POSCO

Separate financial statements for the year ended December 31, 2024 with the independent auditor's report

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Independent auditor's report

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Independent auditor's report

(English translation of a report originally issued in Korean)

The Shareholders and Board of Directors POSCO

Opinion

We have audited the separate financial statements of POSCO (the "Company"), which comprise the separate statement of financial position as of December 31, 2024, and the separate statement of comprehensive income, changes in equity and cash flows for the year then ended, and the notes to the separate financial statements, including material accounting policy information.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the separate financial position of the Company as of December 31, 2024, and its separate financial performance and its separate cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("KIFRS").

Basis for opinion

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

Other matters

The separate financial statements of the Company for the year ended December 31, 2023, were audited by KPMG Samjong Accounting Corp. in accordance with KSA, whose audit report dated March 12, 2024 expressed an unqualified opinion thereon.

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

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

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

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



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

Our objectives are to obtain reasonable assurance about whether the separate 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 separate 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 separate 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.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the separate financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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

Inst Joung Han Joung

Seoul, Korea March 12, 2025

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

POSCO

Separate financial statements for each of the two years in the period ended December 31, 2024

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

Si-woo Lee Chief Executive Officer POSCO

POSCO Separate statements of financial position as of December 31, 2024 and 2023

(in millions of Won)

	Notes		December 31, 2024	December 31, 2023
Assets				
Cash and cash equivalents	4,5,21	₩	1,943,148	2,032,952
Trade accounts and notes receivable, net	6,21,25		4,715,232	5,043,746
Other receivables, net	7,21		5 60,117	382,020
Other short-term financial assets	8,21		3,948,910	5,092,954
Inventories	9		6,463,547	6,800,608
Other current assets	14	_	116,966	104,688
Total current assets		-	17,747,920	19,456,968
Long-term trade accounts and notes receivable, net	6,21,25		134	4,023
Other receivables, net	7,21		122,065	137,512
Other long-term financial assets	8,21		926,505	530,685
Investments in subsidiaries, associates				
and joint ventures	10		2,980,179	2,359,980
Investment property, net	11		58,067	83,389
Property, plant and equipment, net	12		21,236,357	20,571,292
Intangible assets, net	13		455,184	447,998
Defined benefit assets, net	19		222,540	298,442
Deferred tax assets			1,901,452	1,881,454
Other non-current assets	14	_	30,998	53,785
Total non-current assets		-	27,933,481	26,368,560
Total assets		₩	45,681,401	45,825,528

(continued)

POSCO Separate statements of financial position, continued as of December 31, 2024 and 2023

(in millions of Won)

	Notes		December 31, 2024	December 31, 2023
Liabilities				
Trade accounts and notes payable	21	₩	2,210,454	2,031,173
Short-term borrowings				
and current installments of long-term borrowings	4,15,21		2,429,405	2,010,878
Other payables	16,21		1,715,354	1,577,020
Other short-term financial liabilities	17,21		1,840	6,336
Current income tax liabilities			190,051	48,723
Provisions	18		34,385	37,350
Other current liabilities	20,23	-	141,461	95,111
Total current liabilities		-	6,722,950	5,806,591
Long-term borrowings,				
excluding current installments	4,15,21		5,452,879	6,465,820
Other payables	16,21		312,832	350,885
Other long-term financial liabilities	17,21		-	59,905
Long-term provisions	18		83,406	30,138
Other non-current liabilities	20,25	-	2,806	3,261
Total non-current liabilities		-	5,851,923	6,910,009
Total liabilities		-	12,574,873	12,716,600
Equity				
Share capital	22		482,403	482,403
Capital surplus	22		24,227,088	24,212,464
Accumulated other comprehensive income	23		38,441	2,666
Retained earnings		-	8,358,596	8,411,395
Total equity		-	33,106,528	33,108,928
Total liabilities and equity		₩.	45,681,401	45,825,528

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

POSCO Separate statements of comprehensive income for each of the two years in the period ended December 31, 2024

(in millions of Won, except per share informations)	Notes		2024	2023
Revenue	25	₩	37,556,523	38,971,567
Cost of sales	27,30		(34,899,064)	(35,689,797)
Gross profit			2,657,459	3,281,770
Selling and administrative expenses				
Other administrative expenses	26,27,30		(898,633)	(937,846)
Selling expenses	26,30		(285,690)	(261,298)
Operating profit			1,473,136	2,082,626
Finance income and costs				
Finance income	21,28		2,181,794	1,203,442
Finance costs	21,28		(2,090,585)	(1,182,457)
Other non-operating income and expenses				
Other non-operating income	29		187,737	100,268
Other non-operating expenses	29,30		(606,950)	(595,820)
Profit before income tax			1,145,132	1,608,059
ncome tax expense	31		(243,590)	(428,393)
Profit			901,542	1,179,666
Other comprehensive income				
Items that will not be reclassified				
subsequently to profit or loss:				
Remeasurements of defined benefit plans	19,31		(62,722)	(20,874)
Net changes in fair value of equity investments				
at fair value through other comprehensive income	23,31		32,164	5,451
Total comprehensive income		₩	870,984	1,164,243
Earnings per share (in Won)	32			
Basic earnings per share (in Won)			9,344	12, 1 96
Diluted earnings per share (in Won)		₩	9,344	12,196

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

POSCO Separate statements of changes in equity for each of the two years in the period ended December 31, 2024

(in millions of Won)		Share capital	Capital surplus	Hybrid bonds	Accumulated other comprehensive income	Retained earnings	Total
Balance as of January 1, 2023	₩	482,403	31,235,868	199,384	(2,786)	581,756	32,496,625
Comprehensive income:							
Profit		-	-	-	-	1,179,665	1,179,665
Other comprehensive income							
Remeasurements of defined benefit plans, net of tax		-	-	-	-	(20,874)	(20,874)
Net changes in fair value of equity investments							
at fair value through other comprehensive income, net of tax		-	_	_	5.452		5,452
Transactions with owners of the Company,					0,402		5,452
recognized directly in equity:							
Year-end dividends		-	-	-	-	(325,043)	(325,043)
Repayment of hybrid bonds		_	(454)	(199,384)	-	(020,010)	(199,838)
Interest of hybrid bonds		-	(+0+)	(100,004)	-	(4,109)	(4,109)
Shared based payments		-	(9,137)	-	-	-	(9,137)
Share premium transferred to retained earnings		-	(7,000,000)	-	-	7,000,000	(0,101)
Others		-	(13,813)	-	-	-	(13,813)
Balance as of December 31, 2023	₩	482,403	24,212,464	-	2,666	8,411,395	33,108,928
Balance as of January 1, 2024	₩	482,403	24,212,464	-	2,666	8,411,395	33,108,928
Comprehensive income:							
Profit		-	-	-	-	901,542	901,542
Other comprehensive income							
Remeasurements of defined benefit plans, net of tax		-	-	-	-	(62,722)	(62,722)
Net changes in fair value of equity investments							
at fair value through other comprehensive income, net of tax		-	-	-	35,775	(3,611)	32,164
Transactions with owners of the Company,					,		,
recognized directly in equity:							
Year-end dividends		-	-	-	-	(589,786)	(589,786)
Interim dividends		-	-	-	-	(298,222)	(298,222)
Shared based payments		-	14,624	-	-	-	14,624
Balance as of December 31, 2024	₩	482,403	24,227,088	-	38,441	8,358,596	33,106,528
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The accompanying notes are an integral part of the Separate financial statements.

POSCO Separate statements of cash flows for each of the two years in the period ended December 31, 2024

(in millions of Won)			
	Notes	2024	2023
Cash flows from operating activities			
Profit	₩	901,542	1,179,665
Adjustments for :			
Expenses related to post-employment benefit		82,397	76,392
Depreciation		2,364,737	2,228,273
Amortization		93,640	98,841
Impairment loss on trade and other receivables		2,306	5,486
Finance income		(1,698,666)	(658,284)
Finance costs		1,593,508	642,834
Loss on valuation of inventories		26,331	28,878
Gain on disposal of property, plant and equipment		(9,203)	(22,088)
Loss on disposal of property, plant and equipment		138,162	138,069
Impairment loss on property, plant and equipment		227,239	210,694
Impairment loss on intangible assets		597	4,035
Gain on disposal of investment property		-	(17,614)
Impairment loss on investments in subsidiaries		47,800	158,917
Gain on disposal of assets held for sale		(865)	(13,448)
Gain on disposal of emission rights		-	(25,989)
Increase to provisions		49,699	20,959
Gain on insurance claim		(157,278)	(3,522)
Income tax expense		243,591	428,393
Others		(2,145)	1,675
Changes in operating assets and liabilities	35	903,639	(141,542)
Interest received		129,076	167,574
Interest paid		(317,383)	(358,598)
Dividends received		35,358	16,915
Income taxes paid		(114,563)	(76,210)
Net cash provided by operating activities	₩	4,539,519	4,090,305

(continued)

POSCO Separate statements of cash flows, continued for each of the two years in the period ended December 31, 2024

(in millions of Won)				
	Notes		2024	2023
Cash flows from investing activities				
Decrease in deposit instruments		₩	2,434,955	4,735,966
Proceeds from disposal of short-term financial instruments			6,305,427	25,986,545
Proceeds from disposal of current debt securities			899,510	140,000
Proceeds from disposal of equity securities			602	-
Proceeds from disposal of other securities			1,263	-
Collection of loans			11,781	12,331
Proceeds from disposal of assets held for sale			900	21,477
Proceeds from disposal of emission rights			-	25,989
Collection of lease receivables			11,632	821
Acquisition of deposits			116	1,306
Cash inflow from insurance claim			157,278	3,522
Increase in deposit instruments			(4,168,700)	(4,757,495)
Acquisition of short-term financial instruments			(2,994,102)	(25,086,336)
Acquisition of debt securities			(1,010,073)	(309,450)
Acquisition of equity securities			-	(261,638)
Increase in long-term loans			(5,598)	(9,063)
Acquisition of investments in subsidiaries,				
associates and joint ventures			(667,991)	(1,319,019)
Acquisition of property, plant and equipment			(3,325,105)	(3,383,728)
Payment for disposal of property, plant and equipment			(104,399)	(66,455)
Acquisition of intangible assets			(90,186)	(43,023)
Payment for deposits			(9,677)	(15,299)
Net cash used in investing activities		₩	(2,552,367)	(4,323,549)
Cash flows from financing activities	35			
Proceeds from borrowings			695,279	3,134,622
Increase in security deposits			3,510	13,793
Proceeds from disposals of derivatives			177,380	119,550
Receipt of government grants			-	1.328
Repayment of borrowings			(1,992,355)	(2,624,401)
Decrease in security deposits			(1,332,333)	(560)
•				
Repayment of lease liabilities			(77,002)	(37,739)
Payment of cash dividends			(888,008)	(325,043)
Repayment of hybrid bonds			-	(200,000)
Payment of interest of hybrid bonds				(4,587)
Net cash provided by (used in) financing activities		₩	(2,081,358)	76,963
Effect of exchange rate fluctuation on cash held			4,402	(2,365)
Net increase in cash and cash equivalents			(89,804)	(158,646)
Cash and cash equivalents at beginning of the period	5		2,032,952	2,191,598
Cash and cash equivalents at end of the period	5	₩	1,943,148	2,032,952

The accompanying notes are an integral part of the separate financial statemen

1. General Information

POSCO (the "Company") was newly established with the purpose of production and sales of steel rolled products and plates, upon a vertical spin-off of steel business of POSCO HOLDINGS INC. ("Pre-spin off Company", known as POSCO before spin-off, the surviving company) on March 1, 2022 (the date of spin-off). As of December 31, 2024, POSCO is wholly owned by POSCO HOLDINGS INC. (100% ownership).

2. Basis of Preparation

Statement of compliance

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

These financial statements are separate financial statements prepared in accordance with KIFRS 1027 *Separate Financial Statements* presented by a parent, an investor with joint control of, or significant influence over, an investee, in which the investments are accounted for at cost.

The separate financial statements were authorized for issue by the Board of Directors on February 6, 2025, and will be submitted for approval at the shareholders' meeting to be held on March 21, 2025.

Basis of measurement

The separate financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position, as described in the accounting policy below.

- (a) Derivatives measured at fair value through profit or loss
- (b) Financial instruments measured at fair value through profit or loss
- (c) Financial instruments measured at fair value through other comprehensive income
- (d) Defined benefit liabilities measured at the present value of the defined benefit obligation less the fair value of the plan assets

Functional and presentation currency

The separate financial statements are presented in Korean Won, which is the Company's functional currency which is the currency of the primary economic environment in which the Company operates.

2. Basis of Preparation (cont'd)

Use of estimates and judgments

The preparation of the separate financial statements in conformity with KIFRS requires management to make judgments, estimates about the future, including climate-related risks and opportunities, 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 and are consistent with the company's risk management and climate-related commitments where appropriate. Revisions to estimates are recognized prospectively.

(a) Judgments

Information about judgments in applying accounting policies that have the most significant effect on the amounts recognized in the separate financial statements is included in the following notes:

- · Note 10 Investments in subsidiaries and associates
- (b) Assumptions and estimation uncertainties
 - Note 6 Allowance for trade accounts and notes receivable;
 - Note 9 Inventory;
 - · Note 12 Property, plant and equipment;
 - Note 18 Provisions;
 - · Note 19 Employee benefits;
 - Note 21 Financial instruments;
 - Note 31 Income taxes; and
 - Note 34 Commitments and contingencies.

(c) Measurement of fair value

A number of the Company's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. The Company 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

2. Basis of Preparation (cont'd)

including the level in the fair value hierarchy in which such valuation techniques should be classified. Significant valuation issues are reported to the Company's Audit Committee.

When measuring the fair value of an asset or a liability, the Company 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 in Level 1 that are observable for the assets or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

• Level 3 – inputs for the assets 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 might be 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 Company recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

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

• Note 21 – Financial instruments.

Changes in accounting policies

Except for the standards and amendments applied for the first time for the reporting period commenced January 1, 2024 described below, the accounting policies applied by the Company in these financial statements are the same as those applied by the Company in its financial statements as of and for the year ended December 31, 2023.

1) Amendments to KIFRS 1116: Lease Liability in a Sale and Leaseback

The amendments to KIFRS 1116 specify the requirements that a seller-lessee uses in measuring the lease liability arising in a sale and leaseback transaction, to ensure the seller-lessee does not recognize any amount of the gain or loss that relates to the right of use it retains. The amendments had no impact on the Company's separate financial statements.

2) Amendments to KIFRS 1001: Classification of Liabilities as Current or Non-current

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

2. Basis of Preparation (cont'd)

- what is meant by a right to defer settlement;
- that a right to defer must exist at the end of the reporting period;
- that classification is unaffected by the likelihood that an entity will exercise its deferral right; and
- that terms of a liability that could result in its settlement by the transfer of the entity's own equity instruments do not affect its classification as current or non-current if the entity classifies the option as an equity instrument, recognizing it separately from the liability as an equity component of a compound financial instrument.

In addition, an entity is required to disclose when a liability arising from a loan agreement is classified as non-current and the entity's right to defer settlement is contingent on compliance with future covenants within twelve months.

The amendments had no impact on the Company's separate financial statements.

3) Amendments to KIFRS 1007 Statement of Cash Flows and 1107 Financial Instruments: Disclosures – Supplier Finance Arrangements

The amendments to KIFRS 1007 *Statement of Cash Flows* and KIFRS 1107 *Financial Instruments: Disclosures* clarify the characteristics of supplier finance arrangements and require additional disclosure of such arrangements. The disclosure requirements in the amendments are intended to assist users of financial statements in understand the effects of supplier finance agreements on an entity's liabilities, cash flows, and exposure to liquidity risks. As a result of implementing the amendments, the Company has provided additional disclosures about its supplier finance arrangement. Please refer to Note 33.

3. Material Accounting Policy Information

The material accounting policy information applied by the Company in preparation of its separate financial statements are included below.

Investments in subsidiaries, associates and joint ventures

These separate financial statements are prepared and presented in accordance with KIFRS 1027

Separate Financial Statements. The Company applied the cost method to investments in subsidiaries,

associates and joint ventures in accordance with KIFRS 1027.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments in highly liquid securities that are readily convertible to known amounts of cash with maturities of three months or less from the acquisition date and which are subject to an insignificant risk of changes in value. Equity investments are excluded from cash and cash equivalents.

