# Korea Western Power Co., Ltd. and its subsidiaries

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

Korea Western Power Co., Ltd. and its subsidiaries

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

# The Shareholders and Board of Directors Korea Western Power Co., Ltd.

#### Opinion

We have audited the accompanying consolidated financial statements of Korea Western Power Co., Ltd. (the "Company") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2022 and 2021, and the consolidated statements of comprehensive income (loss), consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions of the Republic of Korea.

#### Basis for opinion

We conducted our audits 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 consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements of the Republic of Korea that are relevant to our audits of the consolidated financial statements, and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Emphasis of matter**

We draw attention to Note 2 to the consolidated financial statements, which describes that the Group has prepared the consolidated financial statements in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. Pursuant to its Article 2-5, the Group applies International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS") where specific accounting treatments are not prescribed by the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. There are no accounts of which accounting treatment is materially different compared to KIFRS in order for the Group to be in full compliance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. Our opinion is not modified in respect of this matter.



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

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

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

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

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

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



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

Ernst Joung Han Young

March 13, 2023

This audit report is effective as of March 13, 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 consolidated financial statements and may result in modification to this audit report.

# Korea Western Power Co., Ltd. and its subsidiaries

Consolidated financial statements for the years ended December 31, 2022 and 2021

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

Park, Hyung Duck Chief Executive Officer Korea Western Power Co., Ltd.

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Consolidated Statements of Financial Position

As of December 31, 2022 and 2021

In millions of won	Notes	2022	2021
Assets			
Cash and cash equivalents Current financial assets Trade and other receivables, net Inventories Current non-financial assets Current tax assets <b>Total current assets</b>	6,7,40 ₩ 6,7,11,12,40 6,8,40,41 13 14	83,596 109,324 1,195,533 516,490 98,553 5 2,003,501	123,724 69,389 742,348 302,905 139,478 277 1,378,121
Non-current financial assets Non-current trade and other receivables, net Property, plant and equipment, net Intangible assets, net Investments in associates and joint ventures Deferred tax assets Non-current non-financial assets <b>Total non-current assets</b>	6,9,10,11,12,40,4 6,8,40 17,19,20,43 18 16 37 14	2,399,661 9,199 8,663,623 38,684 531,821 1,846 17,163 11,661,997	469,949 14,210 8,506,011 44,456 432,234 1,706 22,398 9,490,964
Total assets	$\mathbf{W}$	13,665,498	10,869,085

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Consolidated Statements of Financial Position, Continued As of December 31, 2022 and 2021

In millions of won	Notes	2022	2021
Liabilities			
Trade and other payables Current financial liabilities Current tax liabilities Current non-financial liabilities Current provisions <b>Total current liabilities</b>	6,20,21,40,41 ₩ 6,11,22,23,40 26 25	909,927 863,209 10,173 54,545 59,480 1,897,334	562,259 845,292 2,415 58,894 183,666 1,652,526
Non-current trade and other payables Non-current financial liabilities Non-current non-financial liabilities Employee benefits obligations, net Deferred tax liabilities Total non-current liabilities Total liabilities	6,20,21,40 6,11,22,23,40 26 24,28,40 37	498,812 5,062,869 2,067 73,509 <u>658,065</u> 6,295,322 8,192,656	540,409 4,626,799 1,554 98,650 215,103 5,482,515 7,135,041
Equity		0,102,000	
Contributed capital Retained earnings Other components of equity Equity attributable to owner of the KOWEPO	27 28,29 9,11,30	1,272,898 2,562,798 1,637,158 5,472,854	1,272,898 2,323,767 137,387 3,734,052
Non-controlling interests		(12)	(8)
Total equity		5,472,842	3,734,044
Total liabilities and equity	₩.	13,665,498	10,869,085

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

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Consolidated Statements of Comprehensive Income (Loss)

For the years ended December 31, 2022 and 2021

In millions of won, except earnings per share information	Notes	2022	2021
Sales	5,31,41 ₩	8,177,379	5,001,634
Cost of sales	38,41	(7,852,774)	(4,949,450)
Gross profit		324,605	52,184
Selling and administrative expenses	32,38	(95,450)	(97,206)
Operating income (loss)		229,155	(45,022)
Other non-operating income	33	5,876	6,038
Other non-operating expenses	33	(18,838)	(10,161)
Other income (loss), net	34	104	(17,826)
Finance income	6,11,35	227,950	106,302
Finance expenses	6,11,36	(295,612)	(260,984)
Gain from associates and joint ventures, net	16	79,373	52,776
Profit (loss) before income tax	~-	228,008	(168,877)
Income tax expenses (benefits)	37	(17,734)	47,498
Profit (loss) for the year		210,274	(121,379)
Other comprehensive income, net of tax:			
Items that will never be reclassified to profit or loss	24,28,30		
Remeasurements of benefit liability, net of tax		28,743	7,711
Share in other comprehensive income of associates and joint ventures, net of tax		62	2
Net change in the non-current financial assets at fair value		1,510,609	108,602
through other comprehensive income, net of tax Items that are or may be reclassified to profit or loss	11,30		
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax		(16,534)	(963)
Foreign currency translation of foreign operations, net of tax		(6,612)	67
Share in other comprehensive income of associates and joint ventures, net of tax		12,461	9,068
Total other comprehensive income, net of tax		1,528,729	124,487
Total comprehensive income for the year		1,739,003	3,108
Profit (loss) attributable to:			
Owner of the KOWEPO		210,226	(121,378)
Non-controlling interests		48	(1)
J. J		210,274	(121,379)
Total comprehensive income attributable to:			
Owner of the KOWEPO		1,738,954	3,111
Non-controlling interests		49	(3)
		1,739,003	3,108
Earnings (loss) per share			
Basic and diluted earnings (loss) per share (in won)	39 ₩	6,308	(3,642)

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

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Consolidated Statements of Changes in Equity For the year ended December 31, 2021

In millions of won	Equity attributable to owner of the KOWEPO		_				
	-	Contributed Capital	Retained earnings	Other components of equity	Subtotal	Non- controlling interests	Total equity
Balance as of January 1, 2021	₩	1,272,898	2,437,432	20,610	3,730,940	69	3,731,009
Total comprehensive income (loss) for the year: Loss for the year		-	(121,378)	-	(121,378)	(1)	(121,379)
Net change in fair value of equity investments at fair value through other comprehensive income, net of tax		-	-	108,602	108,602	-	108,602
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax		-	-	(963)	(963)	-	(963)
Remeasurements of defined benefit liability, net of tax		-	7,711	-	7,711	-	7,711
Share in other comprehensive income of associates and joint ventures, net of tax		-	2	9,068	9,070	-	9,070
Foreign currency translation of foreign operations, net of tax		-	-	70	70	(3)	67
Transaction with owners recognized directly in equity: Capital transactions within the Group		-	-	-	-	(73)	(73)
Balance as of December 31, 2021	₩	1,272,898	2,323,767	137,387	3,734,052	(8)	3,734,044

(Continued)

### KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Consolidated Statements of Changes in Equity, Continued For the year ended December 31, 2022

In millions of won	Equity attributable to owner of the KOWEPO						
		Contributed Capital	Retained earnings	Other components of equity	Subtotal	Non- controlling interests	Total equity
Balance as of January 1, 2022 Total comprehensive income (loss) for the year:	₩	1,272,898	2,323,767	137,387	3,734,052	(8)	3,734,044
Profit for the year		-	210,226	-	210,226	48	210,274
Net change in fair value of equity investments at fair value through other comprehensive income, net of tax		-	-	1,510,609	1,510,609	-	1,510,609
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax		-	-	(16,534)	(16,534)	-	(16,534)
Remeasurements of defined benefit liability, net of tax		-	28,743	-	28,743	-	28,743
Share in other comprehensive income of associates and joint ventures, net of tax		-	62	12,461	12,523	-	12,523
Foreign currency translation of foreign operations, net of tax <b>Transaction with owners recognized directly in equity:</b>		-	-	(6,613)	(6,613)	1	(6,612)
Changes in the consolidation scope		-	-	(152)	(152)	(53)	(205)
Balance as of December 31, 2022	₩	1,272,898	2,562,798	1,637,158	5,472,854	(12)	5,472,842

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

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Consolidated Statements of Cash Flows

For the years ended December 31, 2022 and 2021

In millions of won	_	2022	2021
Cash flows from operating activities			
Profit (loss) for the year	₩	210,274	(121,379)
Adjustments for:			( ) = ( ) = ( )
Income tax expenses (benefits)		17,734	(47,498)
Depreciation		843,637	833,931
Amortization of intangible assets		7,954	6,155
Loss on disposals of property, plant and equipment, net		9,914	11,991
Loss on disposals of intangible assets, net		-	-
Retirement benefit expenses		36,233	26,119
Interest expense		146,499	130,180
Bad debt expenses		-	1,278
Other Bad debt expenses		4,473	7
Interest income		(9,244)	(4,980)
Gain on disposals of property, plant and equipment, net		(117)	(45)
Loss from associates and joint ventures		(79,373)	(52,776)
Dividend income		(103,173)	(13,612)
Gain on derivative instruments, net		(86,799)	(80,954)
Loss on foreign currency translations, net		70,631	122,532
Provisions for others		42,416	128,773
Others		45,197	(51)
Changes in:	-	945,982	1,061,050
Changes in:		(470.000)	
Current trade receivables		(472,386)	(181,065)
Non-current trade receivables		-	655
Other current receivables		88,086	5,251
Inventories Current non-financial assets		(213,347) (100,194)	(109,245) (71,864)
Non-current non-financial assets		(100,194) (906)	(2,869)
Trade payables		303,148	179,071
Other current payables		33,128	(2,794)
Other non-current payables		-	(1,410)
Current non-financial liabilities		(17,366)	17,900
Non-current non-financial liabilities		900	295
Current provisions		(41,857)	(44,887)
Payments of retirement benefit obligations		(20,795)	(13,923)
Increase in plan assets		(3,088)	(2,037)
'	_	(444,677)	(226,922)
Cash generated from operating activities	_	· · · ·	
Dividends received		64,105	19,629
Interest received		7,132	4,700
Interest paid		(156,688)	(134,373)
Income tax paid	_	(26,315)	(6,088)
Net cash inflows from operating activities	₩	599,813	596,617

### KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Consolidated Statements of Cash Flows, Continued For the years ended December 31, 2022 and 2021

In millions of won	_	2022	2021
Cash flows from investing activities			
Collection of loans	₩	1,738	1,723
Increase in loans		(1,798)	(31,952)
Net increase in short-term financial instruments		12,422	145,523
Decrease in guarantee deposits		4,531	6,498
Increase in guarantee deposits		(7,395)	(15,721)
Proceeds from disposals of investments in associates and joint		406	969
Acquisition of investments in associates and joint ventures		(15,707)	(38,626)
Proceeds from disposals of property, plant and equipment		289	783
Acquisition of property, plant and equipment		(923,297)	(694,733)
Acquisition of intangible assets		(8,041)	(12,481)
Government grants received		-	16
Disposals of non-current assets held for sale		267	175
Net cash inflow from changes in the consolidation scope	_	724	-
Net cash outflow from investing activities		(935,861)	(637,826)
Cash flows from financing activities			
Proceeds from borrowings		1,579,898	247,070
Repayment of borrowings		(1,627,643)	(97,166)
Proceeds from debentures		1,150,442	588,373
Repayment of debentures		(783,630)	(560,000)
Repayment of lease liabilities		(80,530)	(91,200)
Settlement of derivative instruments		61,722	9,839
Net cash outflow from intercompany equity transactions		-	(73)
Net cash inflow from financing activities		300,259	96,843
Net increase (decrease) in cash and cash equivalents before effect of			
exchange rate fluctuations		(35,789)	55,634
Effects of exchange rate on foreign operation's financial statements		(4,753)	73
Effects of exchange rate fluctuations on cash held		414	(75)
Net increase (decrease) in cash and cash equivalents		(40,128)	55,632
Cash and cash equivalents at the beginning of the financial year		123,724	68,092
Cash and cash equivalents at the end of the year	₩_	83,596	123,724

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

#### 1. Reporting Entity

In accordance with a restructuring plan dated January 21, 1999 for the electricity industry in the Republic of Korea, announced by the Ministry of Commerce, Industry and Energy and the Act on Promotion of Restructuring the Electric Power Industry published on December 23, 2000, Korea Western Power Co., Ltd. ("KOWEPO" or the "Company") was incorporated on April 2, 2001 through a spin-off of the power generation division of Korea Electric Power Corporation ("KEPCO"). KOWEPO and its subsidiaries (collectively referred to as the "Group" hereinafter) engage in the generation of electricity and development of electric power resources.

As of December 31, 2022, KOWEPO owns and operates three power plants with a total capacity of 11,466MW.

KOWEPO's head office is located in Taean-gun, Chungcheongnam-do, Korea. Issued capital of KOWEPO as of December 31, 2022 amounts to W166,646 million and KOWEPO's sole shareholder is KEPCO (100%).

In accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS") 1110 *Consolidated Financial Statements*, the Group's consolidated financial statements include the financial results of KOWEPO, which is the parent company, and 9 other subsidiaries ("consolidated entities") and 29 other investees which are accounted for as equity method investments.

#### 2. Basis of Preparation

#### (1) Statement of compliance

The consolidated financial statements of the Group have been prepared in accordance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions pursuant to the *Act on the Management of Public Institutions* and the *Decree on Accounting for Public Corporations and Quasi-governmental Institutions*. The Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions mandates application of KIFRS as enacted by the *Act on External Audit of Stock Companies* where specific accounting treatments are not prescribed by the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions. There are no accounts of which accounting treatment is different compared to KIFRS in order for the Group to be in full compliance with the Rules for Accounting Affairs of Public Corporations and Quasi-governmental Institutions.

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

The consolidated financial statements of the Group are approved by the board of directors on March 3, 2023, and will be finally approved at a shareholders' meeting on March 22, 2023.

#### (2) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position:

- ✓ Derivative financial instruments are measured at fair value
- ✓ Financial non-current assets at fair value through other comprehensive income are measured at fair value
- ✓ Financial assets at fair value through profit or loss are measured at fair value
- ✓ Liabilities for defined benefit plans are recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets

#### 2. Basis of Preparation, Continued

#### (3) Functional and presentation currency

These consolidated financial statements are presented in Korean won, which is the KOWEPO's functional currency and the currency of the primary economic environment in which the Group operates.

#### (4) Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with KIFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

#### 1) The judgment of management

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is included in the following note.

✓ Note 15 : Scope of consolidation - whether the Group has de facto control over an investee

#### 2) The uncertainty of assumptions and estimates

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next fiscal year are included in the following notes:

- ✓ Note 24 : Measurement of defined benefit obligations key actuarial assumptions
- ✓ Notes 25 and 44 : Recognition and measurement of provisions and contingencies key assumptions about the likelihood and magnitude of an outflow of resources
- ✓ Note 40 : Non-current financial assets at fair value through other comprehensive income significant unobservable input

#### 3) Measurement of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. The Group has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the CFO.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of KIFRS, including the level in the fair value hierarchy in which such valuations should be classified.

#### 2. Basis of Preparation, Continued

(4) Use of estimates and judgments, Continued

#### 3) Measurement of fair values, Continued

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows.

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

If the inputs used to measure the fair value of an asset or a liability are categorized in different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. The Group recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in the following note:

✓ Note 40 : Risk management

#### 3. Changes in accounting policies

#### (1) New and amended standards adopted by the Group

The Group has adopted the following new standards and amendments to standards, including any consequential amendments to other standards, with a date of initial application of January 1, 2022.

#### 1) Amendments to KIFRS 1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities qualify for recognition in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of KIFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*, and KIFRS Interpretation 2121 *Levies.* The amendments also confirm that contingent assets should not be recognized at the acquisition date. The amendment does not have a significant impact on the consolidated financial statements.

#### 2) Amendments to KIFRS 1016 Property, Plant and Equipment - Proceeds before intended use

The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, the entity will recognize the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendment does not have a significant impact on the consolidated financial statements.

#### 3. Changes in accounting policies, Continued

(1) New and amended standards adopted by the Group, Continued

3) Amendments to KIFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets* - Onerous Contracts : Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendment does not have a significant impact on the consolidated financial statements.

#### 4) Annual improvements to KIFRS 2018-2020

Annual improvements of KIFRS 2018-2020 Cycle should be applied for annual periods beginning on or after January 1, 2022. The amendment does not have a significant impact on the consolidated financial statements.

- ✓ KIFRS 1101 First time Adoption of Korean International Financial Reporting Standards Subsidiaries that are first-time adopters
- ✓ KIFRS 1109 *Financial Instruments* Fees related to the 10% test for derecognition of financial liabilities
- ✓ KIFRS 1116 *Leases* Lease incentives
- ✓ KIFRS 1041 *Agriculture* Measuring fair value

#### (2) New standards and interpretations not yet adopted by the Group

The following new accounting standards and interpretations have been issued but not yet effective and have not been early adopted by the Group for the year ended December 31, 2022.

# 1) Amendments to KIFRS 1001 *Presentation of Financial Statements* - Classification of Liabilities as Current or Non-current

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability include the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted. The Group is in review for the impact of these amendments on the consolidated financial statements.

#### 2) KIFRS 1001 Presentation of Financial Statements - Disclosure of Accounting Policies

The amendments define and require entities to disclose their material accounting policies. The IASB amended IFRS Practice Statement 2 Disclosure of Accounting Policies to provide guidance on how to apply the concept of materiality to accounting policy disclosures. The amendments are effective for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group is in review for the impact of these amendments on the consolidated financial statements.

#### 3. Changes in accounting policies, Continued

(2) New standards and interpretations not yet adopted by the Group, Continued

# 3) KIFRS 1008 *Accounting Policies, Changes in Accounting Estimates and Errors* - Definition of Accounting Estimates

The amendments define accounting estimates and clarify how to distinguish them from changes in accounting policies. The amendments are effective for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

#### 4) KIFRS 1012 Income Taxes - Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments include an additional condition to the exemption to initial recognition of an asset or liability that a transaction which does not give rise to equal taxable and deductible temporary differences at the time of the transaction. The amendments are effective for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

# 5) KIFRS 1001 *Presentation of Financial Statements* - Disclosure of gain or loss on valuation of financial liabilities subject to adjustment of exercise price

If the entire or a part of financial instrument, exercise price of which is subject to change due to the issuer's share price, is classified as a financial liability, the carrying amount of the financial liability and related gains and losses shall be disclosed. The amendments are effective for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the consolidated financial statements.

#### 4. Significant Accounting Policies

The significant accounting policies applied by the Group in preparation of its consolidated financial statements are included below. The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements, except those as described in Note 3.

#### (1) Consolidation

#### 1) Business combinations

Business combinations are accounted for by applying the acquisition method, except for combinations of business entities or businesses that are under the same control.

The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment. Any gain on a bargain purchase is recognized in profit or loss immediately. Transaction costs are expensed as incurred, except if related to the issue of debt or equity securities. The costs to issue debt or equity securities are recognized in accordance with KIFRS 1032, *Financial Instruments: Presentation* and KIFRS 1109, *Financial Instruments: Recognition and Measurement*.

The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognized in profit or loss.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity.

Otherwise, subsequent changes in the fair value of the contingent consideration are recognized in profit or loss.

If share-based payment awards (replacement awards) are required to be exchanged for awards held by the acquiree's employees (acquiree's awards), then all or a portion of the amount of the acquirer's replacement awards is included in measuring the consideration transferred in the business combination. This determination is based on the market-based measure of the replacement awards compared with the market-based measure of the acquiree's awards relate to pre-combination service.

#### 2) Non-controlling interests

NCI are measured at their proportionate share of the acquiree's identifiable net assets at the date of acquisition.

Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

#### 4. Significant Accounting Policies, Continued

(1) Consolidation, Continued

#### 3) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

#### 4) Loss of control

When the Group loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, and any related NCI and other components of equity. Any resulting gain or loss is recognized in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

#### 5) Interests in equity-accounted investees

The Group's interests in equity-accounted investees comprise interests in associates and joint ventures.

Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and joint ventures are accounted for using the equity method. They are recognized initially at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and OCI of equity-accounted investees, until the date on which significant influence or joint control ceases.

#### 6) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

#### 7) Business combination under common control

For business combinations arising from transfers of interests in the entities that are under common control, the assets and liabilities acquired are recognized at the carrying amounts recognized previously in the Group controlling shareholder's consolidated financial statements. The components of equity of the acquired entities are presented in the same components within the Group's equity except that any contributed capital of the acquired entities is recognized as part of share premium.

#### (2) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of three months or less from the acquisition date that are subject to an insignificant risk of changes in their fair value, and are used by the Group in the management of its short-term commitments.

#### 4. Significant Accounting Policies, Continued

#### (3) Inventories

The cost of inventories is based on the moving average principle, and includes expenditures for acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. In the case of manufactured inventories and work in progress, cost includes an appropriate share of production overheads based on normal operating capacity.

Inventories are measured at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, are recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

#### (4) Non-derivative financial assets

#### 1) Recognition and initial measurement

Trade receivable and issued debt securities are initially recognized at the time of issue. Other financial assets or financial liabilities are recognized at the time of the Group became a contracting party.

Except for trade receivables that do not contain significant financing components, financial assets or financial liabilities are measured at fair value at the time of first recognition. Financial assets in case of not financial asset or financial liability at fair value through profit or loss, the transaction costs directly related to the issue are added or subtract to fair value. Trade receivables that do not contain significant financing components are measured at transaction price.

#### 2) Classification and subsequent measurement

Financial assets are measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL) when initially recognized.

Financial assets are not reclassified unless there is a change in business model. If the Group changes a business model, all financial assets are reclassified at the time of first reporting period after the change.

Financial assets are measured at amortized cost if they meet both of the following conditions and are not designated as at fair value through profit or loss (FVTPL):

- It is held within a business model that is intended to collect contractual cash flows.

- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Debt instruments are measured at fair value through other comprehensive income (FVOCI) if they meet both of the following conditions and are not designated as at fair value through profit or loss (FVTPL):

- It is held within a business model that is achieved by both collecting contractual cash flows and selling financial assets.

- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity instrument that is not held for trading, the Group may irrevocably elect to present subsequent changes in the fair value of that investment in other comprehensive income. This election is made by investment-by-investment basis.

#### 4. Significant Accounting Policies, Continued

(4) Non-derivative financial assets, Continued

#### 2) Classification and subsequent measurement, Continued

As described above, financial assets not measured at amortized cost or at fair value through other comprehensive income (FVOCI) are measured at fair value through profit or loss (FVTPL). This includes all derivative financial assets. On initial recognition, the Group may irrevocably designate a financial asset that otherwise meets the measurement requirements to be measured at amortized cost or at fair value through other comprehensive income (FVOCI) as at fair value through profit or loss (FVTPL) if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

The Group evaluates the objectives of business model in which financial assets are held at a portfolio level because this best reflects the way the business is managed and information is provided to management. This information considered includes:

- Stated accounting policies and objective about portfolio and the operation of these policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets;

- How the performance of the portfolio is evaluated and reported to the Group's management

- The risk that affects the performance of the business model (and the financial assets held within that business model) and, in particular, how those risks are managed

- Compensation to management (e.g. based on the fair value of the assets being managed or on the basis of the contractual cash flows being received)

- The frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity. For this purpose, transfers of financial assets to third parties in transactions that do not meet the derecognizing requirements are not considered for sale.

A portfolio of financial assets that meets the definition of trading or whose performance is valued at fair value through profit or loss is measured at fair value through profit or loss.

Financial assets: An assessment of whether contractual cash flows are solely payments of principal and interest

The principal is defined as the fair value at the initial recognition of the financial assets. Interest is comprised of time value of money, value for the credit risk associated with principal and another cost of basic lending risk and margin.

When assessing whether contractual cash flows consist solely of payments for principal and interest, the Group takes into account contractual terms. If the financial assets include contractual terms that change the timing or amount of cash flows in the contract, it is necessary to determine whether the cash flows that may occur during the period of the financial assets consist solely of principal payments.

The Group considers the followings:

- Conditions that change the amount or timing of cash flows
- Provision to adjust contractual nominal interest rate, including variable interest rate characteristics
- Characteristics of repayment and maturity extension.
- Terms that limit the Group's claim to cash flows arising from a particular asset

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable compensation for early termination of the contract.

#### 4. Significant Accounting Policies, Continued

(4) Non-derivative financial assets, Continued

#### 2) Classification and subsequent measurement, Continued

Additionally, for a financial asset acquired at a discount or premium to its contractual par value, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

Financial assets at fair value through profit or loss (FVTPL)	These assets are subsequently measured at fair value. Net gain or loss, including interest and dividend income, is recognized in profit or loss. Please refer to Note 4. (5) for derivatives designated as hedging instruments.
Financial assets at amortized cost	These assets are subsequently measured at amortized cost using the effective interest method. Amortized cost is reduced by impairment loss. Interest income, foreign currency translation gains and losses and impairment are recognized in profit or loss. The gain or loss on derecognition is also recognized in profit or loss.
Financial liabilities at fair value through other comprehensive income (FVOCI)	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method and foreign currency translation gains and losses are recognized in profit or loss. Other net gain or loss is recognized in other comprehensive income. The gain or loss accumulated in other comprehensive income is reclassified to profit or loss on derecognition.
Equity instruments at fair value through other comprehensive income (FVOCI)	These assets are subsequently measured at fair value. Dividends are recognized in profit or loss if the dividends do not clearly represent collection of investment costs. Other net gain or loss is recognized in other comprehensive income and is never reclassified to profit or loss.

