Other payables		16,341,816		17,025,021
Accrued expenses		788,634		734,705
	₩	158,689,936	₩	180,359,741

## 12. Borrowings and bonds payable

### Short-term borrowings

Details of short-term borrowings as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Financial institution	Interest rate (%)		2022		2021
	Shinhan Bank	6M Bank Bond + 0.87	₩	10,000,000	₩	3,000,000
	Nonghyup Bank	4.13 ~ 6.05		20,000,000		6,000,000
	Hana Bank	5.87 ~ 6.98		20,000,000		3,000,000
Short-term borrowings	Kookmin Bank	3M MOR + 1.57		10,000,000		-
		5.70		10,000,000		-
	Woori Bank	4.43		3,000,000		3,000,000
		3M CD + 1.58		10,000,000		-
	BNP PARIBAS	5.42		6,010,000		3,010,000
			₩	89,010,000	₩	18,010,000

### Current portion of long-term liabilities

Details of current portion of long-term liabilities as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Current portion of bonds payable	₩ -	₩ 149,844,809
	₩ -	₩ 149,844,809

### Long-term borrowings

Details of long-term borrowings as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

Financial institution	Interest rate (%)		2022		2021
KDB Bank	3M CD + 1.46	₩	40,000,000	₩	-

### Bonds payable

Details of bonds payable as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	Issue date	Maturity date	Interest rate (%)	2022	2021	Description
3 <sup>rd</sup> Unsecured public bond	2019-10-07	2022-10-07	1.85	-	150,000,000	
1 <sup>st</sup> Unsecured foreign bond (*1)	2021-12-03	2024-12-03	1.80	38,019,000 (\$30,000,000)	35,565,000 (\$30,000,000)	Interest payment made at every quarter end and lump-sum repayment on maturity
4 <sup>th</sup> Unsecured public bond	2022-02-23	2024-02-23	3.38	50,000,000	-	
4 <sup>th</sup> Unsecured public bond	2022-02-23	2025-02-21	3.69	100,000,000	-	
5 <sup>th</sup> Unsecured public bond	2022-09-30	2024-09-30	3M CD + 2.03	20,000,000	-	
	Sub-total			₩ 208,019,000	₩ 185,565,000	
	Less: present value discount			(616,547)	(455,875)	
	Less: current portion			-	(149,844,809)	
	Total			₩ 207,402,453	₩ 35,264,316	

(\*1) As of December 31, 2022, the Company has contracted a currency swap to hedge the risk of interest and exchange rate fluctuations exposed when repaying the interest and the principal (see Note 14).

**13. Defined benefit liabilities**

The Company operates a defined benefit pension plan, and the present value of the defined benefit obligation is determined using the projected unit credit method based on actuarial assumptions and on a discount basis by an independent actuary firm.

Defined benefit liabilities in the statements of financial position for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Defined benefit liabilities in the statements of financial position:		
Present value of defined benefit obligation	4,686,399	5,770,588
Fair value of plan assets	(7,181,460)	(5,451,992)
	<u>₩ (2,495,061)</u>	<u>₩ 318,596</u>

Expenses incurred in relation to the defined benefit pension plan for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Current service cost	₩ 843,587	₩ 848,484
Interest cost	192,611	112,276
Expected return on plan assets	(202,958)	(111,934)
	<u>₩ 833,240</u>	<u>₩ 848,826</u>

Changes in the present value of the defined benefit obligation for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Beginning balance	₩ 5,770,588	₩ 4,589,682
Current service cost	843,587	848,484
Interest cost	192,611	112,276
Retirement benefits paid	(38,959)	(431,828)
Transfer from (to) affiliates	(150,845)	(176,477)
Re-measurement loss	(1,930,583)	828,451
Ending balance	<u>₩ 4,686,399</u>	<u>₩ 5,770,588</u>

**13. Defined benefit liabilities (cont'd)**

Changes in the fair value of plan assets for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Beginning balance	₩ 5,451,992	₩ 4,576,506
Expected return on plan assets	202,958	111,934
Contributions by employer	2,240,000	1,500,000
Retirement benefits paid	(136,866)	(479,171)
Transfer from (to) affiliates	(485,270)	(214,009)
Re-measurement loss	(91,354)	(43,268)
Ending balance	<u>₩ 7,181,460</u>	<u>₩ 5,451,992</u>

As of the end of the reporting period, the plan assets consist of principal guarantee type financial instruments.

The composition of the re-measurement of the defined benefit pension plan in 2022 and 2021 is as follows (Korean won in thousands):

	2022	2021
Re-measurement loss (gain):		
Demographic assumptions	₩ (322,436)	₩ -
Financial assumptions	(1,631,097)	149,048
Experience adjustments	22,950	679,403
Loss from plan assets	91,354	43,268
	<u>₩ (1,839,229)</u>	<u>₩ 871,719</u>

The principal assumptions used in actuarial calculation as of December 31, 2022 and 2021 are as follows:

	2022	2021
Discount rate	6.22%	3.60%
Expected rate of return on plan assets	3.60%	3.60%
Future salary increase rate	4.55%	4.58%

The following table demonstrates a sensitivity analysis on the effect of changes in the principal assumptions used in actuarial calculation on the present value of defined benefit liabilities as of December 31, 2022 (Korean won in thousands):

	Effect of changes in the discount rate		Effect of changes in future salaries increase rate	
	+1%	-1%	+1%	-1%
Defined benefit liabilities	₩ (501,637)	₩ 603,882	₩ 608,294	₩ (513,544)

The estimated contribution plan by employer for 2022 is ₩812,377,000, and the weighted average duration of the defined benefit obligation as of December 31, 2022 and 2021 was 13.37 years and 10.3 years, respectively.