Inventories

Inventory costs are determined by using the moving-weighted average method. The cost of inventories comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. The allocation of fixed production overheads to the costs of finished goods or work in progress are based on the normal capacity of the production facilities. The carrying amount of those inventories is recognized as cost of goods sold in the period in which the related revenue is recognized.

Non-derivative financial assets

Trade receivables and debt securities issued are initially recognized when they are originated. All other

financial assets are initially recognized when the Company becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) is initially measured at fair value, for an item not at financial assets measured at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

On initial recognition, a financial asset is classified as measured at amortized cost, debt instruments measured at fair value through other comprehensive income, equity instruments measured at fair value through other comprehensive income, or financial assets measured at fair value through profit or loss. Financial assets are not reclassified after their initial recognition unless the Company changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the reporting period following the change in the business model.

(a) Financial assets measured at amortized cost

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at fair value through profit or loss.

- it is held within a business model whose objective is to hold assets to collect contractual cash flows, and

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

Financial assets measured at amortized cost are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, gains and losses on foreign currency translation and impairment losses are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

(b) Debt instruments measured at fair value through other comprehensive income

A debt instrument is measured at fair value through other comprehensive income if it meets both of the following conditions and is not designated as at fair value through profit or loss.

- it is held within a business model whose objective is achieved by both collection contractual cash flows and selling financial assets and

- 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 measured at fair value through other comprehensive income are subsequently measured at fair value. Interest income which is calculated using the effective interest method, gains and losses from foreign currency translation and impairment losses are recognized in profit or loss and other net profit or losses are recognized in other comprehensive income. At the time of elimination, other accumulated comprehensive income is reclassified to profit or loss.

(c) Equity instruments measured at fair value through other comprehensive income

On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment's fair value in other comprehensive income. This election is made on an investment-by-investment basis. Equity instruments measured at fair value through other comprehensive income are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in other comprehensive income and never reclassified to profit or loss.

(d) Financial assets measured at fair value through profit or loss

All financial assets not classified as measured at amortized cost of fair value through other comprehensive income as described above are measured at fair value through profit or loss. This includes all derivative financial assets. On initial recognition, the Company may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized cost or at fair value through other comprehensive income as at fair value through profit or loss if doing so eliminates or significantly reduces an accounting

mismatch that would otherwise arise.

Financial assets measured at fair value through profit or loss are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.

(e) Interest rate benchmark reform

The Company reflects the changes in the basis for determining contractual cash flows of financial assets and financial liabilities as a result of interest rate benchmark reform by updating the effective interest rate. A change in the basis for determining the contractual cash flows is required by the interest rate benchmark reform if the following conditions are met:

- the change is necessary as a direct consequence of the reform; and

- the new basis for determining the contractual cash flows is economically equivalent to the previous basis – i.e. the basis immediately before the change.

When changes were made to a financial asset or financial liability in addition to changes to the basis for determining the contractual cash flows required by interest rate benchmark reform, the Company first updates the effective interest rate, and then applies the policies on accounting for modifications to the additional changes.

(f) Derecognition of financial assets

Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership. If a transfer does not result in derecognition because the Company has retained substantially all the risks and rewards of ownership of the transferred asset, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received.

Investment property

Transaction costs are included in the initial measurement. Subsequently, investment property is carried at depreciated cost less any accumulated impairment losses. Depreciation methods, useful lives and residual values are identical to those applied for property, plant and equipment.

Property, plant and equipment

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.

Items of property, plant and equipment are depreciated from the date they are available for use or, in respect of self-constructed assets, from the date that the asset is completed and ready for use. Other than land, the costs of an asset less its estimated residual value are depreciated. Depreciation of property, plant and equipment is recognized in profit or loss on a straight-line basis, which most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset, over the estimated useful lives of each component of an item of property, plant and equipment. Land is not depreciated. The cost of replacing a part of an item is recognized in the carrying amount of the item of property, plant and equipment, if the following recognition criteria are met:

- (a)it is probable that future economic benefits associated with the item will flow to the Company, and
- (b) the cost can be measured reliably.

The carrying amount of the replaced part is derecognized at the time the replacement part is recognized. The costs of the day-to-day servicing of the item are recognized in profit or loss as incurred.

The estimated useful lives of property, plant and equipment are as follows:

Buildings	5-4	0 years
Structures	5-4	0 years
Machinery and equipment	15	years
Vehicles	4	years
Tools	4	years
Furniture and fixtures	4	years

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 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 an indefinite useful life and not amortized.

Intellectual property rights	5-7 years
Development expense	4 years
Port facilities usage rights	4-75 years
Other intangible assets	4 years

Government grants

(a)Grants related to assets

Government grants whose primary condition is that the Company purchase, construct or otherwise acquire long-term assets are deducted from the carrying amount of the assets and recognized in profit or loss on a systematic and rational basis over the life of the depreciable assets.

(b)Grants related to income

Government grants which are intended to compensate the Company for expenses incurred are deducted from the related expenses.

Leases

(a) As a lessee

At inception or reassessment of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease and non-lease component on the basis of their relative stand-alone prices.

The right-of-use asset is subsequently depreciated on a straight-line basis from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Company by the end of the lease term or the cost of the right-of-use asset reflects that the Company will exercise a purchase option. In that case the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as that of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date. Generally, the Company uses its incremental borrowing rate as the discount rate.

The Company determines its incremental borrowing rate by obtaining interest rates from various external sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

The Company presents right-of-use assets in the same line item as is presents underlying assets of the same nature that it owns, and lease liabilities are included in other payables on the separate statement of financial position.

The Company has elected not to recognize right-of-use assets and lease liabilities for leases of low-value assets and short-term leases, including IT equipment. The Company recognizes the

lease payments associated with these leases as an expense on a straight-line basis over the lease term.

(b) As a lessor

When the Company acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. To classify each lease, the Company makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. The Company considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

The Company leases out its investment properties. The Company classifies these leases as operating leases. The Company recognize lease payments received under lease agreements as revenue on a straight-line basis over the lease term.

Impairment for financial assets

The Company recognizes loss allowances for expected credit losses on:

- financial assets measured at amortized cost (i.e., cash and cash equivalents and trade and other receivables);

- debt instruments measured at fair value through other comprehensive income; and
- lease receivables, contractual assets, loan commitments, and financial guarantee contracts.

If credit risk has increased significantly since the initial recognition, a loss allowance for lifetime expected credit loss is required to be measured at the end of every reporting period. If credit risk has not increased significantly since the initial recognition, a loss allowance is measured based on 12-month expected credit loss.

If the financial instrument has low credit risk at the end of the reporting period, the Company may assume that the credit risk has not increased significantly since initial recognition. However, a loss allowance for lifetime expected credit losses is required for contract assets or trade receivables that do not contain a significant financing component.

(a) Judgments on credit risk

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating expected credit losses, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment and including forward-

looking information.

The Company assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due. The Company considers a financial asset to be in default when the borrower is unlikely to pay its credit obligations to the Company in full, without recourse by the Company to actions such as realizing security (if any is held). The Company considers a debt security to have low credit risk when its credit risk rating is equivalent to investment grade defined by reliable credit rating agencies.

(b) Measurement of expected credit losses

Lifetime expected credit losses are the expected credit losses that result from all possible default events over the expected life of a financial instrument. The 12-month expected credit losses are the portion of lifetime expected credit losses that result from default that are possible within

the 12 months after the reporting date. The maximum period considered when estimating expected credit losses is the maximum contractual period over which the Company is exposed to credit risk.

(c) Credit-impaired financial assets

At each reporting date, the Company assesses whether financial assets measured at amortized cost and debt instrument measured at fair value through other comprehensive income are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Objective evidence that a financial asset or group of financial assets are impaired includes:

- significant financial difficulty of the issuer or borrower;
- a breach of contract, such as a default or delinquency in interest or principal payments;
- the lender, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider;
- it becoming probable that the borrower will enter bankruptcy or other financial reorganization; and
- the disappearance of an active market for that financial asset because of financial difficulties.

(d) Write-off

The gross carrying amount of a financial asset is written off when the Company has no reasonable expectations of recovering a financial asset in entirety or a portion. The Company individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery based on continuous payments and extinct prescriptions. The Company expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's procedures for recovery of amounts due.

Non-derivative financial liabilities

The Company classifies non-derivative financial liabilities into financial liabilities measured at fair value through profit or loss or other financial liabilities. The Company recognizes financial liabilities in the separate statement of financial position when the Company becomes a party to the contractual provisions of the financial liability.

Employee benefits

(a) 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 Company during an accounting period, the Company recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as profit or loss. If the Company has a legal or constructive obligation which can be reliably measured, the Company recognizes the amount of expected payment for profit-sharing and bonuses payable as liabilities.

(b) 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. Any actuarial gains and losses are recognized in profit or loss in the period in which they arise.

(c) Retirement benefits: Defined contribution plans

For defined contribution plans, when an employee has rendered service to the Company during a period, the Company recognizes the contribution payable to a defined contribution plan in exchange for that service as an accrued expense, after deducting any contributions already paid. If the contributions already paid exceed the contribution due for service before the end of the reporting period, the Company recognizes that excess as an asset (prepaid

expense) to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

(d) Retirement benefits: Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Company'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 Company's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The Company 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 Company recognizes an asset, to the extent of the present value of the total of cumulative any economic benefits available in the form of refunds from the plan or reduction in the future contributions to the plan.

Remeasurements of net defined benefit liabilities, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income. The Company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments, net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss in curtailment is recognized immediately in profit or loss. The Company recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

Provisions

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

A provision for restoration regarding contamination of land is recognized in accordance with the Company's announced Environment Policy and legal requirement as needed.

Emission rights

The Company accounts for greenhouse gases emission right and the relevant liability as follows pursuant to *the Act on Allocation and Trading of Greenhouse Gas Emission Permits* which became effective in Korea in 2015.

(a)Greenhouse gas emission right

Greenhouse gas emission rights consist of emission allowances which are allocated from the government free of charge and those purchased from the market. Emission allowances which are allocated from the government free of charge are measured and recognized as zero (0) and the cost includes any directly attributable costs incurred during the normal course of business.

Emission rights held for the purpose of performing the obligation are classified as intangible asset and initially measured at cost and subsequently carried at cost less accumulated impairment losses. The portion to be submitted to the government within one year from the reporting date is classified as current assets.

Green gas emission rights are eliminated when future economic benefits are not expected with the rights submitted to the government, sold or not available for sale any more.

(b)Emission liability

Emission liability is a present obligation of submitting emission rights to the government with regard to emission of greenhouse gas. Emission liability is recognized when there is a high possibility of outflows of resources in performing the obligation and the costs required to perform the obligation are reliably estimable. Emission liability is an amount of estimated obligations for emission rights to be submitted to the government for the commitment period. The emission liability is measured based on the expected quantity of emission for the commitment period in excess of emission allowance in possession and the unit price for such emission rights in the market at the end of the reporting period. The emission liability is derecognized when submitted to the government.

The Company derecognizes an emission right asset when the emission allowance is

unusable, disposed or submitted to government when the future economic benefits are no longer expected to be probable.

Revenue from contracts with customers

Revenue is measured based on the consideration promised in the contract with the customer. The Company recognizes revenue when the control over a good or service is transferred to the customer. The following are the revenue recognition policies for performance obligations in the contracts with customers in accordance with K-IFRS 1115.

(a) Sale of goods

The goods sold by the Company consist mainly of steel products.

For domestic sales, the control of the product is usually transferred to the customer when the product is delivered to the customer, at which point in time revenue is recognized. Invoices are generally due within 10 to 90 days. When a customer makes payment prior to the due date, they are offered a discount at certain percentage of the invoice amount.

For export sales, revenue is recognized at the time when control of the product is transferred to the customer based on the "International Incoterms for Interpretation of Trade Terms" in the respective contracts. The Company's export contracts typically stipulate transfer of control to the customer at the shipment of the products. Invoices are usually issued on the date of bill of lading and revenues are recognized based on the terms of Letter of Credit (L / C), Acceptance Condition (D / A), Payment Condition (D / P), Telegraphic Transfer (T / T) and others.

The Company offers certain discount when the customer makes payments prior to the due date in the invoice in accordance with the payment terms. The Company recognized revenue only to the extent that it is highly probable that a significant reversal of cumulative revenue recognized will not occur when the credit term period elapses.

(b) Transportation service

Revenue for the transportation services performance included in the Company's product sales contracts is recognized over the period in which the services are provided. Revenue is measured by reference to the degree to which the service has been completed. The billing date and payment terms for the service charge are the same as those for the sale of goods.

Finance income and finance costs

The Company's finance income and finance costs include:

- interest income;
- interest expense;
- dividend income;
- the foreign currency gain or loss on financial assets and financial liabilities;
- the net gain or loss on financial assets measured at fair value through profit or loss; and
- the net gain or loss on the disposal of investments in debt securities measured at fair value through other comprehensive income.

Interest income or expense is recognized using the effective interest method. Dividend income is recognized in profit or loss on the date on which the Company's right to receive payment is established.

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.

The Company recognizes interest and penalties related to corporate tax as if it is applicable to the income taxes, the Company applies KIFRS 1012 *Income Taxes*, if it is not applicable to the income taxes, the Company applies KIFRS 1037 Provisions Contingent Liabilities and Contingent Assets.

(a) Current income tax

Current income tax is the expected income 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 period since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit of future periods, and non-taxable or non-deductible items from the accounting profit.

The Company offsets current tax assets and current tax liabilities if, and only if, the Company: - has a legally enforceable right to set off the recognized amounts, and

- intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

(b) Deferred income tax

The measurement of deferred income tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. The Company recognizes a deferred income tax liability for all taxable temporary differences associated with investments in subsidiaries, associates, and joint ventures, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. The Company recognizes a deferred income tax asset for deductible temporary differences arising from investments in subsidiaries, associates and joint ventures, to the

extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference 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.

A deferred income tax asset is recognized for the carryforward of unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which the unused tax losses, tax credits and deductible temporary differences can be utilized. The future taxable profit depends on reversing taxable temporary differences. When there are insufficient taxable temporary differences, the probability of future taxable profit (including the reversal of temporary differences) should be considered.

The carrying amount of a deferred income tax asset is reviewed at the end of each reporting period and is reduced 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 income tax asset to be utilized.

Deferred income 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. Deferred income tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current income tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current income tax liabilities and assets on a net basis.

New standards and interpretations not yet adopted

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Company's separate financial statements are disclosed below. The Company has not early adopted the new or amended standards in preparing these separate financial statements.

(a) Amendments to KIFRS 1021: Lack of Exchangeability

The amendments to KIFRS 1021 *The Effects of Changes in Foreign Exchange Rates* specify how an entity should assess whether a currency is exchangeable and how it should determine a spot exchange rate when exchangeability is lacking. The amendments also require the

disclosure of information that enables users of its financial statements to understand how the currency that is not exchangeable into the other currency affects, or is expected to affect, the Company's financial performance, financial position, and cash flows.

The amendments will be effective for annual reporting periods beginning on or after January 1, 2025. Early adoption is permitted but will need to be disclosed. When applying the amendment, the Company cannot restate comparative information.

The amendments are not expected to have a material impact on the Company's separate financial statements.

(b) Amendments to KIFRS 1109 and 1107: Classification and Measurement of Financial Instruments

The amendments to KIFRS 1109 *Financial Instruments* and KIFRS 1107 *Financial Instruments: Disclosures* – *Classification and Measurement of Financial Instruments* include the following: • clarifying that a financial liability is derecognized on the settlement date and introducing an accounting policy choice to derecognize financial liabilities that are settled by using electronic payment system before the settlement date (if specific criteria are met);

providing additional guidance as to how to assess contractual cash flows of financial assets that include environmental, social and governance (ESG)-linked features and similar features;
clarifying what constitutes non-recourse features and the characteristics of contractually linked financial instruments; and

• introducing new disclosures for financial instruments with contingent features and adding a disclosure requirement for equity instruments measured at fair value through other comprehensive income.

The amendments will be effective for annual periods beginning on or after January 1, 2026. Earlier adoption is permitted, but only for the amendments for the classification of financial assets and related disclosures. The Company does not plan to early apply the amendments.