#### 3) Derecognition of financial assets

The Group derecognizes non-derivative financial assets when the contractual rights to the cash flows from the financial asset expire, or the Group transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in a transferred financial asset that is created or retained by the Group is recognized as a separate asset or liability.

If the Group retains substantially all the risks and rewards of ownership of the transferred financial assets, the Group continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

#### 4. Significant Accounting Policies, Continued

(4) Non-derivative financial assets, Continued

#### 4) Offsetting a financial asset and a financial liability

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated statement of financial position only when the Group currently has a legally enforceable right to offset the recognized amounts, and there is the intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

#### (5) Derivative financial instruments, including hedge accounting

The Group holds derivative financial instruments to hedge foreign exchange and interest rate exposures. An embedded derivative, if a host contract is not a financial asset and meets specified conditions, is accounted for separately from the host.

Derivatives are measured at fair value at initial recognition. It is measured at fair value after initial recognition, and the change is generally recognized in profit or loss.

The Group designates specific derivatives as hedging instruments to hedge the variability of cash flows associated with highly probable future forecast transactions arising from changes in exchange rates and interest rates.

At the inception of the hedge, the Group documents the purpose and strategy of risk management to perform the hedge. The Group documents the economic relationship between the hedged item and the hedging instrument, including whether changes in the cash flows of the hedged item and the hedging instrument are expected to be offset by each other.

#### Cash flow hedge

When derivatives are designated as cash flow hedging instruments, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income, net of tax, and presented in the hedging reserve in equity. The effective portion of changes in the fair value of the derivatives which recognized in other comprehensive income is limited to cumulated changes in fair value of hedged item from inception of the hedge determined based on the present value. Any ineffective portion of changes in the fair value of the fair value of the derivative is recognized immediately in profit or loss.

The Group designates only changes in the fair value of the spot element of future exchange transactions as a hedging instrument in cash flow hedge relationship. The change in the fair value of the forward element ('forward point') of future exchange transaction is accounted for separately as cost of hedging and recognized in cost of hedging of equity.

If a hedged forecast transaction subsequently results in the recognition of a non-financial asset such as inventories, the Group removes that amount from the cash flow hedge reserve and includes it directly in the initial cost of the assets upon the recognition.

For other forecast transaction, the cumulated cash flow hedge reserves and costs of hedging are reclassified to profit or loss as a reclassification adjustment in the same period or periods during which the hedged expected future cash flows affect profit or loss.

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively.

#### 4. Significant Accounting Policies, Continued

#### (5) Derivative financial instruments, including hedge accounting, Continued

If the hedging transaction is a transaction which recognizes non-financial items, in case the hedging accounting is discontinued, cumulated hedging reserves and cost of hedging are left in equity items until that amount is included in the cost of non-financial items when they are initially recognized. For other cash flow hedging transaction not covered in this case, cash flow hedge reserves and cost of hedging are reclassified to profit or loss as a reclassification adjustment in the periods during which the hedged expected future cash flows affect profit or loss.

If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in the hedging reserve and the cost of hedging reserve are immediately reclassified to profit or loss.

#### (6) Impairment of financial assets

#### 1) Financial assets and contract assets

The Group recognizes loss allowance for expected credit losses on the following assets.

- Amortized cost of a financial asset

The Group measures loss allowance for expected credit losses, except for the following financial assets measured at the expected credit loss of 12 months.

- Debt securities whose credit is determined to be at low risk at the end of the reporting period

- Other debt securities and bank deposits that do not have a significant increase in credit risk (i.e. default risk arising over the expected life of the financial asset)

The Group has chosen to measure the loss allowance at an amount equal to lifetime expected credit losses for the trade receivables, contract assets and lease receivables that contain a significant financing component.

When determining whether the credit risk of a financial asset has significantly increased since the initial recognition and when estimating expected credit losses, the Group considers information that can be used and reasonably supported, without undue cost or effort.

#### 2) Measurement of expected credit loss

Expected credit loss is a probability weighted estimate of credit loss. Credit loss is measured as the present value of all cash deficiency (i.e. the difference between all contract cash flows that are expected to be paid and all contract cash flows that are expected to be received). Expected credit losses are discounted at the effective interest rate of the financial asset.

#### 3) Credit-impaired financial assets

At the end of each reporting period, the Group assesses the financial assets measured at amortized cost and other comprehensive income - whether the creditworthiness of the debt securities measured at fair value has been impaired. If there is more than one event that adversely affects the estimated future cash flows of a financial asset, the financial asset is impaired.

The evidence that the credit of a financial asset is impaired includes the following observable information:

- Significant financial difficulties of issuer or borrower

- Breach of contract, such as default or delinquency

- Inevitable mitigation of initial borrowing conditions for economic or contractual reasons related to the borrower's financial difficulties

- Possibility of bankruptcy of borrowers or other possibility of financial restructuring

- Due to financial difficulties, the active market for the financial assets is extinguished

- 4. Significant Accounting Policies, Continued
  - (6) Impairment of financial assets, Continued

#### 4) Presentation of provision for credit loss on statement of financial position, Continued

The allowance for losses on financial assets measured at amortized cost is deducted from the carrying amount of the asset.

For debt measured at fair value through other comprehensive income, the allowance for losses is recognized in other comprehensive income instead of reducing the carrying amount of the asset.

#### 5) Write-off

If an entity does not reasonably expect to recover all or part of the contractual cash flows of a financial asset, the asset is derecognized. For individual customers, on the basis of their past experience with the recovery of similar assets, the Group removes the carrying amount if the financial asset is determined to be impaired, evaluates whether there is a reasonable expectation for the recovery of the entity's customers, and evaluates the timing and amount separately. The Group has no expectation that the proceeds will be recovered significantly. However, any financial assets that are derecognized may be subject to recovery activities in accordance with the Group's procedures for recovering the amount due.

#### (7) Property, plant and equipment

Property, plant and equipment are initially measured at cost and after initial recognition and are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent to initial recognition, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of property, plant and equipment at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Property, plant and equipment, except for land, are depreciated on a straight-line basis over estimated useful lives that appropriately reflect the pattern in which the asset's future economic benefits are expected to be consumed. A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognized in profit or loss.

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

#### 4. Significant Accounting Policies, Continued

#### (7) Property, plant and equipment, Continued

The estimated useful lives of the Group's assets are as follows:

_	Useful lives (years)
Puildingo	8 ~ 30
Buildings	8 ~ 30
Structures Machinery	6 ~ 24
Vehicles	4
Right-of-use assets	2~30
Other property, plant and equipment ("the other PP&E")	4
Other property, plant and equipment ( the other FRAE )	4

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

#### (8) Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which club memberships are expected to be available for use, this intangible asset is determined as having indefinite useful lives and not amortized.

	Useful lives (years)
Computer software	5
Development costs	5
Leasehold rights	8 ~ 10
Others	5 ~ 20

Amortization periods and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. The useful lives of intangible assets that are not being amortized are reviewed at the end of each reporting period to determine whether events and circumstances continue to support indefinite useful life assessments for those assets. Changes are accounted for as changes in accounting estimates.

#### 1) Research and development

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

#### 4. Significant Accounting Policies, Continued

(8) Intangible assets, Continued

#### 2) Subsequent expenditures

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

#### (9) Borrowing costs

The Group capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Other borrowing costs are recognized in expense as incurred. A qualifying asset is an asset that requires a substantial period of time to get ready for its intended use or sale. Financial assets and inventories that are manufactured or otherwise produced over a short period of time are not qualifying assets. Assets that are ready for their intended use or sale when acquired are not qualifying assets.

To the extent that the Group borrows funds specifically for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. The Group immediately recognizes other borrowing costs as an expense. To the extent that the Group borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the Group shall determine the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate shall be the weighted average of the borrowing costs applicable to the borrowings of the Group that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that the Group capitalizes during a period shall not exceed the amount of borrowing costs incurred during that period.

#### (10) Government grants

Government grants are not recognized unless there is reasonable assurance that the Group will comply with the grant's conditions and that the grant will be received.

Government grants whose primary condition is that the Group purchases, constructs or otherwise acquires long-term assets are deducted in calculating the carrying amount of the asset. The grant is recognized in profit or loss over the life of a depreciable asset as a reduction to depreciation expense.

Government grants which are intended to compensate the Group for expenses incurred shall be recognized as other income in profit or loss over the periods in which the Group recognizes the related costs as expenses.

#### (11) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than assets arising from employee benefits, inventories, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

#### 4. Significant Accounting Policies, Continued

#### (11) Impairment of non-financial assets, Continued

The Group estimates the recoverable amount of an individual asset, if it is impossible to measure the individual recoverable amount of an asset, then the Group estimates the recoverable amount of cash-generating unit ("CGU"). A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pre-tax discount rate that reflect current market assessments of the time value of money and the risks specific to the asset or CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

Goodwill acquired in a business combination is allocated to each CGU that is expected to benefit from the synergies arising from the goodwill acquired. Any impairment identified at the CGU level will first reduce the carrying value of goodwill and then be used to reduce the carrying amount of the other assets in the CGU on a pro rata basis. Except for impairment losses in respect of goodwill which are never reversed, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

#### (12) Leases

#### 1) Right-of-use assets

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

#### 2) Lease liabilities

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

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

#### 4. Significant Accounting Policies, Continued

(12) Leases, Continued

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

The Group has elected to apply the practical expedient of not recognizing right-of-use assets and lease liabilities for the short-term leases with a lease term of less than 12 months and leases of low-value assets, including IT-equipment. 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.

#### (13) Non-current assets held for sale

Non-current assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than through continuing use, are classified as held for sale. In order to be classified as held for sale, the asset (or disposal group) must be available for immediate sale in its present condition and its sale must be highly probable. The assets or disposal group that are classified as non-current assets held for sale are measured at the lower of their carrying amount and fair value less cost to sell.

A non-current asset that is classified as held for sale or part of a disposal group classified as held for sale is not depreciated (or amortized).

#### (14) Non-derivative financial liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

#### 1) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

#### 2) Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

#### 3) Elimination of financial liabilities

The Group derecognizes a financial liability from the consolidated statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires). If the contractual terms of the financial liability have changed and the cash flows have changed substantially, the Group will derecognize the existing liability and recognize the new financial liability at fair value on the basis of the new contract.

On derecognition of a financial liability, the difference between the carrying amount and the consideration paid (including transferred non-cash assets or liabilities assumed) is recognized in profit or loss.

#### 4. Significant Accounting Policies, Continued

#### (15) Employee benefits

#### 1) Short-term employee benefits

Short-term employee benefits are employee benefits that are due to be settled within 12 months after the end of the period in which the employees render the related service. When an employee has rendered service to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service.

#### 2) Other long-term employee benefits

Other long-term employee benefits include employee benefits that are settled beyond 12 months after the end of the period in which the employees render the related service and are calculated at the present value of the amount of future benefit that employees have earned in return for their service in the current and prior periods, less the fair value of any related assets. Remeasurements are recognized in profit or loss in the period in which they arise.

#### 3) Retirement benefits: defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The fair value of plan assets is deducted. The calculation is performed annually by an independent actuary using the projected unit credit method.

The discount rate is the yield at the reporting date on corporate bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The Group recognizes all actuarial gains and losses arising from actuarial assumption changes and experiential adjustments in other comprehensive income when incurred.

When the fair value of plan assets exceeds the present value of the defined benefit obligation, the Group recognizes an asset, to the extent of the total of cumulative unrecognized past service cost and the present value of any economic benefits available in the form of refunds from the plan or reduction in the future contributions to the plan.

Past service costs which are the change in the present value of the defined benefits obligation for employee service in prior periods, resulting in the current period from the introduction of, or change to post-employment benefits, is recognized as an expense on a straight-line basis over the average period until the benefits become vested. To the extent that the benefits are already vested immediately following the introduction of, or changes to, a defined benefit plan, the Group recognizes the past service cost immediately.

#### 4. Significant Accounting Policies, Continued

#### (16) Provisions

Provisions are recognized when the Group has a present legal or constructive obligation 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.

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

Where some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement shall be recognized when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement shall be treated as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimates. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

#### (17) Foreign currencies

#### 1) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency using the reporting date's exchange rate. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currencies that the fair value was determined.

Foreign currency differences arising on retranslation of monetary items are recognized in profit or loss, except for differences arising on the retranslation of monetary items at settlement, translation of foreign operations, or a financial liability designated as cash flow hedges, which are recognized in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

#### 2) Foreign operations

If the presentation currency of the Group is different from a foreign operation's functional currency, the financial statements of the foreign operation are translated into the presentation currency using the following methods:

The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy, are translated to presentation currency at exchange rates at the reporting date. The income and expenses of foreign operations are translated to functional currency at exchange rates at the dates of the transactions. Foreign currency differences are recognized in other comprehensive income.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation is treated as assets and liabilities of the foreign operation. Thus, they are expressed in the functional currency of the foreign operation and translated at the closing rate.

#### 4. Significant Accounting Policies, Continued

(17) Foreign currencies, Continued

#### 2) Foreign operations, Continued

When a foreign operation is disposed of, the relevant amount in the translation is transferred to profit or loss as part of the profit or loss on disposal. On the partial disposal of a subsidiary that includes a foreign operation, the relevant proportion of such cumulative amount is reattributed to non-controlling interest. In any other partial disposal of a foreign operation, the relevant proportion is reclassified to profit or loss.

#### 3) Translation of net investments on foreign operations

Foreign exchange gains or losses arising from a monetary item receivable from or payable to a foreign operation, the settlement of which is neither planned nor likely to occur in the foreseeable future and which in substance is considered to form part of the net investment in the foreign operation, are recognized in other comprehensive income in the translation reserve.

#### (18) Equity capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issuance of ordinary shares and share options are recognized as a deduction from equity, net of any tax effects.

Preferred shares are classified as equity if they are not required to be redeemed or redeemed only at the Group's decision and the payment of dividends is determined on the discretion of the Group. Dividend is recognized when it is approved at the shareholders' meeting. Preferred shares that are eligible for collection of determined or determinable amount on or after a specified date or preferred shares to be mandatorily redeemed are classified as liabilities. Related dividends are recognized in profit or loss at the point in time of occurrence as interest expenses.

When the Group repurchases its contributed capital, the amount of the consideration paid is recognized as a deduction from equity and classified as treasury shares. The profits or losses from the purchase, disposal, reissue, or retirement of treasury shares are not recognized as current profit or loss. If the Group acquires and retains treasury shares, the consideration paid or received is directly recognized in equity.

#### (19) Revenue from contracts with customers

In accordance with KIFRS 1115 *Revenue from Contracts with Customers*, the Group recognizes revenue by applying the five-step approach (Step 1: Identify the contract(s) with a customer, Step 2: Identify the performance obligations in the contract, Step 3: Determine the transaction price, Step 4: Allocate the transaction price to the performance obligations in the contract, and Step 5: Recognize revenue when the entity satisfied a performance obligation). Revenue is measured based on the consideration set forth in the contract with the customer, excluding amounts collected on behalf of third parties. The Group also recognizes revenue when control of a good or service transfers to a customer.

#### 1) Identification of performance obligations in the contract

The Group aims to develop and operate electric power resources, power generation, transmission, conversion, distribution, and related operations.

On the other hand, the power supply is identified as a single performance obligation as a series of distinct goods or services. In addition to the power supply, the Group also performs power generation by-products, O&M and others through contracts with customers and identifies performance obligations that are distinct from each contract.

#### 4. Significant Accounting Policies, Continued

#### (19) Revenue from contracts with customers, Continued

#### 2) Variable consideration

Consideration received from customers according to contracts with customers may include variable amount. The Group estimates the variable consideration using an expected value method that it expects to better predict the consideration to be entitled to and recognizes revenue by including variable consideration in the transaction price only to those amounts that are highly probable of not reversing a significant portion of the cumulative revenue recognized when the uncertainty associated with the variable consideration is resolved.

#### 3) Performance obligations satisfied over time

The Group provides customers with services such as EPC business and O&M over time. The Group recognizes revenue based on the progress made on a reasonable basis.

The Group may recognize revenue on a percentage-of-completion basis when the Group meets one of following criteria:

- the customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs

- the entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced; or

- the entity's performance does not create an asset with an alternative use to the entity and the entity has an enforceable right to payment for performance completed to date.

#### 4) Allocation of transaction price to performance obligations

The Group allocates the transaction price to a number of performance obligations identified in a single contract on a relative stand-alone selling price basis, and this allocation has no significant impact on the Group's revenue.

#### (20) Finance income and finance expenses

The Group's finance income and finance expenses consist of:

- Interest income
- Interest expenses
- Dividend income
- Net gain or loss on financial assets at fair value through profit or loss
- Foreign exchange gains and losses on financial assets and financial liabilities
- Impairment losses (or reversals of impairment losses) arising from investments in debt instruments at amortized cost or fair value through other comprehensive income
- Hedge ineffectiveness recognized in profit or loss
- Reclassified net gain or loss previously recognized in other comprehensive income under cash-flow hedging accounting for interest risk and foreign exchange risk on borrowings

Interest income or interest expense was recognized using the effective interest rate method. Dividend income is recognized when the Group is entitled to the dividend.

The 'effective interest rate' is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to the gross carrying amount of the financial asset or the amortized cost of the financial liability.

#### 4. Significant Accounting Policies, Continued

#### (20) Finance income and finance expenses, Continued

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortized cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortized cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

#### (21) Income taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

#### 1) Current tax

Current tax is the expected tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the end of the reporting period and any adjustment to tax payable in respect of previous years. The taxable profit is different from the accounting profit for the year since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit (tax loss) of future periods, and non-taxable or non-deductible items from the accounting profit.

Current tax asset and current tax liability are offset only when the following conditions are met:

- The Group legally holds an enforceable right to offset the recognized amount, and
- Has an intention to settle in a net amount or settle the liability while realizing the asset.

#### 2) Deferred tax

Deferred tax is recognized, using the asset-liability method, in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. A deferred tax liability is recognized for all taxable temporary differences. A deferred tax asset is recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which they can be utilized. However, deferred tax is not recognized for the following temporary differences: taxable temporary differences arising on the initial recognition of goodwill, or the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit or loss nor taxable income.

When future taxable income that tax deficit, tax deduction, and deductible temporary differences can be used is probable, within this scope, deferred tax assets are recognized for unused tax deficit and tax credit carry-forwards, and deductible temporary differences. The future taxable income is determined by the reversal of the temporary difference to be added. If the temporary difference to be added is not sufficient to fully recognize the deferred tax asset, the reversal of current temporary differences and the business plan of the subsidiaries of the Group are considered.

The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. Deferred tax assets or deferred tax liabilities on investment properties measured at fair value, unless any contrary evidence exists, are measured using the assumption that the carrying amount of the property will be recovered entirely through sale.

#### 4. Significant Accounting Policies, Continued

(21) Income taxes, Continued

#### 2) Deferred tax, Continued

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and reduces the carrying amount to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

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

#### (22) Earnings(loss) per share

KOWEPO presents basic and diluted earnings(loss) per share data for its ordinary shares. Basic earnings(loss) per share is calculated by dividing profit(loss) attributable to ordinary shareholders of KOWEPO by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

#### (23) Greenhouse gas emission rights and obligations

With the enforcement of the *Act on the Allocation and Trading of Greenhouse-Gas Emissions Permits* in 2015, the Group applies the following accounting policies for emissions rights and obligations.

#### 1) Emissions rights

Greenhouse gas emissions rights consist of the allowances received free of charge from the government and the ones purchased. The cost of the emissions rights includes expenditures arising directly from the acquisition and any other costs incurred during normal course of the acquisition.

Emissions rights are held by the Group to fulfill the legal obligation and recorded as intangible assets. To the extent that the portion to be submitted to the government within one year from the end of reporting period, the emissions rights are classified as current assets. Emissions rights recorded as intangible assets are initially measured at cost and substantially remeasured at cost less accumulated impairment losses.

Greenhouse gas emission rights are derecognized on submission to the government or when no future economic benefits are expected from its use or disposal.

#### 2) Emissions obligations

Emissions obligations are the Group's present legal obligation to submit the emissions allowances to the government and recognized when an outflow of resources is probable and a reliable estimate can be made of the amount of the obligation. Emissions obligations are measured as the sum of the carrying amount of the allocated rights that will be submitted to the government and the best estimate of expenditure required to settle the obligation at the end of the reporting period for any excess emission.

## 5. Operating Segment

Group did not disclose separate business segment information because the reporting segment in accordance with KIFRS 1108 *Operating Segments* corresponds to a single segment. Sales attributable to KEPCO, the major customer, are W8,033,556 million and W4,923,422 million for the years ended December 31, 2022 and 2021, respectively.

## 6. Classification of Financial Instruments

(1) Classification of financial assets as of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

		Financial assets at fair value through profit or loss	Financial assets at amortized cost	Financial assets at fair value through other comprehensive income	Derivative assets (applying hedge accounting)	Total
Current financial assets:						
Cash and cash equivalents	₩	-	83,596	-	-	83,596
Current financial assets Loans and receivables Short-term financial		-	6,248	-	-	6,248
instruments		-	43,169	-	-	43,169
Derivative assets		-	-	-	59,907	59,907
Trade and other receivables, net		-	1,195,533	-	-	1,195,533
			1,328,546		59,907	1,388,453
Non-current financial assets: Non-current financial assets Non-current financial assets at fair value through other comprehensive		-	_	2,283,318	-	2,283,318
income Non-current financial assets at fair value		7,412	-	-	-	7,412
through profit or loss			C1 400			C1 420
Loans and receivables Non-current derivative assets		-	61,429 -	-	47,502	61,429 47,502
Non-current trade and other receivables, net		-	9,199	-	-	9,199
		7,412	70,628	2,283,318	47,502	2,408,860
	₩	7,412	1,399,174	2,283,318	107,409	3,797,313

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

#### Classification of Financial Instruments, Continued 6.

(1) Classification of financial assets as of December 31, 2022 and 2021 are as follows, Continued:

(ii) As of December 31, 2021

		Financial assets at fair value through profit or loss	Financial assets at amortized cost	Financial assets at fair value through other comprehensive income	Derivative assets (applying hedge accounting)	Total
Current financial assets:						
Cash and cash	₩		100 704			100 704
equivalents Current financial assets	<del>VV</del>	-	123,724	-	-	123,724
Loans and receivables Short-term financial		-	5,222	-	-	5,222
instruments		-	54,793	-	-	54,793
Derivative assets		-	-	-	9,374	9,374
Trade and other receivables, net		_	742,348	_	_	742,348
receivables, net			926,087		9,374	935,461
Non-current financial assets: Non-current financial assets						
Non-current financial assets at fair value through other comprehensive income Non-current financial		-	-	319,364	-	319,364
assets at fair value through profit or loss		7,412	-	-	-	7,412
Loans and receivables		-	63,984	-	-	63,984
Non-current derivative assets		-	-	-	79,188	79,188
Non-current trade and other receivables, net		-	14,210	-	-	14,210
		7,412	78,194	319,364	79,188	484,158
	₩	7,412	1,004,281	319,364	88,562	1,419,619

## 6. Classification of Financial Instruments, Continued

(2) Classification of financial liabilities as of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won	-	Financial liabilities at fair value through profit or loss	Financial liabilities recognized at amortized cost	Derivative liabilities (applying hedge accounting)	Total
Current financial liabilities:					
	₩	-	909,927	-	909,927
Current financial liabilities					
Borrowings		-	59,777	-	59,777
Debentures		-	799,904	-	799,904
Derivative liabilities	_	3,527	-	-	3,527
	-	3,527	1,769,608	-	1,773,135
Non-current financial liabilities:	-		<u> </u>		<u> </u>
Non-current trade and other payables		-	498,812	-	498,812
Non-current financial liabilities					
Borrowings		-	88,642	-	88,642
Debentures		-	4,964,163	-	4,964,163
Non-current derivative liabilities		-	-	10,064	10,064
	-	-	5,551,617	10,064	5,561,681
لا	₩	3,527	7,321,225	10,064	7,334,816
	=	<u> </u>	<u> </u>	<u> </u>	<u> </u>

# (ii) As of December 31, 2021

In millions of won		Financial liabilities at fair value through profit or loss	Financial liabilities recognized at amortized cost	Derivative liabilities (applying hedge accounting)	Total
Current financial liabilities:					
Trade and other payables Current financial liabilities	₩	-	562,259	-	562,259
Borrowings		-	100,348	-	100,348
Debentures		-	744,894	-	744,894
Derivative liabilities		50	-	-	50
		50	1,407,501	-	1,407,551
Non-current financial liabilities:					
Non-current trade and other payables Non-current financial liabilities		-	540,409	-	540,409
Borrowings		-	49,934	-	49,934
Debentures			4,576,865		4,576,865
			5,167,208		5,167,208
	₩	50	6,574,709		6,574,759