#### 14. Commitments and contingencies

##### Borrowing arrangements

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

Financial institution	Remarks	2022		2021	
		Credit line	Outstanding	Credit line	Outstanding
Hana Bank	Comprehensive (*1, 2)	USD 9.5 million	USD 7.89 million	USD 9.5 million	USD 2.53 million
	General borrowing	₩ 10,000 million	₩ 10,000 million	-	-
BNP PARIBAS	Limit loan	₩ 15,000 million	₩ 6,010 million	₩ 10,000 million	₩ 3,010 million
Woori Bank	Limit loan	₩ 10,000 million	₩ 3,000 million	₩ 10,000 million	₩ 3,000 million
Shinhan Bank	Limit loan	₩ 10,000 million	₩ 10,000 million	₩ 10,000 million	₩ 3,000 million
Nonghyup Bank	Limit loan	₩ 20,000 million	₩ 20,000 million	₩ 20,000 million	₩ 6,000 million
Kookmin Bank	Limit loan	₩ 10,000 million	₩ 10,000 million	₩ -	₩ -
KDB Bank	Operating loan	₩ 80,000 million	₩ 40,000 million	₩ -	₩ -
Bank of China	Trade credit limit	USD 5 million	-	USD 5 million	-

(\*1) A comprehensive line of credit is for the establishment of an import letter of credit, foreign currency loans and foreign currency payment guarantees, and the credit limit. The exercise amount is for the credit line as of December 31, 2022 and 2021, respectively.

(\*2) As of December 31, 2022, the outstanding amount of ₩10,000 million is translated in USD.

##### Derivative contracts

As of the end of the reporting period, the Company has currency forward contracts with the following financial institutions. Details as of December 31, 2022 and 2021 are presented as follows (Korean won in thousands):

2022					
Financial institution	Buy/Sell	Notional amount		Fair value	
Hana Bank	Sell	₩	2,263,044	₩	59,002
Shinhan Bank	Sell		3,653,935		34,904
Kookmin Bank	Sell		2,057,020		47,640
		₩	7,973,999	₩	141,546
2021					
Financial institution	Buy/Sell	Notional amount		Fair value	
Hana Bank	Sell	₩	1,188,450	₩	2,125
Shinhan Bank	Sell		3,719,678		(17,064)
		₩	4,908,128	₩	(14,939)

**14. Commitments and contingencies (cont'd)**

The Company has a currency swap contract in order to hedge foreign currency risk for fixed-rate foreign currency borrowings. Details of the currency swap as of December 31, 2022 is as follows (Korean won in thousands):

Contractor	Period	Contracted amount	Interest rate		2022	
					Assets Non-Current	Liabilities Non-Current
Hana Bank	2021-12-03~ 2024-12-03	\$30,000,000	2.21%	1.80%	1,235,288	-

Contractor	Period	Contracted amount	Interest rate		2021	
					Assets Non-Current	Liabilities Non-Current
Hana Bank	2021-12-03~ 2024-12-03	\$30,000,000	2.21%	1.80%	-	412,638

**Payment guarantee**

As of December 31, 2022, details of the payment guarantees are as follows (Korean won in thousands):

Description	Company	Type	Amount
Guarantee provided	Seoul Guarantee Insurance Company	Payment	₩ 1,680
	Hana Bank	Payment	USD 394,176

**Others**

As of December 31, 2022, the Company has long-term purchase agreements for raw materials with SK Gas Co., Ltd., a related party, since February 1, 2016, and the purchase agreements period has been changed until July 31, 2024.

Based on the joint arrangement dated June 22, 2018, the Company sells propylene to Ulsan PP Co., Ltd., a related party, and the contract term is 20-year f and renewed every 3 years.

**15. Emission rights and emission liabilities**

**Emission rights**

Details of annual quantity of allocated emission allowances as of December 31, 2022 are as follows (tCO<sub>2</sub>-eq):

	2021	2022	2023	2024	2025	Total
Allocated emission allowance	700,783	700,783	700,783	694,220	694,220	3,490,789

Changes in emission allowances for the years ended December 31, 2022 and 2021 are as follows (tCO<sub>2</sub>-eq and Korean won in thousands):

		2022					
		Beginning (free allocation) (*1)	Purchase (sold)	Submission to Govt. (*2)	Borrowed (carryforward)	Reclassificati on (*3)	Ending
2021	Quantity	732,899	(27,775)	(649,575)	(55,549)	-	-
	Book value	-	(827,510)	-	-	827,510	-
2022	Quantity	756,332	(26,210)	(490,061)	-	-	240,061
	Book value	-	(536,800)	-	-	536,800	-
2023	Quantity	700,783	-	-	-	-	700,783
	Book value	-	-	-	-	-	-
2024	Quantity	694,220	-	-	-	-	694,220
	Book value	-	-	-	-	-	-
2025	Quantity	694,220	-	-	-	-	694,220
	Book value	-	-	-	-	-	-
Total	Quantity	3,578,454	(53,985)	(1,139,636)	(55,549)	-	2,329,284
	Book value	-	(1,364,310)	-	-	1,364,310	-

(\*1) Beginning balances represent the amount of emission allowance allocated for free in each year, plus the amount of emission allowance carried forward from previous years (2022: 32,116 tons, 2021: 55,549 tons).

(\*2) Submission to the government in 2022 can be changed since the quantity is an estimate.

(\*3) The amount is assessed by reclassifying 53,985 tons out of 87,665 tons occurred in 2021.

		2021					
		Beginning (free allocation)	Purchase (sold)	Submission to Govt.	Borrowed (carryforward)	Reclassificati on	Ending
2021	Quantity	732,899	(42,116)	(655,077)	32,116	-	67,822
	Book value	-	(859,020)	-	-	859,020	-
2022	Quantity	700,783	-	-	-	-	700,783
	Book value	-	-	-	-	-	-
2023	Quantity	700,783	-	-	-	-	700,783
	Book value	-	-	-	-	-	-
2024	Quantity	694,220	-	-	-	-	694,220
	Book value	-	-	-	-	-	-
2025	Quantity	694,220	-	-	-	-	694,220
	Book value	-	-	-	-	-	-
Total	Quantity	3,522,905	(42,116)	(655,077)	32,116	-	2,857,828
	Book value	-	(859,020)	-	-	859,020	-

**Emission liabilities**

Emission liabilities is recognized only where actual emissions exceed the allocated emission allowances.

Estimated greenhouse gas emissions in 2022 are 490,061 tCO<sub>2</sub>-eq, and there are no emission liabilities as of December 31, 2022.

There are no emission allowances that have been provided as collateral as of December 31, 2022.