(c) Annual Improvements to KIFRS Volume 11

Annual Improvements to KIFRS – Volume 11 have been announced for the purpose of improving consistency of requirements set out in each standard, enhancing clarity, and providing better understanding of the amendments.

- Amendments to KIFRS 1101 First-time adoption of KIFRS: Hedge accounting by a firsttime adopter
- Amendments to KIFRS 1107 Financial Instruments: Disclosures: Gain or loss on derecognition, Guidance for application of amendments in practice
- Amendments to KIFRS 1109 Financial Instruments: Accounting for derecognition of lease liabilities and definition of transaction prices
- Amendments to KIFRS 1110 Consolidated Financial Statements: Determination of a 'de facto agent'
- Amendments to KIFRS 1007 Statement of Cash Flows: Cost Method

The amendments will be effective for the annual periods beginning on or after January 1, 2026.

Early adoption is permitted but will need to be disclosed. The amendments are not expected to have a material impact on the Company's separate financial statements.

POSCO Notes to separate financial statements, continued December 31, 2024 and 2023

4. Risk Management

The Company has exposure to the following risks from its use of financial instruments:

- Credit risk;
- Liquidity risk;
- Market risk; and
- Capital risk.

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risks, and the Company's capital management. Further quantitative disclosures are included throughout these separate financial statements.

(a) Financial risk management

1) Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Company's risk management policies are established to identify and analyse the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

The Company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

2) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's receivables from customers and investment securities. In addition, credit risk arises from finance guarantees.

The Company implements a credit risk management policy under which the Company only transacts business with counterparties that have a certain level of credit rate evaluated based on financial condition, historical experience, and other factors. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The default risk of a nation or an industry in which a customer operates its business does not have a significant influence on credit risk. The Company has established a credit policy under which each new customer is analysed individually for creditworthiness.

4. Risk Management (cont'd)

The Company establishes an allowance for impairment that represents its estimate of expected losses in respect of trade and other receivables. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for companies of similar assets in respect of losses that have been incurred.

Credit risk also arises from transactions with financial institutions, and such transactions include transactions of cash and cash equivalents, various deposits, and financial instruments such as derivative contracts. The Company manages its exposure to this credit risk by only entering into transactions with banks that have high international credit ratings. The Company's treasury department authorizes, manages, and oversees new

transactions with financial institutions with whom the Company has no previous relationship.

Furthermore, the Company limits its exposure to credit risk of financial guarantee contracts by strictly evaluating their necessity based on internal decision making processes, such as the approval of the Board of Directors.

3) Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is to ensure, to the greatest extent possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation.

The Company's cash flow from business, borrowing or financing is sufficient to meet the cash requirements for the Company's strategic investments. Management believes that the Company is capable of raising funds by borrowing or financing if the Company is not able to generate cash flow requirements from its operations. Meanwhile, the Company has entered into credit line agreements with multiple banks.

4) Market risk

Market risk means that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. The goal of market risk management is optimization of profit and controlling the exposure to market risk within acceptable limits.

① Interest rate benchmark reform risk

4. Risk Management (cont'd)

A fundamental reform of major interest rate benchmark is being undertaken globally, including the replacement of some interbank offered rates (IBORs) with alternative nearly risk-free rates (referred to as "IBOR reform"). The publication of overnight and 1, 3, 6, and 12 months USD LIBOR has ceased on June 30, 2023 and all other LIBOR publication has ceased on December 31, 2021. As of the year ended December 31, 2024, no financial instrument is exposed to interest rate benchmark reform.

② Currency risk

The Company is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the functional currency of the Company, Korean Won. The Company monitors the related foreign currencies regularly in order to avoid exposure to currency risk. The Company's policy in respect of foreign currency risks is a natural hedge whereby foreign currency income is offset with foreign currency expenditures. The remaining net exposures after the natural hedge have been hedged using derivative contracts such as forward exchange contracts. In addition, the Company's foreign exchange transactions are limited to physical transactions and speculative transactions are not permitted. The Company reduces the foreign currency exposure by repayment of foreign currency borrowings subjected to investment in overseas when its maturities come.

③ Interest rate risk

The Company manages the exposure to interest rate risk by adjusting of borrowing structure ratio between borrowings at fixed interest rate and variable interest rate. As of December 31, 2024, the Company doesn't have any variable interest rate borrowing

④ Market price risk

Equity price risk arises from fluctuation of market price of listed equity securities. Management of the Company measures regularly the fair value of listed equity securities and the risk of variance in future cash flow caused by market price fluctuations. Significant investments are managed separately and all buy and sell decisions are approved by management of the Company.

(b) Management of capital risk

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

4. Risk Management (cont'd)

Details of the net borrowing-to-equity ratio as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Total borrowings	₩	7,882,284	8,476,698
Less: Cash and cash equivalents		1,943,148	2,032,952
Net borrowings		5,939,136	6,443,746
Total equity	₩	33,106,528	33,108,929
Net borrwoings-to-equity ratio		17.94%	19.46%

5. Cash and Cash Equivalents

Details of cash and cash equivalents as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	2024	2023
Total borrowings	2,642	8,436
Less : cash and cash equivalents	534,700	884,700
Net borrowings	1,405,806	1,139,816
Total equity	₩ 1,943,148	2,032,952

(*1) As of December 31, 2024 and 2023, cash and cash equivalents of #1,845 million and #4,040 million, respectively, are restricted for use in connection with government entrustments.

6. Trade Accounts and Notes Receivable

Details of trade accounts and notes receivable as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Current			
Trade accounts and notes receivable	₩	4,715,733	5,044,245
Less: Allowance for doubtful accounts		(501)	(499)
	₩	4,715,232	5,043,746
Non-current			
Trade accounts and notes receivable	₩	537	5,924
Less: Present value discount		-	(1,385)
Less: Allowance for doubtful accounts		(403)	(516)
	₩	134	4,023

The Company discounted its trade receivables in accordance with a factoring agreement entered into with financial institutions. These trade accounts and notes receivable have not been derecognized from the statement of financial position because the Company retains substantially all of the risks and rewards associated with the transferred assets. The amounts received on transfer have been recognized as secured borrowings. As of December 31, 2024 and 2023, the carrying amount of such secured borrowings are #56,079 million and #34,238 million, respectively, which are presented in the statements of financial position as short-term borrowings (see Note 15).

7. Other Receivables

(a) Details of other receivables as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023	
Current				
Loans	₩	9,787	11,560	
Other accounts receivable		494,139	330,287	
Lease receivables		12,121	11,648	
Accured income		44,349	28,790	
Others		1	6	
Less: Allowance for doubtful accounts		(280)	(271)	
	₩	560,117	382,020	
Non-current				
Loans	₩	52,848	52,824	
Other accounts receivable		7,203	18,847	
Lease receivables		46,568	57,648	
Deposits		39,720	30, <mark>1</mark> 61	
Less: Allowance for doubtful accounts		(24,274)	(21,968)	
	₩	122,065	137,512	

(b) Other receivables include finance lease receivables and details of lease receivables for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)				
Customer	Leased items		2024	2023
Pohang University of Science and Technology	Lease contract	₩	7,429	7,586
Korea Business Angels Association	Lease contract		2,090	2,339
POSCO FUTURE M CO.,LTD.	Lease contract		49,170	59,371
		₩	58,689	69,296

POSCO Notes to separate financial statements, continued December 31, 2024 and 2023

7. Other Receivables (cont'd)

(c) As of December 31, 2024 and 2023, details of the total lease investment and net lease investment by maturity are as follows:

(in millions of Won)		2024	2023
Less than 1 year	₩	14,155	14,095
1 year 3 years		41,627	30,411
3 years 5 years		919	25,433
Over 5 years		9,905	9,747
Undiscounted lease payments		66,606	79,686
Unrealized interest income		(7,917)	(10,390)
Present value of minimum lease payment	₩	58,689	69,296

8. Other Financial Assets

(a) Details of other financial assets as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Current			
Derivative assets	₩	301,234	115,362
Debt securities		400,000	289,437
Deposit instruments		2,833,700	1,097,469
Short-term financial instruments		413,976	3,590,686
	₩	3,948,910	5,092,954
Non-current			
Derivative assets	₩	453,652	98,030
Equity securities		465,320	420,925
Other securities		7,511	11,708
Deposit instruments(*1)		22	22
	₩	926,505	530,685

- (*1) As of December 31, 2024 and 2023, financial instruments are restricted in use for financial arrangements, pledge and others.
- (b) Details of equity securities as of December 31, 2024 and 2023 are as follows:

(b) Equity securities as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	2024								
	Number of shares	Ownership (%)		Acquisition cost	Fair value	Net changes in fair value of equity securities	Book value	Book value	
- Marketable equity securities									
SAMWONSTEEL Co., Ltd.	5,700,000	14.25	₩	14,878	13,367	(1,511)	13,367	17,471	
YODOGAWA STEEL WORKS, LTD.	600,000	1.72		13,842	31,522	17,680	31,522	20,891	
DONGKUK INDUSTRIES CO., LTD.	2,611,989	4.82		12,852	11,571	(1,281)	11,571	12,577	
PT.Krakatau Steel	236,625,000	1.22		6,876	2,177	(4,699)	2,177	2,809	
AJUSTEEL Co., Ltd.	510,000	1.93		4,600	1,981	(2,619)	1,981	3,621	
dhSteel	1,564,296	7.21		4,224	698	(3,526)	698	3,113	
Woori Financial Group Inc.	20,280,000	2.79		261,638	311,704	50,066	311,704	263,640	
Others (5 companies)			_	14,616	12,731	(1,885)	12,731	13,020	
				333,526	385,751	52,225	385,751	337,142	
Non-marketable equity securities			_						
TAECHANG STEEL	99,999	10.99		8,845	8,845	-	8,845	8,845	
Pinetree PosMagnesium Co., Ltd.	11,144,000	19.90		8,794	8,794	-	8,794	8,794	
WINSTEEL CO.	342,577	10.00		8,060	8,060	-	8,060	8,060	
KOH-A JUNG GONG CO., LTD.	490,000	19.84		7,573	7,573	-	7,573	7,573	
POONGSAN SPECIAL METAL CO., LTC	315,790	5.00		7,556	7,556	-	7,556	7,556	
DK Corporation	55,000	4.91		7,446	7,446		7,446	7,446	
DaeSung SnM Co., Ltd.	50,567	8.21		7,237	7,237		7,237	7,237	
Others (15 companies)			_	24,058	24,058	-	24,058	28,272	
			_	79,569	79,569	<u> </u>	79,569	83,783	
			₩_	413,095	465,320	52,225	465,320	420,925	

9. Inventories

(a) Details of Inventories as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Finished goods	₩	1,333,023	1,291,805
Semi-finished goods		1,796,543	2,206,118
By-products		16,383	20,774
Raw materials		1,352,488	1,112,287
Fuel and materials		485,424	467,013
Materials-in-transit		1,505,234	1,730,768
Others		783	721
		6,489,878	6,829,486
Less: Allowance for inventories valuation		(26,331)	(28,878)
	₩	6,463,547	6,800,608

(c) Changes in allowance for inventories valuation for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Beginning Loss on Valuation of inventories	₩	28,878 26,331	37,975 28,878
Utilization on sale of inventories		(28,878)	(37,975)
Ending	₩	26,331	28,878

10. Investments in Subsidiaries and Associates

(a) Investments in subsidiaries and associates as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Investment in subsidiaries	₩	2,928,501	2,292,880
Investment in associates		51,678	67,100
	₩	2,980,179	2,359,980

There are no significant restrictions on the ability of subsidiaries and associates to transfer funds to the Company, such as in the forms of cash dividends and repayment of loans or payment of advances.

(b) Details of subsidiaries and carrying amounts as of December 31, 2024 and 2023 are as follows:

(in millions of Won)					2024			2023
	Country	Principal operations	Number of shares	Ownership (%)	Net asset value	Acquisition cost	Book value	Book value
[Domestic]								
POSCO STEELEON Co., Ltd.(*3)	Korea	Coated steel manufacturing	3,412,000	56.87	₩ 376,108	108,421	108,421	108,42
POSCO M-TECH(*1,4)	Korea	Packing materials manufacturing						
		and sales	20,342,460	48.85	111,813	107,278	107,278	107,278
eNtoB Corporation	Korea	Electronic commerce	2,218,190	69.32	70,101	46,358	46,358	46,357
PNR	Korea	Steel by product processing and sales	5,467,686	70.00	13,659	12,339	12,339	12,339
POSCO Humans Co.,Ltd.(*6)	Korea	Business assistance service	2,676,101	100.00	16,578	11,685	11,685	8,13
POSCO GYS Tech	Korea	Maintenance service	3,000,000	100.00	14,332	15,000	15,000	15,00
POSCO GY Solution	Korea	Maintenance service	3,000,000	100.00	14,633	15,000	15,000	15,000
POSCO GYR Tech	Korea	Maintenance service	4.660.000	100.00	18.826	23.300	23.300	23.30
POSCO PH Solution	Korea	Maintenance service	1.880.000	100.00	7.966	9 400	9.400	9.40
POSCO PS Tech	Korea	Maintenance service	3.000.000	100.00	9 917	15.000	15.000	15.000
POSCO PR Tech	Korea	Maintenance service	2,460,000	100.00	9,482	12,300	12,300	12.30
	100100		2,400,000	100.00	663,415	376.081	376.081	372.53
Foreign]					003,413	370,001	370,001	312,33
PT.KRAKATAU POSCO(*1)	Indonesia	Steel manufacturing and sales	739 900	50.00	648,203	928,168	928,168	928,10
POSCO Thainox Public Company Limited	Thailand	STS cold-rolled steel manufacturing	133,300	30.00	040,200	920,100	520,100	520,10
10000 maintex 1 usile company Emiliou	mananu	and sales	5.812.634.019	74.56	397.172	299.936	141.019	141.019
POSCO MEXICO S.A. DE C.V.	Mexico	Automotive steel manufacturing	0,012,004,015	14.00	031,112	233,300	141,015	141,01.
	monioo	and sales	2.686.745.772	83.28	274,629	190.802	190.802	190 739
POSCO (Thailand) Company Limited	Thailand	Steel processing and sales	18,699,481	100.00	120,197	140.614	140.614	140.614
POSCO YAMATO VINA STEEL JOINT STOCK		Transfer & Constant of Tables to Dates	10,000,101	100.00	120,101	110,011	110,014	110,011
COMPANY	Vietnam	Steel manufacturing and sales	425,606,598	51.00	324,486	77.028	77.028	77.02
POSCO COATED STEEL (THAILAND) CO., LTD.	Thailand	Automotive steel manufacturing			6			
		and sales	35,999,998	100.00	96,336	72,225	72,225	72.22
POSCO-India Private Limited	India	Steel manufacturing and sales	764,999,999	100.00	103,915	69,674	69,674	69,67
PT.POSCO INDONESIA JAKARTA PROCESSING						00000		
CENTER	Indonesia	Steel processing and sales	38,004,548	70.51	74,553	56,976	56,976	56,973
POSCO-MKPC SDN BHD	Malaysia	Steel processing and sales	39,585,138	70.00	91,367	56,789	56.789	56.78
POSCO(Chongqing) Automotive Processing	5							
Center Co., Ltd.(*5)	China	Steel processing and sales		90.00	28,421	38,849	6,479	38,849
POSCO-VIETNAM Co., Ltd.	Vietnam	Steel manufacturing and sales	-	100.00	13,106	36,972	36.972	36.97
POSCO-Poland Wroclaw Processing Center								
Sp. z o. o.	Poland	Steel processing and sales	60,000	60.00	33,147	22,929	22,929	22,929
POSCO-Mexico Villagran Wire-rod Processing Center	Mexico	Steel processing and sales	115,308,963	56.75	3,108	1,363	1,363	1,363
POSCO-India Pune Processing Center	India	Steel processing and sales						
Private Limited(*2)			74,787,132	65.00	53,144	37,865	37,865	
POSCO Maharashtra Steel Private Limited(*2)	India	Steel processing and sales	361,789,958	100.00	776,300	519,258	519,258	1.0
POSCO INDIA PROCESSING CENTER PRIVATE	India	Steel processing and sales						
LIMITED(*2)			200,804,570	93.34	113,131	102,565	102,565	5-
POSCO ASSAN TST STEEL INDUSTRY Inc.(*2)	Turkiye	Steel processing and sales	144,579,160	60.00	53	1	1	-
Others (6 companies)(*7)					79,354	91,693	91,693	87,06
					3.230.622	2,743,707	2.552.420	1.920.34
					₩ 3.894.037	3,119,788	2,928,501	2.292.88
					5,034,037	5,115,700	2,320,301	2,232,00

10. Investments in Subsidiaries and Associates (cont'd)

- (*1) The Company classified POSCO M-TECH and PT. KRAKATAU POSCO as the investments in a subsidiary, considering additional facts and circumstances, such as the relative size of the voting rights held by the Company and the degree of diversification of other voting rights holders, although the Company holds less than half of the voting rights of POSCO M-TECH and PT. KRAKATAU POSCO.
- (*2) During the year ended December 31, 2024, the entity was newly included in subsidiaries due to acquisition from POSCO HOLDINGS INC.
- (*3) Excluding the treasury shares acquired during the year ended December 31, 2024, the ownership of the Company in terms of voting rights is 56.96%.
- (*4) Excluding the treasury shares acquired during the year ended December 31, 2023, the ownership of the Company in terms of voting rights is 48.86%.
- (*5) During the year ended December 31, 2024, the Company performed the impairment test on investment in POSCO (Chongqing) Automotive Processing Center Co., Ltd. due to indications of impairment in the investment. The recoverable amount of the investment was determined based on its value in use, which is estimated from the present value of estimated future cash flows from the date of the impairment test, discounted at a rate of 9.35%. As a result of the impairment test, the Company recognized ₩32,370 million of impairment loss.
- (*6) During the year ended December 31, 2024, the Company additionally acquired shares of POSCO Humans from POSCO M-TECH, POSCO DX, POSCO FUTURE M CO., LTD and POSCO INTETNATIONAL Corporation.
- (*7) During the year ended December 31, 2024, the Company participated in paid-in capital increase of Port Hedland Green Steel Pty., Ltd. and acquired additional shares.

