

November 21, 2023

**KOREA EXPRESSWAY CORPORATION**

**Issue of U.S.\$200,000,000 Floating Rate Senior Unsecured Notes due 2028  
under the U.S.\$3,500,000,000  
Global Medium Term Note Program**

This document constitutes the Pricing Supplement relating to the issue of Notes described herein. Terms used herein shall be deemed to be defined as such for the purposes of the terms and conditions (the “Conditions”) set forth in the Offering Memorandum dated May 4, 2022 (the “Offering Memorandum”). This Pricing Supplement is supplemental to and must be read in conjunction with such Offering Memorandum. Terms used herein shall be deemed to be defined as such for the purposes of the Conditions set forth in the Offering Memorandum. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Memorandum.

The Notes have not been registered with the Financial Services Commission of Korea under the Financial Investment Services and Capital Markets Act of Korea. Accordingly, the Notes may not be offered delivered, or sold directly or indirectly in the Republic of Korea (“Korea”) or to any resident of Korea (as defined in the Foreign Exchange Transaction Act of Korea and the rules and regulations promulgated thereunder) or to others for re-offering or resale directly or indirectly in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations.

**NOTIFICATION UNDER SECTION 309B(1)(C) OF THE SECURITIES AND FUTURES ACT 2001 OF SINGAPORE (THE “SFA”)** – the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA) that the Notes are prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

1	Issuer:	Korea Expressway Corporation
2	(i) Series Number:	49
	(ii) Tranche Number:	1
	(iii) Re-opening:	No
3	Specified Currency or Currencies:	United States dollars (U.S.\$)
4	Aggregate Nominal Amount:	
	(i) Series:	U.S.\$200,000,000
	(ii) Tranche:	U.S.\$200,000,000
5	(i) Issue Price:	100.000% of the Aggregate Nominal Amount
	(ii) Use of proceeds:	General corporate purposes
6	(i) Specified Denominations:	U.S.\$200,000 and, in excess thereof, integral multiples of U.S.\$1,000
	(ii) Calculation Amount:	U.S.\$1,000
7	(i) Issue Date:	November 28, 2023
	(ii) Interest Commencement Date:	Issue Date
8	Maturity Date:	The Interest Payment Date on or nearest to November 28, 2028

9	Interest Basis:	Compounded Daily SOFR + 0.98 per cent.
10	Redemption/Payment Basis:	Redemption at par
11	Change of Interest Basis or Redemption/Payment Basis:	Not Applicable
12	Put/Call Options:	Not Applicable
13	Listing:	<p>Singapore Exchange Securities Trading Limited (the “Singapore Stock Exchange”)</p> <p>Taipei Exchange (the “TPEX”)</p> <p>Application will be made by the Issuer to the TPEX for the listing and trading of the Notes on the TPEX of the Republic of China (“ROC” or “Taiwan”).</p> <p>TPEX is not responsible for the content of this document and the Offering Memorandum and any amendment and supplement thereto and no representation is made by TPEX to the accuracy or completeness of this document and the Offering Memorandum and any amendment and supplement thereto. TPEX expressly disclaims any and all liability for any losses arising from, or as a result of the reliance on, all or part of the contents of this document and the Offering Memorandum and any amendment and supplement thereto. Admission to the listing and trading of the Notes on the TPEX shall not be taken as an indication of the merits of the Issuer or the Notes. The Notes will be traded on the TPEX pursuant to the applicable rules of the TPEX. Effective date of listing of the Notes is on or about November 28, 2023.</p>
14	Method of distribution:	Syndicated

**PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE**

15	Fixed Rate Note Provisions	Not Applicable
16	Floating Rate Note Provisions	Applicable
	(i) Specified Period(s)/Specified Interest Payment Dates:	Quarterly on February 28, May 28, August 28 and November 28 of each year commencing on February 28, 2024, subject to adjustment in accordance with the Business Day Convention specified below
	(ii) Business Day Convention:	Modified Following Business Day Convention
	(iii) Additional Business Center(s):	Seoul, Taipei, London and New York City
	(iv) Manner in which the Rate of Interest and Interest Amount are to be determined:	Screen Rate Determination

(v)	Party responsible for calculating the Rate of Interest and Interest Amount (if not the Agent):	Not Applicable
(vi)	Screen Rate Determination:	
	• Reference Rate:	SOFR Benchmark
	• Interest Determination Date(s):	Fifth U.S. Government Securities Business Day prior to the last day of each Interest Period (which expression shall mean the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date).
	• Relevant Screen Page:	Not Applicable
	• SOFR Benchmark:	Compounded Daily SOFR
	• Compounded Daily SOFR:	SOFR Lag
	• Lookback Days:	5 U.S. Government Securities Business Days
	• SOFR Observation Shift Days:	Not Applicable
	• SOFR Index <sub>Start</sub> :	Not Applicable
	• SOFR Index <sub>End</sub> :	Not Applicable
(vii)	ISDA Determination:	
	• Floating Rate Option:	Not Applicable
	• Designated Maturity:	Not Applicable
	• Reset Date:	Not Applicable
(viii)	Margin(s):	0.98% per annum
(ix)	Minimum Rate of Interest:	Not Applicable
(x)	Maximum Rate of Interest:	Not Applicable
(xi)	Day Count Fraction:	Actual 360, adjusted
(xii)	Fall back provisions, rounding provisions and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the Conditions:	Not Applicable
(xiii)	Benchmark Replacement (General)	Not Applicable
(xiv)	Benchmark Replacement (SOFR)	Applicable
17	Zero Coupon Note Provisions	Not Applicable
18	Index Linked Interest Note Provisions	Not Applicable
19	Dual Currency Note Provisions	Not Applicable
<b>PROVISIONS RELATING TO REDEMPTION</b>		
20	Issuer Call	Not Applicable
21	Investor Put	Not Applicable

## GENERAL PROVISIONS APPLICABLE TO THE NOTES

22	Form of Notes:	Registered Notes: Regulation S Global Note
23	Additional Financial Center(s) or other special provisions relating to Payment Days:	Seoul, Taipei, London and New York City
24	Talons for future Coupons or Receipts to be attached to Definitive Bearer Notes (and dates on which such Talons mature):	Not Applicable
25	Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:	Not Applicable
26	Details relating to Installment Notes:	
	(i) Installment Amount(s):	Not Applicable
	(ii) Installment Date(s):	Not Applicable
27	Redenomination applicable:	Not Applicable
28	(i) The rate of interest to be applied for purposes of determining the Attributable Debt as defined in Condition 4.3 ( <i>Covenants – Interpretation</i> ):	Not Applicable
	(ii) Other terms or special conditions:	Not Applicable
<b>DISTRIBUTION</b>		
29	(i) If syndicated, names of Managers:	<u>Lead Manager</u> BNP Paribas SA, Taipei Branch <u>Co-Managers</u> Bank SinoPac Co., Ltd. Cathay United Bank Co., Ltd. Mega International Commercial Bank Co., Ltd. President Securities Corporation SinoPac Securities Corporation Taishin International Bank Co., Ltd. Yuanta Securities Co., Ltd.
	(ii) Stabilization Manager(s) (if any):	Not Applicable
30	If non-syndicated, name of relevant Dealer:	Not Applicable
31	U.S. Selling Restrictions:	Regulation S, Category 2 / TEFRA not applicable
32	Prohibition of Sales to EEA Retail Investors:	Not Applicable
33	Prohibition of Sales to UK Retail Investors:	Not Applicable
34	Additional selling restrictions:	The Notes have not been, and shall not be, offered, sold or re-sold, directly or indirectly to investors

other than "professional investors" as defined under Paragraph 1 of Article 2-1 of the Taipei Exchange Rules Governing Management of Foreign Currency Denominated International Bonds (the "TPEX Rules"). Purchasers of the Notes are not permitted to sell or otherwise dispose of the Notes except by transfer to a Professional Investor.

#### **OPERATIONAL INFORMATION**

35	Any clearing system(s) other than Euroclear and Clearstream and the relevant identification number(s):	Not Applicable
36	Delivery:	Free of payment
37	In the case of Registered Notes, specify the location of the office of the Registrar if other than Frankfurt:	Not Applicable
38	Additional Paying Agent(s) (if any):	Not Applicable
39	ISIN:	XS2722164790
40	Common Code:	272216479
41	LEI:	988400EZO9DR1OFL5772
42	Provisions Relating to Green Notes, Social Notes or Sustainability Notes:	
	(i) Green Notes:	No
	(ii) Social Notes:	No
	(iii) Sustainability Notes:	No

#### **LISTING APPLICATION**

This Pricing Supplement comprises the details required to list the issue of Notes described herein pursuant to the US\$3,500,000,000 Global Medium Term Note Program of Korea Expressway Corporation.

The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained herein. Approval in-principle from, admission to the Official List of, and listing and quotation of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Program or the Notes.

TPEX is not responsible for the content of this document and the Offering Memorandum and any amendment and supplement thereto and no representation is made by TPEX to the accuracy or completeness of this document and the Offering Memorandum and any amendment and supplement thereto. TPEX expressly disclaims any and all liability for any losses arising from, or as a result of the reliance on, all or part of the contents of this document and the Offering Memorandum and any amendment and supplement thereto. Admission to the listing and trading of the Notes on the TPEX shall not be taken as an indication of the merits of the Issuer or the Notes. The Notes will be traded on the TPEX pursuant to the applicable rules of the TPEX. Effective date of listing of the Notes is on or about November 28, 2023.

**RESPONSIBILITY**

The Issuer accepts responsibility for the information contained in this Pricing Supplement. Signed on behalf of the Issuer:

By:           *BT No M*          

Duly authorized signatory

## **SCHEDULE A – RECENT DEVELOPMENTS**

*This section provides information that supplements or replaces certain information in the Offering Memorandum under the headings corresponding to the headings below. Capitalized terms used without definition in this section or elsewhere in this Pricing Supplement have the meanings given to such terms in the Offering Memorandum. If the information in this section differs from the information in the Offering Memorandum, potential investors should refer to the information in this section.*

## RISK FACTORS

*Prospective investors in the Notes should carefully review all of the information contained elsewhere in this Offering Memorandum and the financial statements and the notes thereto, and should consider, in particular, the following factors before purchasing any Notes.*

### **Risks Relating to the Issuer**

***The Government is not an obligor or guarantor of the Notes and is not legally required to provide financial support to the Issuer.***

The Issuer is a Government-owned corporation with a mandate from the Government to construct and manage Korea's expressway network in accordance with the Road Act. As such, the Issuer has received and expects to continue to receive financial support from the Government for the costs of constructing expressways and related land acquisition costs as they relate to fulfillment of the Issuer's mandate under the Road Act. However, the Issuer's outstanding indebtedness, including the Notes, is not backed by the full faith and credit of the Government. The Government is not an obligor of the Notes and the Notes do not have any benefit of a guarantee from the Government although the Government has a statutory basis to provide a guarantee for the benefit of the Issuer. Furthermore, there is no statutory or other legal requirement for the Government to provide the Issuer with financial support to meet its outstanding debt obligations, including the Notes. The Government's support of the Issuer is subject to prior authorization by the National Assembly of Korea as part of the national budget approval process. Capital increase by issuing new shares from subscription by the Government in the Issuer amounted to ₩1,662 billion, ₩2,057 billion and ₩2,318 billion in 2020, 2021 and 2022, respectively. With respect to 2023, the Government has budgeted ₩1,677 billion for capital contribution to the Issuer. Although the Issuer expects that the Government will continue to provide financial support to the Issuer, the Government's inability or unwillingness to provide continued financial support in the future or a decrease in such financial support to the Issuer may have a material adverse effect on the Issuer's ability to meet its payment obligations on its outstanding indebtedness, including the Notes.

***The Issuer anticipates that it will receive limited financial support from the Government in respect of, and as a result will need to incur substantial indebtedness for, its capital expenditures.***

The Issuer finances the development of expressway projects through a combination of capital contributions from the Government, debt financing and cash flow from operations. The Issuer has historically received capital contributions from the Government, which have generally accounted for approximately 40% of the Issuer's budgeted construction costs and, since 2003, 100% of the Issuer's budgeted costs of acquiring related land. However, at times, the Government's capital contribution fell and in the future may fall below such level due to budgetary constraints or other public policy considerations. For example, the Government's actual subsidy ratio (defined as the ratio of the Government's capital contributions to the Issuer's actual costs for construction of new expressways and expansions) fell below the 40% level in 2006, 2007, 2008 and 2010. The actual subsidy ratio was 45%, 49% and 57% in 2020, 2021 and 2022, respectively. In respect of 2023, the Issuer budgeted construction costs of ₩3,683 billion and the Government budgeted capital contributions to the Issuer in the amount of ₩1,677 billion. No assurance can be given that capital contributions from the Government will rise to or above the 40% level in future periods, especially if the Government were to experience similar or more severe budgetary constraints or if such capital contributions were to be assigned a lower priority in the Government's budget allocation process. If the Government's capital contributions decrease significantly, the Issuer will be required to resort to outside financing to fund a larger amount of its capital expenditure and working capital, which would increase the finance costs of the Issuer and adversely affect the Issuer's financial condition and results of operation. In addition, the amount of toll rate discounts and exemptions mandated as public service obligations under the Government's public policy objectives (including compact car discounts,

commuter time discounts and loaded vehicle discounts) amounted to ₩375 billion, ₩346 billion and ₩426 billion in 2020, 2021 and 2022, respectively. If the Government's capital contributions decrease significantly or the Issuer's public service obligations increase significantly, the Issuer will be required to resort to outside financing to fund a larger amount of its capital expenditure and working capital, which would increase the net finance costs of the Issuer and adversely affect the Issuer's financial condition and results of operation.

The amount of the Government's capital contribution is set at the beginning of the fiscal year based on the Issuer's estimated budget for total construction costs for that particular year, but the actual subsidy ratio at the end of the year may be lower than the subsidy ratio based on the budgeted amount due to, among other things, actual costs being higher than the originally budgeted amount. To finance capital expenditures not covered by contributions from the Government or cash flow from operations, the Issuer has incurred, and will be required to continue to incur, substantial amounts of indebtedness. There can be no assurance, however, that the required funds will be available to the Issuer in sufficient amounts or at all or that the costs of such financing will be commercially acceptable to the Issuer.

***The Issuer has significant debt and may encounter difficulties in funding its future capital requirements, including debt repayments.***

The Issuer's business is capital-intensive, and as a result, the Issuer has historically made, and is expected to continue to make, significant capital expenditures. The Issuer's capital expenditures (consisting of cash used for acquisition of intangible assets) for 2020, 2021 and 2022 were ₩4,775 billion, ₩5,414 billion and ₩5,521 billion, respectively. These expenditures are related primarily to the acquisition of the expressway operating rights from the development and construction of expressways for the government and, to a lesser extent, related software. The Issuer has historically relied on its cash flow from operations, government support (in the form of capital contributions to the Issuer) and debt financings to meet its capital requirements. In 2020, 2021 and 2022, the Issuer raised ₩4,965 billion, ₩5,031 billion and ₩5,290 billion respectively, through Won, U.S. dollar and Australian dollar denominated bond issuances and long-term borrowings. As of December 31, 2022, the Issuer's long-term debt (including the current portion thereof and before taking into account the effect of hedging transactions) as a percentage of total equity was 71.14%. If the Issuer were to become unable to obtain financing for its capital expenditures or to refinance its existing debt in sufficient amounts, on commercially reasonable terms, or at all, it would have a material adverse effect on the Issuer's business, financial condition and results of operations, as well as the Issuer's ability to pay interest on or principal of the Notes.

In line with the general policy guideline of the Government for public enterprises (including the Issuer) in general to reduce their respective overall debt levels and as part of the Issuer's efforts to strengthen its financial health, the Issuer expects to manage its debt-to-equity ratio, mainly through adjusting the amount and schedule of expressway construction, sale of assets and cost savings from rationalizing maintenance expenses. The Issuer's debt-to-equity ratio was 84.35% as of December 31, 2022. However, there is no assurance that, due to Government policy, prevailing market conditions and macroeconomic factors beyond the Issuer's control, the Issuer will be able to successfully reduce and manage debt burdens to a level contemplated under the comprehensive plan or to a level that would be optimal for the Issuer's capital structure. If the Issuer fails to do so or the measures taken by the Issuer to so reduce and manage the debt burdens have unintended adverse consequences, such developments may have an adverse effect on the Issuer's business, results of operation and financial condition.