## 6. Classification of Financial Instruments, Continued

(3) Classification of comprehensive income (loss) from financial instruments for the years ended December 31, 2022 and 2021 are as follows:

In millions of won Type	Description		2022	2021
Financial assets at	Interest income	₩	9,244	4,980
amortized cost	Gain (loss) on foreign currency transactions and translations, net		5,087	(3,647)
Financial assets at fair value through other	Gain on valuation of derivative instruments, net (equity, before tax)		1,963,95 4	143,274
comprehensive income	Dividend income		103,173	13,612
Financial assets at fair	Loss on valuation of derivative instruments, net		(3,527)	(50)
value through profit or loss	Gain on transactions of derivative instruments, net		7,647	2,878
Fair value hedge derivative assets	Gain on change in the unrealized fair value of derivative instruments, net		34,130	71,128
	Loss on valuation of derivative instruments, net (equity, before tax)		(21,717)	(1,271)
	Gain on transaction of derivative instruments, net		48,549	6,998
Financial liabilities	Loss on foreign currency transactions and translations, net		(146,050)	(122,493)
recorded at amortized cost	Interest expense of borrowings and debentures Interest expense of lease liabilities		(134,004) (12,441)	(117,953) (11,815)
	Other interest expense		(12,441) (53)	(412)

## 7. Cash and Cash Equivalents and Short-term financial instruments

(1) Cash and cash equivalents as of December 31, 2022 and 2021 are as follows:

In millions of won

		2022	2021
Cash	₩	1	1
Other demand deposits		83,182	123,229
Short-term financial instruments classified as cash			
equivalents		413	494
	₩	83,596	123,724

(2) Short-term financial instruments restricted in use as of December 31, 2022 and 2021 are as follows:

In millions of won

		2022	2021
Short-term financial instruments (*1) Cash and cash equivalents (*2)	₩	40,000 4,648	50,000
	₩	44,648	50,000

(\*1) Restriction on withdrawal related to 'win-win growth program' for small and medium enterprises

(\*2) Restriction on withdrawal related to the borrowing pledged as collateral

## 8. Trade and Other Receivables

(1) Trade and other receivables as of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won	-	Gross amount	Allowance for doubtful accounts	Present value discount	Book value
Current assets:					
Trade receivables	$\mathbf{W}$	1,043,538	-	-	1,043,538
Other receivables		152,214	-	(219)	151,995
	-	1,195,752	-	(219)	1,195,533
Non-current assets:	-				
Trade receivables		1,278	(1,278)	-	-
Other receivables		9,780	(95)	(486)	9,199
	-	11,058	(1,373)	(486)	9,199
	$\mathbf{W}$	1,206,810	(1,373)	(705)	1,204,732

(ii) As of December 31, 2021

In millions of won	<u>.</u>	bross amount	Allowance for doubtful accounts	Present value discount	Book value
Current assets:					
Trade receivables	$\mathbf{W}$	572,347	-	-	572,347
Other receivables		170,148	-	(147)	170,001
		742,495	-	(147)	742,348
Non-current assets:					
Trade receivables		1,278	(1,278)	-	-
Other receivables		14,672	(89)	(373)	14,210
		15,950	(1,367)	(373)	14,210
	₩	758,445	(1,367)	(520)	756,558

# 8. Trade and Other Receivables, Continued

(2) Details of other receivables as of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won		Gross amount	Allowance for doubtful accounts	Present value discount	Book value
Current assets:					
Account receivables	₩	69,035	-	-	69,035
Accrued income		66,970	-	-	66,970
Guarantee		16,209	-	(219)	15,990
		152,214	-	(219)	151,995
Non-current assets:					
Account receivables		95	(95)	-	-
Guarantee		9,685	-	(486)	9,199
		9,780	(95)	(486)	9,199
	₩	161,994	(95)	(705)	161,194

(ii) As of December 31, 2021

In millions of won	_0	iross amount	Allowance for doubtful accounts	Present value discount	Book value
Current assets:					
Account receivables	₩	58,636	-	-	58,636
Accrued income		101,552	-	-	101,552
Guarantee		9,960	-	(147)	9,813
		170,148	-	(147)	170,001
Non-current assets:					
Account receivables		2,453	(89)	-	2,364
Guarantee		12,219	-	(373)	11,846
		14,672	(89)	(373)	14,210
	₩	184,820	(89)	(520)	184,211

# 8. Trade and Other Receivables, Continued

(3) The aging analysis of trade and other receivables as of December 31, 2022 and 2021 are as follows:

in millions of won	Trade receivables			Other receivables			bles	
		2022		2021		2022		2021
Current	₩	1,043,538	₩	572,347	₩	161,899	₩	184,731
Past due but not impaired receivables:	_	<u> </u>	-	<u> </u>	_	<u> </u>		<u>.                                    </u>
Within 60 days past due		-		-		-		-
60 to 90 days past due		-		-		-		-
90 to 120 days past due		-		-		-		-
120 days to 1 year past due		-		-		-		-
More than 1 year past due		-		-		-		-
		-		-		-		-
Receivables Impaired individually	_	1,278	_	1,278	_	95	_	89
	₩	1,044,816	₩	573,625	₩	161,994	₩	184,820

(4) Changes in allowance for doubtful accounts on trade and other receivables for the years ended December 31, 2022 and 2021 are as follows:

in millions of won		Trade receivables			Other receivables				
		2022		2021		2022		2021	
Beginning balance	₩	1,278	₩	-	₩	89	₩		81
Bad debt expenses		-		1,278					-
Others (*1)		-		-		6			8
Ending balance	₩	1,278	₩	1,278	₩	95	₩		89

(\*1) Others include the effect of recognition of currency translation differences.

## 9. Financial Assets at Fair Value through Other Comprehensive Income

(1) Financial assets at fair value through other comprehensive income as of December 31, 2022 and 2021 are as follows:

In millions of won				20	2021	
	Shares	Ownership	)	Acquisition cost	Book value	Book value
Equity securities listed:						
PT Bayan Resources TBK (*1)	1,333,333,400	4.00%	₩	80,533	2,265,200	301,320
Equity securities unlisted:						
Korea Power Exchange (*2)	1,826,275	7.14%		9,131	17,691	17,617
KEPCO UHDE	103,230	2.40%		516	14	14
HeeMang Sunlight Power Co.,	78,600	8.33%		393	393	393
3i Powergen Inc. (*3)	-	15.00%		1,482	-	-
KEPCO Bylong Australia Pty.,						
Ltd. (*4)	3,537,032	2.00%		6,135	-	-
Fire Guarantee (*5)	40	-		20	20	20
			₩	98,210	2,283,318	319,364

- (\*1) For the year ended December 31, 2022, the number of shares the Group holds changed from 133,333,340 to 1,333,333,400 due to share split and the Group has estimated the fair value by using the quoted market prices in active markets.
- (\*2) The Group has estimated the fair value by using the discounted cash flow method and has recognized the difference between its fair value and book value as gain or loss on valuation of financial assets at fair value through other comprehensive income in other comprehensive income or loss during the years ended December 31, 2022 and 2021.
- (\*3) As a result of discontinued operations, the difference between the carrying amount and the recoverable amount is recognized as an impairment loss.
- (\*4) Financial assets at fair value through other comprehensive income held by KOWEPO Bylong Pty., Ltd. which is subsidiary of the Group.
- (\*5) Financial assets at fair value through other comprehensive income held by KOWEPO Service Co., Ltd. Which is subsidiary of the Group.

(2) Changes in financial assets at fair value through other comprehensive income for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

In millions of won		Beginning balance	Valuation	Ending Balance
Equity securities listed Equity securities unlisted	₩	301,320 18.044	1,963,880 74	2,265,200 18,118
	₩	319,364	1,963,954	2,283,318

(ii) For the year ended December 31, 2021

In millions of won	_	Beginning balance	Valuation	Ending Balance
Equity securities listed	₩	159,702	141,618	301,320
Equity securities unlisted		16,388	1,656	18,044
	₩	176,090	143,274	319,364

## 10. Financial Assets at Fair Value through Profit or Loss

(1) Financial assets at fair value through profit or loss as of December 31, 2022 and 2021 are as follows:

In millions of won			202	22	2021
	Ownership		Acquisition cost	Book value	Book value
Equity securities unlisted: Nexpo Solar and others (*1)	20.00%	₩	7,412	7,412	7,412

(\*1) As financial assets at fair value through profit or loss held by Haenaneum Energy Fund which is subsidiary of the Group, it consists of Nexpo Solar and 58 others.

(2) Changes in financial assets at fair value through profit or loss for the year ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

In millions of won	_	Beginning balance	Acquisition	Valuation	Ending Balance
Equity securities unlisted	₩	7,412	-	-	7,412

(ii) For the year ended December 31, 2021

In millions of won	-	Beginning balance	Acquisition	Valuation	Ending Balance
Equity securities unlisted	₩	7,412	-	-	7,412

# 11. Derivatives

(1) Derivatives as of December 31, 2022 and 2021 are as follows:

In millions of won		20	22	2021		
		Current	Non-current	Current	Non-current	
Derivative assets:						
Currency forward	$\mathbf{W}$	-	-	-	-	
Currency swap		59,907	47,502	9,374	79,188	
	₩	59,907	47,502	9,374	79,188	
Derivative liabilities:	_					
Currency forward	$\mathbf{W}$	3,527	-	50	-	
Currency swap		-	10,064			
	$\overline{W}$	3,527	10,064	50	-	

(2) Currency swap contracts as of December 31, 2022 are as follows:

In millions of won, and thousands of USD and CHF

	,		Contract amounts			Contract interest rate		
Туре	Counterparty	Period	Pay (KRW)	Receive	Pay (%)	Receive (%)	rate (in won)	
Cash flow hedge	Korea Developmen Bank BNP Paribas KB Bank Korea Developmen Bank Woori Bank KB Bank	2018~2023 2019~2024 2019~2024 2022~2025 2022~2025 2022~2025	320,880 111,841 111,841 128,560 128,560 128,560	USD 300,000 CHF 100,000 CHF 100,000 USD 100,000 USD 100,000 USD 100,000	2.028 1.778 1.778 3.370 3.370 3.370	3.750 0.125 0.125 4.125 4.125 4.125	1,069.60 1,118.41 1,118.41 1,285.60 1,285.60 1,285.60	

(3) Currency swap forward as of December 31, 2022 are as follows:

In millions of won and thousands of USD

In millions	of won and thousand	ls of USD	Contract			
Туре	Counterparty	Contract Date	Maturity Date	Receive (KRW)	Purchase (USD)	Contract exchange rate (in won)
Trading purpose	Shinhan Bank JP Morgan Bank JP Morgan Bank JP Morgan Bank Standard	2022-11-03 2022-11-07 2022-11-25 2022-12-29	2023-01-09 2023-01-13 2023-01-20 2023-01-05	7,085 14,012 6,611 38,040	5,000 10,000 5,000 30,000	1,417.00 1,401.20 1,322.10 1,268.00
	Chartered Mizuho Bank, Ltd. Seoul Branch NH Bank	2022-12-29 2022-11-09 2022-12-27	2023-01-05 2023-01-06 2023-01-16	25,358 13,681 6,334	20,000 10,000 5,000	1,267.90 1,368.10 1,266.70

## 11. Derivatives, Continued

(4) The gain (loss) on valuation and transaction of derivatives for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

In millions of won

Туре	Valuation gain (loss)       Type     in profit or loss		Transaction gain in profit or loss	Other comprehensive loss (before tax)
Currency forward	₩	(3,527)	7,647	-
Currency swap		34,130	48,549	(21,717)
	₩	30,603	56,196	(21,717)

(ii) For the year ended December 31, 2021

In millions of won

Туре		tion gain (loss) profit or loss	Transaction gain in profit or loss	Other comprehensive loss (before tax)
Currency forward	₩	(50)	2,878	-
Currency swap		71,128	6,998	(1,271)
	₩	71,078	9,876	(1,271)

(\*) The loss on valuation of derivative instruments using cash flow hedge accounting is recognized as accumulated other comprehensive income amounting to W5,657 million, net of tax, as of December 31, 2022.

# 12. Other Financial Assets

(1) Other financial assets as of December 31, 2022 and 2021 are as follows:

In millions of won		202	22	2021		
	_	Current	Non-current	Current	Non-current	
Loans	₩	6,248	61,429	5,222	63,984	
Short-term financial instruments		43,169	-	54,793	-	
Derivative assets		59,907	47,502	9,374	79,188	
Non-current financial assets at fair value through other comprehensive income		-	2,283,318	-	319,365	
Non-current financial assets at fair value through profit or loss		-	7,412	-	7,412	
	₩	109,324	2,399,661	69,389	469,949	

(2) Details of loans as of December 31, 2022 and 2021 are as follows:

# (i) As of December 31, 2022

In millions of won	-	Face value	Allowance for doubtful accounts	Present value discount	Foreign exchange adjustment	Book value
Short-term loans						
Loans for tuition	₩	6,353	-	(105)	-	6,248
	-	6,353	-	(105)	-	6,248
Long-term loans	_					
Loans for tuition		13,474	-	(2,358)	-	11,116
Others	_	53,408	(4,467)		1,372	50,313
		66,882	(4,467)	(2,358)	1,372	61,429
	₩	73,235	(4,467)	(2,463)	1,372	67,677

## (ii) As of December 31, 2021

In millions of won	-	Face value	Present value discount	Foreign exchange adjustment	Book value
Short-term loans					
Loans for tuition	$\mathbf{W}$	5,327	(105)	-	5,222
		5,327	(105)	-	5,222
Long-term loans					
Loans for tuition		14,523	(1,884)	-	12,639
Others	_	51,457		(112)	51,345
		65,980	(1,884)	(112)	63,984
	₩_	71,307	(1,989)	(112)	69,206

## 13. Inventories

Inventories as of December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Raw Materials Supplies Inventories in transit Others	₩	181,018 66,765 268,107 600	46,256 64,807 191,273 569
	₩	516,490	302,905

There is no valuation allowance for loss on inventory valuation as of December 31, 2022 and 2021.

## 14. Non-financial assets

Non-financial assets as of December 31, 2022 and 2021 are as follows:

In millions of won		202	2	202	:1
		Current	Non-current	Current	Non-current
Advance payments	₩	4,405	-	2,245	-
Prepaid expenses		15,414	2,204	12,625	2,063
Others		78,734	14,959	124,608	20,335
	$\mathbf{W}$	98,553	17,163	139,478	22,398

## 15. Subsidiaries

(1) Information related to the consolidated subsidiaries as of December 31, 2022 and 2021 are as follows:

	Key operating		Percentage of ownership or voting right		
Company	activities	Location	2022	2021	
KOWEPO Australia Pty., Ltd.	Overseas resources development	Australia	100.00%	100.00%	
KOWEPO International Corporation	Managing power plant	Philippines	99.99%	99.99%	
PT KOWEPO Sumsel Operation and Maintenance Services	Managing power plant	Indonesia	95.00%	95.00%	
KOWEPO Bylong Pty., Ltd. (*1)	Overseas resources development	Australia	100.00%	100.00%	
KOWEPO Lao International	Managing power plant	Laos	100.00%	100.00%	
KOWEPO Service Co., Ltd.	Managing facility	Republic of Korea	100.00%	100.00%	
Haenaneum Energy Fund	Sunlight generation, ESS	Republic of Korea	99.64%	99.64%	
KOWEPO Europe B.V.	Onshore wind power generation	Netherlands	100%	100%	
KOWEPO Changgi Solar Power Plant Co., Ltd. (formerly, Samyang Solar Power Plant Co., Ltd.)	Energy supply	Republic of Korea	100%	-	

(\*1) The ownership interest in KOWEPO Bylong Pty., Ltd. is the percentage of common share capital excluding preferred share capital which has no voting rights.

(2) For the year ended December 31, 2022, KOWEPO Changgi Solar Power Plant Co., Ltd. (formerly, Samyang Solar Power Plant Co., Ltd.) is included in the consolidation scope since the Group obtained control over the entity through disproportionate capial reduction and Seobusambo highway photovoltaics Co., Ltd. was reclassified to a joint venture from a consolidated entity due to a loss of control of the Group caused by the modification of the agreement after acquisition of the entity. For the year ended December 31, 2021, KOWEPO Europe B.V. was newly established.

## 15. Subsidiaries, Continued

(3) Summary of financial information of consolidated subsidiaries as of and for the years ended December 31, 2022 and 2021 are as follows:

(i) As of and for the year ended December 31, 2022

In millions of won

Company		Assets	Liabilities	Sales	Net profit or loss
KOWEPO Australia Pty., Ltd.	₩	81,696	10,184	52,271	22,745
KOWEPO International Corporation PT KOWEPO Sumsel Operation and		-	10	-	-
Maintenance Services		25	252	-	(94)
KOWEPO Bylong Pty., Ltd.		8	94	-	(7)
KOWEPO Lao International		8,248	87	10,010	11,185
KOWEPO Service Co., Ltd.		6,266	3,130	34,031	171
Haenaneum Energy Fund		7,416	3	-	(48)
KOWEPO Europe B.V. KOWEPO Changgi Solar Power Plant Co., Ltd. (formerly, Samyang Solar Power Plant		42,865	2,422	-	1,668
Co., Ltd.)		48,770	44,647	3,447	(354)

(ii) As of and for year ended December 31, 2021

Company		Assets	Liabilities	Sales	Net profit or loss
KOWEPO Australia Pty., Ltd.	₩	54,564	4,766	22,013	7,387
KOWEPO International Corporation		-	10	-	-
PT KOWEPO Sumsel Operation and					
Maintenance Services		116	259	-	-
KOWEPO Bylong Pty., Ltd.		8	86	-	(18)
KOWEPO Lao International		12,974	70	8,543	5,681
KOWEPO Service Co., Ltd.		7,289	5,869	31,700	303
Haenaneum Energy Fund		7,463	3	40	(74)
KOWEPO Europe B.V.		39,973	1,449	-	(744)

## 16. Investments in Associates and Joint Ventures

(1) Investments in associates and joint ventures as of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won			Percentage		
Company	Major operation	Location	of ownership	Acquisition cost	Book value
Associates					
Pioneer Gas Power., Ltd.	Energy supply	India	38.50% <del>\</del>	₩ 49,831	-
Eurasia Energy Holdings	Energy supply	Russia	40.00%	461	-
Xe-Pian Xe-Namnoy Power Co., Ltd.	Energy supply	Laos	25.00%	87,426	115,584
PT. Mutiara Jawa	Energy supply	Indonesia	29.00%	2,978	3,597
Korea Offshore Wind Power Co., Ltd. (*1)	Energy supply	Republic of Korea	12.50%	26,600	23,115
Daegu Solar Power Plant Co., Ltd.	Energy supply	Republic of Korea	29.00%	1,230	2,849
Dongducheon Dream Power Co., Ltd.	Energy supply	Republic of Korea	34.01%	148,105	89,300
Solar Power Plants Happy City Co., Ltd.	Energy supply	Republic of Korea	28.00%	194	278
Shin Pyeongtaek Power Co., Ltd.	Energy supply	Republic of Korea	40.00%	72,000	133,822
KEPCO Solar Co., Ltd. (*1)	Energy supply	Republic of Korea	8.33%	16,650	18,133
KEPCO ES Co.,Ltd. (formerly, KEPCO Energy Solution Co., Ltd.) (*1)	Energy supply	Republic of Korea	8.33%	25,000	26,071
Seoroseoro Sunny Power Plant Co., Ltd.	Energy supply	Republic of Korea	42.58%	706	859
Anjwa Smart Farm & Solar City Co., Ltd.	Energy supply	Republic of Korea	20.00%	5,651	8,661
Muan Solra Park Co., Ltd.	Energy supply	Republic of Korea	20.00%	4,400	7,838
Yudang Solra Co., Ltd.	Energy supply	Republic of Korea	20.00%	360	586
	,			441,592	430,693
Joint ventures Rabigh O&M Co., Ltd. (*2)	0&M	Saudi Arabia	40.00%	70	5,113
KIAMCO KOWEPO Bannerton Hold Co Pty., Ltd. (*2)	Energy supply	Australia	12.37%	4,095	3,651
Haemodum Solar Energy Co., LTd. (*2)	Energy supply	Republic of Korea	49.00%	2,940	3,367
KOWEPO Changgi Solar Power Plant Co., Ltd. (formerly, Samyang Solar Power Plant Co., Ltd.) (*3)	Energy supply	Republic of Korea	-	-	-
NH-Amundi Global Infra Private Fund No. 21 (*2)	Energy supply	Republic of Korea	29.53%	20,061	21,723

#### 16. Investments in Associates and Joint Ventures, Continued

(1) Investments in associates and joint ventures as of December 31, 2022 and 2021 are as follows, Continued:

(i) As of December 31, 2022, Continued

Company	Major operation	Location	Percentage of ownership	Acquisition cost	Book value
Joint ventures					
Cheongna Energy CO.,LTD. (*2)	Energy supply	Republic of Korea	50.10%	49,344	10,758
Hapcheon Floating Photovoltaic Plant Inc. (*2)	Energy supply	Republic of Korea	49.00%	7,512	8,471
Yeongwol Eco Wind Co., Ltd. (*2)	Energy supply	Republic of Korea	29.00%	3,089	3,155
Gurae Jumin Wind Power Co., Ltd. (*2)	Energy supply	Republic of Korea	29.00%	386	390
Gunsan Land Solar Co., Ltd. (*2)	Energy supply	Republic of Korea	75.29%	19,091	27,544
Capman Lynx SCA, SICAR (*2)	Collective investment	Luxembourg	50.00%	9,601	-
Eumseong Eco Park Co., Ltd. (*2)	Energy supply	Republic of Korea	29.00%	5,741	5,557
Pungbaek Wind Power Co., Ltd. (*2)	Energy supply	Republic of Korea	37.00%	7,886	6,743
Hasami Co., Ltd. (*2)	Energy supply	Republic of Korea	29.00%	1,596	1,589
Seobusambo highway photovoltaics Co., Ltd. (*2) (*4)	Energy supply	Republic of Korea	80.00%	3,020	3,067
				134,432	101,128
				₩ 576,024	531,821

(\*1) It is accounted for as an associate as the Group can exercise significant influence according to the shareholders' agreement even though the Group's ownership interest is less than 20%.

(\*2) The Group accounts for its investments as investments in joint ventures since the strategic financial and operating policy decisions relating to the activities of the joint ventures require unanimous consent of the investors.

(\*3) KOWEPO Changgi Solar Power Plant Co., Ltd. (formerly, Samyang Solar Power Plant Co., Ltd.) was included in consolidation scope due to unequal reduction of the capital during the year ended December 31, 2022.

(\*4) Seobusambo highway photovoltaics Co., Ltd was excluded from the consolidation scope due to a loss of control of the Group caused by the modification of agreement during the year ended December 31, 2022.

## 16. Investments in Associates and Joint Ventures, Continued

(1) Investments in associates and joint ventures as of December 31, 2022 and 2021 are as follows, Continued:

(i) As of December 31, 2021

In millions of won			Percentage		
Company	Major operation	Location	of ownership	Acquisition cost	Book value
Associates					
Pioneer Gas Power., Ltd.	Energy supply	India	38.50%	₽ 49,831	-
Eurasia Energy Holdings	Energy supply	Russia	40.00%	461	-
Xe-Pian Xe-Namnoy Power Co., Ltd.	Energy supply	Laos	25.00%	87,426	92,441
PT. Mutiara Jawa	Energy supply	Indonesia	29.00%	2,979	2,569
Korea Offshore Wind Power Co., Ltd. (*1)	Energy supply	Republic of Korea	12.50%	26,600	21,445
Daegu Solar Power Plant Co., Ltd.	Energy supply	Republic of Korea	29.00%	1,230	2,342
Dongducheon Dream Power Co., Ltd.	Energy supply	Republic of Korea	34.01%	148,105	74,198
Solar Power Plants Happy City Co., Ltd.	Energy supply	Republic of Korea	28.00%	194	223
Shin Pyeongtaek Power Co., Ltd.	Energy supply	Republic of Korea	40.00%	72,000	93,074
Kepco Solar Co., Ltd. (formerly, Solar School Plant Co., Ltd.) (*1)	Energy supply	Republic of Korea	8.33%	16,650	17,447
KEPCO Energy Solution Co., Ltd. (*1)	Energy supply	Republic of Korea	8.33%	25,000	26,061
Seoroseoro Sunny Power Plant Co., Ltd.	Energy supply	Republic of Korea	42.58%	706	721
Anjwa Smart Farm & Solar City Co., Ltd.	Energy supply	Republic of Korea	20.00%	5,651	6,784
Muan Solra Park Co., Ltd.	Energy supply	Republic of Korea	20.00%	4,400	6,083
Yudang Solra Co., Ltd.	Energy supply	Republic of Korea	20.00%	360	565
				441,593	343,953
Joint ventures Rabigh O&M Co., Ltd. (*2)	O&M	Saudi Arabia	40.00%	70	4,071
KIAMCO KOWEPO Bannerton Hold Co Pty., Ltd. (*2)	Energy supply	Australia	12.37%	4,095	3,625
Haemodum Solar Energy Co., Ltd. (*2)	Energy supply	Republic of Korea	49.00%	2,940	3,081
Samyang Solar Power Plant Co., Ltd. (*2)	Energy supply	Republic of Korea	49.00%	5,245	4,993
NH-Amundi Global Infra Private Fund No. 21 (*2)	Energy supply	Republic of Korea	29.53%	19,983	21,456
Cheongna Energy Co.,Ltd. (*2)	Energy supply	Republic of Korea	50.10%	49,344	11,198

### 16. Investments in Associates and Joint Ventures, Continued

(1) Investments in associates and joint ventures as of December 31, 2022 and 2021 are as follows, Continued:

(i) As of December 31, 2021, Continued

Company	Major operation	Location	Percentage of ownership	A 	cquisition cost	Book value
Joint ventures						
Hapcheon Floating Photovoltaic Power Plant Inc. (*2)	Energy supply	Republic of Korea	49.00%		7,512	6,971
Yeongwol Eco Wind Co., Ltd. (*2)	Energy supply	Republic of Korea	29.00%		3,089	3,197
Gurae Jumin Wind Power Co., Ltd. (*2)	Energy supply	Republic of Korea	29.00%		386	396
Gunsan Land Solar Co., Ltd. (*2)	Energy supply	Republic of Korea	75.29%		19,091	19,317
Capman Lynx SCA, SICAR (*2)	Collective investment	Luxembourg	50.00%		9,601	9,976
					121,356	88,281
				₩	562,949	432,234

(\*1) It is accounted for as an associate as the Group can exercise significant influence according to the shareholders' agreement even though the Group's ownership interest is less than 20%.