POSCO Notes to separate financial statements, continued December 31, 2024 and 2023

10. Investments in Subsidiaries and Associates (cont'd)

(c) Details of associates and carrying amounts as of December 31, 2024 and 2023 are as follows:

(in millions of Won)						2024			2023
	Country	Principal operations	Number of shares	Ownership (%)		Net asset value	Acquisition cost	Book value	Book value
[Domestic] DAEHO GLOBAL MANAGEMENT CO., LTD. Pohang Special Welding Co., Ltd.	Korea	Investment advisory service Welding material and tools	71,647	35.82	₩	18,131	4,108	4,108	4,108
r onang operativerang eet, eta.	- Corect	manufacturing and sales	400,000	50.00		7.727	3,111	3.111	3,111
						25,858	7,219	7,219	7,219
[Foreign] SUZHOU POSCO-CORE TECHNOLOGY CO., LTD.(*2)	China	Steel processing and sales	-	23.82		60,485	23,489	9,932	23,489
LLP POSUK Titanium	Kazakhstan	Titanium raw material manufacturing and sales		33.90		17,872	10,068	10,132	10,124
ZHANGJIAGANG XIAO-SHA COIL SERVICE CENTER CO.,LTD(*1) POSCO SUZHOU PROCESSING CENTER	China	Steel processing and sales		17.50		20,179	2,885	2,885	2,885
CO., LTD. POSK(Pinghu) Steel Processing	China	Steel processing and sales	-	30.00		13,815	2,763	2,763	2,763
Center Co., Ltd.(*2)	China	Steel processing and sales	-	20.00		3,042	2,313	441	2,313
POSCO Vietnam Processing Center. Co.,Ltd (*1) POSCO-SAMSUNG-SLOVAKIA PROCESSING	Vietnam	Steel processing and sales	6,542,250	9.17		133,019	12,101	12,101	12,101
CENTER	Slovakia	Steel processing and sales	30	30.00		14,675	6.205	6.205	6,206
						263,087	59,824	44,459	59,881
					₩.	288,945	67,043	51.678	67,100

(*1) As of December 31, 2024, it is classified as an associate even though the Company's ownership percentage is less than 20% but considering the Company's significant influence over the investee when it comes to the structure of its Board of Directors and others.

(*2) As of December 31, 2024, the Company recognized impairment loss due to book value significantly exceeded the recoverable amount.

11. Investment Property

(a) Details of investments properties as of December 31, 2024 and 2023 are as follows:

(in millions of Won)			20	24		2023					
		Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book value		
Land	₩	2	-	-	2	2	-	-	2		
Buildings		7,053	(3,159)	(23)	3,871	7,053	(2,815)	(23)	4,215		
Structures		1,749	(771)	-	978	1,749	(684)	-	1,065		
Right of use assets		80,234	(27,018)	-	53,216	78,107	-	-	78,107		
	₩	89,038	(30,948)	(23)	58,067	86,911	(3,499)	(23)	83,389		

As of December 31, 2024, the fair value of investment properties approximates their carrying amounts.

- (b) Changes in the carrying amounts of investment properties for each of the two years in the period ended December 31, 2024 are as follows:
 - 1) For the year ended December 31, 2024

(in millions of Won)		Beginning	Depreciation(*1)	Others(*2)	Ending	
Land	₩	2	-	-	2	
Buildings		4,215	(344)	-	3,871	
Structures		1,065	(87)	-	978	
Right-of-use assets		78,107	(27,019)	2,128	53,216	
	₩.	<mark>83,389</mark>	(27,450)	2,128	58,067	

- (*1) The useful life and depreciation method of investment property are identical to those of property, plant and equipment.
- (*2) Others include transfer resulting from changes in rental ratio of the subleased asset.

(in millions of Won)		Beginning	Depreciation(*1)	Others(*2,3)	Ending	
Land	₩ -	3,639	-	(3,637)	2	
Buildings		8,929	(1,114)	(3,600)	4,215	
Structures		5,150	(486)	(3,599)	1,065	
Right-of-use assets		-	-	78,107	78,107	
	₩	17,718	(1,600)	67,271	83,389	

11. Investment Property (cont'd)

- (*1) The useful life and depreciation method of investment property are identical to those of property, plant and equipment.
- (*2) Others include the transfer resulting from changes in the purpose of use.
- (*3) For the year ended December 31, 2023, the Company classified the subleased right-of-use asset as investment property.

12. Property, Plant and Equipment, Net

(a) Details of property, Plant and Equipment as of December 31, 2024 and 2023 are as follows:

(in millions of Won)				2024					2023		
		Acquisition cost	Accumulated depreciation	Accumulated impairment	Government grants	Book value	Acquisition cost	Accumulated depreciation	Accumulated impairment	Government grants	Book value
Land	₩	1,298,175		-		1,298,175	1,284,191		-		1,284,191
Buildings		6,716,141	(4,774,714)	(30,894)	(3,275)	1,907,258	6,514,970	(4,588,368)	(20,372)	(3,317)	1,902,913
Structures		5,810,395	(3,411,664)	(36,085)	-	2,362,646	5,214,167	(3,218,744)	(23,034)	-	1,972,389
Machinery and equipment		44,998,703	(31,904,035)	(443,763)	-	12,650,905	42,793,425	(30,649,782)	(308,636)	-	11,835,007
Vehicles		254,728	(225,806)	(123)	(2,101)	26,698	230,553	(208,318)	(122)	(1,874)	20,239
Tools		225,806	(193,890)	(1,881)	-	30,035	223,520	(190,014)	(2,140)	-	31,366
Furniture and fixtures		343,462	(273,238)	(1,559)	(1)	68,664	330,432	(246,671)	(1,338)	(9)	82,414
Right-of-use assets		570,093	(258,221)	-	-	311,872	554,963	(206,464)	-	-	348,499
Construction-in-progress		2,621,418		(41,314)		2,580,104	3,135,944		(41,669)	-	3,094,275
	₩	62,838,921	(41,041,568)	(555,619)	(5,377)	21,236,357	60,282,165	(39,308,361)	(397,311)	(5,200)	20,571,293

(b) Changes in the carrying amount of property, plant and equipment for each of the two years ended December 31, 2024 are as follows:

(in millions of Won)	-	Beginning	Acquisitions	Disposals	Impairment(*1)	Depreciation	Others(*2)	Ending
Land ¥	₩	1,284,191	-	(51)		-	14,035	1,298,175
Buildings		1,902,913	358	(269)	(10,850)	(190,497)	205,603	1,907,258
Structures		1,972,389	3,185	(2,887)	(16,889)	(209,365)	616,213	2,362,646
Machinery and equipment		11,835,007	46,078	(16,803)	(181,537)	(1,819,224)	2,787,384	12,650,905
Vehicles		20,239	863	(31)	-	(19,796)	25,423	26,698
Tools		31,366	3,308	(8)	(24)	(13,993)	9,386	30,035
Furniture and fixtures		82,414	3,399	(396)	(221)	(32,655)	16,123	68,664
Right-of-use assets		348,499	16,773	-	-	(51,757)	(1,643)	311,872
Construction-in-progress		3,094,275	3,198,675	(1,222)	(17,718)		(3,693,906)	2,580,104
*	₩.	20,571,293	3,272,639	(21,667)	(227,239)	(2,337,287)	(21,382)	21,236,357

- (*1) For the year ended December 31, 2024, the Company estimated the recoverable amount based on the net fair value of individual assets including the No.1 steel making plant, No.4 Blast furnace production facility and others in Pohang, which were partially shut down due to renovation. The Company recognized impairment loss of ₩227,239 million since recoverable amounts are less than their carrying amounts.
- (*2) Others represent assets transferred from construction-in-progress to other property, plant and equipment, assets transferred from right-of-use assets to investment property, and others.

12. Property, Plant and Equipment, Net (cont'd)

(in millions of Won)		Beginning	Acquisitions	Disposals	Impairment(*1)	Depreciation	Others(*2)	Ending
Land	₩	1,265,810	9,359	(1,607)	-	-	10,629	1,284,191
Buildings		1,996,826	1,701	(1,328)	(26,748)	(194,621)	127,083	1,902,913
Structures		2,048,075	1,402	(7,646)	(28,581)	(188,046)	147,185	1,972,389
Machinery and equipment		11,945,072	55,080	(47,303)	(155,207)	(1,755,003)	1,792,368	11,835,007
Vehicles		18,578	213	(13)		(11,193)	12,654	20,239
Tools		31,416	6,807	(110)	(11)	(13,908)	7,172	31,366
Furniture and fixtures		74,497	2,823	(30)	(147)	(28,791)	34,062	82,414
Right-of-use assets		332,077	134,835			(35,111)	(83,302)	348,499
Construction-in-progress		1,951,552	3,335,246	-	-	-	(2,192,523)	3,094,275
	₩	19,663,903	3,547,466	(58,037)	(210,694)	(2,226,673)	(144,672)	20,571,293

- (*1) The Company terminated operations of certain portion of the lithium production facilities and others located in Gwangyang and Argentina due to changes in operation plans. The Company estimated the recoverable amount of these assets at the net fair value, and recognized an impairment loss of ₩210,399 million since recoverable amounts are less than their carrying amounts.
- (*2) Others represent assets transferred from construction-in-progress to intangible assets and other property, plant and equipment, right-of-use assets transferred to investment properties, and others.

12. Property, Plant and Equipment, Net (cont'd)

(c) Details of borrowing costs capitalized and capitalized interest rate for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Weighted average expenditure	₩	1,916,515	1,593,142
Borrowing costs capitalized		90,251	63,614
Capitalization rate		4.71%	3.99%

- (d) Changes in the carrying amount of right-of-use assets presented as property, plant and equipment and investment property for each of the two years in the period ended December 31, 2024 and 2023 are as follows:
 - 1) For the year ended December 31, 2024

(in millions of Won)		Beginning	Acquisitions	Depreciation	Others	Ending
Land	₩	7,353	-	(285)	-	7,068
Buildings		174,712	6,947	(48,669)	2,370	135,360
Structures		43,585	-	(5,212)	-	38,373
Machinery and equipment		1,183	-	(395)	-	788
Vehicles		10,499	1,563	(2,631)	-	9,431
Ships		176,688	-	(16,685)	-	160,003
Furniture and fixtures		12,586	8,263	(4,898)	(1,886)	14,065
	₩	426,606	16,773	(78,775)	484	365,088

(in millions of Won)	_	Beginning	Acquisitions	Depreciation	Others	Ending
Land	₩	7,638	-	(285)	-	7,353
Buildings		59,209	124,104	(7,197)	(1,404)	174,712
Structures		48,797	-	(5,212)		43,585
Machinery and equipment		1,578	-	(395)	-	1,183
Vehicles		5,254	5,745	(500)	-	10,499
Ships		193,373	-	(16,685)	-	176,688
Furniture and fixtures		16,228	4,986	(4,837)	(3,791)	12,586
	₩	332,077	134,835	(35,111)	(5,195)	426,606

12. Property, Plant and Equipment, Net (cont'd)

e) The amounts recognized in profit or loss related to leases for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Interest on lease liabilities	₩	12,205	8,713
Expenses relating to short-term leases		3,870	30,333
Expenses relating to leases of low-value assets		6,130	6,059
	₩	22,205	45,105

13. Intangible Assets, Net

(a) Details of intangible assets as of December 31, 2024 and 2023 are as follows:

			202	24		2023			
(in millions of Won)	_	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Intellectual property rights	₩	64,258	(44,752)	-	19,506	54,399	(39,942)	-	14,457
Membership		79,888	-	(554)	79,334	79,888	-	(554)	79,334
Development expense		712,395	(633,966)	(658)	77,771	690,642	(569,387)	(61)	121,194
Port facilities usage rights		682,305	(514,072)	-	168,233	682,305	(499,213)	-	183,092
Construction-in-progress		105,825	-	-	105,825	44,358	-	-	44,358
Other intangible assets		226,693	(221,728)	(450)	4,515	226,026	(220,011)	(451)	5,564
	₩	1,871,364	(1,414,518)	(1,662)	455,184	1,777,618	(1,328,553)	(1,066)	447,999

(b) Changes in the carrying amount of intangible assets for each of the two years in the period ended December 31, 2024 are as follows:

1) For the year ended December 31, 2024

(in millions of Won)	_	Beginning	Acquisitions	Disposals	Amortization	Impairment	Others(*2)	Ending
Intellectual property rights	₩	14,457	75	(198)	(8,191)	-	13,363	19,506
Membership(*1)		79,334	-	-	-	-	-	79,334
Development expense		121,194	3,363	(22)	(68,309)	(597)	22,142	77,771
Port facilities usage rights		183,092	-	-	(14,859)	-	-	168,233
Construction-in-progress		44,358	93,654	-	-	-	(32,187)	105,825
Other intangible assets		5,564	-	-	(2,281)	-	1,232	4,515
	₩	447,999	97,092	(220)	(93,640)	(597)	4,550	455,184

- (*1) The economic useful life of membership is indefinite.
- (*2) Others represent assets transferred from construction-in-progress to intangible assets and assets transferred from property, plant and equipment, and others.

(in millions of Won)	_	Beginning	Acquisitions	Disposals	Amortization	Impairment	Transfer(*2)	Ending
Intellectual property rights	₩	20,548	-	-	(6,091)	-	-	14,457
Membership(*1)		79,320	14	-	-	-	-	79,334
Development expense		134,463	5,762	(97)	(75,857)	-	56,923	121,194
Port facilities usage rights		197,950	-	-	(14,858)	-	-	183,092
Construction-in-progress		50,210	36,779	-	-	-	(42,631)	44,358
Other intangible assets		8,147	886	-	(2,035)	(4,035)	2,600	5,563
	₩	490,638	43,441	(97)	(98,841)	(4,035)	16,892	447,998

- (*1) The economic useful life of membership is indefinite.
- (*2) Others represent assets transferred from construction-in-progress to intangible assets and assets transferred from property, plant and equipment, adjustments to differences of foreign currency translation and others.