**16. Related parties**

Related parties of the Company and nature of their relationship with the Company as of December 31, 2022 are as follows:

Relationship	Related party
Entities with significant influence over the Company	SK Gas Co., Ltd. Advanced Global Investment Company Petrochemical Industries Company K.S.C
Parent companies of the entities with significant influence over the Company	SK Discovery Co., Ltd. (*1) Advanced Petrochemical Company (*2) Kuwait Petroleum Corporation (*3)
Joint venture	Ulsan PP Co., Ltd. (*4)
Large-size conglomerates, etc. (*5)	Affiliates of SK conglomerates such as : SK Chemicals Co., Ltd. SK Multi Utility Co., Ltd. SK PIC Global Co., Ltd. SK Ecoplant Co., Ltd. SK Energy Co., Ltd. SK Geo Centric Co., Ltd. SK Co., Ltd. SK Innovation Co., Ltd SK Telecom Co., Ltd. SK Networks Co., Ltd. SK D&D Co., Ltd. SK Materials Co., Ltd. SK Shieldus Co., Ltd. Happynarae Co., Ltd. etc. SK Gas International Pte. Ltd.

(\*1) SK Discovery Co., Ltd. is the parent company of SK Gas Co., Ltd.

(\*2) Advanced Petrochemical Company is the parent company of Advanced Global Investment Company.

(\*3) Kuwait Petroleum Corporation is the parent company of Petrochemical Industries Company K.S.C.

(\*4) As of the end of the reporting period, the Company holds 50% -1 shares of Ulsan PP Co., Ltd.

(\*5) The entities classified as large-size conglomerates are not related parties of the Company as defined in paragraph 9 of KIFRS 1024. In accordance with a resolution of the Securities and Futures Commission, the entities designated as the large-size conglomerates by the Fair-Trade-Commission are classified as related parties in accordance with the substance of relationship defined in paragraph 10 of KIFRS 1024.

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**16. Related parties (cont'd)**

Significant transactions with related parties for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

Description	Related party	Transactions	2022	2021
Entities with significant influence over the Company	SK Gas Co., Ltd.	Revenue Others	₩ 971,952	₩ 310,306
		Expense Purchase Others	634,525,462	692,342,827
	Advanced Global Investment Company	Expense Others	2,317,995	5,491,064
		Petrochemical Industries Company K.S.C	Expense Others	1,061,006
Joint venture	Ulsan PP Co., Ltd.	Expense Others	884,172	2,550,495
		Revenue Sales Others	281,560,525	275,381,359
Large-size conglomerates, etc.	SK Chemicals Co., Ltd.	Revenue Sales Others	4,792,834	3,351,058
		Revenue Sales	3,949,441	4,354,776
		Expense Others	-	3,060,471
	SK Multi Utility Co., Ltd.	Expense Others	494,648	3,924,415
		Revenue Others	8,756,048	138,698
	SK PIC Global Co., Ltd.	Expense Others	5,607,046	736,849
		Revenue Sales	2,328,390	-
	SK Ecoplant Co., Ltd	Revenue Sales Others	23,059	76,541
		Revenue Sales Others	-	15,676
	SK Energy Co., Ltd.	Revenue Sales Others	39,244,042	33,657,209
		Expense Others	9,395	56,099
	SK Geo Centric Co., Ltd.	Expense Others	113,825	25,832
	SK Co., Ltd.	Expense Others	663,313	884,902
	SK Materials Co., Ltd.	Expense Others	1,928,312	2,207,780
	SK Shieldus Co., Ltd.	Expense Others	286,003	508,870
SK Gas International Pte. Ltd.	Expense Others	56,961	55,542	
Happynarae Co., Ltd.	Expense Others	188,271	303,808	
Others	Expense Others	145,912	140,598	

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**16. Related parties (cont'd)**

The significant receivables and payables arising from transactions with related parties as of December 31, 2022 and 2021 are as follows. (Korean won in thousands):

Description	Related party	Transactions		2022	2021
		Receivables	Others	₩	₩
Entities with significant influence over the Company	SK Gas Co., Ltd.	Payables	Trade payables	137,777,945	153,778,398
			Others	198,231	218,528
		Receivables	Trade receivables	46,826,249	42,565,711
Joint venture	Ulsan PP Co., Ltd.		Others	705,350	620,484
		Receivables	Trade receivables	506,043	486,469
Large-size conglomerates, etc.	SK Chemicals Co., Ltd.	Payables	Others	45,299	42,327
		Receivables	Others	3,826,980	3,217,132
	SK Multi Utility Co., Ltd.	Payables	Others	999,391	782,294
		Receivables	Trade receivables	2,328,390	-
	SK PIC Global Co., Ltd.	Receivables	Trade receivables	-	15,694
		Receivables	Trade receivables	6,026,516	4,391,352
	SK Energy Co., Ltd.	Payables	Others	-	47,124
		SK Geo Centric Co., Ltd.	Payables	Others	3,138
	SK Co., Ltd.	Payables	Others	102,428	1,595
	SK Materials Co., Ltd.	Payables	Others	208,311	251,373
	SK Shieldus Co., Ltd.	Payables	Others	70,851	84,126
	SK Gas International Pte. Ltd.	Payables	Others	56,961	55,542
	Happynarae Co., Ltd.	Payables	Others	16,820	62,163
	Others	Payables	Others	15,568	22,403

Details of capital transactions with related parties for the years ended December 31, 2022 and 2021 (Korean won in thousands):

Account	Company name	2022		2021	
		Investment	Return	Investment	Return
Joint venture	Ulsan PP Co., Ltd.	₩ 25,000,000	₩ -	₩ 10,900,000	₩ -

Compensation for key management personnel for the years ended December 31, 2022 and 2021 is as follows (Korean won in thousands):

	2022	2021
Salary and bonus	₩ 418,101	₩ 410,600

Key management personnel are standing directors who have authorities and responsibilities for the planning, operations and control of the business of the Company.

The Company's agreements with related parties are described in Note 14.