(\*2) The Group accounts for its investments as investments in joint ventures since the strategic financial and operating policy decisions relating to the activities of the joint ventures require unanimous consent of the investors.

## 16. Investments in Associates and Joint Ventures, Continued

(2) Changes in investments in associates and joint ventures for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

Company		Beginning balance	Acquisi- tions	Disposal	Dividends received	Share of income (loss)	Other comprehe- nsive income (loss)	Retained earnings	Other changes	Ending balance
Associates										
Pioneer Gas Power., Ltd.(*1)	₩	-	-	-	-	-	-	-	-	-
Eurasia Energy Holdings(*2)		-	-	-	-	-	-	-	-	-
Xe-Pian Xe-Namnoy Power Co.,		92,441	_		-	15,582	7,561		_	115,584
Ltd		52,771				10,002				
PT. Mutiara Jawa		2,569	-	-	-	1,197	(169)	-	-	3,597
Korea Offshore Wind Power Co.,		21,445	_	-	-	1,670	-	-	-	23,115
Ltd.										
Daegu Solar Power Plant Co., Ltd.		2,342	-	-	(268)	775	-	-	-	2,849
Dongducheon Dream Power Co.,		74,198	-	-	-	15,086	-	16	-	89,300
Ltd.										
Solar Power Plants Happy City		223	-	-	-	55	-	-	-	278
Co., Ltd.		00.074				40 710		05		100.000
Shin Pyeongtaek Power Co., Ltd.		93,074	-	-	-	40,713	-	35	-	133,822
KEPCO Solar Co., Ltd.		17,447	-	-	(117)	800	-	3	-	18,133
KEPCO ES Co.,Ltd. (formerly, KEPCO Energy Solution Co., Ltd.)		26,061	-	-	(142)	144	-	8	-	26,071
Seoroseoro Sunny Power Plant Co., Ltd.		721	-	-	-	138	-	-	-	859
Anjwa Smart Farm & Solar City Co., Ltd.		6,784	-	-	-	1,877	-	-	-	8,661
Muan Solra Park Co., Ltd		6,083	-	-	(600)	2,377	(22)	-	-	7,838
Yudang Solra Co., Ltd.		565	-	-	(160)	181	-	-	-	586
		343,953	-	-	(1,287)	80,595	7,370	62	-	430,693
Joint ventures										
Rabigh O&M Co., Ltd. KIAMCO KOWEPO Bannerton		4,071	-	-	(2,735)	3,866	(89)	-	-	5,113
Hold		3,625	-	-	-	27	(1)	-	-	3,651
Co Pty Ltd.		-,					. ,			
Haemodum Solar Energy Co., Ltd.		3,081	-	-	-	286	-	-	-	3,367
KOWEPO Changgi Solar Power										
Plant Co., Ltd. (formerly, Samyang Solar Power Plant Co., Ltd.)		4,993	-	-	-	(123)	-	-	(4,870)	-
NH-Amundi Global Infra Private		04 155			(A	4 000				04 705
Fund No. 21		21,456	485	(406)	(1,415)	1,603	-	-	-	21,723
Cheongna Energy CO.,LTD.		11,199	-	-	-	(441)	-	-	-	10,758
Hapcheon Floating Photovoltaic										
Plant Inc.		6,971	-	-	-	1,500	-	-	-	8,471
Yeongwol Eco Wind Co., Ltd.		3,196	-	-	-	(41)	-	-	-	3,155

#### 16. Investments in Associates and Joint Ventures, Continued

(2) Changes in investments in associates and joint ventures for the years ended December 31, 2022 and 2021 are as follows, Continued:

(i) For the year ended December 31, 2022, Continued

In millions of won

Company	Beginning balance	Acquisi- tions	Disposal	Dividends received	Share of income (loss)	Other comprehe- nsive income (loss)	Retained earnings	Other changes	Ending balance
Joint ventures									
Gurae Jumin Wind Power Co., Ltd	396	; –	-	-	(6)	-	-	-	390
Gunsan Land Solar Co., Ltd.	19,317	-	-	-	8,219	8	-	-	27,544
Capman Lynx SCA, SICAR (*3)	9,976	-	-	-	(10,195)	5,173	-	(4,954)	-
Eumseong Eco Park Co., Ltd.		5,741	-	-	(184)	-	-	-	5,557
Pungbaek Wind Power Co., Ltd.		7,885	-	-	(1,142)	-	-	-	6,743
Hasami Co.,Ltd.		1,596	-	-	(7)	-	-	-	1,589
Seobusambo highway photovoltaics Co., Ltd.			-	-	-	-	-	3,067	3,067
	88,281	15,707	(406)	(4,150)	3,362	5,091	-	(6,757)	101,128
1	₩ 432,234	15,707	(406)	(5,437)	83,957	12,461	62	(6,757)	531,821

(\*1) The investment has been reduced to zero, which resulted in discontinuation of the equity method. The accumulated unrecognized loss is <del>W</del>56,877 million as of December 31, 2022.

(\*2) The investment has been reduced to zero, which resulted in discontinuation of the equity method. The accumulated unrecognized loss is W203 million as of December 31, 2022.

(\*3) In relation to the wind power generation business invested by Capman Lynx SCA, SICAR, the Group determined that there was objective evidence indicating impairment, such as a decrease in sales due to a lack of power generation, and conducted an impairment testing for the interests in Capman Lynx SCA, SICAR. As a result, <del>W4</del>,954 million of the difference between the carrying amount and the recoverable amount is recognized as an impairment loss and classified as an impairment loss on investments in associates and joint ventures in the statement of comprehensive income.

#### 16. Investments in Associates and Joint Ventures, Continued

(2) Changes in investments in associates and joint ventures for the years ended December 31, 2022 and 2021 are as follows, Continued:

(ii) For the year ended December 31, 2021

In millions of won

Company	Beginning balance	Acquisi- tions	Disposal	Dividends received	Share of income (loss)	Other comprehe-nsive income (loss)	Retained earnings	Ending balance
Associates								
Pioneer Gas Power., Ltd.(*1)	₩ -	-	-	-	-	-	-	-
Eurasia Energy Holdings(*2)	-	-	-	-	-	-	-	-
Xe-Pian Xe-Namnoy Power Co., Ltd.	64,570	-	-	-	19,306	8,565	-	92,441
PT. Mutiara Jawa	1,780	-	-	-	630	159	-	2,569
Korea Offshore Wind Power Co., Ltd.	20,930	-	-	-	515	-	-	21,445
Daegu Solar Power Plant Co., Ltd.	2,067	-	-	(207)	482	-	-	2,342
Dongducheon Dream Power Co., Ltd.	80,637	-	-	-	(6,439)	-	-	74,198
Solar Power Plants Happy City Co.,Ltd.	210	-	-	-	13	-	-	223
Shin Pyeongtaek Power Co., Ltd.	69,591	-	-	-	23,476	-	7	93,074
KEPCO Solar Co., Ltd.	17,261	-	-	-	188	-	(2)	17,447
KEPCO Energy Solution Co., Ltd.	25,808	-	-	-	255	-	(2)	26,061
Seoroseoro Sunny Power Plant Co., Ltd.	230	476	-	-	15	-	-	721
Anjwa Smart Farm & Solar City Co., Ltd.	5,510	141	-	-	1,133	-	-	6,784
Muan Solra Park Co., Ltd.	4,180	220	-	-	1,683	-	-	6,083
Yudang Solra Co., Ltd.	360	-	-	-	205	-	-	565
	293,134	837	-	(207)	41,462	8,724	3	343,953
Joint ventures								
Rabigh O&M Co., Ltd.	3,813	-	-	(4,084)	3,489	853	-	4,071
KIAMCO KOWEPO Bannerton Hold Co Pty Ltd.	4,129	-	-	-	(111)	(393)	-	3,625
Haemodum Solar Energy Co., Ltd.	3,065	-	-	-	16	-	-	3,081
Samyang Solar Power Plant Co., Ltd.	5,535	-	-	-	(542)	-	-	4,993
NH-Amundi Global Infra Private Fund No. 21	22,242	-	(969)	(1,727)	1,910	-	-	21,456
Cheongna Energy CO.,LTD.	4,940	-	-	-	6,259	-	-	11,199
Hapcheon Floating Photovoltaic Plant Inc.	1,890	5,622	-	-	(541)	-	-	6,971
Yeongwol Eco Wind Co., Ltd.	-	3,089	-	-	122	(15)	-	3,196
Gurae Jumin Wind Power Co., Ltd.	-	386	-	-	12	(2)	-	396
Gunsan Land Solar Co., Ltd.	-	19,091	-	-	325	(99)	-	19,317
Capman Lynx SCA, SICAR	-	9,601	-	-	375	-	-	9,976
	45,614	37,789	(969)	(5,811)	11,314	344		88,281
	₩ 338,748	38,626	(969)	(6,018)	52,776	9,068	3	432,234

(\*1) The investment has been reduced to zero, which resulted in discontinuation of the equity method. The accumulated unrecognized loss is W37,629 million as of December 31, 2021.

(\*2) The investment has been reduced to zero, which resulted in discontinuation of the equity method. The accumulated unrecognized loss is W190 million as of December 31, 2021.

## 16. Investments in Associates and Joint Ventures, Continued

(3) The tables below provide a reconciliation of the summarized financial information presented to the carrying amount of its interest in the associates and joint ventures

(i) As of December 31, 2022

In millions of won	Net assets at the end of the year	Group's share in %	Group's share in KRW	Differences in investment s	Intergroup transaction s	Unrealize d losses	Others	Book amount
Associates								
Pioneer Gas Power., Ltd.	₩ (205,787)	38.50%	(79,223)	22,278	-	56,877	68	-
Eurasia Energy Holdings	(508)	40.00%	(203)	-	-	203	-	-
Xe-Pian Xe-Namnoy Power Co., Ltd.	466,385	25.00%	116,596	305	(1,028)	-	(289)	115,584
PT. Mutiara Jawa	12,402	29.00%	3,597	-	-	-	-	3,597
Korea Offshore Wind Power Co., Ltd.	184,850	12.50%	23,106	9	-	-	-	23,115
Daegu Solar Power Plant Co., Ltd.	9,823	29.00%	2,849	-	-	-	-	2,849
Dongducheon Dream Power Co., Ltd.	302,071	34.01%	102,734	1,757	(2,609)	-	(12,582)	89,300
Solar Power Plants Happy City Co., Ltd.	986	28.00%	276	-	-	-	2	278
Shin Pyeongtaek Power Co., Ltd.	363,838	40.00%	145,535	3,559	(15,272)	-	-	133,822
KEPCO Solar Co., Ltd.	217,816	8.33%	18,133	-	-	-	-	18,133
KEPCO ES Co.,Ltd. (formerly, KEPCO Energy Solution Co., Ltd.)	312,852	8.33%	26,071	-	-	-	-	26,071
Seoroseoro Sunny Power Plant Co., Ltd.	1,970	42.58%	839	20	_	_	_	859
Anjwa Smart Farm & Solar City Co., Ltd.	39,225	20.00%	7,845	816	_	_	_	8,661
Muan Solra Park Co., Ltd.	37,565	20.00%	7,513	325	_	_		7,838
Yudang Solra Co., Ltd.	2,929	20.00%	586	525	_	_	-	586
Joint ventures	2,020	20.00 %	500					500
Rabigh O&M Co., Ltd. KIAMCO KOWEPO Bannerton Hold	12,782	40.00%	5,113	-	-	-	-	5,113
Co Pty Ltd.	29,443	12.37%	3,642	9	-	-	-	3,651
Haemodum Solar Energy Co., Ltd.	6,871	49.00%	3,367	-	-	-	-	3,367
NH-Amundi Global Infra Private Fund No. 21	71,777	29.53%	21,196	527	-	-	-	21,723
Cheongna Energy Co.,Ltd.	17,596	50.10%	8,815	3,137	(1,194)	-	-	10,758
Hapcheon Floating Photovoltaic Plant INC.	17,207	49.00%	8,432	39	-	-	-	8,471
Yeongwol Eco Wind Co., Ltd.	4,575	29.00%	1,327	1,828	-	-	-	3,155
Gurae Jumin Wind Power Co., Ltd.	1,182	29.00%	343	48	-	-	-	391
Gunsan Land Solar Co., Ltd.	36,586	75.29%	27,544	-	-	-	-	27,544
Capman Lynx SCA, SICAR	9,908	50.00%	4,954	-	-	-	(4,954)	-
Eumseong Eco Park Co., Ltd.	17,173	29.00%	4,980	577	-	-	-	5,557
Pungbaek Wind Power Co., Ltd.	15,290	37.00%	5,657	1,086	-	-	-	6,743
Hasami Co., Ltd.	3,100	29.00%	899	690	-	-	-	1,589
Seobusambo highway photovoltaics Co., Ltd.	3,834	80.00%	3,067	-	-	-	-	3,067

# 16. Investments in Associates and Joint Ventures, Continued

(3) The tables below provide a reconciliation of the summarized financial information presented to the carrying amount of its interest in the associates and joint ventures, Continued

(i) As of and for year ended December 31, 2021

In millions of won	Net assets at the end of the year	Group's share in %	Group's share in KRW	Differences in investments	Intergroup transactions	Unrealize d losses	Others	Book amount
Associates								
Pioneer Gas Power., Ltd.	₩ (155,788)	38.50%	(59,975)	22,278	-	37,629	68	-
Eurasia Energy Holdings	(476)	40.00%	(190)	-	-	190	-	-
Xe-Pian Xe-Namnoy Power Co., Ltd.	373,976	25.00%	93,494	305	(1,069)	-	(289)	92,441
PT. Mutiara Jawa	8,857	29.00%	2,569	-	-	-	-	2,569
Korea Offshore Wind Power Co., Ltd.	171,487	12.50%	21,436	9	-	-	-	21,445
Daegu Solar Power Plant Co., Ltd.	8,076	29.00%	2,342	-	-	-	-	2,342
Dongducheon Dream Power Co., Ltd.	258,724	34.01%	87,992	1,757	(2,969)	-	(12,582)	74,198
Solar Power Plants Happy City Co., Ltd.	790	28.00%	221	-	-	-	2	223
Shin Pyeongtaek Power Co., Ltd.	263,477	40.00%	105,391	3,559	(15,876)	-	-	93,074
KEPCO Solar Co., Ltd.	209,575	8.33%	17,447	-	-	-	-	17,447
KEPCO Energy Solution Co., Ltd.	312,738	8.33%	26,062	-	-	-	-	26,062
Seoroseoro Sunny Power Plant Co., Ltd.	1,647	42.58%	701	20	-	-	-	721
Anjwa Smart Farm & Solar City Co., Ltd.	29,838	20.00%	5,968	816	-	-	-	6,784
Muan Solra Park Co., Ltd.	28,788	20.00%	5,758	325	-	-	-	6,083
Yudang Solra Co., Ltd.	2,826	20.00%	565	-	-	-	-	565
Joint ventures								
Rabigh O&M Co., Ltd.	10,177	40.00%	4,071	-	-	-	-	4,071
KIAMCO KOWEPO Bannerton Hold Co Pty Ltd.	29,239	12.37%	3,617	8	-	-	-	3,625
Haemodum Solar Energy Co., Ltd.	6,288	49.00%	3,081	-	-	-	-	3,081
Samyang Solar Power Plant Co., Ltd.	10,191	49.00%	4,993	-	-	-	-	4,993
NH-Amundi Global Infra Private Fund No. 21	70,872	29.53%	20,929	527	-	-	-	21,456
Cheongna Energy Co.,Ltd.	18,485	50.10%	9,261	3,137	(1,200)	-	-	11,198
Hapcheon Floating Photovoltaic Plant	14,146	40.00%	6,932	39	-	-	-	6,971
Inc. Yeongwol Eco Wind Co., Ltd.	4,720	49.00%	1,369	1,828	_	-	-	3,197
Gurae Jumin Wind Power Co., Ltd.	1,201	29.00%	348	48	_	_	-	396
Gunsan Land Solar Co., Ltd.	25,658	29.00%		- 40	-	-	-	19,317
		75.29%	19,317	-	-	-	-	
Capman Lynx SCA, SICAR	19,952	50.00%	9,976	-	-	-	-	9,976

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

## 16. Investments in Associates and Joint Ventures, Continued

(4) Summary of financial information of investments in associates and joint venture as of and for the years ended December 31, 2022 and 2021 are as follows:

(i) As of and for year ended December 31, 2022

Company		Assets	Liabilities	Sales	Net profit or loss
Associates					
Pioneer Gas Power., Ltd.	₩	271,339	477,127	-	(46,290)
Eurasia Energy Holdings		648	1,156	-	-
Xe-Pian Xe-Namnoy Power Co., Ltd.		1,371,292	904,907	174,693	61,020
PT. Mutiara Jawa		26,024	13,622	15,421	4,912
Korea Offshore Wind Power Co., Ltd.		376,285	191,435	52,560	13,820
Daegu Solar Power Plant Co., Ltd.		13,254	3,431	4,755	2,914
Dongducheon Dream Power Co., Ltd.		1,521,089	1,219,018	2,240,175	43,072
Solar Power Plants Happy City Co., Ltd.		1,788	802	558	200
Shin Pyeongtaek Power Co., Ltd.		1,203,406	839,568	957,062	100,554
KEPCO Solar co., Ltd.		243,221	25,405	24,778	9,305
KEPCO ES Co.,Ltd.(formerly, KEPCO Energy Solution Co., Ltd.)		318,955	6,103	33,638	1,725
Seoroseoro Sunny Power Plant Co., Ltd.		7,015	5,045	1,157	247
Anjwa Smart Farm & Solar City Co., Ltd.		278,807	239,581	42,477	9,672
Muan Solra Park Co., Ltd.		225,894	188,329	36,081	11,339
Yudang Solra Co., Ltd.		22,073	19,144	3,997	957
Joint ventures					
Rabigh O&M Co., Ltd.		23,664	10,882	32,572	9,176
KIAMCO KOWEPO Bannerton Hold Co Pty., Ltd.		29,517	74	-	(260)
Haemodum Solar Energy Co., Ltd.		22,974	16,103	2,556	581
NH-Amundi Global Infra Private Fund No. 21		71,851	74	4,850	5,431
Cheongna Energy Co.,Ltd.		385,936	368,340	100,200	(889)
Hapcheon Floating Photovoltaic Plant Inc.		78,768	61,561	12,705	3,061
Yeongwol Eco Wind Co., Ltd.		87,856	83,281	-	(144)
Gurae Jumin Wind Power Co., Ltd.		11,648	10,467	-	(19)
Gunsan Land Solar Co., Ltd.		158,370	121,785	28,828	12,154
Capman Lynx SCA, SICAR		112,718	102,810	504	(16,780)
Eumseong Eco Park Co., Ltd.		136,909	119,736	-	(636)
Pungbaek Wind Power Co., Ltd.		46,957	31,667	-	(3,089)
Hasami Co., Ltd.		3,100	- ,	-	(23)
Seobusambo highway photovoltaics Co., Ltd.		8,287	4,453	217	265

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES

Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

# 16. Investments in Associates and Joint Ventures, Continued

(4) Summary of financial information of investments in associates and joint venture as of and for the years ended December 31, 2022 and 2021- are as follows, Continued:

(ii) As of and for the year ended December 31, 2021

					Net profit
Company	_	Assets	Liabilities	Sales	or loss
Associates					
Pioneer Gas Power., Ltd.	W	282,577	438,366	-	(36,864)
Eurasia Energy Holdings		606	1,082	-	-
Xe-Pian Xe-Namnoy Power Co., Ltd.		1,321,406	947,430	161,686	76,996
PT. Mutiara Jawa		24,355	15,498	10,958	2,835
Korea Offshore Wind Power Co., Ltd.		359,804	188,316	36,157	4,421
Daegu Solar Power Plant Co., Ltd.		13,046	4,970	3,519	1,621
Dongducheon Dream Power Co., Ltd.		1,398,244	1,139,521	750,127	(16,685)
Solar Power Plants Happy City Co., Ltd.		1,823	1,033	426	46
Shin Pyeongtaek Power Co., Ltd.		1,028,028	764,551	653,117	57,202
KEPCO Solar co., Ltd.		231,830	22,255	10,897	2,252
KEPCO Energy Solution Co., Ltd.		317,676	4,938	21,423	3,104
Seoroseoro Sunny Power Plant Co., Ltd.		5,833	4,186	469	36
Anjwa Smart Farm & Solar City Co., Ltd.		278,980	249,143	37,691	5,996
Muan Solra Park Co., Ltd.		226,920	198,132	30,990	8,639
Yudang Solra Co., Ltd.		22,430	19,604	3,452	626
Joint ventures					
Rabigh O&M Co., Ltd.		29,108	18,930	32,079	9,808
KIAMCO KOWEPO Bannerton Hold Co Pty., Ltd.		30,811	1,572	-	(916)
Haemodum Solar Energy Co., Ltd.		23,038	16,750	1,799	45
Samyang Solar Power Plant Co., Ltd.		50,837	40,647	7,376	150
NH-Amundi Global Infra Private Fund No. 21		70,910	38	3,428	6,468
Cheongna Energy CO.,LTD.		357,248	338,763	77,640	12,743
Hapcheon Floating Photovoltaic Plant INC.		73,978	59,832	1,120	(972)
Yeongwol Eco Wind Co., Ltd.		43,785	39,066	-	421
Gurae Jumin Wind Power Co., Ltd.		6,934	5,733	-	42
Gunsan Land Solar Co., Ltd.		86,653	60,996	432	432
Capman Lynx SCA, SICAR		113,658	93,706	-	-

# 17. Property, Plant and Equipment

(1) Property, plant and equipment as of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won

		Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment loss	Book value
Land	₩	753,801	-	-	-	753,801
Buildings		1,656,426	(8,446)	(728,024)	(504)	919,452
Structures		1,506,553	(4,224)	(695,900)	(2,937)	803,492
Machinery		10,096,053	(47,468)	(5,487,794)	(53,661)	4,507,130
Vehicles		13,652	(20)	(10,277)	-	3,355
Equipment		158,604	-	(127,991)	(6)	30,607
Tools		35,004	-	(31,668)	-	3,336
Construction-in- progress		980,373	(12,577)	-	-	967,796
Right-of-use assets		1,117,212	(21)	(442,537)	-	674,654
	₩	16,317,678	(72,756)	(7,524,191)	(57,108)	8,663,623

# (ii) As of December 31, 2021

		Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment loss	Book value
Land	₩	708,460	-	-	-	708,460
Buildings		1,611,497	(8,885)	(661,039)	(504)	941,069
Structures		1,450,594	(4,449)	(637,569)	(2,937)	805,639
Machinery		9,680,884	(51,594)	(4,890,111)	(57,449)	4,681,730
Vehicles		13,646	(32)	(9,862)	-	3,752
Equipment		146,618	-	(114,702)	(6)	31,910
Tools		36,146	-	(32,544)	-	3,602
Construction-in- progress		584,379	(12,577)	-	-	571,802
Right-of-use assets		1,113,922	(23)	(355,852)	-	758,047
0	₩	15,346,146	(77,560)	(6,701,679)	(60,896)	8,506,011

## 17. Property, Plant and Equipment, Continued

(2) Changes in property, plant and equipment for the years ended December 31, 2022 and 2021 are as follows:

## (i) For the year ended December 31, 2022

In millions of won

	Acquisition/ Beginning Capital			Dennesistion	Others	Changes in	En din a
	balance	Capitai expenditure	Disposal	Depreciation (*1)	Others (*2)	consolidation scope	Ending balance
-	balarioo	<u>oxponancero</u>	Diopodui				bulurioo
Land 😽	708,461	-	-	-	45,340	-	753,801
Buildings	949,954	-	-	(67,060)	45,004	-	927,898
Less: government grants	(8,885)	-	-	439	-	-	(8,446)
Structures	810,087	3,341	(140)	(53,510)	8,410	39,528	807,716
Less: government grants	(4,449)	-	-	225	-	-	(4,224)
Machinery	4,733,323	111,038	(10,058)	(624,035)	344,330	-	4,554,598
Less: government grants	(51,594)	-	118	4,008	-	-	(47,468)
Vehicles	3,784	204	-	(1,725)	1,112	-	3,375
Less: government grants	(32)	-	-	12	-	-	(20)
Equipment	31,911	214	-	(14,896)	13,378	-	30,607
Tools	3,602	253	-	(1,908)	1,389	-	3,336
Construction-in-progress	584,379	842,222	-	-	(447,403)	1,175	980,373
Less: government grants	(12,577)	-	-	-	-	-	(12,577)
Right-of-use assets	758,070	4,130	(14)	(87,504)	(7)	-	674,675
Less: government grants	(23)		-	2			(21)
₩_	8,506,011	961,402	(10,094)	(845,952)	11,553	40,703	8,663,623

(\*1) W2,315 million of depreciation expenses are recognized as construction-in-progress.