14. Other Assets

Details of other assets as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023	
Current				
Advance payments	₩	3,299	3,857	
Prepaid expenses		113,667	100,831	
	₩	116,966	104,688	
Non-current				
Long-term prepaid expenses	₩	2,570	2,994	
Others		28,428	50,791	
	₩	30,998	53,785	

15. Borrowings

(a) Details of borrowings as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Short-term borrowings			
Short-term borrowings	₩	56,079	34,238
Current portion of debentures		2,375,800	1,977,995
Less: Current portion of discount on debentures issued		(2,474)	(1,355)
	₩	2,429,405	2,010,878
Long-term borrowings			
Debentures	₩	5,486,000	6,505,536
Less: Discount on debentures issued		(33,121)	(39,716)
	₩	5,452,879	6,465,820

(b) Short-term borrowings as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	Lenders	Maturity date	Annual interest rate (%)	2024	2023
Transfers of account receivables that do not qualify for derecognition	Shinhan Card	-	- ₩	56,079	34,238

(c) Current portion of debentures as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		Maturity	Annual			
	Lenders	date	interest rate (%)		2024	2023
Debentures	312-2nd Non-guaranteed bonds and another	2025.1.10 ~ 2025.7.7	3.96~4.04	₩	699,670	619,653
Foreign debentures	Global debentures 7-2 and another another	2025.1.17 ~ 2025.8.4	2.5~4.38		1,673,656	1,356,987
				₩	2,373,326	1,976,640

(d) Long-term borrowings as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		Maturity	Annual			
	Lenders	date	interest rate (%)		2024	2023
Debentures	309-3rd Non-guaranteed bonds and others	2026.1.12 ~ 2029.10.16	1.72~4.11	₩	1,368,349	2,066,441
Foreign debentures	Global debentures 8-2nd and others	2026.1.17 ~ 2033.1.17	4.5~5.88		4,084,530	4,399,379
				₩	5,452,879	6,465,820

16. Other Payables

Details of other payables as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Current			
Accounts payable	₩	887,260	862,707
Accrued expenses		730,866	621,287
Lease liabilities		79,500	78,756
Withholdings		17,728	14,270
	₩	1,715,354	1,577,020
Non-current			
Long-term accrued expenses	₩	15	11
Lease liabilities		312,647	350,594
Long-term withholdings		170	280
	₩	312,832	350,885

17. Other Financial Liabilities

Details of other financial liabilities as of September 30, 2024 and December 31, 2023 are as follows:

(in millions of Won)		2024	2023
Current Financial guarantee liabilities	₩	1.840	6,336
Non-current		.,	
Derivative liabilities	₩	-	54,956
Financial guarantee liabilities		-	4,949
	₩	-	59,905

18. Provisions

(a) Details of provisions as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		20	24	20	23
	_	Current	Non-current	Current	Non-current
Provision for bonus payments(*1,2)	₩	15,189	47,596	13,684	26,511
Provision for restoration(*3)		2,962	-	5,442	-
Provision for product warranties(*4)		16,233	3,599	18,224	3,627
Provision for legal contingencies and claim(*5)		-	32,211	-	-
	₩ _	34,384	83,406	37,350	30,138

- (*1) Represents the provision for bonuses limited to 100% of annual salaries for executives.
- (*2) For the year ended December 31, 2024 and 2023, the Company measured the present value of the estimated future payments based on actuarial evaluations of the long-service benefits, and provisions were recognized at ₩52,308 million and ₩29,590 million, respectively.
- (*3) As of December 31, 2024, due to contamination of certain factory sites in the Company's Pohang works, the Company recognized present value of the estimated cost for recovery as provisions for restoration. In order to determine the estimated costs, the Company has assumed that it would use all of technologies and materials which are currently available to recover the land. In addition, the Company has applied the discount rate of 2.79% to calculate the present value of costs.
- (*4) As of December 31, 2024, the Company recognized the expected sales incentives payable to customers as a provision.
- (*5) As of December 31, 2024, the Company recognized amounting to ₩32,211 million as provision in relation to lawsuits.

POSCO Notes to separate financial statements, continued December 31, 2024 and 2023

18. Provisions (cont'd)

(b) Changes in provisions for each of the two years in the period ended December 31, 2024 are as follows:

1) For the year ended December 31, 2024

(in millions of Won)	Beginning	Increase	Reversal	Utilization	Ending
Provision for bonus payments ₩	40,195	40,349	-	(17,759)	62,785
Provision for restoration	5,442	160	(1,640)	(1,000)	2,962
Provision for legal contingencies and claim	-	32,211	-	-	32,211
Provision for product warranties	21,851	9,726	-	(11,745)	19,832
Others		9,243		(9,243)	
₩	67,488	91,689	(1,640)	(39,747)	117,790

(in millions of Won)		Beginning	Increase	Reversal	Utilization	Ending
Provision for bonus payments	₩	36,149	24,288	-	(20,242)	40,195
Provision for restoration		6,176	348	-	(1,082)	5,442
Provision for sales incentives						
payalbe to customers		21,202	2,257	(380)	(23,079)	-
Provision for product warranties		37,805	32,619	(13,885)	(34,688)	21,851
	₩.	101,332	59,512	(14,265)	(79,091)	67,488

19. Employee Benefits

(a) Defined contribution plans

The expenses related to post-employment benefit plans under defined contribution plans for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)	-	2024	2023
Expense related to post-employment benefit plans under defined contribution plans	₩	52,175	46,641

(b) Defined benefit plans

1) The amounts recognized in relation to net defined benefit liabilities (assets) in the statements of financial position as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Present value of funded obligations	₩	1,324,972	1,259,340
Fair value of plan assets		(1,547,512)	(1,557,782)
Net defined benefit assets	₩	(222,540)	(298,442)

2) Changes in present value of defined benefit obligations for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Defined benefit obligation at the beginning of period	₩	1,259,340	1,193,500
Current service costs		97,343	93,126
Interest costs		47,857	49,130
Remeasurements :		96,606	46,087
- Loss (gain) from change in financial assumptions		45,572	62,497
- Loss (gain) from change in demographic assumptions		2,134	(4,277)
- Loss (gain) from change in others		48,900	(12,133)
Amount transferred from associate		3,544	2,164
Amount transferred to associate		(3,368)	(12,126)
Benefits paid		(176,350)	(112,541)
Defined benefit obligation at the end of period	₩	1,324,972	1,259,340

3) Changes in the fair value of plan assets for the year ended December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Fair value of plan assets at the beginning of period	₩	1,557,782	1,475,606
Interest on plan assets		62,803	65,864
Remeasurement of plan assets		11,386	17,725
Contributions to plan assets		70,000	100,000
Amount transferred from associate		3,544	2,164
Amount transferred to associate		(3,368)	(11,723)
Benefits paid		(154,635)	(91,854)
Fair value of plan assets at the end of period	₩	1,547,512	1,557,782

The Company expects to make an estimated contribution of ₩50,000 million to the defined benefit plan assets in 2025.

4) The fair values of plan assets as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	2024	2023
Debt instruments ₩	190,656	219,723
Deposits	1,356,831	1,312,778
Others	25	25,281
₩	1,547,512	1,557,782

5) The amounts related to net defined benefit plans recognized in the statements of comprehensive income for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023	
Current service costs	₩	97,343	93,126	
Net interest costs(*1)		(14,946)	(16,734)	
	₩	82,397	76,392	

(*1) The actual return on plan assets amounts to ₩74,189 million and ₩83,589 million for the years ended December 31, 2024 and 2023, respectively.

The above expenses by function are as follows:

(in millions of Won)	-	2024	2023
Cost of sales	₩	62,006	50,874
Selling and administrative expenses		20,136	25,262
Others		255	256
	₩	82,397	76,392

 Remeasurements of defined benefit plans, net of tax recognized in other comprehensive income (loss) for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)	-	2024	2023
Beginning	₩	65,518	86,392
Remeasurements of defined benefit plans		(85,220)	(28,362)
Tax effects		22,498	7,488
Ending	₩_	2,796	65,518

7) The principal actuarial assumptions as of December 31, 2024 and 2023 are as follows:

	2024	2023
Discount rate	4.01%	4.53%
Expected future increases in salaries(*1)	3.90%	3.90%

(*1) The expected future increases in salaries are based on the average salary increase rate for the past five years.

All assumptions are reviewed at the end of the reporting period. Additionally, the total estimated defined benefit obligation includes actuarial assumptions associated with the long-term characteristics of the defined benefit plan.

8) Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding the other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

(in millions of Won)		1% Incr	ease	1% Decrease		
	_	Amount	Percentage (%)	Amount	Percentage (%)	
Discount rate	₩	(83,124)	(6.3)	96,631	7.3	
Expected future increases in salaries		95,207	7.2	(83,491)	(6.3)	

9) As of December 31, 2024 the maturity of the expected benefit payments is as follows:

(in millions of Won)	_	Within 1 year	1 year - 5 years	5 years - 10 years	10 years - 20 years	After 20 years	Total
Benefits to be paid	₩	176,959	516,483	302,278	531,585	276,887	1,804,192

20. Other Liabilities

Details of other liabilities as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	2024	2023
Current		
Advances received ₩	¢ 16,548	16,059
Withholdings	51,665	29,829
Unearned revenue	73,248	49,223
¥	#141,461	95,111
Non-current		
Unearned revenue	\$ 2,806	3,261

21. Financial Instruments

- (a) Classification and fair value of financial instruments
 - 1) The carrying amounts and the fair values of financial assets and liabilities as of December 31, 2024 and 2023 are as follows:
 - ① December 31, 2024

(in millions of Won)			Fair value				
		Book value	Level 1	Level 2	Level 3	Total	
Financial assets							
Fair value through profit or loss							
Derivate assets	₩	754,886	-	754,886	-	754,886	
Short term financial instruments		413,976	-	413,976	-	413,976	
Other securities		7,511	-	-	7,511	7,511	
Equity securities		35,541	-	-	35,541	35,541	
Fair value through other comprehensive income							
Equity securities		429,780	385,751	-	44,029	429,780	
Financial assets measured at amortized cost(*1)							
Cash and cash equivalents		1,943,148	-	-	-	-	
Trade accounts and notes receivable		4,703,770	-	-	-	-	
Debt securities		400,000	-	-	-	-	
Other receivables		322,597	-	-	-	-	
Deposit instruments		2,833,722	-	-	-	-	
	₩	11,844,931	385,751	1,168,862	87,081	1,641,694	
Financial liabilities							
Financial liabilities measured at amortized cost(*1)							
Trade accounts and notes payable	₩	2,210,454	-	-	-	-	
Borrowings		7,882,284	-	8,080,375	-	8,080,375	
Financial guarantee liabilities		1,840	-	-	-	-	
Others		1,863,121	-	-	-	-	
	₩	11,957,699	-	8,080,375	-	8,080,375	

(*1) The fair values of financial assets and liabilities measured at amortized cost except borrowings approximate their carrying amounts.

② As of December 31, 2023

(in millions of Won)			Fair value				
		Book value	Level 1	Level 2	Level 3	Total	
Financial assets	_						
Fair value through profit or loss							
Derivate assets	₩	213,392	-	213,392	-	213,392	
Short term financial instruments		3,590,686	-	3,590,686	-	3,590,686	
Other securities		11,708	-	-	11,708	11,708	
Equity securities		1,376	-	-	1,376	1,376	
Fair value through other comprehensive income							
Equity securities		419,549	337,142	-	82,407	419,549	
Financial assets measured at amortized cost(*1)							
Cash and cash equivalents		2,032,952	-	-	-	-	
Trade accounts and notes receivable		5,042,943	-	-	-	-	
Debt securities		289,437	-	-	-	-	
Other receivables		282,577	-	-	-	-	
Deposit instruments		1,097,491	-	-	-	-	
	₩_	12,982,111	337,142	3,804,078	95,491	4,236,711	
Financial liabilities							
Fair value through profit or loss							
Derivative liabilities	₩	54,955	-	54,955	-	54,955	
Financial liabilities measured at amortized cost(*1)							
Trade accounts and notes payable		2,031,173	-	-	-	-	
Borrowings		8,476,698	-	8,616,285	-	8,616,285	
Financial guarantee liabilities		11,286	-	-	-	-	
Others		1,824,728	-	-	-	-	
	₩_	12,398,840	-	8,671,240		8,671,240	

- (*1) The fair values of financial assets and liabilities measured at amortized cost except borrowings approximate their carrying amounts.
- 2) Financial assets and financial liabilities classified as the fair value hierarchy Level 2

Fair values of financial instruments are measured using the derivatives instrument valuation models such as market approach method and discounted cash flow method. Inputs of the financial instrument valuation model include forward rate, interest rate and others. The fair value of derivatives may change depending on the type of derivatives and the nature of the underlying assets. Debt instruments were measured using market-observable interest rates.

- 3) Financial assets and financial liabilities classified as the fair value hierarchy Level 3
 - Details of valuation methods for major financial assets classified as the fair value hierarchy Level 3 and input variables that are significant but not observable as of December 31, 2024 are as follows:

(in millions of Won)						Effect on fair value assessment
	_	Fair value	Valuation technique	Inputs	Range of inputs	with unobservable input
Financial assets at fair value	₩	87,082	Asset value approach	-	-	-

2 Changes in fair value of financial assets classified as the fair value hierarchy Level 3 for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Beginning	₩	95,491	98,016
Gain(loss) on valuation of financial assets		1,285	(2,525)
Disposal		(9,694)	-
Ending	₩	87,082	95,491

4) Financial guarantee contracts recognized as financial liabilities as of December 31, 2024 are as follows:

(in millions of Won)			Guarantee I	Guarantee amount		
Guarantee beneficiary	Financial institution		Foreign currency	Won equivalent	Foreign currency	Won equivalent
[Subsidiaries]				<u> </u>	i	
POSCO-VIETNAM Co., Ltd.	Citi	USD	25,000,000	36,750	11,363,636	16,705
	HSBC	USD	40,000,000	58,800	18,181,818	26,727
	Shinhan Bank	USD	45,000,000	66,150	20,454,545	30,068
POSCO COATED STEEL (THAILAND) CO., LTD.	Citi	THB	800,000,000	34,400	392,000,000	16,856
	HSBC	THB	800,000,000	34,400	392,000,000	16,856
	Mizuho	THB	800,000,000	34,400	392,000,000	16,856
	MUFG	THB	800,000,000	34,400	392,000,000	16,856
	SC	THB	800,000,000	34,400	392,000,000	16,856
	SMBC	THB	800,000,000	34,400	392,000,000	16,856
POSCO ASSAN TST STEEL INDUSTRY	Citi	USD	42,145,620	61,954	42,145,620	61,954
	Shinhan Bank	USD	40,352,190	59,318	40,352,190	59,318
	Woori Bank	USD	40,352,190	59,318	40,352,190	59,318
[Associates]						
LLP POSUK Titanium	Shinhan Bank	USD	12,750,000	18,743	12,750,000	18,743
		USD	245,600,000	361,033	185,599,999	272,833
		THB	4,800,000,000	206,400	2,352,000,000	101,136

- 5) Finance income and costs by category of financial instrument for each of the two years in the period ended December 31, 2024 are as follows:
 - 1) For the year ended December 31, 2024

(in millions of Won)			Finance income and costs(*1)						Other
		Interest income (expense)	Dividend income	Gain and loss on foreign currency	Gain on disposal	Gain valuation	Others	Total	comprehensive income
Financial assets at fair value through profit or loss Financial assets at fair value	₩	-	-	-	180,634	711,854	5,560	898,048	-
through other comprehensive income			26,885				-	26,885	32,164
Financial assets measured at amortized cost		143,608		319,387				462,995	
Financial liabilities at fair value through profit or loss					373	54,955		55,328	
Financial liabilities measured at amortized cost		(347,517)		(1.006,859)			(2,495)	(1.356.871)	
	₩	(203,909)	26,885	(687,472)	181,007	766,809	3,065	86,385	32,164

(*1) Finance income in the statement of comprehensive income includes the dividends from subsidiaries of ₩8,473 million for the year ended December 31, 2024.

(2) For the year ended December 31, 2023

(in millions of Won)		Finance income and costs(*1)						Other	
		Interest income (expense)	Dividend income	Gain and loss on foreign currency	Gain and loss on disposal	Gain on valuation	Others	Total	comprehensive income
Financial assets at fair value through profit or loss Financial assets at fair value	₩	-		(371)	99,321	315,654	(790)	413,814	-
through other comprehensive income Financial assets measured at			2,544	-	-	-		2,544	5,451
amortized cost		171,269		21,668				192,937	
Financial liabilities at fair value through profit or loss Financial liabilities measured at		-		60	(4,394)	8,221		3,887	-
amortized cost		(364,357)		(245,072)			2,861	(606,568)	
	₩.	(193,088)	2,544	(223,715)	94,927	323,875	2,071	6,614	5,451

(*1) Finance income in the statement of comprehensive income includes the dividends from subsidiaries of ₩14,371 million for the year ended December 31, 2023.