## **Risks Relating to Korea**

*If economic conditions in Korea deteriorate, the Issuer's current business and future growth could be materially and adversely affected.*

The Issuer is incorporated in Korea and a significant portion of its assets are located in Korea. As a result, the Issuer is subject to political, economic, legal and regulatory risks specific to Korea, and the Issuer's performance and successful execution of its operational strategies are dependent on the overall Korean economy. The economic indicators in Korea in recent years have shown mixed signs of growth and uncertainty, and future growth of the Korean economy is subject to many factors beyond the Issuer's control, including developments in the global economy.

Developments that could have an adverse impact on Korea's economy include:

- declines in consumer confidence and a slowdown in consumer spending;
- the occurrence of severe health epidemics, such as the COVID-19 pandemic;
- adverse conditions or uncertainty in the economies of countries and regions that are important export markets for Korea, such as China, the United States, Europe and Japan, or in emerging market economies in Asia or elsewhere, including as a result of deteriorating relations between the United States and China;
- adverse changes or volatility in foreign currency reserve levels, inflation rates, interest rates, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. dollar, the Euro or the Japanese Yen exchange rates or revaluation of the Chinese Renminbi) or stock markets;
- increased sovereign default risk in select countries and the resulting adverse effects on the global financial markets, including the possibility of global inflation and the spread of economic recession to Europe as a result of geopolitical risks arising from the Russia-Ukraine conflict;
- deterioration in the financial condition or performance of small- and medium-sized enterprises and other companies in Korea due to the Government's policies to increase minimum wages and limit working hours of employees;
- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy;
- investigations of large Korean business groups and their senior management for possible misconduct;
- a continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers in Korea;
- the economic impact of any pending or future free trade agreements or of any changes to existing free trade agreements;
- social and labor unrest;
- substantial decreases in the market prices of Korean real estate;
- the continued growth of the Chinese economy, to the extent its benefits (such as increased exports to the People's Republic of China ("PRC")) are outweighed by its costs (such as competition in export markets or for foreign investment and the relocation of the manufacturing base from Korea to the PRC), as well as a slowdown in the growth of the PRC's economy, which is Korea's most important export market;
- the economic impact of any pending or future free trade agreements or of any changes to existing free trade agreements;

- a substantial decrease in tax revenues and a substantial increase in the Government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs, which, together, would likely lead to a national budget deficit as well as an increase in the Government's debt;
- financial problems or lack of progress in the restructuring of Korean business groups, other large, troubled companies, their suppliers or the financial sector;
- loss of investor confidence arising from corporate accounting irregularities and corporate governance issues concerning certain Korean companies;
- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;
- geopolitical uncertainty and risk of further attacks by terrorist groups around the world;
- political uncertainty or increasing strife among or within political parties in Korea;
- hostilities or political or social tensions involving oil producing countries in the Middle East (including a potential escalation of hostilities between the United States and Iran) and Northern Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;
- natural or man-made disasters that have a significant adverse economic or other impact on Korea or its major trading partners;
- increased reliance on exports to service foreign currency debts, which could cause friction with Korea's trading partners;
- political or social tensions involving Russia (including the invasion of Ukraine by Russia and ensuing actions that the United States and other countries have taken or may take in the future) and the resulting adverse effects on the global supply of oil and other natural resources and the global financial markets;
- volatility of the won-dollar exchange rate as internal and external uncertainties, such as from the Russia-Ukraine conflict, continue to grow and preference for safe assets also grow;
- changes in financial regulations in Korea; and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

***Escalations in tensions between Korea and North Korea could have an adverse effect on the Issuer.***

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and ballistic missile programs as well as its hostile military actions against Korea. Some of the significant incidents in recent years include the following:

- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted six rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs, which are more powerful than plutonium bombs, and warheads that can be mounted on ballistic missiles. Over the years, North Korea has also conducted a series of ballistic missile tests, including missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. In response, the Government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Government also closed the inter-Korea Gaesong Industrial Complex in response to North Korea's

fourth nuclear test in January 2016. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea, most recently in December 2017 in response to North Korea's intercontinental ballistic missile test in November 2017. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.

- In March 2010, a Korean naval vessel was destroyed by an underwater explosion, killing many of the crewmen on board. The Government formally accused North Korea of causing the sinking, while North Korea denied responsibility. Moreover, in November 2010, North Korea fired more than one hundred artillery shells that hit Korea's Yeonpyeong Island near the Northern Limit Line, which acts as the de facto maritime boundary between Korea and North Korea on the west coast of the Korean peninsula, causing casualties and significant property damage. The Government condemned North Korea for the attack and vowed stern retaliation should there be further provocation.

North Korea's economy also faces severe challenges, which may further aggravate social and political pressures within North Korea.

Although bilateral summit meetings were held between Korea and North Korea in April, May and September 2018 and between the United States and North Korea in June 2018, February 2019 and June 2019, there can be no assurance that the level of tension affecting the Korean peninsula will not escalate in the future. Any increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, if high-level contacts between Korea or the United States and North Korea break down or if further military hostilities occur, could have a material adverse effect on the Korean economy and on the Issuer's business, financial condition and results of operations.

***Labor unrest in Korea may adversely affect the Issuer's operations.***

Economic difficulties in Korea or increases in corporate reorganizations and bankruptcies could result in layoffs and higher unemployment. Such developments could lead to social unrest and substantially increase government expenditures for unemployment compensation and other costs for social programs. According to statistics from the Korea National Statistical Office, the unemployment rate decreased from 3.7% in 2021 to 2.9% in 2022. Further, increases in unemployment and any resulting labor unrest in the future could adversely affect the Issuer's operations, as well as the operations of many of the Issuer's customers and their ability to repay their loans, and could adversely affect the financial condition of Korean companies in general, depressing the price of their securities. These developments would likely have an adverse effect on the Issuer's financial condition and results of operations.

## **Risks Relating to the Notes**

### ***Additional Risks***

Application will be made for the listing of the Notes on the TPEX. No assurances can be given as to whether the Notes will be, or will remain, listing on TPEX or whether a trading market for the Notes will develop or as to the liquidity of any such trading market. If the Notes fail to or cease to be listed on the TPEX, certain investors may not invest in, or continue to hold or invest in, the Notes.

### ***ROC Taxation***

*The following is a general description of the principal ROC tax consequences for investors receiving interest in respect of, or disposing of, the Notes and is of a general nature based on the Issuer's understanding of current law and practice. It does not purport to be comprehensive and does not constitute legal or tax advice.*

*This general description is based upon the law as in effect on the date hereof and that the Notes will be issued, offered, sold and re-sold to professional investors as defined under Paragraph 1 of Article 2-1 of the TPEX Rules only. This description is subject to change potentially with retroactive effect. Investors should appreciate that, as a result of changing law or practice, the tax consequences may be otherwise than as stated below. Investors should consult their professional advisers on the possible tax consequences of subscribing for, purchasing, holding or selling the Notes.*

### ***Interest on the Notes***

As the Issuer of the Notes is not a ROC statutory tax withholder, there is no ROC withholding tax on the interest or deemed interest to be paid by the Issuer on the Notes.

Payments of interest or deemed interest under the Notes to an ROC individual holder are not subject to ROC income tax as such payments received by him/her are not considered to be ROC-sourced income. However, such holder must include the interest or deemed interest in calculating his/her basic income for the purpose of calculating his/her alternative minimum tax (“**AMT**”), unless the sum of the interest or deemed interest and other non- ROC-sourced income received by such holder and the person(s) who is (are) required to jointly file the tax return in a calendar year is below 1 million New Taiwan Dollars (“**NT\$**”). If the amount of the AMT exceeds the annual income tax calculated pursuant to ROC Income Basic Tax Act (also known as the AMT Act), the excess becomes such holder’s AMT payable.

ROC corporate holders must include the interest or deemed interest receivable under the Notes as part of their taxable income and pay income tax at a flat rate of 20% (unless the total taxable income for a fiscal year is NT\$120,000 or under), as they are subject to income tax on their worldwide income on an accrual basis. The AMT is not applicable.

### ***Sale of the Notes***

In general, the sale of corporate bonds or financial bonds is subject to 0.1% securities transaction tax (“**STT**”) on the transaction price. However, Article 2-1 of the ROC Securities Transaction Tax Act prescribes that STT will cease to be levied on the sale of corporate bonds and financial bonds from 1 January 2010 to 31 December 2026. Therefore, the sale of the Notes will be exempt from STT if the sale is conducted on or before 31 December 2026. Starting from 1 January 2027, any sale of the Notes will be subject to STT at 0.1% of the transaction price, unless otherwise provided by the tax laws that may be in force at that time.

Capital gains generated from the sale of bonds are exempt from ROC income tax. Accordingly, ROC individual and corporate holders are not subject to ROC income tax on any capital gains generated from the sale of the Notes. In addition, ROC individual holders are not subject to AMT on any capital gains generated from the sale of the Notes. However, ROC corporate holders should include the capital gains in calculating their basic income for the purpose of calculating their AMT. If the amount of the AMT exceeds the annual income tax calculated pursuant to the ROC Income Basic Tax Act (also known as the AMT Act), the excess becomes the ROC corporate holders’ AMT payable. Capital losses, if any, incurred by such holders could be carried over 5 years to offset against capital gains of same category of income for the purposes of calculating their AMT.

Non-ROC corporate holders with a fixed place of business (e.g., a branch) or a business agent in the ROC are not subject to income tax on any capital gains generated from the sale of the Notes. However, their fixed place of business or business agent should include any such capital gains in calculating their basic income for the purpose of calculating AMT.

As to non-ROC corporate holders without a fixed place of business and a business agent in the ROC, they are not subject to income tax or AMT on any capital gains generated from the sale of the Notes.

### ***ROC Settlement and Trading***

The Issuer has not entered into any settlement agreement with Taiwan Depository & Clearing Corporation (“**TDCC**”) and has no intention to do so.

In the future, if the Issuer enters into a settlement agreement with TDCC, an investor, if it has a securities book-entry account with a Taiwan securities broker and a foreign currency deposit account with a Taiwanese bank, may settle the Notes through the account of TDCC with Euroclear or Clearstream if it applies to TDCC (by filling in a prescribed form) to transfer the Notes in its own account with Euroclear or Clearstream to such TDCC account with Euroclear or Clearstream for trading in the domestic market or vice versa for trading in overseas markets. For settlement through TDCC, TDCC will allocate the respective Notes position to the securities book-entry account designated by such investor in the ROC. The Notes will be traded and settled pursuant to the applicable rules and operating procedures of TDCC and the TPEX as domestic bonds. For such investors who hold their interest in the Notes through an account opened and held by TDCC with Euroclear or Clearstream, distributions of principal and/or interest for the Notes to such holders may be made by payment services banks whose systems are connected to TDCC to the foreign currency deposit accounts of the holders. Such payment is expected to be made on the second Taiwanese business day following TDCC's receipt of such payment (due to time difference, the payment is expected to be received by TDCC one Taiwanese business day after the distribution date). However, when the holders actually receive such distributions may vary depending upon the daily operations of the Taiwanese banks with which the holder has the foreign currency deposit account.

## SELECTED FINANCIAL DATA

The following tables set forth selected consolidated financial data with respect to the Issuer. The selected financial data of the Issuer as of and for the years ended December 31, 2020, 2021 and 2022 were derived from the Issuer's audited consolidated financial statements as of and for the years ended December 31, 2020, 2021 and 2022, respectively.

The selected financial data below should be read in conjunction with the Issuer's audited consolidated financial statements as of and for the years ended December 31, 2020, 2021 and 2022 and the notes to these consolidated financial statements, which are included elsewhere in this Offering Memorandum.

The Issuer's consolidated financial statements included elsewhere in this Offering Memorandum have been prepared in accordance with the Government Accounting Standards for Public Corporations and Quasi-governmental Institutions in the Republic of Korea, which may differ in certain respects from IFRS applied in other countries.

	Year ended December 31,			
	2020	2021	2022	
	<i>(in billions of Won and millions of U.S. dollars)<sup>(1)</sup></i>			
<b>Consolidated Statements of profit or loss and other comprehensive income</b>				
Revenue:				
Toll business.....	₩3,964	₩4,179	₩4,208	U.S.\$3,321
Construction business .....	4,608	5,239	5,294	4,177
Incidental business .....	662	871	1,097	866
Supporting business.....	324	246	180	142
Total.....	9,558	10,535	10,779	8,364
Cost of sales:				
Toll business.....	3,127	3,332	3,179	2,508
Construction business .....	4,608	5,239	5,294	4,177
Incidental business.....	553	768	936	739
Supporting business.....	324	246	180	142
Total.....	8,612	9,585	9,589	7,567
Gross profit .....	945	950	1,190	939
Selling and administrative expenses .....	322	331	336	265
Operating profit .....	623	619	854	674
Other income .....	127	144	92	73
Other expenses.....	342	118	171	135
Other loss, net .....	(15)	(7)	(21)	(17)
Finance income .....	173	230	213	168
Finance costs .....	791	829	879	694
Share of profit (loss) of associates and joint ventures .....	(3)	2	3	2

**Year ended December 31,**

Profit (loss) before income tax .....	(228)	40	92	73
Income tax expense (benefit).....	(255)	7	28	22
Profit of the year .....	<u>₩27</u>	<u>₩34</u>	<u>₩64</u>	<u>U.S.\$51</u>

Note:

- (1) The Issuer maintains its financial statements in Won. The Won financial information for the year ended December 31, 2022 has been translated into U.S. dollars at the exchange rate of ₩1,267.3 to US\$1.00, which was the Market Average Exchange Rate in effect as of December 30, 2022.

**As of December 31,**

	<b>2020</b>	<b>2021</b>	<b>2022</b>	
	<i>(in billions of Won and millions of U.S. dollars)<sup>(1)</sup></i>			

**Selected Consolidated Statements of  
Financial Position Data**

Assets:

Cash and cash equivalents .....	₩508	₩557	₩507	U.S.\$400
Other current assets <sup>(2)</sup> .....	710	888	1,051	829
Total current assets .....	<u>1,218</u>	<u>1,445</u>	<u>1,558</u>	<u>1,229</u>
Construction-in-progress and intangible assets under development .....	10,685	15,422	17,493	13,803
Expressway operating rights <sup>(3)</sup> .....	54,727	53,800	55,221	43,574
Other non-current assets <sup>(4)</sup> .....	2,558	2,735	4,036	3,185
Total non-current assets.....	<u>67,970</u>	<u>71,957</u>	<u>76,750</u>	<u>60,562</u>
Total assets .....	<u>₩69,188</u>	<u>₩73,402</u>	<u>₩78,308</u>	<u>U.S.\$61,791</u>

Liabilities:

Current portion of bonds.....	₩2,853	₩3,036	₩3,066	U.S.\$2,419
Other current liabilities <sup>(5)</sup> .....	1,486	1,621	2,547	2,010
Total current liabilities .....	<u>4,339</u>	<u>4,657</u>	<u>5,613</u>	<u>4,429</u>
Bonds <sup>(6)</sup> .....	24,952	26,732	28,054	22,137
Other non-current liabilities <sup>(7)</sup> .....	1,875	1,894	2,164	1,707
Total non-current liabilities .....	<u>26,827</u>	<u>28,626</u>	<u>30,218</u>	<u>23,844</u>
Total liabilities.....	<u>31,166</u>	<u>33,283</u>	<u>35,830</u>	<u>28,273</u>

Equity:

Share capital .....	36,600	38,656	40,974	32,332
Other equity <sup>(8)</sup> .....	1,422	1,463	1,504	1,187
Total equity .....	<u>38,022</u>	<u>40,119</u>	<u>42,478</u>	<u>33,519</u>
Total liabilities and equity .....	<u>₩69,188</u>	<u>₩73,402</u>	<u>₩78,308</u>	<u>U.S.\$61,791</u>

Notes:

- (1) The Issuer maintains its financial statements in Won. The Won financial information as of and for the year ended December 31, 2022 has been translated into U.S. dollars at the exchange rate of ₩1,267.3 to US\$1.00, which was the Market Average Exchange Rate in effect as of December 30, 2022.
- (2) Represents the sum of financial assets at fair value through profit or loss, short-term loans and receivables, short-term financial instruments, derivatives assets, other financial assets, trade and other receivables, inventories, current tax assets and other non-financial assets.
- (3) Net of accumulated amortization of ₩31,518 billion, ₩33,218 billion and ₩34,700 billion as of December 31, 2020, 2021 and 2022, respectively.
- (4) Represents the sum of financial assets at fair value through profit or loss, financial assets at fair value through other comprehensive income, derivatives assets, long-term loans and receivables, trade and other receivables, property and equipment, investment properties, intangible assets (excluding intangible assets under development), investments in associates and joint ventures and other non-financial assets.
- (5) Represents the sum of trade and other payables, financial liabilities at fair value through profit or loss, current portion of long-term borrowings, derivatives liabilities, current tax liabilities, provisions and other non-financial liabilities.
- (6) Less discount on bonds of ₩6 billion, ₩10 billion and ₩13 billion as of December 31, 2020, 2021 and 2022, respectively.
- (7) Represents the sum of financial liabilities at fair value through profit or loss, trade and other payables, long-term borrowings, derivatives liabilities, other non-financial liabilities, employee benefits liabilities and provisions.
- (8) Represents the sum of share discount, other components of equity and retained earnings, minus non-controlling interests.