(\*2) Others in the amount of W11,553 million consist of W5,483 million transferred from retirement benefits expense and depreciation on property, plant and equipment to construction-in-progress, W13,254 million of capitalized interest expense, W7,059 million transferred to intangible assets, W31 million transferred to assets held for sale and W95 million of translation effect of overseas operation financial statements. The weighted average capitalization rates for the year ended December 31, 2022 is 2.47%.

## 17. Property, Plant and Equipment, Continued

(2) Changes in property, plant and equipment for the years ended December 31, 2022 and 2021 are as follows, Continued:

(ii) For the year ended December 31, 2021

In millions of won

-	Beginning balance	Acquisition/ Capital expenditure	Disposal	Depreciation (*1)	Others (*2)	Ending balance
Land 😽	699,423	-	-	-	9,038	708,461
Buildings	959,909	13	(1)	(65,561)	55,594	949,954
Less: government grants	(9,325)	-	-	440	-	(8,885)
Structures	768,467	8	-	(50,738)	92,350	810,087
Less: government grants	(4,674)	-	-	225	-	(4,449)
Machinery	4,738,899	91,802	(12,765)	(604,648)	520,035	4,733,323
Less: government grants	(55,758)	-	43	4,121	-	(51,594)
Vehicles	3,125	-	-	(1,225)	1,884	3,784
Less: government grants	(29)	-	-	13	(16)	(32)
Equipment	28,356	300	(6)	(14,557)	17,818	31,911
Tools	4,174	293	-	(2,331)	1,466	3,602
Less: government grants	(6)	-	-	6	-	-
Construction-in-progress	668,740	611,265	-	-	(695,626)	584,379
Less: government grants	(12,577)	(16)	-	-	16	(12,577)
Right-of-use assets	852,565	6,506	(10)	(101,123)	132	758,070
Less: government grants	(24)	-	-	1	-	(23)
₩_	8,641,265	710,171	(12,739)	(835,377)	2,691	8,506,011

(\*1) W1,446 million of depreciation expenses are recognized as construction-in-progress.

(\*2) Others in the amount of W2,691 million consist of W3,168 million transferred from retirement benefits expense and depreciation on property, plant and equipment to construction-in-progress, W7,988 million of capitalized interest expense, W8,609 million transferred to intangible assets, W15 million transferred to assets held for sale and W159 million of translation effect of overseas operation financial statements. The weighted average capitalization rates for the year ended December 31, 2021 is 2.21%.

# 18. Intangible Assets

(1) Intangible assets as of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won

	-	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Computer software	₩	58,001	(45,128)	-	12,873
Mining rights		13,642	(9,977)	-	3,665
Development costs		5,115	(3,667)	-	1,448
Leasehold rights		6,561	(3,088)	-	3,473
Others		100,027	(82,571)	(231)	17,225
	₩	183,346	(144,431)	(231)	38,684

## (ii) As of December 31, 2021

	-	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Computer software	₩	52,444	(40,116)	-	12,328
Mining rights		13,649	(8,363)	-	5,286
Development costs		4,068	(3,440)	-	628
Leasehold rights		6,561	(2,405)	-	4,156
Others		104,519	(82,230)	(231)	22,058
	₩	181,241	(136,554)	(231)	44,456

## 18. Intangible Assets, Continued

(2) Changes in intangible assets for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

In millions of won

		Beginning balance	Acquisition/ Capital expenditure	Disposals	Amortization (*1)	Others(*2)	Changes in consolidation scope	Ending balance
Computer	₩	12,328	10	-	(5,032)	5,564	3	12,873
Mining rights		5,286	-	-	(1,687)	66	-	3,665
Development		628	-	-	(226)	1,046	-	1,448
Leasehold rights		4,156	-	-	(683)	-	-	3,473
Others		22,058	8,030		(342)	(12,521)		17,225
	₩	44,456	8,040		(7,970)	(5,845)	3	38,684

(\*1) W16 million of amortization expenses are recognized as construction-in-progress.

(\*2) Others in the amount of ₩5,845 million consist of ₩7,059 million transferred from construction-inprogress, ₩66 million resulting from translation of financial statements of overseas operations and ₩12,971 million transferred from Greenhouse gas emission rights.

(ii) For the year ended December 31, 2021

In millions of won

		Beginning balance	Acquisition/ Capital expenditure	Disposals	Amortization (*1)	Others(*2)	Ending balance
Computer software	₩	10,167	31	-	(3,901)	6,031	12,328
Less: government grants		(4)	-	-	4	-	-
Mining rights		6,377	-	-	(1,324)	233	5,286
Development costs		454	-	-	(161)	335	628
Leasehold rights		4,370	-	-	(557)	343	4,156
Others		22,901	12,450		(306)	(12,987)	22,058
	₩	44,265	12,481		(6,245)	(6,045)	44,456

(\*1) W90 million of amortization expenses are recognized as construction-in-progress.

(\*2) Others in the amount of W6,045 million consist of W8,609 million transferred from construction-inprogress, W241 million resulting from translation of financial statements of overseas operations and W14,895 million transferred from Greenhouse gas emission rights.

## 19. Government Grants

(1) Government grants related to assets are presented in the statement of financial position by deducting the grant in arriving at the carrying amount of the asset in accordance with Article 44 of Public Corporation and a Quasi-governmental Institution Accounting Regulations and Standard.

(2) Government Grants as of December 31, 2022 and 2021 are as follows:

		2022	2021
Buildings	₩	8,446	8,885
Structures		4,224	4,449
Machinery		47,468	51,594
Vehicles		20	32
Construction-in-progress		12,577	12,577
Right-of-use assets		21	23
	₩	72,756	77,560

(3) Changes in government grants for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

	_	Beginning balance	Offsetting	Disposal	Ending balance
Buildings	₩	8,885	(439)	-	8,446
Structures		4,449	(225)	-	4,224
Machinery		51,594	(4,008)	(118)	47,468
Vehicles		32	(12)	-	20
Construction-in-progress		12,577	-	-	12,577
Right-of-use assets		23	(2)	-	21
	₩	77,560	(4,686)	(118)	72,756

# 19. Government Grants, Continued

(ii) For the year ended December 31, 2021

In millions of won

		Beginning balance	Acquisition	Offsetting	Disposal	Others	Ending balance
Buildings	₩	9,325	-	(440)	-	-	8,885
Structures		4,674	-	(225)	-	-	4,449
Machinery		55,758	-	(4,121)	(43)	-	51,594
Vehicles		29	-	(13)	-	16	32
Tools		6	-	(6)	-	-	-
Construction-in-progress		12,577	16	-	-	(16)	12,577
Right-of-use assets		24	-	(1)	-	-	23
Computer software		4	-	(4)	-	-	-
	₩	82,397	16	(4,810)	(43)	_	77,560

(4) Government grants income recognized for the years ended December 31, 2022 and 2021 are as follows:

	2022	2021
₩	4,685	4,810

### 20. Lease

#### (1) Major lease contracts

In order to provide stable supply of bituminous coal, the Group has entered into a consecutive vessel charter agreement as a lease (see Note 44 (5)). On the other hand, the Group does not have the option to obtain ownership of the related vessels or the option to purchase it at a price that is expected to be sufficiently lower than fair value at the end of the agreement.

(2) Right-of-use assets as of December 31, 2022 and 2021 are as follows:

#### (i) As of December 31, 2022

#### In millions of won

	-	Acquisition cost	Government grants	Accumulated depreciation	Book value
Land	₩	9,890	-	(2,449)	7,441
Buildings		3,262	-	(1,296)	1,966
Structures		168,317	(21)	(85,025)	83,271
Machinery		186,962	-	(72,821)	114,141
Vessels		747,776	-	(280,418)	467,358
Vehicles		1,005	-	(528)	477
	₩	1,117,212	(21)	(442,537)	674,654

#### (ii) As of December 31, 2021

	Acquisition cost	Government grants	Accumulated depreciation	Book value
Land W	9,810	-	(1,574)	8,236
Buildings	2,946	-	(961)	1,985
Structures	165,693	(23)	(77,786)	87,884
Machinery	186,788	-	(64,721)	122,067
Vessels	747,777	-	(210,314)	537,463
Vehicles	908	-	(496)	412
$\mathbf{W}$	1,113,922	(23)	(355,852)	758,047

# 20. Lease, Continued

(3) Changes in right-of-use assets for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

#### In millions of won

	l _	Beginning balance	Acquisition	Replacement	Depreciation	Disposals	Others	Ending balance
Land	₩	8,236	80	-	(875)	-	-	7,441
Buildings		1,985	511	-	(527)	(4)	1	1,966
Structures		87,907	2,723	-	(7,338)	-	-	83,292
Less: government								
grants		(23)	-	-	2	-	-	(21)
Machinery		122,067	441	-	(8,357)	(2)	(8)	114,141
Vessels		537,463	-	-	(70,105)	-	-	467,358
Vehicles	_	412	375		(302)	(8)	-	477
	₩	758,047	4,130		(87,502)	(14)	(7)	674,654

(ii) For the year ended December 31, 2021

	 _	Beginning balance	Acquisition	Replacement	Depreciation	Disposals	Others	Ending balance
Land	₩	5,914	3,217	-	(895)	-	-	8,236
Buildings		1,146	1,221	-	(376)	(5)	(1)	1,985
Structures		93,256	1,791	46	(7,186)	-	-	87,907
Less: government grants		(24)	-	-	1	-	-	(23)
Machinery		130,426	26	70	(8,467)	(5)	17	122,067
Vessels		621,401	-	-	(83,938)	-	-	537,463
Vehicles		422	251	-	(261)	-	-	412
	₩	852,541	6,506	116	(101,122)	(10)	16	758,047

# 20. Lease, Continued

(4) Details of lease liabilities of December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won

	Minimum lease payments (MLP) Present value of MLP			
Less than 1 year	$\mathbf{W}$	93,849	93,016	
1~5 years		324,249	305,966	
More than 5 years		232,367	192,806	
	₩	650,465	591,788	

## (ii) As of December 31, 2021

In millions of won

	Minimum lease payments (MLP) Present value of MLP			
Less than 1 year	W	85,961	85,193	
1~5 years		336,415	316,715	
More than 5 years		269,520	223,662	
	$\overline{\mathbf{W}}$	691,896	625,570	

(5) Current portion and non-current portion of lease liabilities as of December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Current lease liabilities	₩.	93,016	85,193
Non-current lease liabilities		498,772	540,377
	₩	591,788	625,570

(6) Changes in lease liabilities for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Beginning balance	₩	625,570	657,514
Acquisition		4,130	6,506
Interest expense		12,441	11,815
Payments		(92,971)	(103,015)
Other changes		42,618	52,750
Ending balance	₩	591,788	625,570

### 20. Lease, Continued

(7) Details of lease liabilities, such as short-term lease, leases for which the underlying asset is of low value, were not recognized as expenses in 2022 and 2021 are as follows:

In millions of won	2022		2021	
Short-term leases	₩.	47.661	49.296	
	~ ~		-,	
Leases of low-value assets		937	190	

### 21. Trade and Other Payables

Trade and other payables as of December 31, 2022 and 2021 are as follows:

In millions of won		202	2	2021		
	-		Non-current	Current	Non-current	
Trade payables	₩	652,910	-	353,237	-	
Other payables		125,322	40	79,801	32	
Accrued expenses		38,372	-	43,946	-	
Other deposits		307	-	82	-	
Lease liabilities		93,016	498,772	85,193	540,377	
	₩	909,927	498,812	562,259	540,409	

### 22. Borrowings and Debentures

(1) Details of borrowings and debentures as of December 31, 2022 and 2021 are as follows:

In millions of won

		2022	2021
Current Liabilities:			
Short-term borrowings	$\mathbf{W}$	55,200	100,000
Current portion of long-term borrowings		4,577	348
Current portion of long-term debentures		800,190	745,650
Less: discount on debentures		(286)	(756)
		859,681	845,242
Non-current Liabilities:			
Long-term borrowings		88,642	49,934
Debentures		4,974,764	4,585,144
Less: discount on debentures		(10,601)	(8,279)
		5,052,805	4,626,799
	₩	5,912,486	5,472,041

(2) Short-term borrowings as of December 31, 2022 and 2021 are as follows:

Туре	Lender	Annual interest rate		Maturity date		2022	2021
Short-term borrowings in	Mirae Asset Securities Co., Ltd.	1.35%	Fixed rate	2022.01.21	₩	-	50,000
domestic currency	BNK Securities, etc.	1.77%	Fixed rate	2022.02.08		-	50,000
, Limit loans in	Kookmin Bank	3.94%	Fixed rate	2023.01.06		50,000	-
domestic currency	Korea Development Bank	4.15%	Floating rate	2023.01.06		3,400	-
Bank overdraft in domestic currency	NH Bank	4.83%	Floating rate	2023.01.06		1,800	-
,					₩	55,200	100,000

### 22. Borrowings and Debentures, Continued

(3) Long-term borrowings as of December 31, 2022 and 2021 are as follows:

- For the year ended December 31, 2022

In millions of won

Lender	Description	Annual interest rate		Maturity date		2022
Korea Energy Agency	Development funds	Floating rate	3yr KTB rate – 2.25%	2023-03-15 2023-06-15 2024-06-15 2024-09-15 2025-06-15 2025-12-15	₩	75 5 11 36 3 25
Korea Housing Urban Guarantee Corporation	Urban Regeneration Support funds		1.80%(*1)	2034-12-22		49,779
Samsung Life Insurance Co.,Ltd.	Energy generation facilities construction funds	Fixed rate	3.77%	2023 ~ 2037		43,285
	Less: current portion				₩_	93,219 (4,577) 88,642

(\*1) At the time of signing the contract, the interest rate of the Ministry of Land, Infrastructure and Transport is 1.8% per annum. If the interest rate is changed according to the fund management plan of the Ministry of Land, Infrastructure and Transport, the interest rate will change accordingly.

- For the year ended December 31, 2021

Lender	Description	Annual interest rate		Maturity date		2021
Korea Energy Agency	Development funds	Floating	3yr KTB rate – 2.25%	2023-03-15 2023-06-15 2024-06-15 2024-09-15 2025-06-15 2025-12-15	₩	374 17 19 57 4 32
Korea Housing Urban Guarantee Corporation	Urban Regeneration Support funds	rate	1.80%(*1)	2025-12-15		49,779
	Less: current portion				₩	50,282 (348) 49,934

(\*1) At the time of signing the contract, the interest rate of the Ministry of Land, Infrastructure and Transport is 1.8% per annum. If the interest rate is changed according to the fund management plan of the Ministry of Land, Infrastructure and Transport, the interest rate will change accordingly.

### 22. Borrowings and Debentures, Continued

(4) Local debentures as of December 31, 2022 and 2021 are as follows:

Туре	Issue date	Maturity	Annual inte	erest rate	2022	2021
Corporate bond #17-1	2012.10.22	2022.10.22	Fixed rate	3.22%	-	100,000
Corporate bond #17-2	2012.10.22	2027.10.22	Fixed rate	3.26%	100,000	100,000
Corporate bond #18-1	2013.05.07	2023.05.07	Fixed rate	2.93%	120,000	120,000
Corporate bond #18-2	2013.05.07	2028.05.07	Fixed rate	3.03%	80,000	80,000
Corporate bond #19-2	2013.06.14	2023.06.14	Fixed rate	3.38%	100,000	100,000
Corporate bond #21	2013.10.22	2023.10.22	Fixed rate	3.67%	110,000	110,000
Corporate bond #22	2013.10.31	2023.10.31	Fixed rate	3.61%	90,000	90,000
Corporate bond #23-2	2014.10.23	2024.10.23	Fixed rate	2.82%	120,000	120,000
Corporate bond #24-2	2014.11.20	2024.11.20	Fixed rate	2.81%	110,000	110,000
Corporate bond #26-2	2015.03.05	2025.03.05	Fixed rate	2.43%	90,000	90,000
Corporate bond #27-2	2015.05.08	2025.05.08	Fixed rate	2.70%	80,000	80,000
Corporate bond #30-2	2016.01.28	2026.01.28	Fixed rate	2.10%	110,000	110,000
Corporate bond #32-2	2016.09.09	2026.09.09	Fixed rate	1.61%	110,000	110,000
Corporate bond #33-1	2017.02.22	2022.02.22	Fixed rate	2.04%	-	70,000
Corporate bond #33-2	2017.02.22	2027.02.22	Fixed rate	2.34%	130,000	130,000
Corporate bond #35-1	2017.05.22	2022.05.22	Fixed rate	2.07%	-	50,000
Corporate bond #35-2	2017.05.22	2027.05.22	Fixed rate	2.46%	40,000	40,000
Corporate bond #35-3	2017.05.22	2032.05.22	Fixed rate	2.59%	110,000	110,000
Corporate bond #36-1	2017.06.23	2022.06.23	Fixed rate	2.08%	-	40,000
Corporate bond #36-2	2017.06.23	2027.06.23	Fixed rate	2.35%	70,000	70,000
Corporate bond #36-3	2017.06.23	2037.06.23	Fixed rate	2.47%	90,000	90,000
Corporate bond #37-1	2017.07.21	2022.07.21	Fixed rate	2.09%	-	40,000
Corporate bond #37-2	2017.07.21	2027.07.21	Fixed rate	2.36%	50,000	50,000
Corporate bond #37-3	2017.07.21	2037.07.21	Fixed rate	2.47%	110,000	110,000
Corporate bond #38-1	2017.09.05	2027.09.05	Fixed rate	2.44%	50,000	50,000
Corporate bond #38-2	2017.09.05	2037.09.05	Fixed rate	2.51%	100,000	100,000
Corporate bond #39-1	2017.09.28	2022.09.28	Fixed rate	2.20%	-	30,000
Corporate bond #39-2	2017.09.28	2047.09.28	Fixed rate	2.46%	120,000	120,000
Corporate bond #40-2	2018.04.20	2038.04.20	Fixed rate	2.81%	60,000	60,000
Corporate bond #40-3	2018.04.20	2048.04.20	Fixed rate	2.81%	70,000	70,000
Corporate bond #41-2	2018.09.14	2038.09.14	Fixed rate	2.27%	100,000	100,000
Corporate bond #41-3	2018.09.14	2048.09.14	Fixed rate	2.25%	90,000	90,000
Corporate bond #42-2	2018.11.01	2038.11.01	Fixed rate	2.25%	60,000	60,000
Corporate bond #42-3	2018.11.01	2048.11.01	Fixed rate	2.20%	20,000	20,000
Corporate bond #43-1	2020.05.28	2025.05.28	Fixed rate	1.40%	60,000	60,000
Corporate bond #43-2	2020.05.28	2040.05.28	Fixed rate	1.59%	100,000	100,000
Corporate bond #43-3	2020.05.28	2050.05.28	Fixed rate	1.62%	90,000	90,000
Corporate bond #44-1	2020.06.23	2025.06.23	Fixed rate	1.42%	90,000	90,000
Corporate bond #44-2	2020.06.23	2040.06.23	Fixed rate	1.69%	60,000	60,000
Corporate bond #45-1	2020.08.27	2025.08.27	Fixed rate	1.28%	70,000	70,000
Corporate bond #45-2	2020.08.27	2040.08.27	Fixed rate	1.68%	80,000	80,000
Corporate bond #45-3	2020.08.27	2050.08.27	Fixed rate	1.68%	80,000	80,000

### 22. Borrowings and Debentures, Continued

(4) Local debentures as of December 31, 2022 and 2021 are as follows, Continued

Туре		Maturity					
	Issue date	date	Annual inte	erest rate		2022	2021
Corporate bond #46-1	2020.11.05	2022.11.05	Fixed rate	1.00%		-	60,000
Corporate bond #46-2	2020.11.05	2025.11.05	Fixed rate	1.42%		10,000	10,000
Corporate bond #46-3	2020.11.05	2050.11.05	Fixed rate	1.76%		80,000	80,000
Corporate bond #47-1	2020.12.22	2025.12.22	Fixed rate	1.51%		40,000	40,000
Corporate bond #47-2	2020.12.22	2030.12.22	Fixed rate	1.82%		50,000	50,000
Corporate bond #47-3	2020.12.22	2050.12.22	Fixed rate	1.88%		80,000	80,000
Corporate bond #48-1	2021.04.29	2024.04.29	Fixed rate	1.39%		60,000	60,000
Corporate bond #48-2	2021.04.29	2026.04.29	Fixed rate	1.87%		150,000	150,000
Corporate bond #48-3	2021.04.29	2031.04.29	Fixed rate	2.18%		20,000	20,000
Corporate bond #49-1	2021.07.29	2024.07.29	Fixed rate	1.68%		110,000	110,000
Corporate bond #49-2	2021.07.29	2026.07.29	Fixed rate	1.92%		130,000	130,000
Corporate bond #49-3	2021.07.29	2031.07.29	Fixed rate	2.00%		30,000	30,000
Corporate bond #50-1	2021.11.10	2024.11.10	Fixed rate	2.36%		20,000	20,000
Corporate bond #50-2	2021.11.10	2026.11.10	Fixed rate	2.60%		60,000	60,000
Corporate bond #50-3	2021.11.10	2041.11.10	Fixed rate	2.50%		10,000	10,000
Corporate bond #51-1	2022.01.25	2025.01.24	Fixed rate	2.76%		50,000	-
Corporate bond #51-2	2022.01.25	2042.01.24	Fixed rate	2.78%		20,000	-
Corporate bond #52-1	2022.03.28	2025.03.28	Fixed rate	3.18%		90,000	-
Corporate bond #52-2	2022.03.28	2042.03.28	Fixed rate	3.35%		30,000	-
Corporate bond #52-3	2022.03.28	2052.03.28	Fixed rate	3.20%		10,000	-
Corporate bond #53-1	2022.05.20	2024.05.20	Fixed rate	3.52%		40,000	-
Corporate bond #53-2	2022.05.20	2025.05.20	Fixed rate	3.78%		120,000	-
Corporate bond #53-3	2022.05.20	2052.05.20	Fixed rate	3.71%		30,000	-
Corporate bond #54-1	2022.07.19	2024-07-19	Fixed rate	3.98%		110,000	-
Corporate bond #54-2	2022.07.19	2025.07.19	Fixed rate	3.97%		50,000	-
Corporate bond #55-1	2022.10.25	2024.10.25	Fixed rate	5.64%		40,000	-
Corporate bond #55-2	2022.10.25	2025.10.25	Fixed rate	5.96%		100,000	-
Corporate bond #56-1	2022.11.28	2024.11.28	Fixed rate	5.41%		70,000	-
Corporate bond #56-2	2022.11.28	2025.11.28	Fixed rate	5.29%		10,000	
						4,740,000	4,360,000
Less: discount on deber	ntures					(7,803)	(7,266)
Less: current portion						(419,926)	(389,867)
					₩	4,312,271	3,962,867

### 22. Borrowings and Debentures, Continued

(5) Foreign debentures as of December 31, 2022 and 2021 are as follows:

In millions of won, In thousands of USD, CHF

		Maturity			Foreign			
Туре	Issue date	date	Annual inte	erest rate	Currency		2022	2021
Euro bond #4	2018.06.07	2023.06.07	Fixed rate	3.750%	USD 300,000	₩	380,190	355,650
Swiss franc bond #2	2019.02.27	2024.02.27	Fixed rate	0.125%	CHF 200,000		274,574	259,494
Euro bond #5	2019.07.22	2022.07.22	Fixed rate	2.375%	USD 300,000		-	355,650
Euro bond #6	2022.06.28	2025.06.28	Fixed rate	4.125%	USD 300,000	_	380,190	
							1,034,954	970,794
Less: discount on deb	entures						(3,084)	(1,769)
Less: current portion							(379,978)	(355,027)
						₩	651,892	613,998

(6) Repayment schedule of borrowings and debentures as December 31, 2022 are as follows:

In millions of won

		Less than		More than				
	_	1 year	1 - 2 years	2 - 5 years	5 years	Total		
Borrowings Debentures	₩	59,777 800,190	3,066 954,574	9,058 2,240,190	76,518 1,780,000	148,419 5,774,954		
	₩	859,967	957,640	2,249,248	1,856,518	5,923,373		

(7) Changes in borrowings and debentures for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

### In millions of won

		Beginning balance	Cash flows	Foreign exchange rates fluctuation	Changes in consolidatio n scope	Others	Ending balance
Borrowings Debentures	₩	150,282 5,321,759	(47,745) 366,812	5,371 72,110	40,511 (50)	- 3.436	148,419 5,764,067
Depentures	₩	5,472,041	319,067	72,110	40,461	3,430	5,912,486

(ii) For the year ended December 31, 2021

		Beginning		Foreign exchange	exchange			
	-	balance	Cash flows	rates fluctuation	Others	balance		
Borrowings	₩	851	149,904	(473)	-	150,282		
Debentures	_	5,219,103	28,373	71,128	3,155	5,321,759		
	₩	5,219,954	178,277	70,655	3,155	5,472,041		

### 23. Other Financial Liabilities

Other financial liabilities as of December 31, 2022 and 2021 are as follows:

#### In millions of won

		202	2	202	1	
		Current Non-current		Current	Non-current	
Derivative liabilities	₩	3,527	10,064	50	-	

### 24. Employment Benefits

(1) The principal assumptions used on actuarial valuation as of December 31, 2022 and 2021 are as follows:

	2022	2021
Discount rate	5.19 ~ 5.30%	2.60 ~ 2.90%
Future salary increase rate	3.22 ~ 5.82%	3.22 ~ 5.82%
Weighted average duration	8.8 ~ 10.7 years	10.5 ~ 12.6 years

(2) Details of the expense relating to its defined benefit plans for the years ended December 31, 2022 and 2021 are as follows:

In millions of won

		2022	2021
Current service cost	₩	19,316	18,814
Interest cost		4,115	3,159
Expected return on plan assets		(1,341)	(981)
	$\overline{W}$	22,090	20,992

(3) Employee benefit obligations as of December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Present value of defined benefit obligation from funded plans Fair value of plan assets	₩	126,098 (52,753)	150,019 (51,570)
Net liabilities incurred from defined benefit plans	₩	73,345	98,449

(4) Changes in the present value of defined benefit obligations for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Beginning balance	₩	150,019	145,708
Current service cost		19,316	18,814
Interest cost		4,115	3,159
Remeasurement component		(37,599)	(10,274)
Actual payments		(9,753)	(7,388)
Ending balance	₩	126,098	150,019

### 24. Employment Benefits, Continued

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

In millions of won		2022	2021
Beginning balance	₩	51,570	48,871
Interest income		1,341	981
Remeasurement component		(229)	(99)
Contributions by the employers		3,088	2,036
Actual payments		(3,017)	(219)
Ending balance	$\overline{\mathbf{W}}$	52,753	51,570

In addition, profit (loss) on accumulated remeasurement component amounting to W10,426 million and W18,317 million has been recognized as other comprehensive profit and other comprehensive loss for the years ended December 31, 2022 and 2021, respectively.