- (b) Credit risk
 - 1) Credit risk exposure

The carrying amounts of financial assets and contract assets represent the Company's maximum exposure to credit risk. The maximum exposure to credit risk as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	_	2024	2023
Cash and cash equivalents	₩	1,943,148	2,032,952
Derivate assets		754,886	213,392
Short-term financial instruments		413,97 <mark>6</mark>	3,590,686
Debt securities		400,000	289,437
Equity securities		35,541	1,376
Other securities		7,511	11,708
Other receivables		322,597	282,577
Trade accounts and notes receivable		4,715,367	5,047,769
Deposit instruments		2,833,722	1,097,491
	₩	11,426,748	12,567,388

The Company provided financial guarantee for the repayment of loans of subsidiaries and associates. As of December 31, 2024 and 2023, the maximum exposure to credit risk caused by financial guarantee amounts to ₩373,968 million and ₩1,875,351 million, respectively.

2) Impairment losses on financial assets and contract assets

The Company assesses the expected credit loss on trade accounts and notes receivable, and other receivables by estimating the default rates based on the following three years of credit loss experience and overdue conditions. The Company assesses the credit loss individually for credit-impaired assets and some other receivables.

 Details of allowances for doubtful accounts as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Trade accounts and notes receivable	₩	904	1,015
Other accounts receivable		5,783	5,775
Loans		18,772	16,464
	₩	25,459	23,254

② Details of impairment losses on financial assets for each of the two years in the period ended December 31, 2024 are as follows:

	2024	2023
₩	-	(29)
	2,306	5,515
	-	-
₩	2,306	5,486
		₩ <u>-</u> 2,306

(*1) Other bad debt expenses are mainly related to loans and other accounts receivable.

③ The aging analysis on trade receivables and their allowance for doubtful accounts as of December 31, 2024 and 2023 is as follows:

(in millions of Won)		202	4	2023		
		Trade accounts and notes receivable	Allowance for doubtful accounts	Trade accounts and notes receivable	Allowance for doubtful accounts	
Not due	₩	4,708,951	490	5,006,675	601	
Over due less than 1 month		467	-	33,084	-	
1 month - 3 months		-	-	3	-	
3 months - 12 months		61	-	2	-	
Over 12 months		5,756	414	9,020	414	
	₩	4,715,235	904	5.048.784	1,015	

(4) The aging analysis on other receivables and their allowances for doubtful accounts as of December 31, 2024 and 2023 is as follows:

(in millions of Won)		202	24	2023		
	_	Loans and other account receivable	Allowance for doubtful accounts	Loans and other account receivable	Allowance for doubtful accounts	
Not due	₩	193,637	24,274	173,357	21,968	
Over due less than 1 month		869	-	408	-	
1 month - 3 months		106	-	2,514	-	
3 months - 12 months		6,989	-	-	-	
Over 12 months		2,793	280	284	271	
	₩	204,394	24,554	176,563	22,239	

(5) Changes in allowances for doubtful accounts for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Beginning	₩	23,254	33,552
Reversal of impairment loss on trade accounts and notes receivable		-	(29)
Write-off		(35)	(15,712)
Impairment loss on other receivables		2,306	5,515
Others		(67)	(72)
Ending	₩	25,458	23,254

(c) Liquidity risk

The contractual maturities for financial liabilities are as follows:

(in millions of Won)		Book value	Contractual cash flow	Within 3 months	3 months - 6 months	6 months - 1 year	1 year - 5 years	After 5 years
Trade accounts and notes payable	₩	2,210,454	2,210,454	2,210,454	-	-	-	-
Borrowings		7,882,284	8,839,133	913,269	17,306	1,841,554	5,535,323	531,681
Financial guarantee liabilities(*1)		1,840	373,968	373,968	-	-	-	-
Lease liabilities		392,148	457,785	22,666	22,446	43,272	183,263	186,138
Others		1,520,294	1,518,454	1,500,541	-	17,728	185	-
	₩	12,007,020	13,399,794	5,020,898	39,752	1,902,554	5,718,771	717,819

(*1) For issued financial guarantee contracts, the maximum amount of the guarantee is allocated to the earliest period in which the guarantee could be called.

(d) Currency risk

1) The Company has exposure to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of the changes in foreign exchange rates. The exposure to currency risk as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	4	2023		
	_	Assets	Liabilities	Assets	Liabilities	
USD	₩	1,737,550	7,396,895	1,269,700	6,336,288	
JPY		75,421	9,588	111,551	9,892	
CNY		281,239	10,692	327,996	488	
INR		559,290	-	630,689	-	
EUR		13,674	2,953	25,543	719,484	
Others		654,507	832	528,459	1,773	
	₩	3,321,681	7,420,960	2,893,938	7,067,925	

2) As of December 31, 2024 and 2023, provided that functional currency against foreign currencies other than functional currency hypothetically strengthens or weakens by 10%, the changes in gain or loss for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		202	24	2023		
	_	10% increase	10% decrease	10% increase	10% decrease	
USD	₩	(565,935)	565,935	(506,659)	506,659	
JPY		6,583	(6,583)	10,166	(10,166)	
CNY		27,055	(27,055)	32,751	(32,751)	
INR		55 <mark>,</mark> 929	(55,929)	63,069	(63,069)	
EUR		1,072	(1,072)	(69,394)	69,394	

(e) Interest rate risk

The carrying amount of interest-bearing financial instruments as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Fixed rate			
Financial assets	₩	5,642,221	7,054,445
Financial liabilities		(8,659,593)	(9,006,114)
		(3,017,372)	(1,951,669)

22. Share Capital and Capital Surplus

(a) Details of share capital as of December 31, 2024 and 2023 are as follows:

(share, in Won)		2024	2023
Authorized shares		200,000,000	200,000,000
Par value	₩	5,000	5,000
Issued shares		96,480,625	96,480,625
Shared capital	₩	482,403,125,000	482,403,125,000

(b) Details of capital surplus as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Share premium Other capital surplus	₩	24,222,056 5,032	24,222,056 (9,592)
	₩	24,227,088	24,212,464

23. Accumulated Other Comprehensive Income

(a) Details of accumulated other comprehensive income as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	_	2024	2023
Changes in fair value of equity investments			0.000
at fair value through other comprehensive income	₩	38,441	2,666

(b) Changes in the fair values of equity investments at fair value through other comprehensive income for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Beginning balance	₩	2,666	(2,786)
Changes in fair value of equity investments		48,608	7,407
Tax effects		(12,833)	(1,955)
Ending balance	₩	38,441	2,666

24. Retained earnings

(a) Retained earnings as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Legal reserve	₩	91,600	32,600
Unappropriated retainde earnings		8,266,996	8,378,795
	₩	8,358,596	8,411,395

(b) Statements of appropriation of retained earnings as of December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024	2023
Retained earnings before appropriation Unappropriated retained earnings			
carried over from prior year	₩	7,730,009	224,112
Transfer of share premium to retained earnings		-	7,000,000
Remeasurements of defined benefit plans		(62,722)	(20,874)
Loss on disposal of equity securities		(3,611)	-
Interests of hybrid bonds		-	(4,108)
Interim dividends		(298,222)	-
Profit for the period		901,542	1,179,665
		8,266,996	8,378,795
Appropriation of retained earnings			
Dividends (Dividends (ratio) per share ₩3,450 (69%) in 2024 ₩6,113 (122%) in 2023)		332,858	589,786
Earned surplus reserve		63,100	59,000
		395,958	648,786
Unappropriated retained earnings carried			
forward to subsequent year	₩	7,871,038	7,730,009

25. Revenue

(a) Details of revenues disaggregated by types of revenue and timing of revenue recognition the years ended December 31, 2024 and 2023 are as follows:

(in millions of Won)

	2024		2023	
Types of revenue				
Revenue from sales of goods	₩	36,050,410	37,610,476	
Revenue from services		1,162,373	1,046,342	
Others		343,740	314,749	
	₩	37,556,523	38,971,567	
Timing of revenue recognition				
Revenue recognized at a point in time	₩	36,306,924	37,854,291	
Revenue recognized over time		1,249,599	1,117,276	
	₩	37,556,523	38,971,567	

(b) Details of account receivables, contract assets and liabilities from contracts with customers as of December 31, 2024 and 2023 are as follows:

(in millions of Won)	2024		2023	
Receivables Account receivables	₩	4,705,101	5,042,943	
Contract assets Account receivables		10,265	4,826	
Contract liabilities Advance received Unearned income		16,548 76,054	16,059 52,484	

26. Selling and Administrative Expenses

(a) Other administrative expenses

Details of other administrative expenses for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)

		2024	2023
Wages and salaries	₩	247,684	255,238
Expenses related to post-employment benefits		26,903	33,474
Other employee benefits		65,419	65,397
Travel		9,252	10,086
Depreciation		35,616	21,224
Amortization		27,120	25,535
Rental		58,466	77,853
Repairs		8,324	10,761
Advertising		57,382	58,805
Research & development		26,193	23,018
Service fees		266,177	285,164
Supplies		499	1,047
Vehicles maintenance		4,807	5,207
Industry association fee		4,992	4,935
Training		27,792	26,152
Conference		4,461	4,337
Others		27,546	29,613
	₩	898,633	937,846

26. Selling and Administrative Expenses (cont'd)

(b) Selling expenses

Details of selling expenses for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)

		2024	2023
Freight and custody expenses	₩	168,747	156,874
Operating expenses for distribution center		5,917	7,438
Sales commissions		94,714	82,109
Sales advertising		4,091	3,686
Sales promotion		3,454	3,257
Sample		777	735
Sales insurance premium		7,990	7,199
	₩	285,690	261,298

27. Research and Development Expenditures Recognized as Expenses

Details of research and development expenditures recognized as expenses for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Administrative expenses	₩	26,193	23,018
Cost of sales		345,673	337,619
	₩	371,866	360,637

28. Finance Income and Costs

Details of finance income and costs for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Finance income			
Interest income(*1)	₩	143,608	171,269
Dividend income		35,358	16,915
Gain on foreign currency transactions		468,779	534,692
Gain on foreign currency translations		579,188	25,767
Gain on valuation of derivatives		734,900	132,083
Gain on transactions of derivatives		79,988	20,754
Gain on valuation of financial assets at fair value			
through profit or loss		30,624	204,968
Gain on disposal of financial assets at fair value			
through profit or loss		103,991	94,058
Others		5,358	2,936
	₩	2,181,794	1,203,442
Finance costs			
Interest expenses	₩	347,517	364,357
Loss on foreign currency transactions		493,098	529,129
Loss on foreign currency translations		1,242,341	255,045
Loss on valuation of derivatives		-	10,651
Loss on transactions of derivatives		2,971	19,885
Loss on disposal of financial assets at fair value			
through profit or loss		3,650	-
Others		1,008	3,390
	₩	2,090,585	1,182,457

(*1) Interest income calculated using the effective interest method for the years ended December 31, 2024 and 2023 is ₩124,830 million and ₩154,310 million, respectively.

29. Other Non-Operating Income and Expenses

Details of other non-operating income and expenses for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Other non-operating income			
Gain on disposals of property, plant and equipment	₩	9,203	22,088
Premium income(*1)		157,278	4,184
Gain on disposals of assets held for sale		865	13,448
Gain on disposals of emission rights		-	25,989
Gain on disposals of Investment Property		-	17,614
Others		20,391	16,945
	₩	187,737	100,268
Other non-operating expenses			
Loss on disposals of property, plant and equipment	₩	138,162	138,069
Impairment loss on property, plant and equipment		227,239	210,694
Loss on disposals of intangible assets		220	97
Impairment loss on intangible assets		597	4,035
Other amortization expense		2,306	5,515
Donations		45,006	48,709
Idle tangible asset expenses		2,971	3,484
Loss on disposals of investments in subsidiaries		47,800	158,917
Others		142,649	26,300
	₩	606,950	595,820

(*1) For the year ended December 31, 2024, the Company received insurance payments of #155,900 million related to damage due to the flooding of the Naengcheon stream in Pohang.

POSCO Notes to separate financial statements, continued December 31, 2024 and 2023

30. Expenses by Nature

Details of expenses categorized by nature for each of the two years in the period ended December 31, 2024 are as follows (excluding finance costs and income tax expense):

(in millions of Won)		2024	2023
Changes in inventories(*1)	₩	382,909	73,532
Raw materials and consumables used		24,853,444	26,317,317
Employee benefits expenses(*3)		2,031,362	1,942,881
Outsourced processing cost		2,844,920	2,807,394
Depreciation(*2)		2,364,737	2,228,273
Amortization		93,640	98,841
Electricity and water expenses		599,374	555,314
Service fees		364,662	370,182
Rental		107,941	125,580
Advertising		57,382	58,805
Freight and custody expenses		1,306,419	1,200,833
Sales commissions		94,714	82,109
Loss on disposal of property, plant and equipment		138,162	138,069
Impairment loss on property, plant and equipment		227,239	210,694
Loss on disposals of investments in subsidiaries		47,800	158,917
Other expenses		1,175,633	1,116,049
	₩	36,690,338	37,484,790

- (*1) Changes in inventories are the changes in products, semi-finished products and byproducts.
- (*2) Including depreciation of investment property.
- (*3) The details of employee benefits expenses for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Wages and salaries	₩	1,897,531	1,816,288
Expenses related to post-employment benefits		133,831	126,593
	₩	2,031,362	1,942,881

31. Income Taxes

(a) Details of income tax expense for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)

		2024	2023
Current income taxes(*1)	₩	253,923	219,762
Deferred income taxes		(19,998)	216,748
Items credited directly to equity		9,665	(8,117)
Income tax expense	₩	243,590	428,393

(*1) Income tax refunds (additions) incurred from the final tax filings are included in income payables.

(b) Details of income taxes credited (charged) directly to equity for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)	2024	2023
Changes in fair value of equity investments		
at fair value through other comprehensive income(*1) ₩	(12,833)	(1,955)
Remeasurements of defined benefit plans(*1)	22,498	7,488
Share premium	-	(13,813)
Loss on disposal of hybrid Bonds		163
₩	9,665	(8,117)

(*1) Those amounts are recognized in other comprehensive income.