**As of and for the years ended December 31,**

	2020	2021	2022	
	<i>(in billions of Won and millions of U.S. dollars, except percentages)<sup>(1)</sup></i>			

**Selected Other Financial Data**

Depreciation and amortization.....	₩1,766	₩1,900	₩1,686	U.S.\$1,330
Total debt/Total capitalization <sup>(2)</sup> .....	43.2%	43.6%	43.7%	43.7%
Capital expenditures <sup>(3)</sup> .....	₩4,775	₩5,414	₩5,521	U.S.\$4,357

Notes:

- (1) 2022 has been translated into U.S. dollars at the exchange rate of ₩1,267.3 to US\$1.00, which was the Market Average Exchange Rate in effect as of December 30, 2022.
- (2) Represents total debt divided by total capitalization. Total debt consists of borrowings and bonds. For details on borrowings and bonds, see Note 18 to the Issuer's consolidated financial statements as of and for the years ended December 31, 2020, 2021 and 2022, which are included elsewhere in this Offering Memorandum. Total capitalization consists of total debt and total equity. The Issuer has included such metric because management believes it provides useful supplemental information as to the Issuer's capital structure.
- (3) Represents capital expenditures consisting of cash used for acquisition of intangible assets.

## BUSINESS

### Overview

The Issuer is a Government-owned corporation established by the KEC Act to develop, manage and operate the nation's expressway network. Under the KEC Act, the Issuer is also mandated to develop areas adjacent to expressways and to conduct research and development relating to expressways. The Issuer has the exclusive right to operate and collect tolls on 4,238 kilometers of expressways in Korea, which represented approximately 85.8% of the total kilometers of expressways in Korea as of December 31, 2022. The network under the Issuer's supervision comprises of 35 routes throughout Korea and includes Korea's major road arteries that connect Korea's most populated metropolitan areas, including Seoul, Busan, Incheon, Daegu, Daejeon, Gwangju and Ulsan. As of December 31, 2022, the Issuer operated 369 toll plazas.

The principal source of income for the Issuer is tolls collected from motorists for the use of the expressways managed by the Issuer. The Issuer also receives lease payments from operators of service areas and gas stations located at various points along the expressways. In addition, the Issuer provides, at cost, road construction services (including supervision of Government construction projects along various locations adjacent to expressways) and supporting services (including the purchase and sale on behalf of the Government of land related to expressways) to the Government. The Issuer's revenue from its toll business was ₩3,964 billion, ₩4,179 billion and ₩4,208 billion in 2020, 2021 and 2022, respectively, which represented 41.5%, 39.7% and 39.0% of the Issuer's revenues, or 85.7%, 82.7% and 79.3% of the Issuer's revenues other than from the construction and supporting businesses (which yield no gross profit as the Issuer operates these businesses at cost), in 2020, 2021 and 2022, respectively. Toll revenues are largely dependent on the total traffic volume on the expressways managed by the Issuer, which was 1,614 million, 1,698 million and 1,770 million vehicles in 2020, 2021 and 2022, respectively, while the total registered vehicles in Korea were 24 million, 25 million and 25 million as of December 31, 2020, 2021 and 2022, respectively, according to the Korea National Statistical Office. See "Business – Traffic."

The Government's mandate for the Issuer includes implementation of the Government's National Arterial Expressway Network Plan, adopted in 1991, which sets forth a plan for the construction of Korea's national expressway network. A key component of this plan was the National 7x9+6R Plan, which contemplated construction of 7,331 kilometers of expressways throughout Korea in the form of a grid comprised of seven south-to-north expressways, nine east-to-west expressways and six ring-shaped beltways encircling major cities. This plan was changed to the current National 10x10+6R<sup>2</sup> Plan, which was adopted in 2020 with a target completion timeline of 2030. The National 10x10+6R<sup>2</sup> Plan contemplates construction of 7,783 kilometers of expressways throughout Korea in the form of a grid comprised of ten south-to-north expressways, ten east-to-west expressways and six ring-shaped beltways encircling major cities. 67% of the National 10x10+6R<sup>2</sup> Plan, in terms of route kilometers, was completed as of December 31, 2022. As of December 31, 2022, the Issuer had 18 new expressway routes under construction for an aggregate length of 530.1 kilometers and 3 expressway routes under expansion for an aggregate length of 40.3 kilometers.

In light of its mandate to the Issuer, the Government provides substantial financial support to the Issuer for all of its expressway-related projects by way of periodic capital contributions, which is used to defray a substantial portion of the Issuer's costs incurred in the construction of the expressways contemplated in the National 10x10+6R<sup>2</sup> Plan, as well as all of the Issuer's costs incurred in the acquisition of related land. Capital increase by issuing new shares from subscription by the Government in the Issuer amounted to ₩1,662 billion, ₩2,057 billion and ₩2,318 billion in 2020, 2021 and 2022, respectively. With respect to 2023, the Government has budgeted ₩1,677 billion for capital contribution to the Issuer. The Government's capital contribution is generally set at a level to cover approximately 40% of the Issuer's budgeted construction costs and, since 2003, 100% of the Issuer's budgeted costs of acquiring related land. However, at times, the Government's capital

contribution may fall below such level due to budgetary constraints or other public policy considerations. For example, the Government's actual subsidy ratio (defined as the ratio of the Government's capital contributions to the Issuer's actual costs for construction of new expressways and expansions) fell below the 40% level in 2006, 2007, 2008 and 2010. The actual subsidy ratio was 45%, 49% and 57% in 2020, 2021 and 2022, respectively.

As of December 31, 2022, approximately 99.9% of the share capital of the Issuer was owned by the Government, with 87.36% held directly and 12.63% held indirectly through The Export-Import Bank of Korea, The Korea Development Bank, Korea Asset Management Corporation and Korea Housing Finance Corporation, all of which were wholly (or, in the case of Korea Asset Management Corporation, approximately 97.1%) owned (directly or indirectly) by the Government.

The Issuer seeks to improve its overall financial position and capital structure. The Issuer's current funding strategy is to match the cash flow generated from borrowings more closely with anticipated capital expenditures, diversify funding sources and reduce financing costs. In addition, the Issuer has sought, and will continue to seek, increases in toll rates and increases in funding from the Government.

As of September 30, 2023, the Issuer had 5,133 full-time employees, of whom 66% were engineers, 30% were operations staff and 4% were administrative staff.

The Issuer was established in 1969. In 2007, the Issuer changed its English name from "Korea Highway Corporation" to "Korea Expressway Corporation." The Issuer's registered office is 77, Hyeoksin 8-ro, Gimcheon-si, Gyeongsangbuk-do, Korea.

## Expressways Under Management, Construction and Expansion

### *Operation of Expressways*

As of December 31, 2022, the Issuer operated an expressway network comprised of 35 routes, extending 4,238 kilometers. This network connects Korea's most populated metropolitan areas, including Seoul, Busan, Incheon, Daegu, Daejeon, Gwangju and Ulsan, which are Korea's largest commercial and industrial cities.

The table below presents certain information with respect to the ten key expressways operated by the Issuer, which in the aggregate accounted for 77.2% of the Issuer's toll revenue in 2022.

	Length	2022 Revenue	Percentage of Toll Revenue	2022 Average Daily traffic	Commencement of Operations <sup>(1)</sup>
	(km)	(in billions of Won)	(%)	(in thousands)	
Gyeongbu Expressway .....	415.3	10,010	24.0	836	1968-1970
Youngdong Expressway .....	234.4	3,669	8.7	328	1971-2001
Seohaean Expressway .....	336.6	3,109	7.4	280	1994-2001
Jungbu Expressway .....	332.5	3,082	7.3	312	1987-2005
Namhae Expressway .....	273.2	2,680	6.4	276	1973-2012
Jungbu Inland Expressway .....	302	255	6.1	104	1977-2012
Sudokwon Jeil Sunhwan Expressway .....	91.7	243	5.8	913	1991-1999
Joongang Expressway .....	288.7	207	4.9	312	1995-2001
Honam Expressway .....	194.2	131	3.1	195	1970-1973
Dangjin-Youngduk Expressway .....	278.9	193	3.5	75	2007-2016

The Issuer has the exclusive right to collect tolls from motorists using the expressways operated by the Issuer. As of December 31, 2022, the Issuer operated 369 toll plazas. The Issuer's revenue from its toll business was ₩3,964 billion, ₩4,179 billion and ₩4,202 billion in 2020, 2021 and 2022, respectively, which represented 41.5%, 39.7% and 39.0% of the Issuer's revenues, or 85.7%, 82.7% and 79.3% of the Issuer's revenues other

than from the construction and supporting businesses (which yield no gross profit as the Issuer operates these businesses at cost), in 2020, 2021 and 2022, respectively. Toll revenues are largely dependent on the total traffic volume on the expressways managed by the Issuer, which was 1,614 million, 1,698 million and 1,770 million vehicles in 2020, 2021 and 2022, respectively, while the total registered vehicles in Korea were 24 million, 25 million and 25 million as of December 31, 2020, 2021 and 2022, respectively, according to the Korea National Statistical Office. See “– Traffic.” Approximately 90.6% of the vehicles using the expressway network operated by the Issuer in 2022 were passenger cars, representing 84.5% of the Issuer’s toll revenue in 2022.

### ***Construction and Expansion***

Since its establishment, the Issuer has supervised the construction of 4,088 kilometers of expressways. As of December 31, 2022, the Issuer had 18 new expressway routes under construction for an aggregate length of 654 kilometers and 3 expressway routes under expansion for an aggregate length of 40.9 kilometers. Under the 10x10+6R<sup>2</sup> Plan, an additional 2,585 kilometers of expressway remain to be built. According to internal estimates, the average cost per kilometer to the Issuer of constructing new expressways was approximately ₩475 billion as of December 31, 2022.

### ***Construction Approval Process***

Ten to thirteen years generally elapse between the time the Government decides to construct a new expressway or expressway section and the day such expressway is open for the general public to travel. The construction of an expressway involves several steps, including the commissioning of feasibility studies, which takes between one to two years, preparation of master plans and blue prints for construction, which takes between four to five years, and finally, the actual construction of the expressway, which takes between five to six years. During the feasibility study stage, detailed and comparative studies of various alternative locations for constructing the expressways are conducted. Environmental studies and research and technical analysis, and analysis of traffic flows are also conducted. During the master plan and blueprint stages, various meetings with environmental, business and local interest groups are held to identify their concerns. These meetings allow the Issuer to address the concerns of the community before commencing construction. The Issuer is responsible for preparing the master plan and the blueprints.

The Issuer must also locate and purchase, on behalf of the Government, the land for the proposed expressway, including obtaining any rights of way over private land as well as exercising the right to eminent domain on behalf of the Government. Since 2003, the Government generally provided for 100% of the Issuer’s land acquisition costs. While the Issuer acquires the land, title is recorded in the name of the Government and the Issuer records the cost of the acquisition as a part of construction-in-progress and obtains expressway operating rights from the Government upon completion the construction of the expressway.

The Issuer acts as project manager for the construction of a certain section of an expressway and the Issuer uses a general contractor selected through a competitive bidding process to serve as the construction supervisor for that project. The Issuer selects the general contractor for a particular construction project based upon an open, competitive bid process, after taking into account the proposed contractor’s experience with such projects, the cost proposal, prior successful projects completed on behalf of the Issuer by such contractor, safety record and quality, among other factors. Once selected, the contractor is responsible for the project as a whole, including the engagement of any subcontractors. The Issuer’s construction offices are responsible for monitoring the construction of the sections of the expressway falling within their respective jurisdictions.

### ***Construction of New Expressways***

New expressways are constructed in accordance with policy initiatives of the MOLIT, which takes into account annual budgets and directives established by the Government. The Issuer invested ₩3,650 billion, ₩4,070 billion and ₩4,095 billion in 2020, 2021 and 2022, respectively and has budgeted ₩3,683 billion for 2023. As

of December 31, the Issuer had 654.0 kilometers of new expressways under construction, comprising of 18 routes.

### ***Expansion of Existing Expressways***

Pursuant to the National Arterial Expressway Network Plan, the Issuer improves the expressway network under its management and regularly invests in enhancing the quality of the services it offers. To improve traffic flow, the Issuer widens sections of the expressways, and constructs new interchanges, where traffic is often congested. The Issuer's capital expenditures (consisting of cash used for acquisition of intangible assets) for 2020, 2021 and 2022 were ₩4,775 billion, ₩5,414 billion and ₩5,521 billion respectively. As of December 31, 2022, the Issuer had 40.9 kilometers of expressways under expansion, comprising of 3 routes.

### ***Expressway Maintenance***

The Issuer seeks to maintain a high level of safety for motorists by keeping expressways and engineering structures in good condition. The Issuer also seeks to reduce the effects of wear and tear from traffic and the aging of the expressway network, and to meet the technical standards applicable to expressways and engineering structures.

The Issuer believes that regular inspection of the expressways and engineering structures is critical to extending the life of the expressways under the Issuer's management. The Issuer systematically inspects and tests the expressways semi-annually. Expressway surfaces are generally replaced every five to ten years. Engineering structures, signage and other works are also systematically inspected and tested periodically. As of December 31, 2022, approximately 58.06% of the Issuer's employees performed functions relating to maintenance and repair of the expressways and engineering structures. A substantial part of the maintenance and repair work is outsourced to third party contractors. In 2020, 2021 and 2022 the Issuer's costs relating to maintenance and repairs amounted to ₩836 billion, ₩789 billion and ₩2,170 billion, respectively.

## **Traffic**

Traffic volume on the expressways under the Issuer's management is determined by the number of kilometers in service and the number of motorists utilizing the expressways, which in turn are influenced by a number of factors, including toll rates, the economic conditions in Korea, the number of registered vehicles in Korea, fuel prices and the accessibility and existence of alternative means of transportation.

The Issuer calculates traffic volume for a given period of calculation by aggregating the number of vehicles which have exited the expressways through the Issuer's toll plazas during such period. This method helps to reduce double counting of vehicles traveling on more than one route during the same journey. The table below presents traffic volume on the expressways operated by the Issuer, toll revenue from the use of such expressways and the total number of registered vehicles in Korea for the periods indicated.