(6) Details of fair value of plan assets as of December 31, 2022 and 2021 are as follows:

In millions of won	2022	2021
I I I I I I I I I I I I I I I I I I I	√ 20,005	
Others	32,748	37,261
1	↓52,753	51,570

For the years ended December 31, 2022 and 2021, actual returns on plan assets amounted W1,113 million and W882 million, respectively.

(7) Details of other long-term employee benefit liabilities as of December 31, 2022 and 2021 are as follows:

In millions of won	2022	2	2021
Unpaid long-service leave	W	164	201

(8) Remeasurement component recognized in other comprehensive income (loss) for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Remeasurement loss from changes in financial Experience adjustments Expected return	₩	43,153 (5,554) (229) 37,370	9,581 693 (99) 10,175

### 25. Provisions

(1) Provisions as of December 31, 2022 and 2021 are as follows:

In millions of won	_	2022	2021
Provision for employment benefits Provision for RPS (*1) Provision for green gas (*2) Provision for litigation	₩-	40,868 - 7,640 <u>10,972</u> 59,480	36,218 - 137,021 

(\*1) As the Group is obligated to produce and supply certain amount of energies from renewable energy sources in accordance with the *Act on the Promotion of the Development and Use of New and Renewable Sources of Energy,* the Group has recognized provision for renewable portfolio standard (RPS).

(\*2) As the Group has a present obligation which is expected to be fulfilled by submitting emission rights to the government with regard to emission of greenhouse gas in accordance with the *Act on the Allocation and Trading of Greenhouse Gas Emission Permits,* the Group has recognized provision for green gas.

(2) Changes in provisions for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

In millions of won		Beginning balance	Increase	Utilization	Reversal	Ending balance
Provision for employment	-					
benefits	₩	36,218	46,507	(41,857)	-	40,868
Provision for RPS		-	6,254	-	(6,254)	-
Provision for green gas		137,021	19,296	(130,023)	(18,654)	7,640
Provision for litigation		10,427	545	-	-	10,972
	₩	183,666	72,602	(171,880)	(24,908)	59,480

(ii) For the year ended December 31, 2021

In millions of won	Beginning balance	Increase	Utilization	Reversal	Other changes	Ending balance
Provision for employment						
benefits W	33,988	40,770	(38,540)	-	-	36,218
Provision for RPS	9,126	15,058	-	(24,184)	-	-
Provision for financial						
guarantees	5,537	-	(6,188)	-	651	-
Provision for green gas	-	137,021	-	-	-	137,021
Provision for litigation	9,705	880	(158)	-	-	10,427
$\mathcal{W}$	58,356	193,729	(44,886)	(24,184)	651	183,666

### 25. Provisions, Continued

(3) Green gas emission rights and emission liabilities

(i) The amount of free allocation for each planning period and implementation year as December 31, 2022 are as follows:

In ten thousands of tons (tCO2-eq)

	3rd planning period						
	2021	2022	2023	2024	2025	Total	
Free allocation	2,824	2,723	2,723	908	908	10,086	

(ii) Changes in Green gas emission rights for the years ended December 31, 2022 and 2021 are as follows:

- For the year ended December 31, 2022

In ten thousands of tons (tCO2-eq), millions of won

	2nd planning period					
	202	0	202	1	2022	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance,						
including free allocation	3,335	13,769	2,824	-	2,723	-
Purchase (sale)	(68)	8,305	457	115,269	125	32,812
Submitted to the Government	(3,042)	-	(3,336)	(118,367)	(48)	(11,657)
Borrowing						
(carried forward)	(225)	(22,074)	55	3,098	90	18,976
Ending balance	-	-	-	-	2,890	40,131

	3rd planning period					
	202	3	2024		2025	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance, including free allocation	2,723	-	908	-	908	-
Purchase (sale)	33	6,315	35	7,185	-	-
Submitted to the Government Borrowing (carried forward)	-	-	-	-	-	-
Ending balance	2,756	6,315	943	7,185	908	-

	Total		
	Quantity	Amount	
Beginning balance,			
including free allocation	10,086	-	
Purchase (sale)	650	161,581	
Submitted to the Government	(3,384)	(130,024)	
Borrowing			
(carried forward)	145	22,074	
Ending balance	7,497	53,631	

### 25. Provisions, Continued

(3) Green gas emission rights and emission liabilities, Continued

(ii) Changes in Green gas emission rights for the years ended December 31, 2022 and 2021 are as follows, Continued:

- For the year ended December 31, 2021

In ten thousands of tons (tCO2-eq), millions of won

	2nd planning period		3rd planning period			
	202	20	2021		2022	
	Quantity	Amount	Quantity	Amount	Quantity	Amount
Beginning balance,						
including free allocation	3,335	13,769	2,723	-	2,723	-
Purchase (sale)	(68)	8,305	184	51,736	23	6,971
Submitted to the Government	(3,042)	-	-	-	-	-
Borrowing (carried forward)	(225)	(22,074)	111	16,083	34	5,991
Ending balance	-	-	3,018	67,819	2,780	12,962

	3rd planning period						
	202	3	2024		2025		
	Quantity	Amount	Quantity	Amount	Quantity	Amount	
Beginning balance, including free allocation	2,723	-	908	-	908	-	
Purchase (sale) Submitted to the Government	30	5,479	-	-	-	-	
Borrowing (carried forward)	-	-	-	-	-	-	
Ending balance	2,753	5,479	908	-	908	-	

	Total			
	Quantity	Amount		
Beginning balance,				
including free allocation	9,985	-		
Purchase (sale)	237	64,186		
Submitted to the Government	-	-		
Borrowing				
(carried forward)	145	22,074		
Ending balance	10,367	86,260		

(iii) There are no green gas emission rights provided as collateral by the Group as of December 31, 2022.

(iv) Among the green gas emission rights held by the Group, there are no emission rights held for short-term trading gains as of December 31, 2022.

(v) The estimated green gas emissions of the Group for the current implementation year is 30.12 million tons (tCO2-eq).

### 26. Non-financial Liabilities

Non-financial liabilities as of December 31, 2022 and 2021 are as follows:

In millions of won		202	22	2021		
	_	Current	Non-current	Current	Non-current	
Advance payment	₩	45,403	-	51,114	-	
Deferred revenue		549	653	274	565	
Withholdings		6,598	-	4,649	-	
Others		1,995	1,414	2,857	989	
	₩	54,545	2,067	58,894	1,554	

### 27. Contributed Capital

(1) Details of issued capital as of December 31, 2022 and 2021 are as follows:

In millions of won, except par value and number of shares

Туре	Number of	Number of shares issued	Par value	2022	2021
Common Stock	100,000,000	33,329,119 <del>W</del>	5,000	166,646	166,646

(2) Changes in number of outstanding capital stock for the years ended December 31, 2022 and 2021 are as follows:

Number of shares	2022	2021
Beginning balance Changes Ending balance	33,329,119 	33,329,119 

(3) Details of share premium as of December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Share premium	₩	1,106,252	1,106,252

### 28. Retained Earnings and Dividends Paid

(1) Details of retained earnings as of December 31, 2022 and 2021 are as follows:

In	millions	of	won

		2022	2021
Legal reserves (*1)	$\overline{W}$	75,614	75,614
Voluntary reserves		1,502,761	1,666,534
Retained earnings before appropriations		984,423	581,619
	₩	2,562,798	2,323,767

(\*1) In accordance with the Commercial Law, an amount equal to at least 10% of cash dividend for each accounting period is required to be appropriated as a legal reserve until the reserve equals 50% of issued capital. The legal reserve cannot be used as a source for cash dividends and may be used to offset an accumulated deficit.

(2) Details of voluntary reserves as of December 31, 2022 and 2021 are as follows:

In millions of won

		2022	2021
Reserve for the rationalization of business (*1)	₩	181	181
Reserve for investment on social overhead capital		13,000	13,000
Reserve for business expansion		1,489,580	1,653,353
	₩	1,502,761	1,666,534

(\*1) Prior to 2002, KOWEPO appropriated certain tax-deductible benefits as reserve for the rationalization of business, for offsetting future deficit in accordance with the *Restriction of Special Taxation Act*. However, when the Act was amended on December 11, 2002, the Group's reserves have been changed to voluntary reserves due to deletion of related provision.

(3) Changes in retained earnings before appropriations for the years ended December 31, 2022 and 2021 are as follows:

	2022	2021
Beginning balance W	581,618	587,759
Profit (loss) for the year attributed to owner of the		
Company	210,226	(121,379)
Remeasurements of defined benefit liability, net of tax	28,743	7,711
Transfers to reserves	163,773	107,525
Changes in equity method retained earnings	63	3
Ending balance W	984,423	581,619

# KOREA WESTERN POWER CO., LTD. AND ITS SUBSIDIARIES Notes to the Consolidated Financial Statements

For the years ended December 31, 2022 and 2021

### 28. Retained Earnings and Dividends Paid, Continued

(4) There are no dividend payments for the years ended December 31, 2022 and 2021.

(5) Changes in retained earnings in equity method for the years ended December 31, 2022 and 2021 are as follows:

#### In millions of won

		2022	2021
Beginning balance	$\overline{\mathbf{W}}$	499	496
Changes		62	3
Ending balance	₩	561	499

(6) Changes in remeasurements components for the years ended December 31, 2022 and 2021 are as follows:

In millions of won

		2022	2021
Beginning balance	$\overline{W}$	(18,317)	(26,028)
Changes		37,370	10,175
Income tax effect		(8,627)	(2,465)
Ending balance	₩	10,426	(18,318)

### 29. Statement of appropriation of retained earnings

Statements of appropriation of retained earnings for the years ended December 31, 2022 and 2021 are as follows:

Date of appropriation for 2022: March 22, 2023 Date of appropriation for 2021: March 28, 2022

In millions of won		2022	2021
Unappropriated retained earnings			
Balance at beginning of year	₩	711,596	711,596
Profit (loss) for the year		106,361	(171,562)
Remeasurements gain		27,198	7,789
-		845,155	547,823
Transfer from voluntary reserves			
Reserves for business expansion		-	163,773
Balance at end of year before appropriation	₩	845,155	711,596
Appropriation of retained earnings			
Cash dividends		(53,193)	-
Legal reserve		(5,320)	-
Reserve for business expansion		(75,046)	-
		(133,559)	-
Unappropriated retained earnings to be carried over	₩	711,596	711,596

The statement of appropriation of retained earnings above was prepared based on the Company's separate financial statements.

### 30. Other Components of Equity

(1) Other components of equity as of December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Accumulated other comprehensive income	₩	1,679,093	179,171
Other equity		(41,935)	(41,784)
	₩	1,637,158	137,387

(2) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

		Financial assets at fair value through other comprehensiv e income valuation reserve	Reserve for gain (loss) on valuation of derivatives	Reserve for overseas operations translation credit	Shares in other comprehensive income (loss) of investments in associates and joint ventures	Total
Beginning balance Valuation gain on financial assets at fair value through	₩	173,408	10,878	(7,051)	1,936	179,171
other comprehensive income		1,963,954	-	-	-	1,963,954
Valuation loss on derivatives Foreign currency translation of		-	(21,717)	-	-	(21,717)
foreign operations Valuation of investments in		-	-	(6,613)	-	(6,613)
associates		-	-	-	12,461	12,461
Tax effect		(453,345)	5,182			(448,163)
Ending balance	₩	1,684,017	(5,657)	(13,664)	14,397	1,679,093

#### 30. Other Components of Equity, Continued

(2) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2022 and 2021 are as follows, Continued:

(ii) For the year ended December 31, 2021

In millions of won

Beginning balance         W         64,806         11,841         (7,121)         (7,132)         62,394           Valuation gain on financial assets at fair value through other comprehensive income         143,274         -         -         143,274           Valuation loss on derivatives         -         (1,271)         -         143,274           Valuation loss on derivatives         -         (1,271)         -         (1,271)           Foreign currency translation of foreign operations         -         -         70         -         70           Valuation of investments in associates         -         -         -         9,068         9,068           Tax effect         (34,672)         308         -         -         (34,364)           Ending balance         W         173,408         10,878         (7,051)         1,936         179,171			Financial assets at fair value through other comprehensiv e income valuation reserve	Reserve for gain (loss) on valuation of derivatives	Reserve for overseas operations translation credit	Shares in other comprehensive income (loss) of investments in associates and joint ventures	Total
Valuation loss on derivatives-(1,271)(1,271)Foreign currency translation of foreign operations70-70Valuation of investments in associates9,0689,068Tax effect(34,672)308(34,364)	Valuation gain on financial	₩	64,806	11,841	(7,121)	(7,132)	62,394
Foreign currency translation of foreign operations70-70Valuation of investments in associates9,0689,068Tax effect(34,672)308(34,364)	other comprehensive income		143,274	-	-	-	143,274
foreign operations70-70Valuation of investments in associates9,0689,068Tax effect(34,672)308(34,364)			-	(1,271)	-	-	(1,271)
Tax effect         (34,672)         308         -        (34,364)	foreign operations		-	-	70	-	70
	associates		-	-	-	9,068	9,068
Ending balance         W         173,408         10,878         (7,051)         1,936         179,171	Tax effect		(34,672)	308			(34,364)
	Ending balance	₩	173,408	10,878	(7,051)	1,936	179,171

(3) Details of other equity for the years ended December 31, 2022 and 2021.

In millions of won		2022	2021
Capital reduction	₩	(41,046)	(41,046)
Other capital adjustments		(889)	(737)
	$\overline{W}$	(41,935)	(41,783)

#### 31. Sales

Details of sales for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Sales of electricity Others	W	8,109,643 67,736	4,969,035
Others	₩	8.177.379	<u>32,599</u> 5,001,634
	<del>~~</del>	8,177,379	5,001,634

#### 32. Selling and Administrative Expenses

Details of selling and administrative expenses for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Salaries	₩	21,654	20,612
Retirement benefit expense		1,625	1,251
Welfare and benefit expense		2,677	2,273
Insurance expense		787	670
Depreciation		13,413	13,525
Amortization		3,304	2,399
Commission		19,735	22,003
Advertising expense		1,995	1,941
Training expense		120	54
Vehicle maintenance expense		163	135
Publishing expense		173	144
Business promotion expense		102	94
Rent expense		1,480	1,094
Telecommunication expense		409	493
Transportation expense		23	19
Taxes and dues		4,866	4,980
Expendable supplies expense		331	478
Water, light and heating expense		798	699
Repairs and maintenance expense		945	1,466
Ordinary development expense		17,390	18,288
Travel expense		487	240
Clothing expense		61	64
Bad debt expenses		-	1,278
Others		2,912	3,006
	₩	95,450	97,206

### 33. Other Non-operating Income and Expense

(1) Other non-operating income for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Rental income Gains from assets contributed	₩	5,849 27	5,667 371
	₩	5,876	6,038

(2) Other non-operating expenses for years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Donations Other bad debt expenses	₩	14,365 4,473	10,154 7
	₩	18,838	10,161

### 34. Other Income (Loss)

Details of other income and loss for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Gain on disposal of property, plant, and			
equipment	₩	117	45
Gain on foreign currency translation		8,028	2,152
Gain on foreign currency transaction		13,514	3,779
Other gains		39,426	11,573
Loss on disposal of property, plant, and			
equipment		(9,914)	(11,991)
Loss on disposal of intangible assets		-	-
Loss on foreign currency translation		(1,631)	(1,176)
Loss on foreign currency transaction		(40,495)	(7,861)
Other losses		(8,941)	(14,347)
	₩	104	(17,826)

### 35. Finance Income

(1) Finance income for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Interest income	₩	9.244	4,980
Dividend income		103,173	13,612
Gain on valuation of derivatives		39,620	71,128
Gain on transaction of derivatives		68,699	14,336
Gain on foreign currency translation		6,981	1,772
Gain on foreign currency transaction		233	474
	₩	227,950	106,302

(2) Interest income included in finance income for years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Cash and cash equivalents	W	5,083	3,800
Loans and receivables		3,209	905
Other financial instruments		516	113
Trade and other receivables		436	162
	W	9,244	4,980

### 36. Finance Expenses

(1) Finance expenses for years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021	
Interest expense Loss on valuation of derivatives	₩	146,499 9,017	130,180 50	
Loss on transaction of derivatives		12,503	4,459	
Loss on foreign currency translation		84,008	125,280	
Loss on foreign currency transaction Others		43,585	- 1,015	
	₩	295,612	260,984	

(2) Interest expenses included in finance expenses for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022	2021
Short term borrowings	₩	3,604	151
Long term borrowings		1,723	28
Debentures		141,932	125,761
Trade and other payables		53	413
Lease liabilities		12,441	11,815
		159,753	138,168
Less: capitalized borrowing costs		(13,254)	(7,988)
	₩	146,499	130,180

### 37. Income Tax Expenses (benefits)

(1) Components of income tax expenses (benefits) for the years ended December 31, 2022 and 2021 are as follows:

In millions of won	-	2022	2021
Current income tax			
Current income tax	₩	31,560	8,966
Adjustment for prior period		141	-
Income tax charged directly to equity		(456,790)	(36,829)
	_	(425,089)	(27,863)
Deferred income tax	_		
Generation and realization of temporary differences Amount due to tax deficits, tax credits and temporary		452,337	(15,703)
differences that were not recognized in the past		(9,514)	(3,932)
	_	442,823	(19,635)
Income tax expenses (benefits)	₩	17,734	(47,498)

### 37. Income Tax Expenses (benefits), Continued

(2) The relationship between accounting income and corporate tax profit in the current and prior terms is as follows:

In millions of won		2022	2021
Profit (loss) before income tax expenses (benefits) Income tax expenses (benefits) in accordance with statutory tax rate	₩	228,008	(168,877) (40,868)
Adjustments	_	55,176	(40,000)
Effects of the application of accumulative tax rate		(462)	(462)
Effects of non-deductible expenses		(5,745)	1,502
Effects of tax credits or exemptions		(21,864)	(3,738)
Amount due to tax deficits, tax credits and temporary differences			
that were not recognized in the past		(9,514)	(3,932)
		(37,585)	(6,630)
Adjustment for prior period		141	-
Income tax expenses (benefits)	₩	17,734	(47,498)
Average effective tax rate		7.78%	(*1)

(\*1) The average effective tax rate for the year ended December 31, 2021 is not presented as a result of negative average effective tax rate due to net loss before income tax expenses (benefits).

(3) Income tax recognized in other comprehensive income for the years ended December 31, 2022 and 2021 are as follows:

In millions of won	-	2022	2021
Net change in the non-current financial assets at fair value	₩		
through other comprehensive income, net of tax Loss on valuation of derivatives using cash flow hedge		(453,345)	(34,672)
accounting, net		5,182	308
Remeasurements of defined benefit obligations	_	(8,627)	(2,465)
	₩	(456,790)	(36,829)

### 37. Income Tax Expenses (benefits), Continued

(4) Recognized deferred income tax assets (liabilities) in the statement of financial position for the years ended December 31, 2022 and 2021 are as follows:

Amounts

(i) For the year ended December 31, 2022

In millions of won

	Balance as of January 1, 2022	Amounts recognized in profit or loss	recognized in other comprehensive income (loss)	Balance as of December 31, 2022
Deferred tax on temporary differences				
Long-term employee benefits	∀ 23,769	2,245	(8,627)	17,387
Cash flow hedges	(21,420)	(5,528)	5,182	(21,766)
Property, plant and equipment	(247,913)	47,150	-	(200,763)
Intangible assets	56	(2)	-	54
Inventories	1,242	2,277	-	3,519
Financial instruments at fair value through				
other comprehensive income	(56,395)	38	(453,345)	(509,702)
Foreign currency translation	19,598	5,657	-	25,255
Other provision	(4,240)	175	-	(4,065)
Others	45,241	(32,666)	-	12,575
	(240,062)	19,346	(456,790)	(677,506)
Unused tax deficit and tax credit carry				
forward	26,665	(5,379)	-	21,286
Total ↔	↓ (213,397)	13,967	(456,790)	(656,220)

(ii) For the year ended December 31, 2021

In millions of won				Amounts recognized in	
		Balance as of January 1, 2021	Amounts recognized in profit or loss	other comprehensive income (loss)	Balance as of December 31, 2021
Deferred tax on temporary differences					
Long-term employee benefits	₩	23,361	2,872	(2,465)	23,768
Cash flow hedges		(4,518)	(17,210)	308	(21,420)
Property, plant and equipment		(287,927)	40,014	-	(247,913)
Intangible assets		56	-	-	56
Inventories		1,219	23	-	1,242
Financial instruments at fair value throug	h				
other comprehensive income		(21,723)	-	(34,672)	(56,395)
Foreign currency translation		2,246	17,353	-	19,599
Other provision		(4,240)	-	-	(4,240)
Others		29,305	15,936		45,241
		(262,221)	58,988	(36,829)	(240,062)
Unused tax deficit and tax credit carry					
forward		29,255	(2,590)	-	26,665
Total	₩	(232,966)	56,398	(36,829)	(213,397)

#### 37. Income Tax Expenses (benefits), Continued

(5) The details of deductible temporary differences not recognized as deferred tax assets as of December 31, 2022 are as follows:

In millions of won	-	2022
Investments in associates, and others	₩	162,085

(6) Deferred tax liabilities presented in the statement of financial position of are as follows:

In millions of won		2022	2021
Deferred income tax assets	₩	1,846	1,706
Deferred income tax liabilities		(658,065)	(215,103)

#### 38. Expenses Classified by Nature

Expenses classified by nature for years ended December 31, 2022 and 2021 are as follows:

(i) For the year ended December 31, 2022

In millions of won	_	Selling and administrative expenses	Cost of sales	Total
Raw materials used Salaries Retirement benefit expense Welfare and benefit expense Insurance expense Depreciation Amortization Commission Advertising expense Training expense Vehicle maintenance expense Publishing expense Business promotion expense Rent expense Telecommunication expense Taxes and dues Expendable supplies expense Water, light and heating expense Repairs and maintenance expense Ordinary development expense Travel expense Clothing expense	_ ₩	expenses 21,654 1,625 2,677 787 13,413 3,304 19,735 1,995 120 163 173 102 1,480 409 23 4,866 331 798 945 17,390 487	Cost of sales           6,407,608           236,331           34,608           23,311           12,727           830,224           4,650           17,163           540           494           121           229           261           20,252           246           71           30,473           2,461           368           206,018           19,075           771           624	Total           6,407,608           257,985           36,233           25,988           13,514           843,637           7,954           36,898           2,535           614           284           402           363           21,732           655           94           35,339           2,792           1,166           206,963           36,465           1,258           685
Survey and analysis expense Others	_	- 2,912	104 4,044	104 6,956
	₩	95,450	7,852,774	7,948,224

### 38. Expenses Classified by Nature, Continued

Expenses classified by nature for years ended December 31, 2022 and 2021 are as follows:

(ii) For the year ended December 31, 2021

In millions of won		Selling and administrative expenses	Cost of sales	Total
	-			
Raw materials used	₩	-	3,442,779	3,442,779
Salaries		20,612	235,674	256,286
Retirement benefit expense		1,251	24,869	26,120
Welfare and benefit expense		2,273	23,023	25,296
Insurance expense		670	12,383	13,053
Depreciation		13,525	820,407	833,932
Amortization		2,399	3,755	6,154
Commission		22,003	16,913	38,916
Advertising expense		1,941	619	2,560
Training expense		54	97	151
Vehicle maintenance expense		135	115	250
Publishing expense		144	249	393
Business promotion expense		94	220	314
Rent expense		1,094	22,635	23,729
Telecommunication expense		493	216	709
Transportation expense		19	68	87
Taxes and dues		4,980	29,539	34,519
Expendable supplies expense		478	1,905	2,383
Water, light and heating expense		699	295	994
Repairs and maintenance expense		1,466	188,335	189,801
Ordinary development expense		18,288	20,333	38,621
Travel expense		241	602	843
Clothing expense		64	288	352
Survey and analysis expense		-	93	93
Bad debt expenses		1,278	-	1,278
Others	-	3,005	104,038	107,043
	₩_	97,206	4,949,450	5,046,656

### 39. Earnings (Loss) per Share

(1) Basic earnings (loss) per share for the years ended December 31, 2022 and 2021 are as follows:

In won		2022	2021
Basic earnings (loss) per share	W	6,308	(3,642)

Since the Group does not own dilutive securities, basic losses per share are identical to dilutive losses per share.