(c) Reconciliations between income tax expense at the effective income tax rate and profit before tax at the statutory tax rate of the Republic of Korea for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Profit before income tax expense	₩	1,145,132	1,608,058
Income tax expense computed at statutory rate Adjustments:		291,953	414,165
Tax credit		(61,562)	(55,733)
Effect of tax rate change		-	7,992
Tax effect of investment in subsidiaries		9,592	41,947
Tax effect due to permanent differences		1,824	12,055
Tax effects due to a tax audit		-	8,484
Others		1,783	(517)
		(48,363)	14,228
Income tax expense	₩	243,590	428,393
Effective tax rate (%)		21.30%	26.60%

31. Income Taxes (cont'd)

(d) Changes in deferred tax assets (liabilities) for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024			2023	
	December 31, 2023	Increase (decrease)	December 31, 2024	December 31, 2022	Increase (decrease)	December 31, 2023
Deferred income tax due to						
temporary differences						
Idle capacity loss	₩ -	-	-	24,629	(24,629)	-
PPE - Depreciation	204,818	69,846	274,664	326,287	(121,469)	204,818
Prepaid expenses	9,993	1,760	11,753	10,914	(921)	9,993
Gain or loss on foreign currency translation	92.249	122,891	215,140	26.650	65,599	92,249
Defined benefit liabilities	(21,393)	(36,195)	(57,588)	(3,191)	(18,202)	(21,393)
Accrued revenue	(7,601)	(4,106)	(11,707)	(2,404)	(5,197)	(7,601)
Effect of spin-off	1,536,176	(557)	1,535,619	1,543,628	(7,452)	1,536,176
Others	82,393	(139,129)	(56,736)	201,833	(119,440)	82,393
	1,896,635	14,510	1,911,145	2,128,346	(231,711)	1,896,635
Deferred tax from tax credit carried over						
Tax credit carried over	9,430	(4,177)	5,253	-	9,430	9,430
Deferred income taxes						
recognized directly to equity						
Net changes in fair value of equity investments						
at fair value through other comprehensive income	(951)	(12,833)	(13,784)	1,004	(1,955)	(951)
Remeasurements of defined benefit plans	(23,660)	22,498	(1,162)	(31,148)	7,488	(23,660)
	(24,611)	9,665	(14,946)	(30,144)	5,533	(24,611)
	₩ 1,881,454	19,998	1,901,452	2,098,202	(216,748)	1,881,454

(e) Deferred tax assets and liabilities as of the years ended December 31, 2024 and 2023 are as follows:

(in millions of Won)		2024			2023	
	Asset	Liabilities	Net	Asset	Liabilities	Net
Deferred income tax due to temporary differences						
Idle capacity loss	₩ -	-	-	-	-	-
PPE - Depreciation	274,664	-	274,664	204,818	-	204,818
Prepaid expenses	11,753	-	11,753	9,993		9,993
Gain or loss on foreign currency translation	380,280	(165,140)	215,140	109,881	(17,632)	92,249
Defined benefit liabilities	350,949	(408,537)	(57,588)	355,115	(376,508)	(21,393)
Accrued revenue	-	(11,707)	(11,707)	-	(7,601)	(7,601)
Effect of spin-off	1,538,619	(3,000)	1,535,619	1,539,176	(3,000)	1,536,176
Others	224,409	(281,145)	(56,736)	213,852	(131,459)	82,393
	2,780,674	(869,529)	1,911,145	2,432,835	(536,200)	1,896,635
Deferred tax from tax credit carried over						
Tax credit carried over	5,253	-	5,253	9,430	-	9,430
Deferred income taxes						
recognized directly to equity						
Net changes in fair value of equity investments						
at fair value through other comprehensive income	4,626	(18,410)	(13,784)	2,149	(3,100)	(951)
Remeasurements of defined benefit plans		(1,162)	(1,162)		(23,660)	(23,660)
	4,626	(19,572)	(14,946)	2,149	(26,760)	(24,611)
	₩ 2,790,553	(889,101)	1,901,452	2,444,414	(562,960)	1,881,454

As of December 31, 2024, deductible temporary differences of ₩339,670 million related to investments in subsidiaries were not recognized as deferred tax assets, because it is not probable, they will reverse in the foreseeable future.

(f) The Company recognized current tax payable or receivable at the amount expected to be paid or received that reflects uncertainly related to income taxes.

(g) The Company is not subject to the Pillar Two.

32. Earnings Per Share

Basic earnings per share for each of the two years in the period ended December 31, 2024 are as follows:

(in Won, except share information)	_	2024	2023
Profit Interests of hybrid bonds, net of tax Weighted-average number of	₩	901,541,550,691 -	1,179,665,464,273 (3,023,850,958)
common shares outstanding(*1)	_	96,480,625	96,480,625
Basic earnings per share	₩	9,344	12,196

(*1) The weighted-average number of common shares used to calculate basic earnings per share is as follows:

(shares)	2024	2023
Total number of common shares issued	96,480,625	96,480,625
Weighted-average number of common shares outstanding	96,480,625	96,480,625

The Company does not have any dilutive potential common shares as of December 31, 2024 and 2023, so diluted earnings per share are the same as basic earnings per share.

33. Related Party Transactions

(a) The Company's related parties as of December 31, 2024 are as follows:

	Company
The parent company	POSCO HOLDINGS INC.
Subsidiaries	POSCO STEELEON Co., Ltd, POSCO M-TECH, PNR, POSCO Humans Co., Ltd., eNtoB Corporation, POSCO (Thailand) Company.Ltd, POSCO-MKPC SDN BHD, POSCO- VIETNAM Co., Ltd., POSCO Thainox Public Company Limited, POSCO COATED STEEL (THAILAND) CO., LTD., POSCO Philippine Manila Processing Center, Inc., PT.KRAKATAU POSCO, POSCO Maharashtra Steel Private Limited, POSCO ASSAN TST STEEL INDUSTRY Inc., POSCO-India Pune Processing Center. Pvt. Ltd., POSCO INDIA PROCESSING CENTER PRIVATE LIMITED and others
Associates	DAEHO GLOBAL MANAGEMENT CO., LTD., Pohang Special Welding Co., Ltd., POSK(Pinghu) Steel Processing Center Co., Ltd., LLP POSUK TITANIUM, POSCO SUZHOU PROCESSING CENTER CO.,LTD, SUZHOU POSCO-CORE TECHNOLOGY CO., LTD., ZHANGJIAGANG XIAO-SHA COIL SERVICE CENTER CO.,LTD, POSCO Vietnam Processing Center. Co.,Ltd, POSCO-SAMSUNG-SLOVAKIA PROCESSING CENTER
Other related parties(*1)	POSCO Eco & Challenge Co., Ltd., POSCO DX, POSCO WIDE Co., Ltd., POSCO FUTURE M CO., LTD., POSCO FLOW CO., LTD., SNNC, POSCO Mobility Solution Corporation, eSteel4U, POSCO INTERNATIONAL Corporation, POSCO Canada Ltd., POSCO(Guangdong) Automotive Steel Co., Ltd., POSCO VST CO., LTD., POSCO INTERNATIONAL SINGAPORE PTE LTD., Roy Hill Holdings Pty Ltd, POSCO Asia CO.,LTD., POSCO-China Holding Corp.

- (*1) Other related parties are the subsidiaries, associates and joint ventures of POSCO HOLDINGS INC., the parent company of the Company.
- (b) Significant transactions with the Company's related parties for each of the two years in the period ended December 31, 2024 are as follows:

1) For the year ended December 31, 2024

(in millions of Won)	Sales and others(*1)		Purchase and others(*2)			
	Sales	Others	Purchase of material	Purchase of fixed assets	Outsourced processing cost	Others
The parent company						
POSCO HOLDINGS INC.(*10) \\	10,781	396	-	209	-	1,039,230
Subsidiaries						
POSCO STEELEON Co., Ltd	596,223	5,548	96	54	41,741	159
eNtoB Corporation	18	1,176	344,195	75,702	3,878	18,297
POSCO M-TECH	64	726	91,076		216,867	
PNR	649	-	-		45,594	
POSCO Humans Co.,Ltd.	1.085	-		-	6,513	25,849
POSCO (Thailand) Company.Ltd	90,525				-	35
POSCO-MKPC SDN BHD	8,352	909				421
POSCO VIETNAM Co., Ltd.	298,474	318				92
POSCO MEXICO S.A. DE C.V.(*5)	612,592	262		-		1,876
POSCO-Poland Wroclaw Processing Center Sp. z o. o.(*5)	7.271					.,
POSCO Thainox Public Company Limited	256,246					305
POSCO COATED STEEL (THAILAND) CO., LTD.	293,629	483				1,924
POSCO Chengdu Processing Center Co.,LTD	36	-				.,
POSCO TNPC Otomotiv Celik San. Ve Tic. A.S	58,229					523
PT. POSCO INDONESIA JAKARTA PROCESSING CENTER(*5)	3,352					3,187
POSCO PS Tech(*6)	70			14,562	124,985	1,531
POSCO PR Tech(*6)		24	12	22,198	97,579	1,730
POSCO PH Solution(*6)		41	33	11,078	48,367	4,845
POSCO GYS Tech(*6)	113	12	8	10,159	117,370	1,713
POSCO GYR Tech(*6)	103	12	3	19,051	108,820	936
POSCO GY Solution(*6)	84	15		6,519	54,291	22
PT. KRAKATAU POSCO(*7)	9,563	3,360		0,010		
POSCO-India Pune Processing Center Private Ltd(*7)	19,507	-				
POSCO Maharashtra Steel Private Limited(*7)	901,463	116				125.080
POSCO INDIA PROCESSING CENTER PRIVATE LIMITED(*7)	150,930					1,413
POSCO ASSAN TST STEEL INDUSTRY(*7)	395,102	2,984				81
Others	11,913	2,004				913
-	3,715,593	15,974	435,423	159,323	866,005	190,932
Associates						
SUZHOU POSCO-CORE TECHNOLOGY CO., LTD.						
POSCO-SAMSUNG-SLOVAKIA PROCESSING CENTER	- 38.654	-				
POSCO-SAMSUNG-SLOVARIA PROCESSING CENTER POSCO Vietnam Processing Center.Co.,Ltd(*10)	58,654 63,326	-	-	-	-	391
Others	151	56		-		39
	102,131	56				391
Other related parties(*3,4)						
POSCO Eco & Challenge Co., Ltd.	302			979,454	143	37,284
POSCO DX(*8)	1,911	17		554,898	67,484	180,298
POSCO WIDE Co., Ltd.	9.225	70	774	2.929	24.080	46,610
POSCO FUTURE M CO., LTD.	447.214	189	561,317	39,498	235,955	12.020
POSCO FLOW CO., LTD. (*9)	11,633	100	723,451	35,458	13,997	1,259,954
SNNC	8,527	- 8	279,194	1,168	13,887	1,209,904
	773.091	8	279,194	2,594	52,004	898
POSCO Mobility Solution Corporation		1	-	2,594	52,004	256
	539,493	-	62	-	753	
POSCO INTERNATIONAL Corporation(*11) POSCO Canada Ltd.	10,779,382	-	1,163,919 26,700		/53	29,222
	-	-	26,700			
POSCO(Guangdong) Automotive Steel Co.,Ltd	267,797	-	-	-	-	
POSCO VST CO., LTD.	218,615	-	-	-	-	
POSCO INTERNATIONAL SINGAPORE PTE LTD.		37	1,694,409	-	-	
Roy Hill Holdings Pty Ltd	-	-	1,703,902	-	-	00.044
Others	420,520	483	6 349 911	223,659	3,833	98,019
	13,477,710	805	6,349,811	1,804,232	398,249	
₩_	17,306,215	17,231	6,785,234	1,963,764	1,264,254	2,895,133

- (*1) Sales and others mainly consist of sales of steel products to the parent company, associates and other related parties and joint ventures.
- (*2) Purchases and others mainly consist of related party's purchases of construction services and purchases of raw materials to manufacture steel products.
- (*3) Other related parties are subsidiaries, associates and joint ventures of POSCO HOLDINGS INC., the parent company of the Company.
- (*4) As of December 31, 2024, the Company has provided financial guarantees to related parties (Note 21-(a)-4)).

- (*5) During the year ended December 31, 2023, the entities were newly included in subsidiaries due to acquisition from POSCO HOLDINGS INC.
- (*6) Newly established during the year ended December 31, 2023.
- (*7) During the year ended December 31, 2024, the entity was newly included in subsidiaries due to acquisition from POSCO HOLDINGS INC., and the transactions occurred prior to the inclusion are included.
- (*8) Others (purchase) mainly consist of maintenance expenses for the ERP System.
- (*9) Others (purchase) mainly consist of freight expenses.
- (*10) Others (purchase) mainly consist of service fees for brand usage and rentals.
- (*11) As of December 31, 2024, the Company is entered into a SWAP contract for LNG procurement.

2) For the year ended December 31, 2023

(in millions of Won)	Sales and others(*1)		Purchase and others(*2)			
	Sales	Others	Purchase of material	Purchase of fixed assets	Outsourced processing cost	Others
The parent company –						
POSCO HOLDINGS INC.(*5) \\	13,903	56	-	-	-	471,788
Subsidiaries(*4)	,					,
POSCO STEELEON Co., Ltd	- 567,924	- 2.987	-	-	40,764	- 728
,	,	· · · · · · · · · · · · · · · · · · ·	-	-	40,764	
eNtoB Corporation	15	3,660	422,363	72,686		18,619
POSCO M-TECH	63	767	69,035	27,716	217,815	485
PNR	694	3		39	51,100	13
POSCO Humans Co.,Ltd.	524	-	-	-	6,485	24,074
POSCO (Thailand) Company.Ltd	86,863	-	-	-	-	20
POSCO-MKPC SDN BHD	13,548	1,509	-	-	-	250
POSCO-VIETNAM Co., Ltd.	311,028	473	-	-	-	73
POSCO MEXICO S.A. DE C.V.(*6)	550,253	437	-	-	-	2,008
POSCO-Poland Wroclaw Processing Center Sp. z o. o.(*6)	4,657	-	-	-	-	-
POSCO Thainox Public Company Limited	245,098	5,463	-	-	-	25
POSCO COATED STEEL (THAILAND) CO., LTD.	268,191	590	-	-	-	1,352
POSCO ChengDu Processing Center	8,440	-	-	-	-	
POSCO TNPC Otomotiv Celik San. Ve Tic. A.S	63,966	-	-	-	-	843
PT. POSCO-INDONESIA JAKARTA PROCESSING CENTER(*6)	2,557	-	-	-	-	2,954
POSCO PS Tech(*7)	-	39	-	3,814	67,673	936
POSCO PR Tech(*7)	-	14	-	5,666	54,241	44
POSCO PH Solution(*7)		23	-	648	29,504	1,334
POSCO GYS Tech(*7)	42	16	2	539	64,385	
POSCO GYR Tech(*7)	50	2	-	4,052	58,412	204
POSCO GY Solution(*7)	42	5	-	1,637	32,499	108
PT. KRAKATAU POSCO(*6)	4,927	1,457	17,407	-	-	21
Others	10,811	-	-	-	-	495
-	2,139,693	17,445	508,807	116,797	622,957	54,586
SUZHOU POSCO-CORE TECHNOLOGY CO.,LTD.	282	-	-	-	-	-
POSCO-SAMSUNG-SLOVAKIA PROCESSING CENTER	55,679	-	-	-	-	-
POSCO Vietnam Processing Center.Co.,Ltd(*10)	63,287	-	-	-	-	523
Others	54	24				9
-	119,302	24	-		· · ·	532
Other related parties(*3,4)						
POSCO Eco & Challenge Co., Ltd.	213	46	4	866,450	97	16,891
POSCO DX (*8)	443	18	1,539	514,135	65,845	188,136
POSCO WIDE Co., Ltd.	6,232	19,417	162	1,377	25,848	33,489
POSCO FUTURE M CO., LTD.	437,364	527	573,266	59,967	247,063	8,131
POSCO FLOW CO., LTD.(*9)	17,230	35	611,647	-	17,963	1,143,649
SNNC	9,249	4	477,692	-	-	50
POSCO Mobility Solution Corporation	943,350	-	150	2,337	40,041	2,439
eSteel4U	534,745	-	-	-	-	304
POSCO INTERNATIONAL Corporation	11,051,214	2	1,471,916	-	5,508	30,194
POSCO Canada Ltd.	-	-	433,109	-	-	-
POSCO Maharashtra Steel Private Limited	945,466	9	-	-	-	1,905
POSCO(Guangdong) Automotive Steel Co.,Ltd	205,475	-	-	-	-	-
POSCO VST CO., LTD.	185,180	3	-	-	-	21
POSCO INTERNATIONAL SINGAPORE PTE LTD.		6	1,549,040	-	-	-
POSCO ASSAN TST STEEL INDUSTRY	185,916	2,841	-	-	-	-
Roy Hill Holdings Pty Ltd	-	-	1,590,307	-	-	-
Others	667,782	276	157,309	59,037	59	96,619
-	15,189,859	23,184	6,866,141	1,503,303	402,424	1,521,828
₩-	17,462,757	40,709	7,374,948	1,620,100	1,025,381	2,048,734
	11,402,101	40,709	1,314,948	1,020,100	1,025,381	2,048,734

- (*1) Sales and others mainly consist of sales of steel products to the parent company, associates and other related parties and joint ventures.
- (*2) Purchases and others mainly consist of related party's purchases of construction services and purchases of raw materials to manufacture steel products.
- (*3) Other related parties are subsidiaries, associates and joint ventures of POSCO HOLDINGS INC., the parent company of the Company.
- (*4) As of December 31, 2023, the Company has provided financial guarantees to related parties.

- (*5) Others (purchase) include dividends paid to POSCO HOLDINGS INC. during the year period ended December 31, 2023, amounting to W 325,043 million, as well as service fees for brand usage and rentals.
- (*6) During the year ended December 31, 2023, the entity was newly included in subsidiaries due to acquisition from POSCO HOLDINGS INC., and the transactions occurred prior to the inclusion are included.
- (*7) Newly established during the year ended December 31, 2023.
- (*8) Others (purchase) mainly consist of maintenance expenses for the ERP System.
- (*9) Others (purchase) mainly consist of freight expenses.
- (*10) Including transactions that occurred before the entity was included in associates.