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**17. Equity**

**Issued capital**

Issued capital as of December 31, 2022 and 2021 are as follows:

Description	Unit	2022	2021
Authorized shares	Per share	50,000,000	50,000,000
Par value	Korean won	10,000	10,000
Ordinary shares issued	Per share	3,400,660	3,400,660
Issued capital	Korean won in thousands	34,006,600	34,006,600

**Capital surplus**

Details of the Company's capital surplus as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Capital surplus	₩ 353,695,009	₩ 353,695,009

**Accumulated other comprehensive loss**

Details of the Company's accumulated other comprehensive loss as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Changes in equity from equity method investee	₩ (13,366)	₩ (13,366)

**Retained earnings**

Details of retained earnings as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Legal reserve	₩ 3,278,236	₩ 2,924,568
Unappropriated retained earnings	119,401,988	250,173,976
	₩ 122,680,225	₩ 253,098,544

**Statements of appropriation of retained earnings**

Details of the appropriation of retained earnings for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Retained earnings before appropriations:		
Unappropriated retained earnings carried forward from the prior year	₩ 246,283,622	₩ 239,146,990
Re-measurement loss on defined benefit liabilities	1,331,298	(660,763)
Changes in retained earnings from equity method investee	(249,423)	(79,821)
Profit (loss) for the year	(127,963,509)	11,767,571
	119,401,988	250,173,977
Appropriation of retained earnings:		
Cash dividends	-	(3,536,686)
Legal reserve	-	(353,669)
	-	(3,890,355)
Unappropriated retained earnings to be carried forward to the next year	₩ 119,401,988	₩ 246,283,622

Appropriation approval dates for 2022 and 2021 are March 29, 2023 and March 29, 2022, respectively.

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**17. Equity (cont'd)**

**Dividends**

Details of cash dividends proposed in accordance with the approval at shareholder's meetings for the years ended December 31, 2022 and 2021 are as follows:

	Unit	2022	2021
Ordinary shares issued	Per share	-	3,400,660
Dividened per share	Korean won	-	1,040
Dividends	Korean won in thousands	-	3,536,686

**18. Revenue from contracts with customers**

**Operating segment**

The Company operates as a single business segment. Therefore, the notes on operating profit, profit before tax, and total assets and liabilities by business segments are not disclosed.

**Disaggregated revenue information**

Set out below is the disaggregation of the Company's revenue from contracts with customers for the years ended December 31, 2022 and 2021 (Korean won in thousands):

		2022	2021
Revenue from contract with customers			
Finished goods	₩	660,138,582	₩ 882,170,890
Merchandise		64,709,224	11,644,725
Services		1,849,218	2,835,424
	₩	<u>726,697,024</u>	<u>₩ 896,651,039</u>
Geographical market			
Domestic	₩	493,544,548	₩ 608,191,428
China		26,713,344	52,772,944
Japan		206,439,132	235,614,915
Others		-	71,752
	₩	<u>726,697,024</u>	<u>₩ 896,651,039</u>
Timing of transfer of goods or services			
Goods transferred at one time	₩	724,847,806	₩ 893,815,615
Services transferred over time		1,849,218	2,835,424
	₩	<u>726,697,024</u>	<u>₩ 896,651,039</u>

Details of revenue from major customers which account for more than 10% of total sales for the years ended December 31, 2022 and 2021 are as follows. (Korean won in thousands):

	2022	2021
Ulsan PP Co., Ltd.	₩ 281,560,525	₩ 275,381,359
MARUBENI CORPORATION	118,423,066	174,707,073
TONGSUH PETROCHEMICAL Co., Ltd.	80,665,285	98,629,925
	<u>₩ 480,648,876</u>	<u>₩ 548,718,357</u>

19. Operating expenses

**Classification of expenses by nature**

Details of expenses by nature for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Changes in inventories	₩ 2,363,983	₩ (2,537,723)
Raw material and cost of merchandise	703,263,551	703,205,466
Salary and bonus	11,627,640	11,343,000
Retirement benefits	1,251,592	868,716
Depreciation	50,724,210	54,380,857
Depreciation of right-of-use assets	164,573	253,668
Amortization of intangible assets	491,419	232,923
Utilities	82,867,435	92,370,156
Freight	-	568,685
Commission fee	4,904,305	4,997,710
Employee welfare benefits	4,650,556	3,998,094
Taxes and dues	568,677	560,768
Tariff refunds, etc.	(7,140,474)	(5,282,671)
	<u>₩ 855,737,467</u>	<u>₩ 864,959,649</u>

19. Operating expenses (cont'd)

**Selling and administrative expenses**

Details of selling and administrative expenses for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Salary and bonus	₩ 1,982,315	₩ 2,585,546
Retirement benefits	444,422	159,161
Employee welfare benefits	2,478,249	1,997,520
Conference	4,322	1,490
Lease payments	243,884	320,974
Depreciation	42,216	105,560
Depreciation of right-of-use assets	164,573	183,135
Amortization of intangible assets	413,738	214,759
Consumable supplies expenses	9,122	9,377
Utilities	2,685	2,698
Travel	30,008	18,522
Vehicle maintenance	15,163	22,587
Communication	6,207	10,077
Taxes and dues	39,142	31,985
Insurance	5,914	2,138
Commission fee	2,395,900	2,419,521
Gifts and entertainment	159,426	199,202
Training	181,164	196,092
Advertising	8,638	6,000
Others	57,532	48,750
	<u>₩ 8,684,620</u>	<u>₩ 8,535,094</u>

**20. Finance income and costs and other non-operating income and expense**

**Finance income and costs**

Finance income and finance costs for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Finance income:		
Interest income	₩ 221,212	₩ 149,090
Gain on valuation of financial assets at fair value through profit or loss	175,318	169,257
Gain on transaction of financial assets at fair value through profit or loss	5,102,770	1,115,549
Gain on foreign currency translation	189,104	28,238
Gain on foreign currency transactions	5,330,272	3,264,647
Gain on valuation of derivative instruments	1,378,634	2,125
Gain on transaction of derivative instruments	1,028,746	1,181,293
	<u>₩ 13,426,056</u>	<u>₩ 5,910,199</u>
Finance costs:		
Interest expense	₩ 9,893,076	₩ 5,280,524
Loss on foreign currency translation	2,566,361	254,710
Loss on foreign currency transactions	6,758,971	1,610,953
Loss on valuation of derivative instruments	1,800	429,703
Loss on transaction of derivative instruments	1,283,748	2,672,456
	<u>₩ 20,503,956</u>	<u>₩ 10,248,346</u>

**Other non-operating income and expenses**

Other non-operating income and expenses for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Other non-operating income:		
Gain on disposal of property, plant and equipment	₩ -	₩ 1,614
Miscellaneous revenue	3,735,823	1,211,545
	<u>₩ 3,735,823</u>	<u>₩ 1,213,159</u>
Other non-operating expenses:		
Loss on disposal of trade receivables	₩ 107,847	₩ 45,917
Donations	169,449	1,245,584
Loss on disposal of property, plant and equipment	410,680	54,899
Miscellaneous expense	64,616	10,682
	<u>₩ 752,592</u>	<u>₩ 1,357,082</u>