<b>Period</b>	<b>Traffic Volume (in millions)</b>			<b>Toll Revenue</b>	<b>Total Registered Vehicles</b>
	<b>Passenger Vehicles</b>	<b>Non-passenger Vehicles</b>	<b>Total Number of Vehicles</b>		
				<i>(in billions of Won)</i>	<i>(in millions)</i>
2020 .....	1,458	155	1,614	3,964	24
2021 .....	1,534	164	1,698	4,179	25
2022 .....	1,604	167	1,770	4,208	25

### ***Traffic Management***

The Issuer believes that traffic management and motorist assistance are part of its key functions. The Issuer has a Traffic Information Center, which seeks to optimize traffic flow on the expressway network by providing prompt and reliable traffic information to motorists using the expressways. The Traffic Information Center collects real-time traffic information from toll plazas, magnetic loops installed on the expressways, closed-circuit TVs at toll plazas and at various points along the expressways, emergency roadside telephones, patrol cars and regional weather forecasts. The Issuer's traffic management system is able to offer motorists with current and integrated expressway traffic information twenty-four hours a day, seven-days a week, through a call center and various broadcasting media, such as variable message signs, the Internet, a voice message service accessible by telephone and app services accessible by smart phones. The Traffic Information Center also receives data from the toll collection system and provides information such as travel speeds, traffic congestion, the amount of time required to travel a certain section of the expressway and optimal travel routes between various points on the expressway network. In addition, in order to reduce the number of times the motorists have to stop to pay tolls and otherwise improve the convenience of road usage, the Issuer has recently established an integrated toll system between the expressways operated by the Issuer and certain privately operated expressways and is currently expanding the areas in which the standardized expressway pass for nation-wide use can be used.

### ***Safety and Security***

The safety and security of the motorists using the expressway network under the Issuer's management is a key priority for the Issuer. The Issuer works closely with the national police force to control traffic, and ensure the safety and security of motorists using the expressways. The national police force routinely patrols the expressways and the Issuer has established plans that outline the Issuer's response procedures to ensure motorists' safety and security. In recognition of the adverse effect on traffic conditions from heavy rainfalls and snowfalls, the Issuer seeks to continually improve its safety and emergency response procedures, including a state-of-art meteorological disaster response system, helicopter rescue operations, in order to more rapidly and effectively detect, as well as respond to, emergency situations. The Issuer has also expanded facilities for preventing traffic accidents, such as rest areas, and public awareness campaigns for safe driving and against drunk driving.

### ***Accidents***

The Issuer seeks to reduce the rate of traffic accidents on the expressways operated by the Issuer. The number of traffic accidents on the expressways operated by the Issuer was 1,834, 1,735 and 1,672 in 2020, 2021 and 2022, respectively. The number of fatalities (measured as deaths resulting at or within 30 days following the traffic accident) was 179, 171 and 156 in 2020, 2021 and 2022, respectively.

The measures taken by the Issuer to reduce accidents on the expressways operated by the Issuer include regular inspections of road conditions, prompt removal of hazardous debris from roads, installing barriers, signs and other safety enhancing facilities in areas with high incidence of accidents, strict management of irrigation systems to minimize the duration of wet surface caused by rainfall, installing rest areas for sleep-deprived motorists, adoption of a state-of-art meteorological disaster response system, instant alert messaging of accidents through commercial road navigation systems, and operation of an accident prevention system using big data. The Issuer also seeks to increase motorists' awareness of expressway safety through media campaigns.

## Tolls

The principal source of income for the Issuer is tolls collected by the Issuer from the motorists for the use of expressways operated by the Issuer. The following table presents, since 2010, the dates on which toll rate increases were implemented, compared to the inflation rate and the average increase of utility prices during the period between the date of such toll rate increase and the date of the toll rate increase immediately preceding such toll rate increase.

	Average Toll Rate Increase	Inflation for the Preceding 12 Months Period <sup>(1)</sup>	Average Increase of Utility Prices for the Preceding 12 Months Period <sup>(2)</sup>
		(%)	
November 2011 .....	2.9	4.2	7.4
December 2015.....	4.7	1.3	(7.1)

Source: Korea National Statistical Office.

Notes:

- (1) Consumer Price Index.
- (2) Consists of electricity, fuel, and water prices.

### ***Toll Collection System***

The Issuer uses two kinds of systems for toll collection: “open” and “closed.”

For an expressway using the open toll collection system, motorists stop only once to pay a fixed amount of toll at a given checkpoint regardless of their entry or exit points along such expressway. In contrast, for an expressway using the closed toll collection system, motorists must make two stops, once to collect a ticket at the entry point of the expressway and later to pay toll at the exit point of the expressway. Tolls at the open systems are for a fixed amount, while toll amounts at the closed systems vary depending on the distance traveled. Open systems are generally used for expressways with short distances, such as those servicing motorists within a greater metropolitan area that typically have a high level of traffic congestion, while closed systems are generally used for expressways with long distances, such as between major cities.

In an effort to alleviate congestion at toll plazas, the Issuer operates an automated toll collection system known as “Hi-Pass.” The system utilizes radio signals, transmitted between electronic terminals located at toll booths and transponders loaded onboard vehicles, to automate the entire process of tracking a vehicle’s entry and exit from the expressway network and the collection of toll payments, which are either deducted automatically from Hi-Pass cards purchased in advance by motorists or charged in arrears.

### **Toll Rate Structure**

Under the current toll rate structure adopted in March 2004, the toll amount paid by motorists using the expressways operated by the Issuer is generally determined as the sum of a fixed basic amount and a variable additional amount. For expressways using the open toll system, the basic toll amount is ₩720 with the variable additional toll amount determined by multiplying the distance in kilometers from the toll booth where the toll is being collected to the nearest entry/exit point on the expressway by a coefficient in the range of ₩44.3 to

¥74.4, depending on the vehicle type. For expressways using the closed toll system, the basic toll amount is ¥900 with the variable additional toll amount determined by multiplying the distance in kilometers actually traveled by the motorist (measured as the distance between the entry and exit checkpoints on the relevant expressway traveled by the motorist) by the coefficient used in the open toll rate calculation.

For expressways with only two lanes, tolls are reduced by 50% for both the basic and additional rates. For expressways with six lanes or more, the coefficient used in computing the additional variable rate is increased by 20%. Reduced toll rates also apply to certain types of vehicles, such as vehicles with engine displacements of 1,000 cubic centimeters or less and cargo vehicles using the expressways during designated off-peak hours, as well as commuters using the expressways during peak rush hour times.

### ***Toll Collection***

The Issuer collects tolls at a collection of toll booths known as toll plazas, typically located near the exit points of a given expressway. Motorists can pay tolls either manually or automatically. Manual payments involve the motorist stopping at a toll booth located at a lane designated for manual payment, by paying the toll to the toll collector stationed in the toll booth by cash. Automatic payments involve the motorist passing through (without stopping by) a toll booth located at a lane designated for Hi-Pass payment, where the toll is automatically debited from the motorist's Hi-Pass card account upon passing by the Hi-Pass reader at the toll booth. Each of the Issuer's toll plazas has a combination of manual and Hi-Pass toll booths.

The operation of the Issuer's toll booth plazas is outsourced to outside service providers under service contracts. The Issuer believes that, compared to direct handling of toll collection by internal employees of the issuer, such outsourcing reduces overhead (including employment-related benefits) and increases operational efficiency. However, since March 2013, a number of lawsuits have been filed by toll gate workers employed by outside service providers seeking to be recognized as employees of the Issuer. See "Litigation."

As of December 31, 2022, the Hi-Pass system was under operation at all of the toll booth plazas operated by the Issuer. The Issuer plans to continue to increase the proportion of Hi-Pass lanes at toll plazas. The Issuer believes that the availability of the Hi-Pass system at all of its toll plazas helps to improve traffic flow at toll plazas by reducing congestion from the vehicles stopping to make manual payments and also reduce the unit cost of revenue for the Issuer as the Hi-Pass system requires lower overhead in the long term compared to the manual toll booths staffed in person.

The Issuer also offers motorists the option of paying toll charges in arrears, in effect allowing Hi-Pass cards to be used as credit cards and thereby encouraging the use of these payment methods to paying by cash, which generally involves a longer stopover time due to the time required to hand out changes.

The Issuer is committed to continually improving the toll collection process. The Issuer gathers data on the number, type and driving distances of motorists who utilize the expressways operated by the Issuer based on either the magnetic tickets issued to motorists or information transmitted by the Hi-Pass system. The data is transmitted to the Issuer's headquarters by optical fiber cable laid along the expressways for auditing and recording. The data collected allows the Issuer to keep accurate records of the amount of tolls received and aids in reducing losses from fraud. At the same time, the Issuer can assess traffic volumes at various points on the expressways to assist in traffic management. Furthermore, the Issuer started implementing the Smart Tolling system in 2016. The Smart Tolling system will gradually replace toll booths operated by toll workers by utilizing advanced image recognition technologies to identify and subsequently charge motorists, which serves to reduce congestion from the vehicles unregistered for the Hi-Pass system stopping to make manual payments at toll plazas. The Issuer believes that the increased width of the Smart Tolling lanes compared to Hi-Pass lanes will also help reduce congestion from vehicles registered for Hi-Pass system slowing down near the toll plazas. See "– Traffic – Traffic Management."

## **Toll Concessions**

Under the KEC Act and the Toll Road Act, the Issuer has the exclusive right to collect tolls on the expressways operated by the Issuer until it recovers all of its investments made in connection with the construction of all of the expressways under the National 10x10+6R<sup>2</sup> Plan, including related financing costs. In addition, the Toll Road Act requires the MOLIT to set the toll collection period for a period not exceeding 30 years. If the Issuer does not completely recover its investments made in connection with the construction of expressways under the National 10x10+6R<sup>2</sup> Plan, including related financing costs, within the period set by the MOLIT, the MOLIT will consider extending the toll collection period upon the request of the Issuer.

## **Other Businesses**

### ***Service Areas and Gas Stations***

In addition to the Issuer's principal business of constructing, managing and maintaining expressways, the Issuer also engages in the business of leasing service areas and gas stations. The Issuer leases to third parties the right to operate service areas and gas stations located at various points along the expressways. As of December 31, 2022, the Issuer leased 207 service areas and 203 gas stations. The Issuer's revenue from leasing service areas and gas stations was ₩174 billion, ₩164 billion and ₩252 billion in 2020, 2021 and 2022, respectively. As of December 31, 2022, the Issuer also directly operated 12 gas stations.

The Issuer generally builds the service areas and gas stations and then leases them to third parties, selected through an open, competitive bidding process, who then operate various businesses, such as restaurants and shops, at such service areas and sell gasoline and liquefied petroleum gas at such gas stations. These operators make payments for the right to operate a business at the service areas and the gas stations. The terms of these leases are generally five years.

The Issuer allows service area and gas station operators, selected through an open, competitive bidding process, to construct their own structures and facilities. These operators generally pay a reduced fee for the right to operate such service areas and gas stations, as compared to those operators who conduct business on service areas and gas stations constructed by the Issuer. Allowing these operators to construct their own structures and facilities allows the Issuer to reduce its service area and gas station related investment costs. The terms of the contracts with these operators require that title to the structures and facilities constructed at the service area or gas station, as applicable, must be transferred to the Issuer without consideration at the end of the contract period. The length of the contract period is dependent on the size of the operator's investment.

	<b>As of December 31,</b>		
	<b>2020</b>	<b>2021</b>	<b>2022</b>
Number of service areas.....	199	201	207
Number of gas stations <sup>(1)</sup> .....	206	208	215

Notes:

(1) Includes liquefied petroleum gas stations and 12 directly operated gas stations.

	<b>As of December 31,</b>		
	<b>2020</b>	<b>2021</b>	<b>2022</b>
Revenue from leasing of service areas .....	₩106	99	162
Revenue from leasing of gas stations .....	₩69	66	90
<b>Total</b> .....	<b>₩174</b>	<b>164</b>	<b>252</b>

### ***Development of Areas Adjacent to Expressways***

The construction and expansion of expressways create certain opportunities for development in areas such as public roads owned by the Government which have become obsolete, such as interchanges and areas under bridges. The Issuer develops, or supports third parties' development of, various businesses on these areas, which provide a variety of services to motorists and the general public. The lands on which these developments take place are owned by either the Government or the Issuer. The types of developments include theme parks, cultural centers, premium outlets, shopping mall complexes and solar energy complexes, among others. The Issuer has developed, or supported the development of, 127 such areas, of which 184 were in operation as of December 31, 2022.

At certain interchanges, the Issuer develops, or supports the development of, freight terminals and warehouses which are leased to and operated by private parties, generally for ten year terms.

### ***Supporting and Incidental Services***

The Issuer provides certain supporting services to the Government on a contractual basis. These services include acquiring land related to expressways and supervising the construction of structures, such as pedestrian bridges, on behalf of the Government. All of the actual costs incurred by the Issuer in providing such services are passed through to the Government.

The Issuer also provides, as part of its incidental business, certain services to the Government and other third parties, which principally consist of acquiring land unrelated to expressways for local municipalities.

### ***Technical Consulting and Research and Development***

The Issuer engages in the business of providing certain services to the non-governmental third parties for fees. These services include providing technical consulting and operating research and development projects with regard to road construction and maintenance.

### ***Overseas Operations***

The Issuer on occasion provides technical consulting services to Korean and foreign companies and government agencies engaged in road construction projects overseas. For example, in December 2014, the Issuer was selected by the Algerian government to supervise the installation of equipment to facilitate the toll payment system in certain sections of the Algeria East-West Highway. In December 2014, the Issuer was selected by the Bangladesh government to supervise the construction of the main Padma Bridge. In December 2016, the Issuer and the Road Development Authority of the Republic of Mauritius entered into a Memorandum of Understanding providing for the cooperation in the field of construction and maintenance of roads, bridges and tunnels in the context of the implementation of the Road Decongestion Program.

### ***Subsidiaries, Affiliated Companies and Other Investments***

As of December 31, 2022, the Issuer had two subsidiaries, Korea Expressway Corporation Facility Management Co., Ltd. ("KECFM") and Korea Expressway Corporation Service Co., Ltd. ("KECS"), that were consolidated under the Government Accounting Standards for Public Enterprises and Quasi-governmental Institutions in the

Republic of Korea. KECFM was established in June 2018 as a wholly owned subsidiary of the Issuer and engages in facility management and safety patrol business for the Issuer. KECS was established in May 2019 as a wholly owned subsidiary of the Issuer and engages in customer service business for the Issuer, including toll fee collection and call center and traffic broadcasting operations.

The Issuer also holds equity interest in the following companies.

Busan-Ulsan Expressway Co., Ltd. (“BUEC”), the company that constructed and is currently operating the privately funded Busan-Ulsan Expressway, was established in May 2006. Construction on the Busan-Ulsan Expressway was completed in December 2008. As of December 31, 2022, the Issuer held a 51% equity interest in BUEC.

Korea Construction Management Corporation (“KCMC”) was established in March 1999 and engages in the business of construction supervision. As of December 31, 2022, the Issuer held a 42.50% equity interest in KCMC.

Expressway Solar Power Co., Ltd. (“Expressway Solar”) was established in April 2012 and engages in the business of solar energy generation. As of December 31, 2022, the Issuer held a 50% equity interest in Expressway Solar.

Highway Solar Co., Ltd. (“Highway Solar”) was established in 2013 and engages in the business of solar and other forms of renewable energy generation. As of December 31, 2022, the Issuer held a 29% equity interest in Highway Solar.

DREAMLINE Corporation, which engages in the business of leasing fiber-optic networks on expressways, was established in July 1997. As of December 31, 2022, the Issuer held a 0.83% equity interest in DREAMLINE Corporation.

The 2nd Seoul-Incheon Linking Highway Co., Ltd. was established in August 2007 and engages in the business of operating the 2nd Seoul-Incheon Linking Highway Co., Ltd. As of December 31, 2022, the Issuer held a 4.76% equity interest in the 2nd Seoul-Incheon Linking Highway Co., Ltd.

The Seoul North Highway Corporation was established in October 2007 and engages in the business of operating the northern part of the Seoul Highway. As of December 31, 2022, the Issuer held a 10% equity interest in the Seoul North Highway Corporation.