- (c) Details of outstanding balances with material transactions with the related parties as of December 31, 2024 and 2023 are as follows:
 - 1) As of December 31, 2024

(in millions of Won)		Receivables		Payables			
	Trade accounts			Trade accounts			
	and notes receivable	Others	Total	and notes payable	Accounts payable	Others	Total
The parent company							
POSCO HOLDINGS INC.	₩ -	41,966	41,966	-	102,520	84,604	187,12
Subsidiaries							
POSCO STEELEON Co., Ltd	61,687	113	61,800	-	6	6,047	6,05
eNtoB Corporation			-	430	6,801	340	7,57
POSCO M-TECH	-	1	1	-	19,182	23,787	42,96
PNR	-	86	86	-	1,868	3,505	5,37
POSCO Humans Co.,Ltd.	16	-	16	-	885	2,622	3,50
POSCO (Thailand) Company.Ltd	19,973	-	19,973	-	-	-	
POSCO-MKPC SDN BHD		-		-	-	-	
POSCO-VIETNAM Co., Ltd.	106,033	1,421	107,454	-	-	-	
POSCO MEXICO S.A. DE C.V.	211,563	956	212,519				
POSCO Thainox Public Company Limited	84,360	481	84.841	-	-	-	
POSCO COATED STEEL (THAILAND) CO., LTD.	72,357	693	73,050		1		
POSCO PS Tech		3	3		7.930	14.873	22.80
POSCO PR Tech		6	6		3.760	12,853	16.61
POSCO PH Solution		3	3		3,819	7,167	10,98
POSCO GYS Tech		3	3		4,796	14,717	19,51
POSCO GYR Tech		2	2		7.061	13,797	20.85
POSCO GY Solution		2	2		1,876	7,273	9,14
PT. KRAKATAU POSCO	7,593	5,912	13,505	-	1,070	1,215	3,14
POSCO Maharashtra Steel Private Limited	363,586	1,912	365,498		124,210		124,21
POSCO Manarashira Steel Phyate Limited POSCO ASSAN TST STEEL INDUSTRY Inc.	281.858	1,912	283.205	-	124,210	-	124,21
Others	201,030	200	203,205		01	-	•
Others	1,209,071	13,141	1,222,212	430	182,276	106,981	289,68
Associates							
Pohang Special Welding Co., Ltd.		33	33				
POSCO Vietnam Processing Center, Co., Ltd	5.585	55	5.585	-		-	
POSCO Vietnam Processing Center, Co.,Ltd	5,585	33	5,618				
	0,000		0,010				
Other related parties		9			70.404		70.70
POSCO Eco & Challenge Co., Ltd.	-		9	-	70,421	280	70,70
POSCODX	40	4	44	-	179,910	25,832	205,74
POSCO WIDE Co., Ltd.	475	659	1,134		6,488	4,664	11,15
POSCO FUTURE M CO., LTD.	43,546	4,770	48,316	42,635	17,166	20,110	79,91
POSCO FLOW CO., LTD.	331	546	877	120,980	2,100	43,533	166,61
SNNC	518	70	588	8,426	1,285	13	9,72
POSCO Mobility Solution Corporation	112,418	-	112,418	-	1,746	5,055	6,80
eSteel4U	106,875	-	106,875	-	-	-	
POSCO INTERNATIONAL Corporation	906,600	1,231	907,831	30,212	6,032	4,330	40,57
POSCO(Guangdong) Automotive Steel Co., Ltd.	48,546	-	48,546	-	-	-	
POSCO VST CO., LTD.	82,674	519	83,193	-		-	
POSCO INTERNATIONAL SINGAPORE PTE LTD.	-	-	-	184,013	188	-	184,20
Roy Hill Holdings Pty Ltd	-	2,440	2,440	356,234	25	-	356,25
Others	33,493	28,544	62,037	1,775	13,805	5,147	20,72
	1,335,516	38,792	1,374,308	744,275	299,166	108,964	1,152,40
	₩ 2,550,172	93,932	2,644,104	744,705	583,962	300,549	1,629,21

2) As of December 31, 2023

(in millions of Won)		Receivables		Payables			
	Trade accounts			Trade accounts			
	and	0.1		and		0.1	
	notes receivable	Others	Total	notes payable	Accounts payable	Others	Total
The parent company							
POSCO HOLDINGS INC.	₩ 315	36,523	36,838		111.034	136,813	247,847
1 0000 HOLDWOO WO.	•• 515	50,525	50,050		111,034	150,015	247,047
Subsidiaries							
POSCO STEELEON Co., Ltd	56,447	2	56,449	-	49	5,542	5,591
eNtoB Corporation	· -		· · ·	926	7,929	21	8.876
POSCO M-TECH		1	1		17,532	20,358	37,890
PNR		22	22		2.589	5,091	7,680
POSCO Humans Co.,Ltd.	16	1	17		767	3,271	4,038
POSCO (Thailand) Company.Ltd	19,284		19,284			-	.,
POSCO-VIETNAM Co., Ltd.	66,599	1,760	68,359				
POSCO MEXICO S.A. DE C.V.	208,369	1,118	209.487		156		156
POSCO Thainox Public Company Limited	67,969	543	68,512				
POSCO COATED STEEL (THAILAND) CO., LTD.	64,659	1.461	66,120	-		-	-
POSCO PS Tech	04,000	3	3		6,641	10,048	16,689
POSCO PR Tech	-	6	6		5,281	6,874	12,155
POSCO PH Solution		3	3		2,132	3,296	5,428
POSCO GYS Tech	-	3	3				
POSCO GYS Tech					5,290	11,000	16,290
	-	2	2	-	4,896	9,085	13,981
POSCO GY Solution	-	2	2	-	2,043	5,519	7,562
PT. KRAKATAU POSCO	1,299	12,661	13,960	-			-
Others	17	94	111		·		-
	484,659	17,682	502,341	926	55,305	80,105	136,336
Associates and joint ventures							
Pohang Special Welding Co., Ltd.		41	41	-		-	-
POSCO Vietnam Processing Center. Co.,Ltd	6.096		6,096				
	6.096	41	6,137				
Other related parties							
POSCO Eco & Challenge Co., Ltd.		22	22	512	111,956	215	112.683
POSCO DX	38	4	42	59	191,911	23,686	215,656
POSCO WIDE Co., Ltd.	380	699	1.079		2.832	5,823	8,655
POSCO FUTURE M CO., LTD.	72.348	63,930	136,278	56,535	21,983	18,652	97,170
POSCO FLOW CO., LTD.	3,020	446	3.466	156,240	2,562	47,014	205,816
SNNC	427	60	487	25,480	2,002	16	25,496
POSCO Mobility Solution Corporation	167,203		167,203	20,400	2,090	4,843	6,933
eSteel4U	120.010		120.010		2,000	4,045	0,000
POSCO INTERNATIONAL Corporation	1,014,938	132	1,015,070	38,119	5,278	6,561	49,958
POSCO Maharashtra Steel Private Limited	486.828	2.060	488.888	50,115	5,270	0,501	49,550
POSCO(Guangdong) Automotive Steel Co., Ltd.	59,646	2,000	59,646		21	-	21
POSCO (Stranguong) Automotive Steer Co., Etc. POSCO VST CO., LTD.	61,422	611	62,033				-
	01,422	011	62,033	-		-	-
POSCO INTERNATIONAL SINGAPORE PTE LTD.	-	-	-	147,273	-	-	147,273
POSCO ASSAN TST STEEL INDUSTRY	177,085	3,807	180,892	-		-	-
Roy Hill Holdings Pty Ltd		-	-	260,830		-	260,830
Others	18,577	19,640	38,217	49,661	12,461	3,816	65,938
	2,181,922	91,411	2,273,333	734,709	351,094	110,626	1,196,429
	₩ 2,672,992	145,657	2,818,649	735,635	517,433	327,544	1,580,612

(d) For the years ended December 31, 2024 and 2023, details of compensation to the Company's key management officers are as follows:

(in millions of Won)		2024	2023
Short-term benefits	₩	36,856	54,811
Retirement benefits		10,620	17,416
	₩	47,476	72,227

Key management includes directors (including non-standing directors), executive officers who have significant influence over and responsibilities for the Company's business and operations.

- (e) Guarantees provided to related parties
 - 1) The Company has entered into a financial guarantee contract for related parties as of the year ended December 31, 2024, and the related guarantee obligations are recognized as financial guarantee liabilities. (See Note 21-(a)-4))
 - 2) During the years ended December 31, 2024 and 2023, there were acquisition of shares from the parent company and other related parties, as well as additional capital contributions to subsidiaries. (See Note 10)

34. Commitments and Contingencies

(a) Contingent liabilities

Contingent liabilities may develop in a way not initially expected. Therefore, management continuously assesses contingent liabilities to determine whether an outflow of resources embodying economic benefits has become probable. If it becomes probable that an outflow of future economic benefits will be required for an item previously dealt with as a contingent liability, a provision is recognized in the financial statements of the period in which the change in probability occurs (except in the extremely rare circumstances where no reliable estimate can be made).

The management makes estimates and assumptions that affect disclosures of commitments and contingencies. All estimates and assumptions are based on the evaluation of current circumstances and appraisals with the supports of internal specialists or external consultants.

The management regularly analyzes current information about these matters and provides for probable contingent losses including the estimate of legal expense to resolve the matters. Internal and external lawyers are used for these assessments. In making the decision regarding the need for provisions, management considers whether the Company has an obligation as a result of a past event, whether it is probable that an outflow or cash or other resources embodying economic benefits will be required to settle the obligation and the ability to make a reliable estimate of the amount of obligation.

34. Commitments and Contingencies (cont'd)

- (b) Commitments
 - The Company entered into long-term contracts to purchase iron ore, coal, nickel and others. The contracts of iron ore and coal generally have terms of more than two years and three years, respectively, and the contracts of nickel have terms of more than one year. These contracts provide for periodic price adjustments based on the market price. As of December 31, 2024, 80 million tons of iron ore and 7 million tons of coal remained to be purchased under such long-term contracts.
 - 2) The Company entered into an agreement with Tangguh Liquefied Natural Gas (LNG) Consortium in Indonesia. The purchase contract period and volume are 550 thousand tons of LNG annually for 20 years commencing in August 2005 and 120 thousand tons from September 2025 to December 2026. The purchase price is subject to change, based on changes of the monthly standard oil price (JCC) and with a price ceiling.
 - 3) The Company entered into a consecutive voyage charter (CVC) contract for the transportation of raw materials. As of December 31, 2024, there are 36 vessels under contract and the average remaining contract period is about 6 years.
 - 4) The Company entered into an agreement (LNG SPA) with POSCO INTERNATIONAL SINGAPORE PTE LTD. to purchase 370 thousand tons of LNG annually for 15 years commencing in November 2026. The purchase price is subject to change based on changes of U.S. Henry Hub Natural Gas Spot Price. The Company has extension option of extending the purchase contract by five years.
 - 5) As of December 31, 2024, the Company has entered into supplier finance agreements which have a limit of USD 1,115 million with SMBC and four other financial institutions.
 - 6) As of December 31, 2024, the committed amount for the acquisition of tangible and intangible assets not yet incurred is W 4,390.4 billion.
 - As of December 31, 2024, the Company has entered into agreements for overdraft and trade finance with financial institutions, including Woori Bank, with a credit limit of W 3,150.4 billion.
 - 8) As of December 31, the carrying amount of financial liabilities related to supplier finance agreements entered into by the Company is as follows, and there are no significant non-cash changes in the carrying amount of trade payables and other payables that are part of the supplier finance agreements.

(in millions of Won)		2024
Trade accounts and notes payable Accounts Payables	₩	861,022 206,335

34. Commitments and Contingencies (cont'd)

(c) Litigation in progress

The Company is involved in 172 lawsuits collectively amounting to W 457.3 billion as defendant as of December 31, 2024, which arise in the ordinary course of business such as claim for confirmation of employee status. The Company has recognized provisions for certain lawsuits and claim and the Company believes that it have a present obligation as of December 31, 2024.

(d) The Company was spun off from POSCO HOLDINGS INC. and newly incorporated with March 1, 2022 as the date of spin-off, and the Company is jointly liable for the liabilities of POSCO HOLDINGS INC. under Article 530(9)(1) of the *Commercial Act* of the Republic of Korea.

POSCO Notes to separate financial statements, continued December 31, 2024 and 2023

35. Statements of Cash Flows

(a) Changes in assets and liabilities arising from operating activities for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)		2024	2023
Trade accounts and notes receivable, net	₩	434,338	(481,534)
Other accounts receivable		(155,274)	172,243
Accrued revenue		(3,252)	(4,698)
Inventories		320,066	639,339
Prepaid expenses		(12,878)	(37,444)
Other current assets		563	2,472
Long-term guarantee deposits		<mark>(</mark> 310)	-
Derivative assets		26,710	23,414
Other non-current assets		23,398	(10,619)
Trade accounts and notes payable		114,723	(115,758)
Other accounts payable		84,660	(229,695)
Accrued expenses		116,108	79,955
Advances received		491	10,262
Withholdings		21,837	(6,491)
Unearned revenue		23,570	10,033
Other current liabilities		(20,481)	(61,498)
Derivative liabliities		-	(17,085)
Payments of severance benefits		(176,349)	(112,540)
Plan assets		84,635	(8,549)
Other non-current liabilities		21,084	6,651
	₩	903,639	(141,542)

35. Statements of Cash Flows (cont'd)

(b) Changes in liabilities arising from financing activities for each of the two years in the period ended December 31, 2024 are as follows:

1) For the year ended December 31, 2024

(in millions of Won)							
	-	Short-term borrowings	Long-term borrowings	Dividend payable	Lease liabilities	Long-term financial liabilities	Derivatives that hedge long-term borrowings
Beginning	₩	34,238	8,442,460	-	429,350	14,537	(146,855)
Changes from financing cash flows		21,841	(1,318,917)	(888,008)	(77,002)	3,348	177,380
The effect of changes in foreign exchange rates		-	684,981	-	25,280	-	-
Changes in fair values		-	-	-		-	(647,690)
Other changes:							
Decrease in retained earnings		-	-	888,008		-	-
Interest expense			17,681	-	24	-	
Increase in lease assets		-	-	-	14,496	-	-
Ending	₩	56,079	7,826,205	-	392,148	17,885	(617,165)

2) For the year ended December 31, 2023

(in millions of Won)							
		Short-term borrowings	Long-term borrowings	Dividend payable	Lease liabilities	Long-term financial liabilities	Derivatives that hedge long-term borrowings
Beginning	₩	841,339	6,917,926	479	337,337	1,304	(148,527)
Changes from financing cash flows		(807,101)	1,317,322	(329,631)	(37,739)	13,233	119,550
The effect of changes in foreign exchange rates		-	190,046	-	3,349	-	-
Changes in fair values			-	-	-	-	(117,878)
Other changes:							
Decrease in retained earnings			-	329,152	-	-	
Interest expense		-	17,166	-	23	-	-
Increase in lease assets		-		-	126,380	-	
Ending	₩	34,238	8,442,460	-	429,350	14,537	(146,855)

(c) Significant transaction not involving cash inflows and outflows for each of the two years in the period ended December 31, 2024 are as follows:

(in millions of Won)	2024	2023
Transfer from construction-in-progress to other property, plant and equipment ₩	3,691,307	2,192,937
Change in account payables due to PP&E and intangible asset	62,057	34,376
Reclassification of current portion of borrowings and bonds	2,217,632	1,975,280
Capitalized borrowing costs	90,251	63,614
Increase in right-of-use assets	20,621	131,919

POSCO Notes to separate financial statements, continued December 31, 2024 and 2023

36. Events after the Reporting Period

(a) On January 14, 2025, the Company issued following non-guaranteed Korea won bond.

(in billions of Won)		Par value	Annual interest rate	Maturity date
314-1	₩	110	2.889%	January 14, 2027
314-2		590	3.078%	January 14, 2028
314-3		200	3.124%	January 14, 2030
314-4		100	3.184%	January 14, 2032

(b) In February 2025, the U.S. government issued an executive order imposing a 25% tariff on all steel and aluminum products, effective from March 12, 2025. This tariff imposition introduces uncertainty in financial statement projections, and the company is currently evaluating the related impact.