(2) Profit (loss) attributable to controlling interest and weighted average number of common shares outstanding for the years ended December 31, 2022 and 2021 are as follows:

In millions of won, except for number of share	2022	2021
Profit (loss) attributable to controlling interest W	210,226	(121,378)
Weighted average number of common shares	33,329,119	33,329,119

#### 40. Risk Management

#### (1) Capital risk management

The Group manages its capital to ensure that it will be able to continue as a going concern while maximizing the return to shareholder through the optimization of the debt and equity balance. The capital structure of the Group consists of net debt (offset by cash and bank balances) and equity. The Group's overall capital risk management strategy remains unchanged from that of the prior period.

Details of the Group's capital management accounts as of December 31, 2022 and 2021 are as follows:

In millions of won	2022		2021
Total borrowings and debentures	₩	5,912,486	5,472,041
Cash and cash equivalents		83,596	123,724
Net borrowings and debentures		5,828,890	5,348,317
Total shareholder's equity	₩	5,472,842	3,734,044
Debt to equity percentage		106.51%	143.23%

#### (2) Financial risk management

The Group is exposed to various risks related to its financial instruments, such as market risk (foreign currency risk, interest rate risk and price risk) and credit risk. The Group monitors and manages the financial risks relating to the operations of the Group through internal risk reports which analyses exposures by the degree and magnitude of risks. The Group uses derivative financial instruments for certain hedge risk exposures. The Group's overall financial risk management strategy remained unchanged from the prior period.

### 40. Risk Management, Continued

(2) Financial risk management, Continued

#### 1) Credit risk

Credit risk is the risk of a financial loss to the Group when a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises primarily from the Group's sales activities, loans and receivables, derivative instruments. In addition, credit risk exposure may exist within financial guarantees and unused line of credits. The Group transacts with banks and financial institutions with excellent credit rating, so the credit risk from financial institutions is limited. In case of ordinary customers, the Group evaluates the customers' credit worthiness considering their financial statements, past experience and other factors.

#### a) Credit risk management

Electricity sales, the main operations of the Group are the necessity for daily life and industrial activities of Korean nationals, and have importance as one of the national key industries. The Group uses publicly available information and its own internal data related to trade receivables, to rate its major customers and to measure the credit risk that a counter party will default on a contractual obligation. For the incurred but not recognized loss, it is measured considering overdue period.

#### b) Impairment and allowance account

In accordance with the Group policies, individual material financial assets are assessed on a regular basis, trade receivables that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. Value of the acquired collateral (including the confirmation of feasibility) and estimated collectable amounts are included in this assessment. Allowance for bad debts assessed on a collective basis are recognized for (i) the group of assets which individually are not material and (ii) incurred but not recognized losses that are assessed using statistical methods, judgment and past experience.

Book values of the financial assets represent the maximum exposure of the credit risk. Details of the Group's level of maximum exposure of the credit risk as of December 31, 2022 and 2021 are as follows:

In millions of won	2022	
Cash and cash equivalents	4 83,596	123,724
Loans	67,677	69,206
Short-term financial instruments	43,169	54,793
Derivative assets (hedge accounting)	107,409	88,562
Trade and other receivables	1,204,732	756,558

As of the reporting date, there are no financial assets and non-financial assets that were acquired through the exercise of the right of collateralized assets and reinforcement of credit arrangement.

As of the reporting date, the total guarantee amount to be assumed by the Group when the event of financial guarantees occurs in accordance with the financial guarantee contracts is  $\frac{W}{20,300}$  million (Note 41).

#### 2) Market risk

Market risk is the risk that the Group's fair values of the financial instruments or future cash flows are affected by the changes in the market. Market risk consists of interest rate risk, currency risk and other price risk.

### 40. Risk Management, Continued

(2) Financial risk management, Continued

3) Sensitivity analysis

a) Major assets and liabilities with uncertainties in underlying assumptions

① Defined benefit obligation

A sensitivity analysis of defined benefit obligation assuming a 1% increase or decrease in the actuarial assumptions as of December 31, 2022 and 2021 are as follows:

In millions of won

			2022		2021	
			1%	1%	1%	1%
Туре	Accounts		Increase	Decrease	Increase	Decrease
Future salary increase rate	Increase (decrease) in defined benefit obligation	₩	13,892	(11,958)	19,372	(16,437)
Discount rate	Increase (decrease) in defined benefit obligation		(12,165)	14,407	(17,024)	20,554

b) Management judgment affected by uncertainties in underlying assumptions

① Foreign currency risk

The Group undertakes transactions denominated in foreign currencies; consequently, exposures to currency exchange rate fluctuations arise. The carrying amounts of the Group's foreign currency denominated monetary assets and monetary liabilities as of December 31, 2022 and 2021 are as follows:

### (i) As of December 31, 2022

### In thousands of foreign currencies

	USD	CHF	EUR	JPY	AUD	IDR
Assets						
Cash and cash equivalents	18,151	-	-	-	-	-
Trade and other receivables	38,782	-	20	-	-	-
Short-term financial instruments	2,500	-	-	-	-	-
Long-term loans	18,099	-	-	-	-	-
	77,532	-	20	-	-	-
Liabilities						
Trade and other payables	(584,689)	-	-	(866,955)	-	-
Debentures	(600,000)	(200,000)	-	-	-	-
	(1,184,689)	(200,000)	-	(866,955)	-	_
Net exposure in foreign currency	(1,107,157)	(200,000)	20	(866,955)	-	-

### 40. Risk Management, Continued

(2) Financial risk management, Continued

3) Sensitivity analysis, Continued

b) Management judgment affected by uncertainties in underlying assumptions, Continued

1) Foreign currency risk, Continued

(ii) As of December 31, 2021

In thousands of foreign currencies

	USD	CHF	EUR	JPY
Assets				
Cash and cash equivalents	24,897	-	-	-
Trade and other receivables	2,787	-	-	-
Short-term financial instruments	4,000	-	-	-
Long-term loans	18,099	-	-	-
	49,783	-	-	-
Liabilities				
Trade and other payables	(640,616)	-	(56)	(54,953)
Debentures	(600,000)	(200,000)	-	-
	(1,240,616)	(200,000)	(56)	(54,953)
Net exposure in foreign currency	(1,190,833)	(200,000)	(56)	(54,953)

A sensitivity analysis on the Group's profit for the year assuming a 10% increase or decrease in currency exchange rates as of December 31, 2022 and 2021 are as follows:

In millions of won	202	2022		2022 2021		21
	10% Increase			10% Decrease		
Increase (decrease) of profit before income tax	₩ (168,588)	168,588	(167,187)	167,187		
Increase (decrease) of shareholder's equity	(168,588)	168,588	(167,187)	167,187		

The sensitivity analysis above is conducted for monetary assets and liabilities denominated in foreign currencies other than functional currency, without consideration of hedge effect of related derivatives, as of December 31, 2022 and 2021.

To manage its foreign currency risk related to foreign currency denominated receivables and payables, the Group has a policy to enter into currency swap agreements. In addition, to manage its foreign currency risk related to foreign currency denominated expected sales transactions and purchase transactions, the Group enters into cross-currency forward agreements.

When derivatives are traded for hedging purpose, the Group negotiates the terms of the derivatives contract to meet the conditions for hedging. In order to hedge the exchange risk of payment of payables and collection of receivables in foreign currencies, the exposure period until the time of cash flow forecasts for transactions up to the point of settlement of payables and receivables is included. These forecast transactions are highly likely to occur, and the balance of currency swap contracts depends on the level and exchange rates of the expected payables and receivables in foreign currencies.

### 40. Risk Management, Continued

(2) Financial risk management, Continued

- 3) Sensitivity analysis, Continued
- b) Management judgment affected by uncertainties in underlying assumptions, Continued
- 1) Foreign currency risk, Continued

There is an economic relationship between the hedged items and hedging instruments since the terms of currency swap contract is consistent with the terms of forecast transactions. Since the risk of the Group's currency swap contract is consistent to hedged item, the hedging relationship is set to 1:1. At the end of the reporting period, the Group's hedging instruments is hedging against the risk of hedged items.

#### ② Interest rate risk

The Group is exposed to interest rate risk due to its borrowing with floating interest rates. A 1% increase or decrease is used when reporting interest rate risk internally to key management personnel which represents management's assessment of the reasonably possible change in interest rates.

The Group's borrowings and debentures with floating interest rates as of December 31, 2022 and 2021 are as follows:

In millions of won	-	2022	2021
Short-term borrowings Long-term borrowings	₩	5,200 49,934	- 50,282
	$\overline{W}$	55,134	50,282

A Sensitivity analysis on the Group's borrowings and debentures assuming a 1% increase or decrease in interest rates for the years ended December 31, 2022 and 2021 are as follows:

#### In millions of won

		2022		20	21
	_	1%	1%	1%	1%
		Increase	Decrease	Increase	Decrease
Increase(decrease) of profit before income tax	₩	(551)	551	(503)	503
Increase(decrease) of shareholders' equity		(551)	551	(503)	503

#### 4) Liquidity risk

The Group has established an appropriate liquidity risk management framework for the management of the Group's short, medium and long-term funding and liquidity management requirements. The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

In addition, the Group has established credit lines on its trade financing and bank overdrafts, and through payment guarantees it has received, it maintains an adequate credit (borrowing) line. In addition, in case of major construction investment, the Group has the ability to use reserve cash or utilize long-term borrowings.

#### 40. Risk Management, Continued

(2) Financial risk management, Continued

#### 4) Liquidity risk, Continued

The following table shows the details of maturities of non-derivative financial liabilities as of December 31, 2022 and 2021. This table, based on the undiscounted cash flows of the non-derivative financial liabilities including estimated interests, has been prepared based on the respective liabilities' earliest maturity date.

#### (i) As of December 31, 2022

In millions of won		Less than 1 year	1-2 years	2-5 years	More than 5 years	Total
Borrowings and debentures Trade and other payables	₩	1,005,752 910,760	1,082,847 92,470	2,448,303 231,818	2,420,276 232,367	6,957,178 1,467,415
Financial guarantee contract (*1)		20,300	-	-	-	20,300
	₩	1,936,812	1,175,317	2,680,121	2,652,643	8,444,893

(\*1) This is the total amount of guarantee the Group would bear in the event of a financial guarantee event.

(ii) As of December 31, 2021

In millions of won		Less than 1 year	1-2 years	2-5 years	More than 5 years	Total
Borrowings and debentures	₩	972,746	864,389	1,876,104	2,717,910	6,431,149
Trade and other payables		563,026	87,595	248,851	269,520	1,168,992
Financial guarantee contract (*1)	_			20,300		20,300
	₩	1,535,772	951,984	2,145,255	2,987,430	7,620,441

(\*1) This is the total amount of guarantee the Group would bear in the event of a financial guarantee event.

As the Group manages liquidity on a net asset and net liability basis, it is necessary to include information about non-derivative financial assets in order to understand liquidity risk management.

The expected maturities for non-derivative financial assets as of December 31, 2022 and 2021 in detail are as follows:

#### (i) As of December 31, 2022

		Less than 1 year	1-5 years	Over 5 years	Uncertain	Total
Cash and cash equivalents Financial instruments at fair value	₩	83,596	-	-	-	83,596
through other comprehensive income Financial instruments at fair value		-	-	-	2,283,318	2,283,318
through profit or loss		-	-	-	7,412	7,412
Loans		6,353	63,787	-	-	70,140
Short-term financial instruments		43,169	-	-	-	43,169
Trade and other receivables		1,195,753	9,684	-	-	1,205,437
	₩	1,328,871	73,471	-	2,290,730	3,693,072

### 40. Risk Management, Continued

(2) Financial risk management, Continued

4) Liquidity risk, Continued

(i) As of December 31, 2021

In millions of won

		Less than 1 year	1-5 years	Over 5 years	Uncertain	Total
Cash and cash equivalents	₩	123,724	-	-	-	123,724
Financial instruments at fair value						
through other comprehensive income		-	-	-	319,364	319,364
Financial instruments at fair value through profit or loss		_	_	_	7,412	7,412
Loans		5.327	65.867	-	- ,7,712	71,194
Short-term financial instruments		54,793	-	-	-	54,793
Trade and other receivables		742,495	14,583	-	-	757,078
	₩	926,339	80,450	-	326,776	1,333,565

Derivative liabilities classified by maturity periods which from reporting date to maturity date of contract as of December 31, 2022 and 2021 are as follows:

### (i) As of December 31, 2022

In millions of won

		Less than 1 year	1-2 years	2-5 years	More than 5 years	Total
Net settlement	-					
-Trading purpose	₩	-	-	-	-	-
Gross settlement						
-Trading purpose		3,527	-	-	-	3,527
-Hedge accounting purpose		-	10,064	-	-	10,064
	₩	3,527	10,064	-	-	13,591

### (ii) As of December 31, 2021

		Less than 1 year	1-2 years	2-5 years	More than 5 years	Total
Net settlement	_					
-Trading purpose	₩	-	-	-	-	-
Gross settlement						
-Trading purpose		50	-	-	-	50
-Hedge accounting purpose		-	-	-	-	-
	₩	50	-	-		50
	=					

#### 40. Risk Management, Continued

#### (3) Fair value risk

The fair value of the Group's actively-traded financial instruments (i.e. FVTPL, FVOCI, etc.) is based on the traded market-price as of the reporting period end. The fair value of the Group's financial assets is the amount which the asset could be exchanged for or the amount a liability could be settled for.

The fair values of financial instruments where no active market exists or where quoted prices are not otherwise available are determined by using valuation techniques. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the Group uses that technique.

For trade receivables and payables, the Group considers the carrying value, net of impairment, as fair value. While for disclosure purposes, the fair value of financial liabilities is estimated by discounting a financial instrument with similar contractual cash flows using the effective interest method.

1) Fair value and book value of financial assets and liabilities as of December 31, 2022 and 2021 are as follows:

In millions of won		202	22	2021		
		Book value	Fair value	Book value	Fair value	
Assets recognized at fair value Financial assets at fair value through other comprehensive income Financial assets at fair value through profit or	₩	2,283,318	2,283,318	319,364	319,364	
loss		7,412	7,412	7,412	7,412	
Derivatives assets (hedge accounting)	\\/	107,409	107,409	88,562	88,562	
	₩	2,398,139	2,398,139	415,338	415,338	
Trade and other receivables Loans Short-term financial instruments	₩	83,596 1,204,732 67,677 <u>43,169</u> 1,399,174	83,596 1,204,732 67,677 <u>43,169</u> <u>1,399,174</u>	123,724 756,558 69,206 54,793 1,004,281	123,724 756,558 69,206 54,793 1,004,281	
Derivatives liabilities (hedge accounting)	₩	3,527 10,064 13,591	3,527 10,064 13,591	50 50	50 50	
Liabilities carried at amortized cost Trade and other payables Borrowings Debentures	₩	1,408,739 148,419 <u>5,764,067</u> 7,321,225	1,408,739 148,419 <u>4,995,835</u> <u>6,552,993</u>	1,102,668 150,282 <u>5,321,759</u> 6,574,709	1,102,668 150,282 5,252,715 6,505,665	

#### 40. Risk Management, Continued

#### (3) Fair value risk, Continued

2) The interest rates used to discount estimated cash flows, when applicable, are based on the government yield curve at the reporting date plus an adequate credit spread.

The discount rates used for calculating fair value as of December 31, 2022 and 2021 are as follows:

Туре	2022 (%)	2021 (%)
Derivatives	2.78 ~ 3.17	1.00 ~ 1.33
Debentures	2.04 ~ 5.40	-0.30 ~ 2.53

#### 3) Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique. The level of hierarchy of fair value is as follows:

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

Level 2 Other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly

Level 3 Techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data

Fair values of financial instruments by hierarchy level as of December 31, 2022 and 2021, respectively, are as follows:

(i) As of December 31, 2022

		Level 1	Level 2	Level 3	Total
Financial assets at fair value:	-				
Financial assets at fair value through other					
comprehensive income	₩	2,265,200	-	18,118	2,283,318
Financial assets at fair value through profit or loss		-	-	7,412	7,412
Derivative assets held for hedging		-	107,409	-	107,409
	₩	2,265,200	107,409	25,530	2,398,139
Financial liabilities at fair value:	-				
Derivative liabilities held for trading		-	3,527	-	3,527
Derivative liabilities held for hedging	₩	-	10,064	-	10,064
	₩	-	13,591	-	13,591

### 40. Risk Management, Continued

3) Fair value hierarchy, Continued

(ii) As of December 31, 2021

In millions of won

		Level 1	Level 2	Level 3	Total
Financial assets at fair value:					
Financial assets at fair value through other					
comprehensive income	₩	301,320	-	18,044	319,364
Financial assets at fair value through profit or loss		-	-	7,412	7,412
Derivative assets held for hedging		-	88,562	-	88,562
	₩	301,320	88,562	25,456	415,338
Financial liabilities at fair value:	-				
Derivative liabilities held for trading	₩	-	50	-	50
	₩	-	50		50
	_				

The fair value of financial instruments not traded in an active market is determined using valuation techniques.

The Group determined the fair value of its financial assets measured at fair value through other comprehensive income through the discounted cash flow, and used assumptions such as weighted average capital cost of 6.29% and permanent growth rate of 0% to determine for value. If one or more of the significant inputs is not based on observable market data, the instrument is included in Level 3.

There were no transfers between levels 1 and 2 for recurring fair value measurements during the year.

Changes in level 3 for recurring fair value measurements for the year ended December 31, 2022 and 2021 are as follows:

(i) As of December 31, 2022

In millions of won		Beginning balance	Acquisitio n	Valuation	Ending balance
Financial assets at fair value through other comprehensive income Financial assets at fair value through profit or loss	₩	18,044 7,412 25,456	- 	74 	18,118 7,412 25,530
(ii) As of December 31, 2021					
In millions of won		Beginning balance	Acquisitio n	Valuation	Ending balance
Financial assets at fair value through other comprehensive income Financial assets at fair value through profit or loss	₩	16,388 7,412	-	1,656	18,044 7,412
	₩.	23,800		1,656	25,456

### 41. Related Party Transactions

(1) The nature of the Group's relationship with related parties as of December 31, 2022 is as follows:

Control relationship	Related party
Parent company	Korea Electric Power Corporation
Associates	Pioneer Gas Power, Ltd.
	Eurasia Energy Holdings
	Xe-Pian Xe-Namnoy Power Co., Ltd.
	PT. Mutiara Jawa
	Korea Offshore Wind Power Co., Ltd.
	Daegu Solar Power Plant Co., Ltd.
	Dongducheon Dream Power Co., Ltd.
	Solar Power Plants Happy City Co., Ltd.
	Shin Pyeongtaek Power Co., Ltd.
	KEPCO ES Co.,Ltd.(formerly, KEPCO Energy Solution Co., Ltd.) KEPCO Solar Co., Ltd.
	Seoroseoro Sunny Power Plant Co., Ltd.
	Anjwa Smart Farm & Solar City Co., Ltd.
	Muan Solra Park Co., Ltd.
	Yudang Solra Co., Ltd.
Joint ventures	Rabigh O&M Co., Ltd.
	KIAMCO KOWEPO Bannerton Hold Co Pty., Ltd.
	Haemodum Solar Energy Co., Ltd.
	NH-Amundi Global Infra Private Fund No.21
	Hapcheon Floating Photovoltaic Plant Inc.
	Cheongna Energy Co., Ltd.
	Yeongwol Eco Wind Co., Ltd.
	Gurae Jumin Wind Power Co., Ltd.
	Gunsan Land Solar Co., Ltd.
	CapMan Lynx SCA, SICAR
	Eumseong Eco Park Co., Ltd.
	Pungbaek Wind Power Co., Ltd.
	Hasami Co., Ltd.
	Seobusambo highway photovoltaics Co., Ltd.
Other related party	Korea Hydro & Nuclear Power Co., Ltd.
	Korea South-East Power Co., Ltd.
	Korea Midland Power Co., Ltd.
	Korea Southern Power Co., Ltd.
	Korea East-West Power Co., Ltd.
	KEPCO Engineering & Construction Company Inc.
	KEPCO KPS Co., Ltd.
	KEPCO KDN Co., Ltd.
	KEPCO Nuclear Fuel Co., Ltd.
	Korea Gas Corporation
	Korea Electronic Power Industrial Development Co., Ltd.
	Korea Power Exchange
	Korea Development Bank
	KEPCO Bylong Australia Pty., Ltd.
	PT Bayan Resources TBK
	Etc.