The Korea Overseas Infrastructure & Urban Development Corporation (“KIND”) was established in June 2018 and engages in the business of supporting global Public-Private-Partnership business. As of December 31, 2022, the Issuer held a 4.68% equity interest in this entity.

BAKAD International B.V. was established in February 2020 and engages in the business of designing, constructing, maintaining and financing the Almaty Ring Road in Kazakhstan. As of December 31, 2022, the Issuer held a 0.1% equity interest in this entity.

BARR Operation and Maintenance LLP was established in November 2022 and engages in the business of operating and maintaining the Almaty Ring Road in Kazakhstan. As of December 31, 2022, the Issuer held a 40% equity interest in this entity.

As part of the Government’s initiative to streamline public corporations and make them more profitable, the Issuer is required to sell its stake in certain of its subsidiaries, associates, joint ventures and other investments in the near future. In accordance with such initiative, the Issuer is currently taking steps to sell its equity interests in DREAMLINE Corporation, Highway Solar, Expressway Solar, 2nd Seoul-Incheon Linking Highway Co., Ltd. subject to prevailing market conditions. KCMC has been integrated into Korea Authority of Land &

Infrastructure Safety and since May 2023, the Issuer has resolved to, and has been proceeding with steps to, liquidate and dissolve KCMC.

## **Research and Development**

The Issuer's Expressway and Transportation Research Institute ("ETRI"), established in 1973, is Korea's leading road research institute. ETRI engages in traffic, road pavement and infrastructure research, reviews and maintains a program to assure quality control at construction sites, examines all construction materials and performs safety checks of facilities. Investigating and solving various problems in expressway construction, and maintenance and management of construction sites, ETRI is a leader in domestic road technology development and participates in joint national research programs with the Government. ETRI is designated by the MOLIT and the Ministry of Knowledge Economy as an organization specializing in safety assessment and has obtained an ISO 9001 certification, an international quality standard system in the fields of expressway design, development, construction and service. In 2020, 2021 and 2022, the Issuer incurred ₩52 billion, ₩54 billion and ₩52 billion of other selling and administrative expenses on research salaries and research expenses, which consisted of 0.5%, 0.5% and 0.5%, respectively, of total revenue.

## **Competition**

The Issuer faces two principal types of competition: (i) non-road modes of transportation, such as railway, and (ii) alternative road networks, such as toll-free public expressways and private expressways.

The principal competing mode of transportation in Korea that services the comparable destinations covered by the expressways operated by the Issuer is the national railway system, including the high-speed railway commonly known as KTX. However, the Issuer does not believe that rail transportation poses a material threat to the Issuer's business because high-speed railways (and railways in general) are used for long distance travel, while expressways are used mostly for short distance travel. For example, the Issuer estimates that approximately 90% of travel in Korea is for a distance of less than 100 kilometers (and approximately 54% of travel for a distance of less than 30 kilometers) and the average distance traveled on expressways is approximately 50 kilometers. In addition, the Issuer believes that the majority of travelers prefer driving to riding trains due to the greater convenience and privacy associated with the former. In addition, traveling by train requires the traveler to tailor their schedules to meet pre-set departure times, as well as arrange for other modes of transportation to travel to and from trains stations from their departure points and to their ultimate destinations. Furthermore, trains generally do not operate 24 hours a day, and travelers traveling at a time other than train operating hours have few other options than driving. Nevertheless, in recognition of competition from railways regardless of its effect, the Issuer is taking steps to improve the facilities on expressways that service the same destinations as railways and to enhance the convenience of the expressways.

Toll-free highways and expressways funded by private capital are the two principal alternative automotive modes of transportation available to motorists in Korea. The Issuer believes that toll-free highways do not represent a significant threat to the Issuer's business because these roads generally have fewer lanes, require more travel time due to lower speed limits, generally have lower road quality compared to expressways operated by the Issuer and generally do not provide the closest route to intended destinations.

As for privately funded expressways, 24 projects have to-date been approved by the MOLIT for development by private enterprises. Of these 24 projects, 21 have begun commercial operations in Korea, namely the Incheon Airport Highway, the Cheonan-Nonsan Expressway, the Daegu-Busan Expressway, the Seoul Metropolitan Area 1 circular Expressway, the Busan-Ulsan Expressway, the Seoul-Chuncheon Expressway, the Yongin-Seoul Expressway, the Incheon Bridge, the West Suwon-Pyeongtaek Expressway, the Pyeongtaek-Siheung Expressway, the Suwon-Kwangmyeong Expressway, the Kwangju-Wonju Expressway, the Busan New Port the

second road behind, the Incheon-Gimpo Expressway, the Sangju-Yeongcheon Expressway, the Guri-Pocheon Expressway, the Anyang-Seongnam Expressway, the Oksan-Ochang Expressway, the Seoul Munsan Expressway, the Bongdam-Songsan Expressway and the Hwaseong-Gwangju Expressway.

See “Relationship with the Government – Government Road Construction Policy – Expressways funded by private capital.” The Issuer does not believe that the private expressway projects will pose a material threat to the Issuer’s business given their limited overlap with the expressways operated by the Issuer and the location of these projects in relatively less populated areas. For example, the Incheon Airport Highway services a route that is not covered by the Issuer and therefore has not resulted in any loss of traffic volume for the Issuer. The Issuer further believes that the amount of traffic volume lost to the Cheonan-Nonsan Expressway is not material as these cities have relatively small population. With respect to the other projects planned for private development, these routes are expected to service destinations not served by the Issuer. The private expressway projects connect and complement the major expressways operated and maintained by the Issuer under the National 10x10+6R<sup>2</sup> Plan.

## **Environmental Matters**

The Issuer is subject to the Framework Act on Environmental Policy of 1990, as amended, and a number of related regulations covering air pollution, air quality, water pollution and the administration of hazardous substances. The Issuer believes that it is in material compliance with all applicable environmental laws and regulations. See “Risk Factors – Risks Relating to the Issuer – Environmental regulations may limit the Issuer’s operations” and “Risk Factors – Risks Relating to the Issuer – The Issuer is subject to various operational risks, any of which could give rise to significant delays or additional costs.”

In an effort to minimize environmental damage during the construction of expressways, the Issuer analyses the potential environmental impact of each expressway project and retains environmental experts from the initial design stage until completion of construction to evaluate the environmental impact of the proposed expressway project. From the beginning of the construction planning and design stage, the Issuer establishes strict procedures for inspection and analysis of environmental impact and also engages in open dialogue with affected residents and other members of the public through explanatory sessions and public hearings.

The Issuer implements an environmental management plan, designed to minimize negative environmental impact from the construction and operation of its expressways. Among other things, the plan contemplates taking measure to reduce pollution (including noise pollution), minimize waste generated from the construction and operation of expressways and make efficient use of energy and other resources in constructing and operating expressways.

## **Litigation**

As of December 31, 2022, the Issuer was involved in 481 different court proceedings as a defendant, with an aggregate claim against the Issuer in the amount of ₩948 billion. Approximately 39% of such proceedings involving an aggregate claim against the Issuer in the amount of ₩1.38 billion were in relation to traffic accidents where the accident victims or insurance companies alleged road mismanagement by the Issuer.

A number of toll gate workers employed by outside service providers have, since March 2013, filed lawsuits demanding that the Issuer recognizes the workers as its regular employees and accordingly pay wages in an amount equal to what they would have been entitled to if they were regular employees of the Issuer, or approximately ₩698 billion to the workers. In August 2019, the supreme court ruled in favor of the toll gate workers, upholding the decision made by the court of appeals that the toll workers should be recognized as regular employees of the Issuer. The specific amount the toll gate workers are entitled to receive from the Issuer

is yet to be determined. In addition, in October 2013, safety patrol workers employed by outside service providers have filed lawsuits demanding that the Issuer recognize the workers as its regular employees and accordingly pay wages in an amount equal to what they would have been entitled to if they were regular employees of the Issuer, or approximately ₩41 billion to the workers. In June 2016 the court of appeals ruled partially in favor of the safety patrol workers. In June 2016, the court of appeals ruled partially in favor of the safety patrol workers and the Issuer paid approximately ₩11 billion to the safety patrol workers. Such decision of the court of appeals was upheld by the supreme court in May 2020. Several similar cases are also pending in district courts and courts of appeals. Although the Issuer has set aside ₩619 billion as provision for litigation, if these cases are adversely determined against the Issuer, there is no assurance that it would not have a material adverse effect on the Issuer, its business, financial condition or results of operation.

## **Insurance**

The Issuer maintains casualty and fire insurance for its facilities. The Issuer does not maintain any business interruption insurance, natural disaster insurance or liability insurance. In 2020, 2021 and 2022, the Issuer's loss on disasters amounted to ₩18 billion, ₩18 billion and ₩31 billion, respectively.

## **Employees**

As of September 30, 2023, the Issuer had 5,133 full-time employees, all of whom are employed within Korea. Of the total number of employees, 66% were engineers, 30% were operations staff and 4% were administrative staff.

The Issuer has multiple labor unions, the oldest of which has existed since 1987. As of September 30, 2023, approximately 85.19% of the Issuer's employees were members of the unions, which negotiates a collective bargaining agreement and wage agreement for its members each year. The Issuer maintains a good relationship with its employees and has not experienced any material labor disruptions.

## MANAGEMENT

Under the Act on the Management of Public Institutions and the Issuer’s articles of incorporation, the Issuer’s management is vested in the board of directors (the “BOD”), which consists of not more than 15 directors, including the president.

The directors are classified into two categories: standing directors and non-standing directors. The number of standing directors may not be more than seven, including the president, and the non-standing directors may not be more than eight. In addition, the number of standing directors must be less than one-half of the total number of directors. The Issuer currently has seven standing directors and seven non-standing directors. The standing directors other than the Issuer’s president and standing member of the Audit Committee are appointed by the Issuer’s president upon approval by the general meeting of the Issuer’s shareholders. The Issuer’s standing directors presently constitute the Issuer’s executive officers. The non-standing directors are appointed from among specialists in the private sector by the Minister of the MOEF upon nomination by the Committee on the Nomination of Officials (“Nomination Committee”), which is established in accordance with the Act on the Management of Public Institutions and composed of the non-standing directors and other members appointed by the BOD and approval by the Steering Committee of the MOEF and the general meeting of the Issuer’s shareholders. The Issuer’s president is appointed by the President of Korea upon the motion of the Minister of the MOLIT after being nominated by the Nomination Committee and approved by the Steering Committee of the MOEF and the general meeting of the Issuer’s shareholders. Non-standing directors must constitute the majority of the members of the Nomination Committee. The president represents the Issuer and administers the Issuer’s day-to-day business in all matters not specifically designated as responsibilities of the BOD.

The Act on the Management of Public Institutions and the articles of incorporation of the Issuer also require the Issuer to establish an Audit Committee as a committee of the BOD. The Audit Committee is comprised of three members, of whom two members must be non-standing directors. The principal function of the Audit Committee is to conduct internal review of the Issuer’s operations and accounting, and to present its opinion to the BOD, thereby ensuring the independence and professionalism of the Issuer. The Issuer’s standing member of the Audit Committee is appointed by the President of Korea upon the motion of the Minister of the MOEF after being nominated by the Nomination Committee and approved by the Steering Committee of the MOEF and the general meeting of the Issuer’s shareholders. The standing member of the Audit Committee is also a member of the BOD.

The names, titles, and outside occupations, if any, of the directors and members of the Audit Committee and the respective years in which they took office are set forth below.

Name	Year of Birth	Title/Position	Outside Occupation, if any	Position held since
Ham, Jingyu .....	1959	President	None	February 14, 2023
Lee, Seungho.....	1958	Standing Director and Standing Member of the Audit Committee	None	May 9, 2023
Son, Jinsik .....	1965	Vice President of Management and Standing Director	None	March 28, 2023
Kim, Janghwan.....	1966	Standing Director	None	February 8, 2022

<b>Name</b>	<b>Year of Birth</b>	<b>Title/Position</b>	<b>Outside Occupation, if any</b>	<b>Position held since</b>
Park, Jonggon.....	1966	Standing Director	None	March 28, 2023
Seol, Seunghwan.....	1966	Standing Director	None	June 12, 2023
Park, Keontae.....	1967	Vice President of Engineering and Standing Director	None	June 12, 2023
Lee, Seungki.....	1967	Non-Standing Director (Auditor) and Non-Standing Member of the Audit Committee	Accountant at Hanaro Accounting Office	February 11, 2022
Lee, Jongwon.....	1982	Non-Standing Director	Professor at the Sorabol University Department of Nursing	October 1, 2021
Seo, Hyeongbae.....	1977	Non-Standing Director	Chairman at Kimpo Geomdan Citizen's Solidarity	November 21, 2022
Gwak, Bongho.....	1956	Non-Standing Director	None	January 19, 2023
Lee, Sanghak.....	1957	Non-Standing Director	None	January 19, 2023
Jang, Jusik.....	1954	Non-Standing Director	None	August 11, 2023
Jeon, Hwasik.....	1957	Non-Standing Director	None	August 11, 2023
Kim, Jaecil.....	1968	Non-Standing Director	None	August 11, 2023

*Ham, Jingyu* has been the president of the Issuer since February 14, 2023. Mr. Ham received a Bachelor's degree, a Master's degree and a Ph. D. in Law from Korea University. He previously served as a Member of the 19th and the 20th National Assembly and as an associate professor at the Industry-Academic Cooperation Foundation at Hanseo University.

*Lee, Seungho* has been a standing director and a standing member of the Audit Committee of the Issuer since May 9, 2023. Mr. Lee received a Bachelor's degree in English from Hankuk University of Foreign Studies and a Master's degree in Urban Planning from the University of Oregon. He previously served as the Deputy Mayor of Daegu.

*Son, Jinsik* has been the vice president and a standing director of the Issuer since March 28, 2023. Mr. Son received a Bachelor's degree in Law and a Master's degree in Advertising and PR from Yonsei University. He previously served as general manager of the Daegu Gyeongbuk Division of the Issuer.

*Kim, Janghwan* has been a standing director since February 8, 2022. Mr. Kim currently serves as executive managing director of the Business Division. Mr. Kim received a Bachelor's degree in Business Administration from Chonnam National University. He previously served as head of the Finance Division of the Issuer.

*Park, Jonggon* has been a standing director of the Issuer since March 28, 2023. Mr. Park received a Bachelor's degree in Civil Engineering from Chungbuk National University and a Master's degree in Transportation Studies from Hanyang University. He previously served as director of the Construction Division of the Issuer.

*Seol, Seunghwan* has been a standing director of the Issuer since June 12, 2023. Mr. Seol received a Bachelor's degree in Civil Engineering from Dankook University and a Master's Degree in Management from Soongsil University. He previously served as director of the Traffic Division of the Issuer.

*Park, Keontae* has been a standing director of the Issuer since June 12, 2023. Mr. Park received a Bachelor's degree in Civil Engineering from Sungkyunkwan University and a Master's degree in Civil Engineering from Yonsei University. He previously served as director of the Technical Evaluation Division of the Issuer.

*Lee, Seungki* has been a non-standing director (auditor) and a non-standing member of the Audit Committee of the Issuer since February 11, 2022. Mr. Lee received a Bachelor's degree in Business Administration from Yeungnam University. Mr. Lee is currently an accountant at Hanaro Accounting Office.

*Lee, Jongwon* has been a non-standing director since October 1, 2021. Mr. Lee received a Bachelor's degree in Business Administration, a Master's degree in Education from Yonsei University. Mr. Lee is currently a Professor at the Sorabol University Department of Nursing.

*Seo, Hyeongbae* has been a non-standing director of the Issuer since November 21, 2022. Mr. Seo received a Bachelor's degree in IT Electronic Engineering Soongsil University. Mr. Seo is currently the Chairman at Kimpo Geomdan Citizen's Solidarity.

*Gwak, Bongho* has been a non-standing director of the Issuer since January 19, 2023. Mr. Gwak received a Bachelor's degree in Public Administration from Chungnam National University. He previously served as a member of the Okcheon-gun Assembly.

*Lee, Sanghak* has been a non-standing director of the Issuer since January 19, 2023. Mr. Lee received a Bachelor's degree in Animal Science from Daegu University and a Master's degree in Political Science from Kyungpook National University. He previously served as Head of Business at Gyeongsangbuk-do Culture & Tourism Organization.