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**21. Income tax**

Major components of income tax expense for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Current income tax	₩ 2,892	₩ 1,661,022
Changes in deferred tax due to temporary differences	(27,896,510)	1,154,439
Income tax expense directly reflected in equity	(456,330)	236,440
Income tax expense	₩ (28,349,948)	₩ 3,051,901

Income tax expense directly reflected in equity for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Re-measurement loss on defined benefit liabilities	₩ (430,846)	₩ 210,956
Change in equity form equity method investee	(25,484)	25,484
	₩ (456,330)	₩ 236,440

Reconciliation of income tax expense applicable to profit before income tax at the Korea statutory tax rate to income tax expense at the effective tax rate of the Company for the years ended December 31, 2022 and 2021 is summarized as follows (Korean won in thousands):

	2022	2021
Profit (loss) before income tax	₩ (156,313,457)	₩ 14,819,472
Tax expense (benefit) at the statutory tax rate (*1)	(36,264,722)	3,238,284
Adjustments:		
Expenses not deductible for tax purposes	5,245	8,110
Non-taxable Income	(91,589)	-
Tax credit	-	(364,687)
Tax payment and refund	-	(190,349)
Unrecognized deferred tax assets/liabilities	9,127,429	-
Others	(1,126,041)	360,543
Income tax expense	₩ (28,349,948)	₩ 3,051,901
Effective tax rate (*2)	-	20.59%

(\*1) Details of statutory tax rate is as follows:

	2021
Less than ₩200,000,000	10%
Over ₩200,000,000 and less than ₩20,000,000,000	20%
Over ₩20,000,000,000 and less than ₩300,000,000,000	22%
Over ₩300,000,000,000	25%
Local income tax	10% of income tax

(\*2) Effective tax rate for the year ended December 31, 2022 is not presented as the Company receives tax benefits for the year ended December 31, 2022.

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**21. Income tax (cont'd)**

Significant changes in cumulative temporary differences and deferred tax assets and liabilities for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022			Ending balance
	Beginning balance	Recognized in profit or loss	Recognized directly to equity	
Accrued revenues	₩ (40,960)	₩ 286	₩ -	₩ (40,674)
Defined benefit liabilities	77,100	353,747	(430,846)	1
Other long-term employee benefit liabilities	49,693	24,725	-	74,418
Unsettled costs	39,638	46,550	-	86,188
Construction-in-progress	24,454	(79,956)	-	(55,502)
Loss on valuation of derivative instruments	83,946	(436,745)	-	(352,799)
Buildings	493,161	62,943	-	556,104
Structures	(4,410,472)	505,680	-	(3,904,792)
Machinery	(35,787,959)	2,393,382	-	(33,394,577)
Other properties	3,901,990	775,887	-	4,677,877
Loss on valuation of equity method	3,857,501	(3,832,017)	(25,484)	-
Valuation allowance for inventories	524,983	(402,835)	-	122,148
Depreciation	1,568,515	(64,815)	-	1,503,700
Right-of-use assets	(75,431)	8,393	-	(67,038)
Lease liabilities	77,876	(5,908)	-	71,968
Deficit carried over	-	29,003,523	-	29,003,523
	<u>₩ (29,615,965)</u>	<u>₩ 28,352,840</u>	<u>₩ (456,330)</u>	<u>₩ (1,719,455)</u>

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**21. Income tax (cont'd)**

	2021			
	Beginning balance	Recognized in profit or loss	Recognized directly to equity	Ending balance
Accrued revenues	₩ (23,785)	₩ (17,175)	₩ -	₩ (40,960)
Defined benefit liabilities	3,189	(137,045)	210,956	77,100
Other long-term employee benefit liabilities	-	49,693		49,693
Unsettled costs	67,880	(28,242)	-	39,638
Construction-in-progress	(57,736)	82,190	-	24,454
Loss on valuation of derivative instruments	457,796	(373,850)	-	83,946
Buildings	405,907	87,254	-	493,161
Structures	(3,925,764)	(484,708)	-	(4,410,472)
Machinery	(30,686,821)	(5,101,138)	-	(35,787,959)
Other properties	1,980,694	1,921,296	-	3,901,990
Loss on valuation of equity method	830,439	3,001,578	25,484	3,857,501
Valuation allowance for inventories	-	524,983	-	524,983
Depreciation	1,568,515	-	-	1,568,515
Right-of-use assets	(222,824)	147,393	-	(75,431)
Lease liabilities	224,458	(146,582)	-	77,876
Deficit carried over	916,526	(916,526)	-	-
	<u>₩ (28,461,526)</u>	<u>₩ (1,390,879)</u>	<u>₩ 236,440</u>	<u>₩ (29,615,965)</u>

The Company applied the tax rate at the time when temporary differences are expected to lapse which is the estimated future tax rate applied to temporary differences.

The temporary differences which the Company has not recognized as deferred tax assets as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022	2021
Investment in joint venture	₩ 39,342,368	₩ -

Probability of deferred tax assets depends on various factors, including the Company's ability to generate taxable income during the period in which temporary differences are realized, the overall economic environment and outlook of the industry. The Company reviews these factors periodically and recognizes deferred tax assets for deductible temporary differences to the extent that it is probable that taxable income will be available against which the deductible temporary differences as of December 31, 2022 and 2021.

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**22. Earnings per share**

The Company's basic earnings per share for the years ended December 31, 2022 and 2021 are computed as follows:

	2022	2021
Profit (loss) for the year attributable to ordinary shares	₩ (127,963,508,655)	₩ 11,767,570,652
Weighted average number of ordinary shares outstanding	3,400,660 shares	3,400,660 shares
Basic and diluted earnings (loss) per share	₩ (37,629)	₩ 3,460

Diluted earnings per share are equal to the basic earnings per share as there are no dilutive potential shares for the years ended December 31, 2022 and 2021.

The weighted average number of ordinary shares outstanding for the years ended December 31, 2022 and 2021 is computed as follows (Korean won in thousands, except per share amounts):

2022					
Type	Start date	Closing date	Number of days	Number of shares outstanding	Weighted average number of shares
Base shares	2022.1.1	2022.12.31	365	3,400,660	3,400,660
2021					
Type	Start date	Closing date	Number of days	Number of shares outstanding	Weighted average number of shares
Base shares	2021.1.1	2021.12.31	365	3,400,660	3,400,660

**23. Statement of cash flows**

Cash in the statements of cash flows represent cash and cash equivalents in the statements of financial position.