### 41. Related Party Transactions, Continued

(2) Significant transactions with associates for the years ended December 31, 2022 and 2021 are as follows:

In millions of won	f won		d others	Purchase and others	
Related parties		2022	2021	2022	2021
Karaa Electric Dower Corporation	۱۸/	0 000 050	1 000 700	00 1 / /	70 115
Korea Electric Power Corporation Korea Hydro & Nuclear Power Co., Ltd.	₩	8,033,952	4,923,736	83,144 21	73,115
		- 2 202	2 906	125	- 1 / O
Korea Southern Power Co., Ltd.		3,383	3,806	125	148
Korea East-West Power Co., Ltd.		-	89	-	124 177
Korea South-East Power Co., Ltd.		- 74	66	-	
Korea Midland Power Co., Ltd.		/4	62	-	185
KEPCO Engineering & Construction				0 60 4	10 101
Company Inc.		-	-	8,634	10,131
KEPCO KPS Co., Ltd.		2,117	2,042	91,852	70,506
KEPCO KDN Co., Ltd.			-	17,581	16,181
Cheongna Energy Co., Ltd.		29,654	9,073	80	57
Korea Offshore Wind Power Co., Ltd.		263	109	5,179	4,733
Daegu Solar Power Plant Co., Ltd.		260	207	2,644	2,547
Dongducheon Dream Power Co., Ltd.		164	183	4,080	-
Solar Power Plants Happy City Co., Ltd.		-	-	266	257
Rabigh Operation & Maintenance Company		0.005			
Limited		3,005	4,164	-	-
Pioneer Gas Power Limited		-	-	-	502
Korea Gas Corporation		2,569	1,219	2,820,923	1,393,448
Korea Electronic Power Industrial					
Development Co., Ltd.		3,298	4,316	48,242	47,186
Korea Power Exchange		-	-	4,970	4,923
Shin Pyeongtaek Power Co., Ltd.		13,342	13,610	233	188
Muan Solra Park Co., Ltd		600	-	17,052	31,017
Yudang Solra Co., Ltd.		160	-	1,915	3,495
Anjwa Smart Farm & Solar City Co., Ltd.		774	421	16,942	24,601
Seoroseoro Sunny Power Plant Co., Ltd.		-	-	166	217
CapMan Lynx SCA, SICAR		1,670		-	
Xe-Pian Xe-Namnoy Power Co., Ltd.		2,203	1,565	-	-
KEPCO ES Co.,Ltd. (formerly, KEPCO					
Energy Solution Co., Ltd.)		142	-	-	-
KEPCO Solar Co., Ltd.		117	-	638	289
PT. Mutiara Jawa		136	988	-	-
Haemodum Solar Energy Co., Ltd.		34	-	214	936
NH-Amundi Global Infra Private Fund No.21		1,415	1,727	-	-
PT Bayan Resources TBK		103,448	13,612	-	-
Gunsan Land Solar Co., Ltd.		502		533	
Hapcheon Floating Photovoltaic Plant INC.		478		2,526	
Korea Development Bank		47,168	46,856	14,868	4,372
	₩	8,250,928	5,027,851	3,142,828	1,689,335

### 41. Related Party Transactions, Continued

(3) Receivables and payables arising from related party transactions as of December 31, 2022 and 2021 are as follows:

In millions of won		Receiv	ables	Paya	bles
Company name	Туре	2022	2021	2022	2021
Korea Electric Power Corporation	Trade receivables	₩ 1,020,592	564,246	-	-
	Non-trade receivables and others	81,831	151,582	-	-
	Trade payables	-	-	5,946	3,258
	Non-trade payables and others	-	_	2,875	1,450
Korea Southern Power Co., Ltd.	Non-trade receivables and others	654	732		-
, ,	Non-trade payables and others	-	-	29	32
Korea East-West Power Co., Ltd.	Non-trade receivables and others	-	52	-	_
Korea Midland Power Co., Ltd.	Non-trade receivables and others	-	27,056	-	_
, ,	Non-trade payables and others	-		-	271
Korea South-East Power Co., Ltd.	Non-trade receivables and others	-	52	-	_
	Non-trade payables and others	-	_	-	334
KEPCO KPS Co., Ltd.	Non-trade receivables and others	230	6	-	_
	Non-trade payables and others		_	1,374	13,246
KEPCO KDN Co., Ltd.	Non-trade receivables and others	1,500	_	-	
	Non-trade payables and others			1,875	1,711
Cheongna Energy Co., Ltd.	Trade receivables	17,021	3,975	-	-
Korea Offshore Wind Power Co., Ltd.	Trade receivables	17,021	63	_	_
Rabigh Operation & Maintenance			00		
Company Limited	Non-trade receivables	26	_	-	_
Pioneer Gas Power Limited	Non-trade payables and others	-	_	502	502
Shin Pyeongtaek Power Co., Ltd.	Non-trade receivables and others	742	2,790		
	Non-trade payables and others	-		90	77
Korea Gas Corporation	Non-trade receivables and others	658	185	-	-
	Trade payables	-	-	453,510	155,967
	Non-trade payables and others	-	_	1,293	758
Korea Electronic Power Industrial	Trade receivables	126	234	-	-
Development Co., Ltd.	Non-trade receivables and others	-	15	_	_
Xe-Pian Xe-Namnoy Power Co., Ltd.	Non-trade receivables and others	4,091	2,677	_	_
	Loans	22,937	21,456	_	_
Capman Lynx SCA, SICAR (*1)	Loans	31,629	29,770		
KEPCO ES CO., LTD. (formerly, KEPCO		51,025	20,770	_	-
Energy Solution Co., Ltd.)	Trade receivables	_	_	_	_
Kepco Solar Co., Ltd.	Non-trade payables and others	_	_	_	8
Gunsan Land Solar Co., Ltd.	Non-trade receivables and others	138	_	_	0
Anjwa Smart Farm & Solar City Co.,	Non trade receivables and others	100			
Ltd.	Deferred revenue and others	_	_	921	_
Daegu Solar Power Plant Co., Ltd.	Non-trade payables and others	_	_	2	_
PT. Mutiara Jawa	Non-trade receivables and others	37	34	ے _	_
Korea Development Bank	Derivative assets	59,907	49,005	-	_
	Derivative liabilities		-0,000	3,358	-
	Accrued expenses and others	-	-	3,338	-
		₩ 1,242,119	853,930	471,776	177,614
		<u>**</u> 1,242,119	000,900	4/1,//0	177,014

(\*1) The Group recognizes the allowance for doubtful accounts amounting to W 4,467 million for loans to Capman Lynx SCA, SICAR.

### 41. Related Party Transactions, Continued

(4) Details of bituminous coal transactions (\*1) with related parties for the years ended December 31, 2022 and 2021 are as follows:

In millions of won		2022		2021	
Related parties		Loans and others	Borrowings and others	Loans and others	Borrowings and others
Korea Midland Power Co., Ltd. Korea Southern Power Co., Ltd.	₩	- 57,802	13,168 30,864	50,183 7,171	27,761
Korea South-East Power Co., Ltd.		-	-	43,272	31,868
Korea East-West Power Co., Ltd.		-		6,317	6,491
	W	57,802	44,032	106,943	66,120

(\*1) Translations above are non-monetary exchange transactions without commercial substance between related parties.

(5) The details of loans from associates as of December 31, 2022 and 2021 are as follows:

#### In millions of won

Туре	Company name	December 31, 2021	Foreign exchange adjustment	December 31, 2022
Associate	Xe-Pian Xe-Namnoy			
	Power Co., Ltd.	21,456	1,481	22,937
Joint venture	Capman Lynx SCA, SICAR (*1)	29,770	1,859	31,629

(\*1) The Group recognizes the allowance for doubtful accounts amounting to ¥ 4,467 million for loans to Capman Lynx SCA, SICAR.

(6) The details of borrowings from associates as of December 31, 2022 and 2021 are as follows:

### In millions of won

Туре	Company name	2021	Borrowing	Repayment	2022
Other related parties	Korea Development Bank	-	59,175	(55,775)	3,400

(7) Derivatives with associates as of December 31, 2022 are as follows:

In millions of won, In thousands of USD

Type		Contract	Amount		Intere	Exchange	
	Counterparty	period	Sell	Buy	Sell	Buy	rate
Hedging	Korea Development Bank	2018 ~2023	KRW 320,880	USD 300,000	2.028%	3.750%	1,069.60
Hedging	Korea Development Bank	2022 ~2025	KRW 128,560	USD 100,000	3.370%	4.125%	1,285.60

#### 41. Related Party Transactions, Continued

(8) The salaries and other compensations to the key members of management for the years ended December 31, 2022 and 2021 are as follows:

In millions of won			
Туре		2022	2021
Short-term employee benefits	₩	683	714
Retirement and severance benefits		41	38

(9) Guarantees provided to related party as of December 31, 2022 are as follows:

In millions of won, In thousands of USD, SAR

Provider	Related Parties	Type of guarantee	Amount	Guarantee
Korea Western Power Co., Ltd.	Cheongna Energy Co., Ltd.	Investments in associate pledged as collateral	KRW 10,758	KB Bank, etc.
Korea Western Power Co., Ltd.	Dongducheon Dream Power Co., Ltd.	Investments in associate pledged as collateral(*1)	KRW 52,476	KB Bank, etc.
Korea Western Power Co., Ltd.	Dongducheon Dream Power Co., Ltd.	Borrowing payment guarantees	KRW 20,300	BNK Securities, etc.
Korea Western Power Co., Ltd.	Daegu Solar Power Plant Co., Ltd.	Investments in associate pledged as collateral	KRW 2,849	
Korea Western Power Co., Ltd.	PT Mutiara Jawa	Investments in associate pledged as collateral	KRW 3,597	Woori Bank
Korea Western Power Co., Ltd.	Rabigh Operation & Maintenance Company Limited	Contract performance guarantees, etc.		National Bank of Kuwait
Korea Western Power Co., Ltd.	Xe-Pian Xe-Namnoy Power Co., Ltd.	Investments in associate pledged as collateral	KRW 115,584	Krung Thai Bank
Korea Western Power Co., Ltd.	Xe-Pian Xe-Namnoy Power Co., Ltd	Guarantees of Impounding bonus (*2)	USD 5,000	SK E&C
Korea Western Power Co., Ltd.	Solar Power Plants Happy City Co., Ltd.	Investments in associate pledged as collateral	KRW 278	NH Bank
Korea Western Power Co., Ltd.	Shin Pyeongtaek Power Co., Ltd.	Investments in associate pledged as collateral	KRW 133,823	KB Bank, etc.
Korea Western Power Co., Ltd.	Korea Offshore Wind Power Co., Ltd.	Investments in associate pledged as collateral		Woori Bank, etc.
Korea Western Power Co., Ltd.	Haemodum Solar Energy Co., Ltd	Investments in associate pledged as collateral	KRW 3,367	NH Bank
Korea Western Power Co., Ltd.	Seoroseoro Sunny Power Plant Co., Ltd.	Investments in associate pledged as collateral	KRW 859	KEB Hana Bank, etc.
Korea Western Power Co., Ltd.	Muan Solar Park Co., Ltd	Investments in associate pledged as collateral	KRW 7,838	Industrial Bank of Korea, etc.
Korea Western Power Co., Ltd.	Yudang Solar Co., Ltd.	Investments in associate pledged as collateral	KRW 586	KEB Hana Bank, etc.
Korea Western Power Co., Ltd.	Anjwa Smart Farm & Solar City Co., Ltd.	Investments in associate pledged as collateral	KRW 8,662	KEB Hana Bank, etc.
Korea Western Power Co., Ltd.	Hapcheon Floating Photovoltaic Plant INC.	Investments in associate pledged as collateral	KRW 8,471	NH Bank, etc.

### 41. Related Party Transactions, Continued

9) Guarantees provided to related party as of December 31, 2022 are as follows, Continued

Provider	Related Parties	Type of guarantee	Amount	Guarantee
Korea Western Power Co., Ltd.	Yeongwol Eco Wind Co., Ltd.	Investments in associate pledged as collateral	KRW 3,155	KEB Hana Bank, etc.
Korea Western Power Co., Ltd.	Gurae Jumin Wind Power Co., Ltd.	Investments in associate pledged as collateral	KRW 391	KEB Hana Bank, etc.
Korea Western Power Co., Ltd.	Gunsan Land Solar Co., Ltd.	Investments in associate pledged as collateral	KRW 27,544	KEB Hana Bank.
Korea Western Power Co., Ltd.	SEOBUSAMBO EXPRESS ROAD SOLAR POWER PLANT CO.,LTD.	Investments in associate pledged as collateral	KRW 3,067	KEB Hana Bank, etc.
Korea Western Power Co., Ltd.	Eumseong Eco Park Co., Ltd.	Investments in associate pledged as collateral	KRW 5,557	Kyobo Life Insurance Co., Ltd, etc.
Korea Western Power Co., Ltd.	Pungbaek Wind Power Co., Ltd.	Investments in associate pledged as collateral	KRW 6,743	HANWHA LIFE INSURANCE CO., LTD., etc.

(\*1) Dongducheon Dream Power Co., Ltd.'s common stock and convertible preferred stocks held by the consolidated group were provided as collateral to financial institutions.

(\*2) Xe-Pian Xe-Namnoy Power Co., Ltd. entered into the agreement to pay incentives to SK E&C when the impoundment occurs upon the completion of the hydropower project. In case that Xe-Pian Xe-Namnoy Power Co., Ltd. becomes unable to pay the incentives to SK E&C, the Group provides guarantees for payment up to USD 5,000,000.

(10) Cheongna Energy Co., Ltd., a joint venture, operates integrated energy transportation and distributions and has outstanding borrowings from the financial institutions. In relation to the borrowings, the Group entered into the supplemental funding agreement for Cheongna Energy Co., Ltd. According to the agreement, the Group is required to fund through subordinated borrowing or all shareholders of Cheongna Energy Co., Ltd. are required to raise the additional funds based on the shareholders' equity ratios when Cheongna Energy Co., Ltd. is unable to repay the principal and interest amounts.

(11) Shin Pyeongtaek Power Co., Ltd, which is a related party of the Group, is engaged in sales of electric power and has a loan from financial institutions. As of December 31, 2022, the Group has entered into a supplementary funding agreement with Shin Pyeongtaek Power Co., Ltd. Accordingly, in the event that Shin Pyeongtaek Power Co., Ltd. has insufficient funds, or if there is any investor who cannot make a supplemental funding, the strategic investors of Shin Pyeongtaek Power Co., Ltd. including the Group must make an additional funding through equity investment or providing a subordinated loans in proportion to their ownership percentage. In addition, if there is such an investor who cannot make a supplemental funding among strategic investors, the alternative investor must acquire all the shares of those investors in accordance with the agreement. If an alternative investor fails to take over all the shares, a strategic investor, including the Group, is required to acquire the shares.

(12) As of December 31, 2022, Korea Offshore Wind Power Co., Ltd., an associate, operates marine wind power generating facility and its construction. It has entered into project financing agreement with Woori Bank and etc.. The Group has provided stocks of Korea Offshore Wind Power Co., Ltd. to creditors for collateral. The Group also has entered into funding agreement through subordinated borrowings for any excessive operating expense.

### 41. Related Party Transactions, Continued

(13) As of December 31, 2022, Yudang Solar Co., Ltd., an associate, has constructed and operated a 7,988.76KW solar power plant and 29,223.32KW power storage facility in Dongsan-ri, Heongyeong-myeon, Muan-gun, Jeollanam-do. If KEB Hana Bank, a lender and agent bank, determines that a cause for implementation of supplemental funding has occurred and requests to provide insufficient fund to investors, each investor is obliged to provide the amount in proportion to their ownership percentage from the requested amounts through additional investment or subordinated borrowings.

(14) As of December 31, 2022, Yeongwol Eco Wind Co., Ltd., a joint venture, plans to build a 42MW wind power plant in Gurae-ri, Yeongwol-gun, Gangwon-do to generate electric power. In the event that KEB Hana Bank Co., a lender and agent bank, requests to fulfill the obligation to provide funds due to additional investments exceeding expected total costs during the construction, each investor is obliged to provide the requested amount in cash.

(15) As of December 31, 2022, Gurae Jumin Wind Power Co., Ltd., a joint venture, plans to build a 4.2MW wind power plant in Gurae-ri, Yeongwol-gun, Gangwon-do to generate electric power. In the event that KEB Hana Bank Co., a lender and agent bank, requests to fulfill the obligation to provide funds due to additional investments exceeding expected total costs during the construction, each investor is obliged to provide the requested amount in cash.

(16) As of December 31, 2022, Gunsan Land Solar Co., Ltd., a joint venture, has constructed and operated a 99MW solar power plant in Area of reclaimed water in Osikdo-dong, Gunsan-si, Jeollabuk-do to generate electric power. According to the shareholder agreement, after the construction period ends, Gunsan Land Solar Co., Ltd. shall procure up to 80% of the total project cost as a citizen investment and provide a 7% rate of return on the citizen investment, with a maximum of 80%. In the case of additionally procuring the under-recruited portion of the citizen's investment with debt capital, it is obliged to provide the city with the difference between the 7% return on the citizen's investment corresponding to the under-recruitment and the cost of additional debt capital to the city of Gunsan.

(17) As of December 31, 2022, Seobusambo highway photovoltaics Co., Ltd., a joint venture, has constructed and operates a 7.672 MW-size solar power plant at 129, Bongan-ri, Janggun-myeon, Sejong-si and 13 other areas. If KEB Hana Bank, a lender and agent bank, determines that a cause for implementation of supplemental funding has occurred and requests investors to provide additional fund, each investor is obliged to provide the amount in proportion to their ownership percentage out of the total amount requested through additional investments or subordinated borrowings.

(18) As of December 31, 2022, Eumseong Eco Park Co., Ltd., a joint venture, plans to build a 19.8MW-size full cell plant at 524, oseon-ri, Geumwang-eup, Eumseong-gun, Chungcheongbuk-do and 1 other area. If Kyobo Life Insurance Co., Ltd, a lender, requests to fulfill the obligation to provide funds since additional investments are required for settling expenditure incurred in excess of expected total costs during the construction, each investor is obliged to provide the amount in proportion to their ownership percentage out of the total amount requested through additional investment or subordinated borrowings.

### 42. Statements of Cash Flows

(1) Significant non-cash investing and financing transactions for the years ended December 31, 2022 and 2021 are as follows:

In millions of won	_	2022	2021
Transfer of long-term borrowings and debentures to current portion	₩	780,510	715,297
Transfer of construction-in-progress to property, plant and equipment		466,156	706,809
Transfer of acquisition cost of property, plant and equipment to			
payables		(33,976)	(8,948)
Acquisition of right-of-use assets		4,130	6,506

(2) Details of changes in liabilities arising from current financial activities in 2022 and 2021 are as follows:

(i) for the year ended December 31, 2022

In millions of won	<sup>7</sup> Non-cash change							
		Beginning	Cash		Fluctuatio n of foreign exchange	Changes in consolidatio		
Туре		balance	flow	Acquisition	rate	n scope	Others	2022
Borrowings	₩	150,282	(47,745)	-	5,371	40,511	-	148,419
Debentures		5,321,759	366,812	-	72,110	(50)	3,436	5,764,067
Lease liabilities		625,570	(80,530)	4,130	42,618	-	-	591,788
Derivative assets		(88,512)	61,722	-	-	-	(67,028)	(93,818)
	₩	6,009,099	300,259	4,130	120,099	40,461	(63,592)	6,410,456

(ii) for the year ended December 31, 2021

In millions of won				No			
		Beginning			Fluctuation of foreign		
Туре		balance	Cash flow	Acquisition	exchange rate	Others	2021
Borrowings	₩	851	149,904	-	(473)	-	150,282
Debentures		5,219,103	28,373	-	71,128	3,155	5,321,759
Lease liabilities		657,514	(91,200)	6,506	52,754	(4)	625,570
Derivative assets	_	(18,668)	9,839			(79,683)	(88,512)
	₩	5,858,800	96,916	6,506	123,409	(76,532)	6,009,099

### 43. Commitments for Expenditure

The commitments for acquisition of property, plant and equipment as of December 31, 2022 are as follows:

In millions of won

Description		Amounts	Balance
Service of designing Taean units (#9,10)	₩	112,909	12,467
Service of designing Gimpo cogeneration construction		17,442	4,430
Purchase of gas turbine and attached equipment for Gimpo			
cogeneration construction		126,302	32,748
Purchase of steam turbine, HRSG and POWER BLOCK for Gimpo			
cogeneration construction		221,997	38,714
Construction of Gimpo cogeneration		181,797	56,558
Service of designing Gumi compound construction		17,792	12,009
Purchase of gas turbine and attached equipment for Gumi natural			
gas power plant		197,983	197,983
Construction of Gumi natural gas power plant		204,094	204,094
Installation of natural gas supply equipment for Gumi natural gas			
power plant		70,620	70,620
Service of designing Yeosu natural gas power plant		17,200	16,062
	₩	1,168,136	645,685

### 44. Commitments and Contingencies

(1) Ongoing litigations and claims related with contingent liabilities as of December 31, 2022 and 2021 are as follows:

	20	2022			
	Number of	Number of		Number of	
	cases	Claim amount	cases	_	Claim amount
As the defendant	12	₩ 21,000	14	₩	22,500
As the plaintiff	9	313,500	11		471,400

### 44. Commitments and Contingencies, continued

(2) Credit lines provided by financial institutions as of December 31, 2022 are as follows:

In millions of won, In thousands of USD

Description	Financial Institutions	Currency	Limited amount	Exercised amount
Foreign currency payment	NH Bank	USD	8,700	4,713
guarantee	Credit Agricole	USD	3,250	3,250
Commitments on Bank-overdraft	NH Bank	KRW	200,000	1,800
Derivatives trading credit	NH Bank	USD	8,000	-
	KEB Hana Bank	USD	50,000	-
	Woori Bank	USD	45,000	7,645
Loan limit	Mizuho Bank	USD	100,000	-
	Korea Development Bank	USD	60,000	-
	DBS Bank	USD	50,000	-
	Shinhan Bank	USD	60,000	-
	KB Bank	USD	100,000	-
	Korea Development Bank	KRW	50,000	3,400
	KB Bank	KRW	50,000	50,000
	NH Bank	KRW	5,000	-
	KB Bank	KRW	10,000	-
	Woori Bank	KRW	4,000	-
	Shinhan Bank	KRW	5,000	-
	IBK Bank	KRW	5,000	-
	KEB Hana Bank	KRW	5,000	-
	Samsung Life Insurance co.,	KRW		
	Ltd		45,000	43,286
Certification of payment on L/C	Shinhan Bank	USD	60,000	2,086
	NH Bank	USD	63,000	-

(3) As of December 31, 2022, the Group has a loan agreement of KRW 45,000 million with the lenders such as Samsung Life Insurance Co., Ltd. In relation to this financial agreement, the Group provides the entire stock of KOWEPO Changgi Solar Power Plant Co., Ltd. (formerly, Samyang Solar Power Plant Co., Ltd.) and business-related tangible assets held by the parent as collateral to the lenders. In addition, if there is a shortage of expenses in case of various civil complaints and insurance accidents occurring in the course of business, the parent company may provide additional investment or subordinated conditional loans to its subsidiary, KOWEPO Changgi Solar Power Plant Co., Ltd. (formerly, Samyang Solar Power Plant Co., Ltd.). There is a replenishment obligation to provide the insufficient funds in a way.

(4) Main raw material purchase agreements as of December 31, 2022 are as follows:

Raw materials	Supplier	Contract period	Annual contract amount (thousand tons, thousand kl))
Bituminous coal	Australia	2023.01~2025.12	8,727
	Indonesia	2023.01~2026.12	4,374
	Russia	2023.01~2025.12	3,386
	South Africa	2023.01~2026.12	1,604
	USA	2023.01~2024.06	670_
			18,761
LNG	Korea Gas Corporation	2007~2033	Determined annually
	Korea Gas Corporation	2015~2025	Determined annually
Oil	HANWHA TOTALENERGIES	2022.08~2023.01	
	PETROCHEMICAL Co., Ltd.		16

#### 44. Commitments and Contingencies, continued

(5) Details of long-term marine transportation commitment for the safe transport of bituminous coal as of December 31, 2022 are as follows:

Shipping company	Ship name	Contract period
NYK	Frontier Lodestar	2013.02~2028.10
H-Line	HL Balikpapan	2011.07~2026.06
H-Line	Hyundai Leader	2016.04~2031.03
H-Line	HL Taean	2018.05~2036.04
SK Shipping Co., Ltd.	K. Western Dream	2016.03~2028.02
SK Shipping Co., Ltd.	K. Taean	2018.10~2036.09
Hansung Line Co., Ltd.	Western Marine	2012.01~2026.12
Daebo International Shipping Co., Ltd.	Glovis Daylight	2015.12~2030.11
Wooyang Shipping Co., Ltd	Wooyang Venus	2016.07~2026.06
Five Ocean Corporation	F. Ocean	2016.12~2026.11

(6) As described in Note 41, the Group provides financial supports including the debt repayment guarantees to related parties.

(7) For stable supply of bituminous coal, the Group has entered into a basic bituminous coal swap agreement which is a non-monetary exchange agreement with no commercial substance.

#### 45. Uncertainty of the effects of COVID-19

Preventive actions and control policies such as transportation limit are being implemented globally to block the spread of Coronavirus disease 2019 ("COVID-19"). As a result, the global economy is having a material impact in a wide scope. Also, various types of supporting policies are being announced by governments to handle COVID-19.

The items impacted by COVID-19 are impairment of property, plant and equipment, the recognition of provisions and others. The Group prepared the consolidated financial statements by reasonably estimating the impact of COVID-19 on the Group. However, there is uncertainty in measuring the termination of COVID-19 and the estimating the impact of COVID-19 on the Group.

#### 46. Uncertainty of the effects of Ukraine crisis

The armed conflict in Ukraine, which began in February 2022, and the international community's sanctions against Russia related thereto, are not only applicable to companies that are subject to sanctions, but also to companies directly or indirectly doing business with Ukraine or Russia, and directly or indirectly to the industry or economy of Ukraine or Russia. It can indirectly affect the companies it is exposed to. This event is an event after the reporting period that does not require amendment. The Group cannot reasonably estimate the future financial impact of the Ukraine crisis.

### 47. Introduction and Effect of Global Minimum Tax

The Organization for Economic Co-operation and Development (OECD) /G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) addresses the tax challenges arising from the digitalization of the global economy. Global Minimum Tax (Pillar Two) were released and they apply to multinational Enterprises (MNEs) with revenue in excess of 750 million euros per their consolidated financial statements. National Assembly of South Korea passed into law new Global Minimum Tax rules to align with the OECD BEPS Pillar Two in December 2022. The regulation will be included in the Adjustment of International Taxes Act and will be effective for fiscal years beginning on or after January 1, 2024. However, the Enforcement Decrees that provide further detail on the application of the legislation is not yet effective as of December 31, 2022. In South Korea, Pillar Two legislation is not yet considered substantively enacted as of December 31, 2022 for financial reporting purposes. The Group therefore has not recognized any tax effect arising from the Global Minimum Tax in its consolidated financial statements as of and for the year ended December 31, 2022.

### 48. Events After the Reporting Period

(1) The Group issued corporate bonds for the purpose of use for debt repayment and facility funds. The details of the issuance are as follows:

In millions of won

Classification	Issuance date	Maturity date	Annual interest rate (%)		Beginning balance
Corporate bond #57-1	2023.01.17	2025.01.17	4.065	₩	70,000
Corporate bond #57-2	2023.01.17	2026.01.17	4.044		30,000
				W	100.000

(2) On January 8, 2023, Taean IGCC gas refinery facility of the Group suspended manufacturing activities due to fire. The Group is conducting investigation on the amount of damage caused by the fire and assessing whether the damage can be covered by the property-all-risk insurance plan that the Group subscribes.