*Jang, Jusik* has been a non-standing director of the Issuer since August 11, 2023. Mr. Jang received a Bachelor's degree in Electrical Engineering from Soongsil University and a Master's degree in Legal Studies from Dongguk University. He currently serves as a standing member of the Peaceful Unification Advisory Council and previously served as Representative Director of Korail Retail.

*Jeon, Hwasik* has been a non-standing director of the Issuer since August 11, 2023. Mr. Jeon received a Bachelor's degree in Community Development Studies and a Master's degree in Environmental Management from Yeungnam University. He previously served as the Deputy Governor of Seongju-gun, Gyeongsangbuk-do Province.

*Kim, Jaeil* has been a non-standing director of the Issuer since August 11, 2023. Mr. Kim received a Bachelor's degree in Public Administration from Gwangju University. He previously served as Head of Labor Union of the Issuer.

Resolutions can be passed by a majority of the board members.

The Issuer's president may be removed by the President of Korea upon motion of the MOLIT. In addition, the Minister of the MOEF may either recommend or request removal of the Issuer's president upon approval by the Steering Committee of the MOEF if the results of operations are deemed to be poor. The standing directors, in the order contemplated by internal regulations, assist the president and act for the president when the president is unable to act.

The business address of the directors is 77, Hyeoksin 8-ro, Gimcheon-si, Gyeongsangbuk-do, Korea.

### **Compensation of Directors and Executive Officers**

For the year ended December 31, 2022, the key management personnel compensations paid was ₩1.1 billion.

### **Board Practices**

The term of the president is three years, and the term of the directors (other than the president) is two years. The president and directors may be reappointed for successive periods of one year each.

The president's management contract provides for benefits upon termination of his or her employment. The president is eligible for termination benefits after more than one year of continuous service. For each year of employment with the Issuer, the payment amount for termination benefits is equal to the average value of compensation for one month.

The terms for termination benefits for standing directors are determined in accordance with the Issuer's internal regulations for executive compensation. Standing directors are eligible for benefits after retirement or upon death following one year of continuous service. The payment amount for retirement benefits is calculated by computing the standard level of compensation and multiplying by the number of continuous years of service.

### **Related Party Transactions**

The Issuer engages from time to time in various transactions with related parties, which include its associates and joint ventures. The Issuer believes that it has conducted its transactions with related parties as it would in comparable arm's length transactions with a non-related party, on a basis substantially as favorable to the Issuer as would be obtainable in such transactions. For details on the Issuer's related party transactions, see Note 39 to the Issuer's consolidated financial statements as of and for the year ended December 31, 2020, 2021 and 2022.

## SHARE OWNERSHIP

The following table sets out certain information relating to the principal shareholders of the Issuer as of December 31, 2022.

<b>Name of Shareholder</b>	<b>As of December 31, 2022</b>	
	<b>Number of Common Shares Held</b>	<b>% of Total Common Shares</b>
Ministry of Land, Infrastructure and Transport .....	3,579,653,651	87.36%
The Export-Import Bank of Korea <sup>(1)</sup> .....	328,714,464	8.02%
The Korea Development Bank <sup>(2)</sup> .....	92,628,550	2.26%
Korea Asset Management Corporation <sup>(3)</sup> .....	80,834,760	1.98%
Korea Housing Finance Corporation <sup>(4)</sup> .....	15,000,000	0.37%
Kookmin Bank <sup>(5)</sup> .....	573,448	0.01%
<b>Total common shares</b> .....	<b>4,097,404,873</b>	<b>100.00%</b>

Note:

- (1) The Government owns, directly or indirectly, 100% of The Export-Import Bank of Korea, as of December 31, 2022.
- (2) The Government owns, directly or indirectly, 100% of The Korea Development Bank, as of December 31, 2022.
- (3) All shares of the Ministry of Economy and Finance were transferred to the Korea Asset Management Corporation on April 20, 2021 as investment in kind by the Ministry of Economy and Finance.
- (4) The Government owns, directly or indirectly, 100% of Korea Housing Finance Corporation, as of December 31, 2022.
- (5) Kookmin Bank received equity interests in the Issuer from the Government in connection with the recapitalization of Kookmin Bank.

## **SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS**

### **Selling Restrictions**

#### ***Taiwan***

The Notes have not been, and shall not be, offered, sold or re-sold, directly or indirectly to investors other than "professional investors" as defined under Paragraph 1 of Article 2-1 of the Taipei Exchange Rules Governing Management of Foreign Currency Denominated International Bonds (the "TPEX Rules"). Purchasers of the Notes are not permitted to sell or otherwise dispose of the Notes except by transfer to a Professional Investor.

#### ***Singapore***

Each Manager has acknowledged that this Offering Memorandum has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Manager has represented, warranted and agreed that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Offering Memorandum or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001 of Singapore, as modified or amended from time to time (the "SFA")) pursuant to Section 274 of the SFA or (ii) to an accredited investor (as defined in Section 4A of the SFA) pursuant to and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018.

*Prospective investors to note:*

*Where the Notes are subscribed or purchased under Section 275 of the SFA by an accredited investor which is:*

- (a) a corporation the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or*
- (b) a trust whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor;*

*securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes pursuant to an offer made under Section 275 of the SFA except:*

- (1) to an institutional investor or to an accredited investor;*
- (2) where no consideration is or will be given for the transfer; or*
- (3) where the transfer is by operation of law.*

### **Notice to capital market intermediaries and prospective investors pursuant to paragraph 21 of the Hong Kong SFC Code of Conduct**

**Important Notice to CMI's (including private banks):** This notice to CMI's (including private banks) is a summary of certain obligations the Code imposes on CMI's, which require the attention and cooperation of other

CMI (including private banks). Certain CMIs may also be acting as OCs for this offering and are subject to additional requirements under the Code.

Prospective investors who are the directors, employees or major shareholders of the Issuer, a CMI or its group companies would be considered under the Code as having an Association with the Issuer, the CMI or the relevant group company. CMIs should specifically disclose whether their investor clients have any Association when submitting orders for the Notes. In addition, private banks should take all reasonable steps to identify whether their investor clients may have any Associations with the Issuer or any CMI (including its group companies) and inform the Managers accordingly.

CMIs are informed that the marketing and investor targeting strategy for this offering includes institutional investors, sovereign wealth funds, pension funds, hedge funds, family offices and high net worth individuals, in each case, subject to the selling restrictions set out elsewhere in this Offering Memorandum and the applicable Pricing Supplement.

CMIs should ensure that orders placed are bona fide, are not inflated and do not constitute duplicated orders (i.e. two or more corresponding or identical orders placed via two or more CMIs). CMIs should enquire with their investor clients regarding any orders which appear unusual or irregular. CMIs should disclose the identities of all investors when submitting orders for the Notes (except for omnibus orders where underlying investor information may need to be provided to any OCs when submitting orders). Failure to provide underlying investor information for omnibus orders, where required to do so, may result in that order being rejected. CMIs should not place “X-orders” into the order book.

CMIs should segregate and clearly identify their own proprietary orders (and those of their group companies, including private banks as the case may be) in the order book and book messages.

CMIs (including private banks) should not offer any rebates to prospective investors or pass on any rebates provided by the Issuer. In addition, CMIs (including private banks) should not enter into arrangements which may result in prospective investors paying different prices for the Notes.

The Code requires that a CMI disclose complete and accurate information in a timely manner on the status of the order book and other relevant information it receives to targeted investors for them to make an informed decision. In order to do this, those Managers in control of the order book should consider disclosing order book updates to all CMIs.

When placing an order for the Notes, private banks should disclose, at the same time, if such order is placed other than on a “principal” basis (whereby it is deploying its own balance sheet for onward selling to investors). Private banks who do not provide such disclosure are hereby deemed to be placing their order on such a “principal” basis. Otherwise, such order may be considered to be an omnibus order pursuant to the Code. Private banks should be aware that placing an order on a “principal” basis may require the relevant affiliated Managers (if any) to categorize it as a proprietary order and apply the “proprietary orders” requirements of the Code to such order and will result in that private bank not being entitled to, and not being paid, any rebate.

In relation to omnibus orders, when submitting such orders, CMIs (including private banks) that are subject to the Code should disclose underlying investor information in respect of each order constituting the relevant omnibus order (failure to provide such information may result in that order being rejected). Underlying investor information in relation to omnibus orders should consist of:

- The name of each underlying investor;
- A unique identification number for each investor;
- Whether an underlying investor has any “Associations” (as used in the Code);

- Whether any underlying investor order is a “Proprietary Order” (as used in the Code);
- Whether any underlying investor order is a duplicate order.

Underlying investor information in relation to omnibus order should be sent to:  
Lloyds.PAO@asia.bnpparibas.com; dl.asia.syndicate@asia.bnpparibas.com

To the extent information being disclosed by CMIs and investors is personal and/or confidential in nature, CMIs (including private banks) agree and warrant: (A) to take appropriate steps to safeguard the transmission of such information to any OCs; and (B) that they have obtained the necessary consents from the underlying investors to disclose such information to any OCs. By submitting an order and providing such information to any OCs, each CMI (including private banks) further warrants that they and the underlying investors have understood and consented to the collection, disclosure, use and transfer of such information by any OCs and/or any other third parties as may be required by the Code, including to the Issuer, relevant regulators and/or any other third parties as may be required by the Code, for the purpose of complying with the Code, during the bookbuilding process for this offering. CMIs that receive such underlying investor information are reminded that such information should be used only for submitting orders in this offering. The Managers may be asked to demonstrate compliance with their obligations under the Code, and may request other CMIs (including private banks) to provide evidence showing compliance with the obligations above (in particular, that the necessary consents have been obtained). In such event, other CMIs (including private banks) are required to provide the relevant Manager with such evidence within the timeline requested.

**SCHEDULE B – AUDITED CONSOLIDATED FINANCIAL STATEMENTS FOR THE  
YEARS ENDED DECEMBER 31, 2022 AND 2021**

## **Independent auditor's report**

(English Translation of a Report Originally Issued in Korean)

### **The Shareholders and Board of Directors Korea Expressway Corporation**

#### **Opinion**

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

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2022 and 2021, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Government Accounting Standards for Public Enterprises and Quasi-government Organizations in the Republic of Korea ("Government Accounting Standards").

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

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

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

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

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

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

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

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

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



March 20, 2023

This audit report is effective as of March 20, 2023, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

# **Korea Expressway Corporation and its subsidiaries**

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

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

Ham, Jin-gyu  
Chief Executive Officer  
Korea Expressway Corporation

Headquarters: (Address) 77, Hyeoksin 8-ro, Gimcheon-si, Gyeongsangbuk-do, Korea  
(Telephone) +82-1588-2504

**Korea Expressway Corporation and its subsidiaries**  
**Consolidated statements of financial position**  
**as of December 31, 2022 and 2021**

(Korean won in thousands)

	Notes	December 31, 2022	December 31, 2021
<b>Assets</b>			
<b>Current assets:</b>			
Cash and cash equivalents	5,37	₩ 507,239,814	₩ 557,477,291
Financial assets at fair value through profit or loss	7,9,37	72,765,039	486,340
Short-term loans and receivables	10,37	1,357,753	1,467,970
Short-term financial instruments	6,37	60,000,000	60,000,000
Derivatives assets	7,37	30,656,729	15,872,079
Other financial assets	37	452,634,842	419,905,937
Trade and other receivables	8,37	393,521,034	349,656,977
Inventories	11	32,715,243	26,566,224
Current tax assets		-	4,362
Other non-financial assets	12	7,407,640	13,796,838
		<u>1,558,298,094</u>	<u>1,445,234,018</u>
<b>Non-current assets:</b>			
Financial assets at fair value through profit or loss	7,9,37	658,387,434	63,968,359
Financial assets at fair value through other comprehensive income	9,37	24,220,763	22,180,690
Derivatives assets	7,37	231,951,327	165,749,129
Long-term loans and receivables	10,37	33,763,924	36,565,718
Trade and other receivables	8,37	124,594,209	112,907,370
Plant, property and equipment	14	1,169,299,986	1,132,681,934
Investment properties	15	1,701,087,592	1,695,250,529
Intangible assets	16	72,716,944,417	68,713,607,860
Investments in associates and joint ventures	13	5,658,076	4,010,138
Net defined benefit assets	20	74,555,917	-
Other non-financial assets	12	9,438,249	9,968,296
		<u>76,749,901,894</u>	<u>71,956,890,023</u>
<b>Total assets</b>		<u>₩ 78,308,199,988</u>	<u>₩ 73,402,124,041</u>

(Continued)

**Korea Expressway Corporation and its subsidiaries**  
**Consolidated statements of financial position**  
**as of December 31, 2022 and 2021 (cont'd)**  
(Korean won in thousands)

	<u>Notes</u>	<u>December 31, 2022</u>	<u>December 31, 2021</u>
<b>Liabilities</b>			
<b>Current liabilities:</b>			
Trade and other payables	17,37	₩ 1,190,177,421	₩ 968,227,353
Financial liabilities at fair value through profit or loss	7,18,37	-	105,124,997
Short-term borrowings	18,37	465,200,000	-
Current portion of long-term borrowings	18,37	400,000,000	200,000,000
Current portion of bonds	18,37	3,066,030,122	3,036,359,843
Derivatives liabilities	7,37	-	180,099
Current tax liabilities		20,546,350	3,600,794
Provisions	21	127,498,475	126,934,787
Other non-financial liabilities	23	343,021,475	217,085,451
		<u>5,612,473,843</u>	<u>4,657,513,324</u>
<b>Non-current liabilities:</b>			
Financial liabilities at fair value through profit or loss	7,18,37	17,741,432	6,446,013
Trade and other payables	17,37	203,763,054	205,447,144
Long-term borrowings	18,37	1,000,000,000	900,000,000
Bonds	18,37	28,054,103,375	26,731,737,371
Derivatives liabilities	7,37	105,794,774	23,655,541
Other non-financial liabilities	23	28,853,099	30,231,194
Employee benefits liabilities	20	71,505,948	109,046,085
Provisions	21,41	735,752,283	619,279,949
		<u>30,217,513,965</u>	<u>28,625,843,297</u>
<b>Total liabilities</b>		<b><u>35,829,987,808</u></b>	<b><u>33,283,356,621</u></b>
<b>Equity</b>			
Equity attributable to owners of the parent:			
Share capital	1,25	40,974,048,730	38,656,087,730
Share discount		(19,337,256)	(17,190,811)
Retained earnings	26	1,573,897,630	1,478,171,130
Other components of equity	27	(50,396,924)	1,699,371
Non-controlling interests		-	-
<b>Total equity</b>		<b><u>42,478,212,180</u></b>	<b><u>40,118,767,420</u></b>
<b>Total liabilities and equity</b>		<b><u>₩ 78,308,199,988</u></b>	<b><u>₩ 73,402,124,041</u></b>

**Korea Expressway Corporation and its subsidiaries**  
**Consolidated statements of profit or loss and other comprehensive income**  
**for the years ended December 31, 2022 and 2021**

(Korean won in thousands, except earnings per share)