The statements of cash flows of the Company are prepared by the indirect method, and significant non-cash transactions for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

Description	2022	2021
Changes in other payables for acquisition of property, plant and equipment	₩ 1,556,821	₩ 1,452,185
Transfer of construction-in-progress to property, plant and equipment	10,001,474	960,350
Reclassification to current portion of bonds payable	-	149,794,861
Modification to lease contracts	123,747	(358,139)
Reclassification to current portion of lease liabilities	198,894	102,529

**SK Advanced Co., Ltd.**  
**Notes to the financial statements**  
**For the years ended December 31, 2022 and 2021**

**23. Statement of cash flows (cont'd)**

Changes in liabilities arising from financing activities for the years ended December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022				
	Beginning balance	Cash flows from financing activities	Reclassification to current portion	Others (*1)	Ending balance
Short-term borrowings (*2)	₩ 18,010,000	₩ 71,000,000	₩ -	₩ -	₩ 89,010,000
Accrued expenses	734,705	(9,373,259)	-	9,427,188	788,634
Accrued dividend	-	(3,536,686)	-	3,536,686	-
Current portion of long-term liabilities	149,844,809	(150,000,000)	-	155,191	-
Long-term borrowings	-	40,000,000	-	-	40,000,000
Current portion of lease liabilities	126,555	(163,274)	198,894	-	162,175
Bonds payable	35,264,316	169,383,788	-	2,754,349	207,402,453
Lease liabilities	195,248	-	(198,894)	151,680	148,034
	<u>₩ 204,175,633</u>	<u>₩ 117,310,569</u>	<u>₩ -</u>	<u>₩ 16,025,094</u>	<u>₩ 337,511,296</u>

(\*1) Others include interest payable accrued for interest-bearing loans, changes in lease liabilities due to new lease contracts and increase in lease payments, and appropriation of retained earnings from dividends.

(\*2) The Company has repaid ₩48,000,000,000 and borrowed ₩119,000,000,000 in short-term borrowings during the current reporting period.

	2021				
	Beginning balance	Cash flows from financing activities	Reclassification to current portion	Others (*1)	Ending balance
Short-term borrowings (*2)	₩ 18,010,000	₩ -	₩ -	₩ -	₩ 18,010,000
Accrued expenses	1,458,209	(5,762,321)	-	5,038,817	734,705
Accrued dividend	-	(10,201,980)	-	10,201,980	-
Current portion of long-term liabilities	99,964,381	(100,000,000)	149,794,861	85,567	149,844,809
Current portion of lease liabilities	294,675	(249,480)	102,529	(21,169)	126,555
Bonds payable	149,646,491	35,010,547	(149,794,861)	402,139	35,264,316
Lease liabilities	632,837	-	(102,529)	(335,060)	195,248
	<u>₩ 270,006,593</u>	<u>₩ (81,203,234)</u>	<u>₩ -</u>	<u>₩ 15,372,274</u>	<u>₩ 204,175,633</u>

(\*1) Others include interest payable accrued for interest-bearing loans, changes in lease liabilities due to new lease contracts and increase in lease payments, and appropriation of retained earnings from dividends.

(\*2) The Company has repaid ₩62,000,000,000 and borrowed ₩62,000,000,000 in short-term borrowings during the prior reporting period.

**24. Financial risk management objectives and policies**

The Company's principal financial liabilities comprise bonds payable and trade and other payables. The main purpose of these financial liabilities is to finance the Company's operations and to provide guarantees to support its operations. Also, the Company has various financial assets, including trade and other receivables, cash and cash equivalents, and others.

The Company is exposed to market risk, credit risk and liquidity risk. The Company's senior management oversees the management of these risks in accordance with the Company's risk policies, which are reviewed regularly, and details are provided below. Furthermore, it is the Company's policy that no trading in derivatives for speculative purposes shall be undertaken.

## 24. Financial risk management objectives and policies (cont'd)

### Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market prices comprise three types of risk: interest rate risk, foreign currency risk and other price risk, such as equity price risk.

#### Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate arising from changes in market interest rates. The Company manages its interest rate risk by monitoring a fluctuation of 1% in interest rates. The fluctuation in interest rates reflects management's assumptions that may reasonably arise. Details of borrowings with variable rate as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		2021	
Short-term borrowings	₩	30,000,000	₩	-
Long-term borrowings		40,000,000		-
Bond payable		20,000,000		-
	₩	90,000,000	₩	-

The following table demonstrates the sensitivity to a reasonable change in the interest rate, with all other variables held constant, on the Company's profit before income tax as of December 31, 2022 and 2021 (Korean won in thousands):

	2022		2021	
	1%p increase	1%p decrease	1%p increase	1%p decrease
Short-term borrowings	₩ (104,301)	₩ 104,301	₩ -	₩ -
Long-term borrowings	₩ (103,014)	₩ 103,014	₩ -	₩ -
Bond payable	₩ (50,959)	₩ 50,959	₩ -	₩ -
	₩ (258,274)	₩ 258,274	₩ -	₩ -

#### Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The book values of monetary assets and liabilities which are not presented in functional currency as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		2021	
	Assets	Liabilities	Assets	Liabilities
USD	₩ 7,913,948	₩ 41,975,818	₩ 7,765,374	₩ 47,005,680

The Company manages its foreign currency risk periodically. The following table demonstrates the sensitivity to a reasonable change in the Korean Won exchange rate, with all other variables held constant, on the Company's profit before income tax as of December 31, 2022 and 2021 (Korean won in thousands):

	2022		2021	
	+5%	-5%	+5%	-5%
USD	₩ (1,703,094)	₩ 1,703,094	₩ (1,962,015)	₩ 1,962,015

#### Other price risk

Other price risk is the risk that fair value or future cash flows of financial instruments will fluctuate due to fluctuations in market prices other than interest rate risk or foreign currency risk. As of December 31, 2022, the Company has no assets or liabilities which are exposed to other price risk.

## 24. Financial risk management objectives and policies (cont'd)

### Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss of the Company.

#### Other receivables

Customer credit risk is managed by each business unit subject to the Company's established policy, procedures and control relating to customer credit risk management. Credit quality of the customer is assessed based on an extensive credit rating scorecard and individual credit limits are defined in accordance with this assessment. Outstanding customer receivables are regularly monitored and any shipments to major customers are generally covered by letters of credit or other forms of credit insurance. The Company evaluates the impairment of trade receivables and other receivables at every reporting date. The maximum exposure to credit risk at the reporting date is the book value of financial assets (See Note 3).

#### Other assets

Credit risks associated with the Company's other assets which consist of cash, short-term deposits and short-term and long-term loans arising from the default by the counterparties. Maximum exposure to credit risks will be the book value of the related other assets. The Company deposits its surplus funds with Hana Bank and other financial institutions whose credit ratings are high. Accordingly, credit risk related to financial institutions is considered limited.

### Liquidity risk

Liquidity risk refers to the risk that the Company may default on the contractual obligations that become due.

The Company manages its risk of a shortage of funds using a recurring liquidity planning tool, and matches the financial liabilities with the financial assets, taking into account the maturity dates and cash flows from the operating activities of those financial instruments.

The table below summarizes the maturity profile of the Company's financial liabilities based on the contractual undiscounted payments (Korean won in thousands):

	2022		
	Less than 1 year	1 to 5 years	Total
Trade and other payables	₩ 158,689,936	₩ -	₩ 158,689,936
Short-term borrowings	89,010,000	-	89,010,000
Bond payable	-	208,019,000	208,019,000
Long-term borrowings	-	40,000,000	40,000,000
Other non-current liabilities	-	271,348	271,348
Lease liabilities	165,511	156,702	322,213
	<u>₩ 247,865,447</u>	<u>₩ 248,447,050</u>	<u>₩ 496,312,497</u>
	2021		
	Less than 1 year	1 to 5 years	Total
Trade and other payables	₩ 180,359,741	₩ -	₩ 180,359,741
Short-term borrowings	18,010,000	-	18,010,000
Bond payable	150,000,000	35,565,000	185,565,000
Other non-current liabilities	-	224,200	224,200
Lease liabilities	146,583	209,747	356,330
	<u>₩ 348,516,324</u>	<u>₩ 35,998,947</u>	<u>₩ 384,515,271</u>

**24. Financial risk management objectives and policies (cont'd)**

**Capital management**

The primary objective of the Company's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximize shareholders' value.

The Company manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain the sound capital structure, the Company may adjust the dividend payment to shareholders, reduce capital stock, or issue new shares.

The Company has not made any change to the objectives, policies or processes for managing capital during the years ended December 31, 2022.

The Company monitors the debt-to-equity ratio which is total liabilities divided by the total equity. The debt-to-equity ratio as of the December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		2021	
Total liabilities	₩	479,902,381	₩	414,777,237
Total equity	₩	510,368,467	₩	640,786,787
Debt-to-equity ratio		97.56%		64.73%

## 25. Fair value measurement

### Fair value of financial instruments

Details of the book values and fair values of financial assets and liabilities as of December 31, 2022 and 2021 are as follows (Korean won in thousands):

	2022		2021	
	Book value	Fair value	Book value	Fair value
<b>Financial assets:</b>				
Fair value of financial assets:				
Short-term financial instruments	₩ 59,294,989	₩ 59,294,989	₩ 86,153,367	₩ 86,153,367
Derivatives financial assets	1,378,634	1,378,634	2,125	2,125
Amortized cost of financial assets:				
Cash and cash equivalents	9,680,164	9,680,164	12,977,959	12,977,959
Trade and other receivables	95,734,192	95,734,192	80,072,604	80,072,604
Long-term financial instruments	2,000	2,000	2,000	2,000
Deposits	126,234	126,234	87,188	87,188
Long-term trade and other receivables	2,699,949	2,699,949	2,808,364	2,808,364
Total financial assets	₩ 168,916,162	₩ 168,916,162	₩ 182,103,607	₩ 182,103,607

	2022		2021	
	Book value	Fair value	Book value	Fair value
<b>Financial liabilities:</b>				
Fair value of financial liabilities:				
Derivatives financial liabilities	₩ 1,800	₩ 1,800	₩ 429,703	₩ 429,703
Amortized cost of financial liabilities:				
Trade and other payables	158,689,936	158,689,936	180,359,741	180,359,741
Short-term borrowings	89,010,000	89,010,000	18,010,000	18,010,000
Current portion of long-term liabilities	-	-	149,844,809	149,844,809
Long-term borrowings	40,000,000	40,000,000	-	-
Current portion of lease liabilities	162,175	162,175	126,555	126,555
Bonds payable	207,402,453	207,402,453	35,264,316	35,264,316
Lease liabilities	148,034	148,034	195,248	195,248
Other non-current liabilities	271,348	271,348	224,200	224,200
Total financial liabilities	₩ 495,685,746	₩ 495,685,746	₩ 384,454,572	₩ 384,454,572

25. Fair value measurement (cont'd)

**Fair value on the statement of financial position:**

As of December 31, 2022 and 2021, the fair value of financial instrument by fair value hierarchy is as follow (Korean won in thousands):

	2022			
	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>				
Financial assets measured at fair value through profit or loss :				
Short-term financial instruments	₩ -	₩ 59,294,989	₩ -	₩ 59,294,989
Derivatives financial assets	-	1,378,634	-	1,378,634
Financial assets at amortized cost :				
Cash and cash equivalents	-	9,680,164	-	9,680,164
Trade and other receivables	-	-	95,734,192	95,734,192
Long-term financial instruments	-	2,000	-	2,000
Deposits	-	3,226	123,008	126,234
Long-term trade and other Receivables	-	-	2,699,949	2,699,949
Total financial assets	₩ -	₩ 70,359,013	₩ 98,557,149	₩ 168,916,162
<b>Financial liabilities</b>				
Financial liabilities at fair value through profit or loss :				
Derivatives financial liabilities	₩ -	₩ 1,800	₩ -	₩ 1,800
Financial liabilities at amortized cost :				
Trade and other payables	-	-	158,689,936	158,689,936
Short-term borrowings	-	89,010,000	-	89,010,000
Long-term borrowings	-	40,000,000	-	40,000,000
Current portion of lease liabilities	-	162,175	-	162,175
Bonds payable	-	207,402,453	-	207,402,453
Lease liabilities	-	148,034	-	148,034
Other non-current liabilities	-	-	271,348	271,348
Total financial liabilities	₩ -	₩ 336,724,462	₩ 158,961,284	₩ 495,685,746