	Notes	2022	2021
Revenue	4,28,39	₩ 10,779,475,425	₩ 10,535,071,953
Cost of sales	35,39	9,589,066,521	9,585,244,794
<b>Gross profit</b>		<b>1,190,408,904</b>	<b>949,827,159</b>
Selling and administrative expenses	29,35	336,265,072	331,278,996
<b>Operating profit</b>	<b>4</b>	<b>854,143,832</b>	<b>618,548,163</b>
Other income	30	92,196,045	143,706,067
Other expenses	30	171,231,093	118,273,881
Other loss, net	31	(20,657,457)	(6,765,823)
Finance income	32,37	212,678,314	230,016,918
Finance costs	33,37	878,912,760	828,975,451
Gain related to associates and joint ventures	13	3,306,377	1,906,221
<b>Profit before income tax</b>		<b>91,523,258</b>	<b>40,162,214</b>
<b>Income tax expense</b>	<b>34</b>	<b>27,808,111</b>	<b>6,527,080</b>
<b>Profit for the year</b>		<b>63,715,147</b>	<b>33,635,134</b>
<b>Other comprehensive income</b>			
<b>for the year, net of tax</b>			
<b>Items that will not be reclassified to profit or loss in subsequent periods:</b>			
Remeasurements of defined benefit plans	20	56,467,636	2,279,329
Share of other comprehensive loss of associates and joint ventures	13	(26,874)	(70,157)
Gain on valuation of financial assets at fair value through other comprehensive income	9	1,960,994	536,934
		58,401,756	2,746,106
<b>Items that may be reclassified to profit or loss in subsequent periods:</b>			
Net changes in unrealized fair value of AFS financial assets	9		
Gain (loss) on hedging instruments in cash flow hedges	7,37	(54,823,125)	26,942,971
Share of other comprehensive income of associates and joint ventures	13	792,710	-
		(54,030,415)	26,942,971
<b>Total comprehensive income for the year</b>		<b>₩ 68,086,488</b>	<b>₩ 63,324,211</b>
<b>Profit for the year attributable to:</b>			
Owners of the parent		63,715,147	33,635,134
Non-controlling interests		-	-
		63,715,147	33,635,134
<b>Total comprehensive income for the year attributable to:</b>			
Owners of the parent		68,086,488	63,324,211
Non-controlling interests		-	-
		68,086,488	63,324,211
<b>Earnings per share:</b>			
	36		
Basic earnings per share		₩ 16	₩ 9
Diluted earnings per share		₩ 16	₩ 9

**Korea Expressway Corporation and its subsidiaries**  
**Consolidated statements of changes in equity**  
**for the years ended December 31, 2022 and 2021**

(Korean won in thousands)

	Share capital and share discount	Retained earnings	Other components of equity	Equity attributable to owners of the parent	Non-controlling interests	Total equity
<b>As of January 1, 2021</b>	₩ 36,591,594,599	₩ 1,455,835,486	₩ (25,710,378)	₩ 38,021,719,707	₩ -	₩ 38,021,719,707
<b>Total comprehensive income for the year :</b>						
Profit for the year	-	33,635,134	-	33,635,134	-	33,635,134
Other comprehensive income	-	2,279,329	27,409,749	29,689,078	-	29,689,078
	-	35,914,463	27,409,749	63,324,212	-	63,324,212
<b>Transactions with owners of the parent recognized directly in equity:</b>						
Capital increase by issuing new shares	2,056,514,000	-	-	2,056,514,000	-	2,056,514,000
Dividends paid	-	(13,578,818)	-	(13,578,818)	-	(13,578,818)
Share discount	(9,211,680)	-	-	(9,211,680)	-	(9,211,680)
	2,047,302,320	(13,578,818)	-	2,033,723,502	-	2,033,723,502
<b>As of December 31, 2021</b>	₩ 38,638,896,919	₩ 1,478,171,131	₩ 1,699,371	₩ 40,118,767,421	₩ -	₩ 40,118,767,421
<b>As of January 1, 2022</b>	₩ 38,638,896,919	₩ 1,478,171,131	₩ 1,699,371	₩ 40,118,767,421	₩ -	₩ 40,118,767,421
<b>Total comprehensive income for the year :</b>						
Profit for the year	-	63,715,147	-	63,715,147	-	63,715,147
Other comprehensive income	-	56,467,636	(52,096,295)	4,371,341	-	4,371,341
	-	120,182,783	(52,096,295)	68,086,488	-	68,086,488
<b>Transactions with owners of the parent recognized directly in equity:</b>						
Capital increase by issuing new shares	2,317,961,000	-	-	2,317,961,000	-	2,317,961,000
Dividends paid	-	(15,244,604)	-	(15,244,604)	-	(15,244,604)
Share discount	(11,358,125)	-	-	(11,358,125)	-	(11,358,125)
	2,306,602,875	(15,244,604)	-	2,291,358,271	-	2,291,358,271
<b>Amortization of share discount</b>	9,211,680	(9,211,680)	-	-	-	-
<b>As of December 31, 2022</b>	₩ 40,954,711,474	₩ 1,573,897,630	₩ (50,396,924)	₩ 42,478,212,180	₩ -	₩ 42,478,212,180

**Korea Expressway Corporation and its subsidiaries**  
**Consolidated statements of cash flows**  
**for the years ended December 31, 2022 and 2021**

(Korean won in thousands)

	<b>2022</b>		<b>2021</b>
<b>Cash flows from operating activities:</b>			
Profit for the year	₩ 63,715,147	₩	33,635,134
Adjustments to reconcile profit for the year to net cash provided by operating activities:			
Bad debt expenses	1,176,179		2,226,105
Other bad debt expenses	596,198		232,282
Loss on valuation of financial instruments at fair value through profit or loss, net	74,899,643		965,216
Loss on disposal of financial instruments, net	13,284,886		472,500
Gain on valuation of derivative instruments, net	(66,597,230)		(183,964,110)
Loss (gain) on transaction of derivative instruments, net	9,611,160		(16,412,000)
Loss on hedged item related to fair value hedge	3,135,230		5,102,845
Gain on disposal of property and equipment, net	(952,956)		(976,128)
Depreciation	191,821,020		187,094,430
Loss on disposal of investment properties, net	503,913		3,777,262
Gain on disposal of intangible assets	(6,582,108)		(11,688,416)
Amortization	1,493,876,910		1,713,213,145
Interest expenses	602,351,075		602,490,797
Income tax expense (benefit)	27,808,111		6,527,080
Loss on foreign currency translations, net	65,853,745		182,876,013
Employee benefits	128,538,176		139,804,121
Retirement benefits	67,886,489		65,978,817
Share of profit of associates and joint ventures	(1,029,189)		(206,411)
Dividend income	(425,349)		(230,600)
Interest income	(26,759,358)		(9,183,483)
Gain on contribution of assets	(2,453,105)		(2,903,896)
Income from incidental business	(4,916,446)		(6,573,534)
Increase in provisions	118,590,501		91,675,034
Reversal of provisions	(2,080,836)		(65,021,636)
Reversal of other allowance for doubtful accounts	(550,676)		(348,859)
Loss (gain) other accounts	3,279,379		(584,641)
Gain on disposal of investments in associates	(2,277,188)		(1,699,810)
	₩ 2,688,588,174	₩	2,702,642,123

(Continued)

**Korea Expressway Corporation and its subsidiaries**  
**Consolidated statements of cash flows**  
**for the years ended December 31, 2022 and 2021 (cont'd)**

(Korean won in thousands)

	<b>2022</b>		<b>2021</b>
<b>Cash flows from operating activities:</b>			
Changes in operating assets and liabilities:			
Short-term loans	₩ 110,216	₩	5,306,746
Other current financial assets	(32,728,905)		(96,437,633)
Other accounts receivable	(50,232,889)		(54,612,191)
Accrued income	(1,449)		(20,498)
Short-term deposits	5,799,191		717,019
Inventories	(6,149,019)		(5,473,835)
Short-term advance payments	(1,210)		34,752
Short-term prepaid expenses	8,880,000		(6,990,670)
Greenhouse gas emissions rights	187,561		(31,209)
Long-term loans	2,801,794		(10,633,709)
Long-term deposits	(11,686,839)		648,777
Long-term prepaid expenses	437,470		(545,130)
Short-term other accounts payable	205,806,293		187,236,203
Short-term accrued expenses	(2,008,287)		(3,112,261)
Short-term leasehold deposits received	4,540,543		(30,720,165)
Short-term other deposits received	(1,623,952)		(5,591,677)
Short-term advances received	134,580,703		(48,416,646)
Short-term unearned revenue	(1,141,689)		(504,077)
Withholdings	(8,133,376)		(1,424,742)
Current portion of provision for employee benefits	(126,162,026)		(127,945,130)
Provision for GHG emission	(484,185)		(697,992)
Long-term leasehold deposits received	(3,782,625)		25,340,179
Long-term unearned revenue	4,168,739		2,862,042
Retirement benefits paid	(4,168,191)		(1,641,306)
Contributions to plan assets	(108,525,598)		(77,293,514)
Other long-term employee benefits	(11,809,587)		(12,017,059)
Increase in government grants for consignment management service	225,188,011		309,810,189
Decrease in government grants for consignment management service	(284,012,686)		(275,230,871)
	(60,151,992)		(227,384,408)
Dividends received	599,311		230,600
Interest paid	(583,067,232)		(590,431,933)
Interest received	25,983,750		9,065,498
Income taxes refunded	(10,858,193)		2,224,723
<b>Net cash provided by operating activities</b>	<b>₩ 2,124,808,965</b>	<b>₩</b>	<b>1,929,981,737</b>

(Continued)

**Korea Expressway Corporation and its subsidiaries**  
**Consolidated statements of cash flows**  
**for the years ended December 31, 2022 and 2021 (cont'd)**  
(Korean won in thousands)

	<b>2022</b>	<b>2021</b>
<b>Cash flows from investing activities:</b>		
Proceeds from disposals of property and equipment	₩ 1,332,664	₩ 2,095,289
other comprehensive income	15,827,420	-
Proceeds from disposals of investment property	602	75,396
Proceeds from disposals of intangible assets	29,708,025	27,263,788
Acquisition of financial assets at fair value through Proceeds from disposal of investments in associates and joint ventures	2,277,188	1,699,810
Acquisition of investments in associates and joint ventures	(26,874)	-
Acquisition of financial assets at fair value through other comprehensive income	(79,079)	(42,977)
Acquisition of financial assets at fair value through profit or loss, net	(751,254,416)	(15,606,682)
Acquisition of property and equipment	(135,904,140)	(145,271,799)
Acquisition of short-term financial instruments	-	(15,000,000)
Acquisition of investment properties	(97,616,505)	(194,625,463)
Acquisition of intangible assets	(5,520,636,008)	(5,413,801,503)
<b>Net cash used in investing activities</b>	<b>(6,456,371,123)</b>	<b>(5,753,214,141)</b>
<b>Cash flows from financing activities:</b>		
Proceeds from short-term borrowings	1,210,000,000	-
Proceeds from long-term borrowings	500,000,000	400,000,000
Proceeds from bonds	4,318,923,252	4,630,939,789
Proceeds from capital increase by issuing new shares	2,306,602,875	2,047,302,320
Repayments of current portion of borrowings	(744,800,000)	(300,000,000)
Repayments of current portion of long-term borrowings	(200,000,000)	-
Repayments of bonds	(3,049,912,447)	(2,853,920,500)
Repayments of other current financial liabilities	(100,000,000)	-
Repayments of lease liabilities	(3,560,872)	(4,162,977)
Dividends paid	(15,244,604)	(13,578,818)
<b>Net cash provided by financing activities</b>	<b>4,222,008,204</b>	<b>3,906,579,814</b>
<b>Net (decrease) increase in cash and cash equivalents</b>	<b>(109,553,954)</b>	<b>83,347,410</b>
<b>Net foreign exchange difference</b>	<b>491,802</b>	<b>429,475</b>
<b>Cash and cash equivalents at the beginning of the year</b>	<b>940,374,092</b>	<b>856,597,207</b>
<b>Cash and cash equivalents at the end of the year before government grants for consignment management service</b>	<b>831,311,940</b>	<b>940,374,092</b>
<b>Less: government grants for consignment management service</b>	<b>(324,072,126)</b>	<b>(382,896,801)</b>
<b>Cash and cash equivalents at the end of the year</b>	<b>₩ 507,239,814</b>	<b>₩ 557,477,291</b>

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**1. General**

Korea Expressway Corporation (the "Company") was established on February 15, 1969, under the *Korea Expressway Corporation Act*. The Company is engaged in the construction and operation of an expressway network in the Republic of Korea. The Company generates its revenue primarily from tolls collected from motorists for the use of the expressways managed by the Company. The Company also receives lease payments paid by operations of service areas and oil stations located at various points along the expressways and fees from certain services for the Korean Government (the "Government"), including supervision of the government construction projects in various locations adjacent to the expressways.

As of December 31, 2022, the Company's shareholders are as follows:

Shareholders	Number of shares	Ownership (%)
Ministry of Land, Infrastructure and Transport	3,579,653,651	87.36
Korea EXIM Bank	328,714,464	8.02
Korea Development Bank	92,628,550	2.26
Korea Asset Management Corporation	80,834,760	1.98
Korea Housing Finance Corporation	15,000,000	0.37
Kookmin Bank	573,448	0.01
	<u>4,097,404,873</u>	<u>100.00</u>

**The Group**

Details of the Company and its subsidiaries (collectively referred to as the "Group") as of December 31, 2022 and 2021 are as follows (Korean won in millions):

As of December 31, 2022:

Company	Country of incorporation	Business area	Assets	Liabilities	Sales	Profit for the year
Korea Expressway Corporation	Korea	Construction and management of roads	₩ 78,281,623	₩ 35,816,154	₩ 10,778,716	₩ 58,363
Korea Expressway Corporation Facility Management Co., Ltd.	Korea	Building(facilities) and maintenance, etc.	3,718	2,120	18,037	335
Korea Expressway Corporation Service Co., Ltd.	Korea	Toll road and facility usage fee	103,456	58,957	346,705	7,140

As of December 31, 2021:

Company	Country of incorporation	Business area	Assets	Liabilities	Sales	Profit for the year
Korea Expressway Corporation	Korea	Construction and management of roads	₩ 73,391,383	₩ 33,266,842	₩ 10,534,309	30,453
Korea Expressway Corporation Facility Management Co.,Ltd.	Korea	Building(facilities) and maintenance, etc.	3,371	2,544	16,019	48
Korea Expressway Corporation Service Co.,Ltd.	Korea	Toll road and facility usage fee	69,340	41,217	328,182	16,167

## **2. Summary of significant accounting policies**

### **Basis of consolidation**

The consolidated financial statements comprise the financial statements of the Group as of December 31, 2022. Control is obtained when the Group is exposed to, or has rights to, variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if, and only if, the Group has:

- power over the investee (i.e., existing rights that give it the current ability to direct the relevant activities of the investee);
- exposure, or rights, to variable returns from its involvement with the investee; and
- the ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights results in control. When the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- the contractual arrangement(s) with the other vote holders of the investee;
- rights arising from other contractual arrangements; and
- the Group's voting rights and potential voting rights.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date the Group ceases to control the subsidiary.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the owners of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to ensure conformity with the Group's accounting policies. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction.

If the Group loses control of a subsidiary, it derecognizes the related assets (including goodwill), liabilities, non-controlling interest and other components of equity, while any resultant gain or loss is recognized in profit or loss. Any investment retained in the former subsidiary is recognized at its fair value.

### **Basis of preparation**

The consolidated financial statements of the Group have been prepared in accordance with Accounting Standards for Public Enterprises and Quasi-governmental Institutions in the Republic of Korea ("Government Accounting Standards") pursuant to the *Act on the Management of Public Institutions and the Decree on Accounting for Public Corporations and Quasi-governmental Institutions*, which mandates application of International Financial Accounting Standards as adopted by the Republic of Korea ("KIFRS") enacted by the *Act on External Audit of Stock Companies* where specific accounting treatments are not prescribed by Government Accounting Standards. The accompanying consolidated financial statements have been translated into English from Korean financial statements. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, Korean version, which is used for regulatory reporting purposes, shall prevail.

The Group adopted the KIFRS from the reporting period beginning on January 1, 2011. The date of transition to KIFRS according to KIFRS 1101, *First-time Adoption of Korean International Financial Reporting Standards*, was January 1, 2010.

## 2. Summary of significant accounting policies (cont'd)

### 1) Application of Government Accounting Standards

#### - Accounting Treatment for Assets Consigned

The Group represents assets that have been entrusted for consignment and management by third parties, such as the Government, by subtracting the assets from the acquired assets.

#### - Remaining government subsidies and Consigned project expenses

The Group has incurred government subsidies related to its own business carried over to the next year and deducts it from cash and cash equivalents in accordance with Article 44-2 of public corporations and quasi-governmental organizations.