**25. Fair value measurement (cont'd)**

	2021			
	Level 1	Level 2	Level 3	Total
<b>Financial assets</b>				
Financial assets measured at fair value through profit or loss :				
Short-term financial instruments	₩ -	₩ 86,153,367	₩ -	₩ 86,153,367
Derivatives financial assets	-	2,125	-	2,125
Financial assets at amortized cost :				
Cash and cash equivalents	-	12,977,959	-	12,977,959
Trade and other receivables	-	-	80,072,604	80,072,604
Long-term financial instruments	-	2,000	-	2,000
Deposits	-	2,991	84,196	87,187
Long-term trade and other Receivables	-	-	2,808,364	2,808,364
Total financial assets	₩ -	₩ 99,138,442	₩ 82,965,164	₩ 182,103,606
<b>Financial liabilities</b>				
Financial liabilities at fair value through profit or loss :				
Derivatives financial liabilities	₩ -	₩ 429,703	₩ -	₩ 429,703
Financial liabilities at amortized cost :				
Trade and other payables	-	-	180,359,741	180,359,741
Short-term borrowings	-	18,010,000	-	18,010,000
Current portion of long-term liabilities	-	149,844,809	-	149,844,809
Current portion of lease liabilities	-	126,555	-	126,555
Bonds payable	-	35,264,316	-	35,264,316
Lease liabilities	-	195,248	-	195,248
Other non-current liabilities	-	-	224,200	224,200
Total financial liabilities	₩ -	₩ 203,870,631	₩ 180,583,941	₩ 384,454,572

**26. Uncertainty of the impact of COVID-19**

Various prevention and controls, including movement restrictions are implemented around the world to stop the spread of COVID-19, as a result, the impact is widely spread on the global economy. In addition, various forms of government support policies are announced. The Company reviewed the impact of the COVID-19 on its financial statements, and items affected by COVID-19 are valuation of inventories (see Note 5.). The Company has prepared financial statements with a reasonable estimated of the impact of COVID-19. However, significant uncertainty exists in estimating the duration and ultimate impact of COVID-19 on the Company's financial statements at this stage.

## **Review conclusion on internal control over financial reporting**

The accompanying independent auditor's review report on internal control over financial reporting is attached as a result of reviewing the internal control over financial reporting of SK Advanced Co., Ltd. (the "Company") and auditing the financial statements of the Company for the year ended December 31, 2022 in accordance with Article 8 of the *Act on External Audit of Stock Companies* of the Republic of Korea.

1. Independent auditor's review report on internal control over financial reporting
2. Management's report on the operations of the internal control over financial reporting

**Independent auditor's review report on internal control over financial reporting**  
(English Translation of a Report Originally Issued in Korean)

**SK Advanced Co., Ltd.**  
**Chief Executive Officer**

We have reviewed the accompanying management's report on the operations of the internal control over financial reporting (the "ICFR") of SK Advanced Co., Ltd. (the "Company") as of December 31, 2022. The Company's management is responsible for effective design and operations of its ICFR, including the reporting of its operations. Our responsibility is to review the management's ICFR report and issue a report based on our review. The management's report on the operations of the ICFR of the Company states, "Based on our assessment of the operations of the ICFR as of December 31, 2022, no material weakness, in all material respects, has been identified for the standpoint of the Best Practice Guideline for ICFR."

We conducted our review in accordance with the ICFR review standards established by the Korean Institute of Certified Public Accountants. These standards require that we plan and perform our review to obtain assurance less than an audit as to management's report on the operations of the ICFR. A review includes the procedures of obtaining an understanding of the ICFR, inquiring as to management's report on the operations of the ICFR and performing a review of related documentation within limited scope, if necessary. However, as the Company is a non-public large-sized company, the design, operations and assessment of its ICFR are limited compared with those of public large-sized companies, in accordance with Chapter 5 *Application for small-and-medium sized companies* of the Best Practice Guideline for ICFR. As such, we performed our review in accordance with Chapter 14 *Review standards for small-and-medium sized companies* of the ICFR review standards.

A company's ICFR consists of an establishment of related policies and organization to ensure that it is designed to provide reliability in preparation of financial statements and financial reporting for external purposes in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS"). However, because of its inherent limitations, the ICFR may not prevent or detect material misstatements of the financial statements. Also, projections of any assessment of the ICFR on future periods are subject to the risk that ICFR may become inadequate due to the changes in conditions, or that the degree of compliance with the policies or procedures may be significantly reduced.

Based on our review of the management's report on the operations of the ICFR, nothing has come to our attention that causes us to believe that the management's report referred to above is not presented fairly, in all material respects, in accordance with Chapter 5 *Application for small-and-medium sized companies* of the Best Practice Guideline for ICFR.

We conducted our review of the ICFR in place as of December 31, 2022, and we did not review the ICFR subsequent to December 31, 2022. This report has been prepared for regulatory purposes pursuant to the *Act on External Audit of Stock Companies* in the Republic of Korea, and may not be appropriate for other purposes or for other users.



March 17, 2023

This report is annexed in relation to the audit of the financial statements as of December 31, 2022 and the review of internal control over financial reporting pursuant to Article 8 of the *Act on External Audit of Stock Companies* in the Republic of Korea.

**Management's report on the operations of internal control over financial reporting**

To the Shareholders, Board of Directors and Audit of  
SK Advanced co. ltd

We, as the Chief Executive Officer and the Internal Accounting Manager of SK Advanced co. ltd (the "Company"), assessed operating status of the Company's Internal Control over Financial Reporting("ICFR") as of December 31, 2022.

The Company's management, including the Chief Executive Officer and the Internal Accounting Manager, is responsible for designing and operating ICFR. We evaluated whether the Company effectively designed and operated ICFR to prevent and detect any errors or frauds which may cause any misstatement in financial statements to ensure preparation and disclosure of reliable financial information. We used Chapter 5(Application to Small and Medium sized Companies) of the Best Practice Guideline for ICFR to evaluate the design and operating effectiveness of the ICFR.

Based on our assessment of the operations of the ICFR as of December 31, 2022, no material weakness, in all material respects, has been identified for the standpoint of the Best Practice Guideline for ICFR.

We certify that this report does not contain any untrue statement of a fact, or omit to state a fact necessary to be presented herein. We also certify that this report does not contain or present any statements which might cause material misunderstandings of the readers, and we have reviewed and verified this report with sufficient care.

2023.02.14

Park Jin Seok

Chief Executive Officer

Kim Kyu Woong

Internal Accounting Manager