#### - Recognition of Revenue and Expenses related to Consignment Management

The Group recognizes funds received from the Ministry of Land, Infrastructure and Transport and others for consignment management services as revenue and expenses or assets and liabilities as the associated project progresses. The Group does not offset each account.

#### - Contribution to the Employee Welfare Fund

The Group contributes to the employee welfare fund under the Employee Welfare Fund Act, which is recognized as selling and administrative expenses.

The significant accounting policies used for the preparation of the current consolidated financial statements are consistent with those applied to the consolidated financial statements for the year ended December 31, 2020, except for the effect associated with the adoption of the Standards and Interpretations described below.

### 2) Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

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

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

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

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

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

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

## 2. Summary of significant accounting policies (cont'd)

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

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

### **Deferred Tax related to Assets and Liabilities arising from a Single Transaction - Amendments to KIFRS 1012**

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

### 3) New and amended standards and interpretations

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

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

An onerous contract is a contract under which the unavoidable costs of meeting the obligations under the contract costs (i.e., the costs that the Group cannot avoid because it has the contract) exceed the economic benefits expected to be received under it. The amendments specify that when assessing whether a contract is onerous or loss-making, an entity needs to include costs that relate directly to a contract to provide goods or services including both incremental costs (e.g., the costs of direct labour and materials) and an allocation of costs directly related to contract activities (e.g., depreciation of equipment used to fulfil the contract and costs of contract management and supervision). General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendments had no impact on the consolidated financial statements of the Group.

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

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

### **Property, Plant and Equipment: Proceeds before Intended Use – Amendments to KIFRS 1116 Leases**

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

## 2. Summary of significant accounting policies (cont'd)

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

The amendment permits a subsidiary that elects to apply paragraph D16(1) of KIFRS 1101 to measure cumulative translation differences using the amounts reported in the parent's consolidated financial statements, based on the parent's date of transition to KIFRS, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101. These amendments had no impact on the consolidated financial statements of the Group as it is not a first-time adopter.

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

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

### **KIFRS 1041 *Agriculture – Taxation in fair value measurements***

The amendment removes the requirement in paragraph 22 of KIFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of KIFRS 1041. These amendments had no impact on the consolidated financial statements of the Group as it did not have assets in scope of KIFRS 1041 as of the reporting date.

## **Significant accounting policies**

Significant accounting policies applied to the preparation of the consolidated financial statements are as follows. Unless otherwise stated, the accounting policies have been continuously applied in the stated accounting periods.

### ***Business combinations and goodwill***

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date fair value, and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition-related costs are expensed as incurred and included in administrative expenses.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as of the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

Any contingent consideration to be transferred by the acquirer will be recognized at fair value at the acquisition date. Contingent consideration classified as an asset or liability that is a financial instrument is measured at fair value with the changes in fair value recognized in profit or loss or other comprehensive income in accordance with KIFRS 1109. Contingent consideration classified as equity is not remeasured, and its subsequent settlement is accounted for within equity. Other contingent consideration that is not within the scope of KIFRS 1109 is measured at fair value at each reporting date with changes in fair value recognized in accordance with the appropriate accounting standards.

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

## 2. Summary of significant accounting policies (cont'd)

### ***Business combinations and goodwill (cont'd)***

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

Where goodwill has been allocated to a cash-generating unit (CGU) and part of the operation within that unit is disposed of, the goodwill associated with the disposed operation is included in the carrying amount of the operation when determining the gain or loss on disposal. Goodwill disposed in these circumstances is measured based on the relative values of the disposed operation and the portion of the CGU retained.

### ***Investments in associates and joint ventures***

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

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

The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries. The Group's investments in its associate and joint venture are accounted for using the equity method.

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

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

The aggregate of the Group's share of profit or loss of an associate and a joint venture is shown on the face of the consolidated statement of profit or loss and other comprehensive income outside operating profit and represents profit or loss after tax and non-controlling interests in the subsidiaries of the associate or joint venture. The financial statements of the associate or joint venture are prepared for the same reporting period as the Group. When necessary, adjustments are made to bring the accounting policies in line with those of the Group.

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

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

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

## 2. Summary of significant accounting policies (cont'd)

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

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

When a Group entity undertakes its activities under joint operations, the Group as a joint operator recognizes in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;
- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The results of operations and assets and liabilities of joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with KIFRS 1105.

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

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

### *Revenue from contracts with customers*

The Group operates a project to provide road installation, management, and road-related unit services. Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group determined itself as the principal in contracts with customers as it controls promised goods or services in providing goods or services to the customer.

### *Leases*

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

#### 1) Group as a lessee

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

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

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

## 2. Summary of significant accounting policies (cont'd)

### Leases (cont'd)

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment. Refer to the accounting policies in section, Impairment of property and equipment and intangible assets other than goodwill.

#### ii) Lease liabilities

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

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

The Group's lease liabilities are included in interest-bearing loans and borrowings.

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

The Group applies the short-term lease recognition exemption to its short-term leases of machinery, furniture and fixtures, etc. (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office supplies that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term.

#### 2) Group as a lessor

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

### Foreign currencies

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

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

## 2. Summary of significant accounting policies (cont'd)

### **Foreign currencies (cont'd)**

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

- exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences arising from transactions to avoid specific foreign currency risk; and
- exchange differences on monetary items that is receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur in the foreseeable future (therefore forming part of the net investment in the foreign operation). Such exchange differences are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.

### **Borrowing costs**

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

### **Government grants**

Government grants are recognized when there is reasonable assurance that the grant will be received and all attached conditions will be complied with.

The benefit of a government loan at a below-market rate of interest is treated as a government grant. The benefit of the below-market rate of interest shall be measured as the difference between the initial carrying value of the loan determined in accordance with KIFRS 1109 and the proceeds received.

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

Grants related to income shall be recognized as income on a systematic basis over the periods in which the entity recognizes as expenses that related costs for which the grants are intended to compensate. A government grant that becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs shall be recognized in profit or loss of the period in which it becomes receivable.

### **Retirement and termination benefits**

In relation to the defined benefit plan, the defined benefit obligation is calculated by performing an actuarial evaluation at the end of each reporting period using the Projected Unit Credit Method by an independent actuary.

Remeasurements, comprising actuarial gains and losses, any change in the effect of the asset ceiling (if applicable) and the return on plan assets (excluding interest), are recognized in other comprehensive income during the period in which they occur and are immediately reflected in the consolidated statement of financial position. Remeasurements recognized in other comprehensive income are transferred directly to retained earnings and will not be reclassified to profit or loss.

Past service cost is recognized in profit or loss in the period of a plan amendment. Net interest is determined by multiplying the discount rate at the beginning of the period by the net defined benefit liability or asset. Defined benefit costs are composed of service cost (current service cost, past service cost and any gain or loss on settlement.), net interest expense (income) and remeasurement.

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

## 2. Summary of significant accounting policies (cont'd)

### *Retirement and termination benefits (cont'd)*

Defined benefit obligation recognized in the consolidated statement of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

The Group shall recognize a liability for termination benefits at the earlier of the following dates:

- (a) when the Group can no longer withdraw the offer of those benefits; and
- (b) when the Group recognizes costs for a restructuring

Discretionary contributions made by employees or third parties reduce service cost upon payment of these contributions to the plan. When the formal terms of the plans specify that there will be contributions from employees or third parties, the accounting depends on whether the contributions are linked to service, as follows:

If the contributions are not linked to services (e.g., contributions are required to reduce a deficit arising from losses on plan assets or from actuarial losses), they are reflected in the remeasurement of the net defined benefit liability (asset).

If contributions are linked to services, they reduce service costs. For the amount of contribution that is dependent on the number of years of service, the entity reduces service cost by attributing the contributions to periods of service using the attribution method required by KIFRS 1019 paragraph 70 for the gross benefits. For the amount of contribution that is independent of the number of years of service, the entity reduces service cost in the period in which the related service is rendered in accordance with KIFRS 1019 paragraph 70.

### *Income taxes*

Income tax expense consists of current tax and deferred tax.

#### 1) Current tax

Current tax is calculated based on taxable income for the current period. Taxable profit differs from profit before income tax in the consolidated statement of profit or loss and other comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. Current tax liabilities shall be measured using the tax rates that have been enacted or substantively enacted by the end of the reporting period.

#### 2) Deferred tax

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

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

## 2. Summary of significant accounting policies (cont'd)

### *Income taxes (cont'd)*

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

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

For the purpose of measuring deferred tax liabilities and deferred tax assets for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted; the presumption is rebutted when the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment properties over time, rather than through sale.

### 3) Current and deferred taxes for the year

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

### *Property and equipment*

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

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

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

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

	<u>Estimated useful lives (years)</u>
Buildings	8–30
Structures	8–30
Machineries	4–10
Information technology equipment	4–10
Vehicles	4–6
Others	4–8

## 2. Summary of significant accounting policies (cont'd)

### *Property and equipment (cont'd)*

If each part of an item of property and equipment has a cost that is significant in relation to the total cost of the item, it is depreciated separately.

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

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

### *Investment properties*

Investment properties are properties held to earn rentals and/or for capital appreciation (including property under construction for such purposes). Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are reported at cost less accumulated depreciation and accumulated impairment losses.

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

While land is not depreciated, all other investment property is depreciated based on the respective assets' estimated useful lives of 8–30 years using the straight-line method.

Depreciation methods, residual values and useful lives of investment properties are reviewed at the end of each reporting period, and if it is deemed appropriate to change them, they are accounted for as changes in accounting estimates.

An investment property is derecognized upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. Any gain or loss arising on derecognition of the investment property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the investment property is derecognized.

### *Intangible assets*

#### 1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, and if it is deemed appropriate to change them, they are accounted for as changes in accounting estimates. Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

Amortization expense is computed on the estimated useful lives of the assets shown below:

	<u>Estimated useful lives (years)</u>	<u>Amortization</u>
Industrial property rights	5–50	Straight-line method
Software	4–5	Straight-line method
Development costs	5	Straight-line method
Expressway operating rights	-	Investment cost recovery method

## 2. Summary of significant accounting policies (cont'd)

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

#### 2) Internally generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

Expenditure arising from development (or from the development phase of an internal project) is recognized as an intangible asset if, and only if, the development project is designed to produce new or substantially improved products, and the Group can demonstrate the technical and economic feasibility and measure reliably the resources attributable to the intangible asset during its development.

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria. Where no internally generated intangible asset can be recognized, development expenditure is recognized in profit or loss in the period in which it is incurred.

Subsequent to initial recognition, internally generated intangible assets are reported at cost, less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

#### 3) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

#### 4) Derecognition of intangible assets

An intangible asset is derecognized on disposal or when no future economic benefits are expected from its use. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

### *Impairment of property and equipment and intangible assets other than goodwill*

At the end of each reporting period, the Group reviews the carrying amounts of its property and equipment and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell or value in use. If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount and the reduced amount is recognized in profit or loss.

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

## 2. Summary of significant accounting policies (cont'd)

### ***Inventories***

Inventories are stated at the lower of cost or net realizable value. Cost of inventories, except for those in transit, are measured under the weighted-average method and consists of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale.

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

### ***Provisions***

A provision shall be recognized when:

- (a) an entity has a present obligation (legal or constructive) as a result of a past event;
- (b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and
- (c) a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material). The discount rate used is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage is recognized in profit or loss as finance costs.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

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

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

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

#### 1) Financial assets

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

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

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

## 2. Summary of significant accounting policies (cont'd)

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

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

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

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

### **Subsequent measurement**

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

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

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

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

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

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

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

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

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

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

The Group's debt instruments at fair value through OCI is included in debt instruments classified as non-current assets.

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

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

## 2. Summary of significant accounting policies (cont'd)

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

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

The Group can elect to classify irrevocably its non-listed equity investments under this category.

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

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

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

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if:

- (a) the economic characteristics and risks are not closely related to the host;
- (b) a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative;  
and
- (c) the hybrid contract is not measured at fair value through profit or loss.

Embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

### ***Financial assets at fair value through profit or loss(cont'd)***

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

## **Derecognition**

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

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

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognize the transferred asset to the extent of its continuing involvement. In that

## 2. Summary of significant accounting policies (cont'd)

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

case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

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

#### 2) Impairment of financial assets

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

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

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

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

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

For debt instruments at fair value through OCI, the Group applies the low credit risk simplification. At every reporting date, the Group evaluates whether the debt instrument is considered to have low credit risk using all reasonable and supportable information that is available without undue cost or effort. In making that evaluation, the Group reassesses the internal credit rating of the debt instrument. In addition, the Group considers that there has been a significant increase in credit risk when contractual payments are more than 30 days past due.

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

The Group considers a financial asset in default when contractual payments are 1 year past due. However, in certain cases, the Group may also consider a financial asset to be in default when internal or external information indicates that the Group is unlikely to receive the outstanding contractual amounts in full before taking into account any credit enhancements held by the Group. A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

## 2. Summary of significant accounting policies (cont'd)

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

#### 3) Financial liabilities

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

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

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

The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, and derivatives liabilities.

##### **Subsequent measurement**

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

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

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

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

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

##### ***Loans and borrowings***

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

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

This category generally applies to interest-bearing loans and borrowings. For more information, refer to note on borrowings and bonds.

##### **Derecognition**

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

##### **Offsetting of financial instruments**

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

## 2. Summary of significant accounting policies (cont'd)

### Derivative financial instruments

#### Initial recognition and subsequent measurement

Derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative. Changes of derivative's fair value are directly recognized in profit or loss.

## 3. Significant accounting judgments, estimates and assumptions

In the preparation of the Group's consolidated financial statements, management is required to apply accounting policies and make judgments, estimation and assumptions affecting the carrying amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. The management's significant judgments about the application of the Group's accounting policies and the main resources of the uncertainty are as follows:

### (1) Fair value of financial instruments

The Group uses valuation techniques that include inputs that are not based on observable market data to estimate the fair value of certain type of financial instruments. The Group believes that the chosen valuation techniques and assumptions used are appropriate in determining the fair value of financial instruments.

### (2) Provisions

As described in Note 21, the Group recognized provisions for litigation and others. These provisions are determined by estimation according to past experiences. Meanwhile, the Group provides performance awards according to management performance that is evaluated by Ministry of Strategy and Finance. As described in Note 21, these performance awards are recognized as provisions for employee benefits.

### (3) Defined benefit obligation

The Group's defined benefit obligation is determined based on the actuarial valuation carried out at the end of each annual reporting period. Actuarial assumptions are the Group's best estimates of the variables in determining the cost of providing retirement benefits, such as discount rates, rates of expected future salary increases and mortality rates. Significant estimation uncertainty is likely to persist in making such assumptions due to the long-term nature of retirement benefit plan. Additional items are described in Note 20.

### (4) Income taxes

The Group recognized the current taxes and deferred taxes through the best estimation of expected tax effect that is expected in future as a result of business activities during the year ended December 31, 2020. However, the final taxation may differ with the estimation; this difference may influence current tax and deferred tax assets and liabilities where the final tax effect is decided.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**4. Segment information**

The Group is organized into four different strategic operating segments. Each operating segment separately provides products and services, and the Group manages each operating segment individually as technological and marketing strategies applied to each operating segment are different. The Chief Operating Decision Maker reviews the internal reporting data for each strategic business at least quarterly.

Operating segments of the Group are as follows:

Operating segments	Description	Customers
Toll business	Highway	Highway user
Incidental business	Expressway rest stop, oil station lease and research service	Expressway rest stop operator, etc.
Supporting business	Consignment management service	Government, etc.
Construction business	Road construction	Government

The table below provides information for each segment for the years ended December 31, 2022 and 2021 (Korean won in millions):

	2022		
	Total revenue	Revenue from external customers	Operating profit
Toll business	₩ 4,207,980	₩ 4,207,980	₩ 756,143
Incidental business	1,096,779	1,096,779	98,001
Supporting business	180,333	180,333	-
Construction business	5,294,383	5,294,383	-
	₩ 10,779,475	₩ 10,779,475	₩ 854,144
	2021		
	Total revenue	Revenue from external customers	Operating profit
Toll business	₩ 4,178,844	₩ 4,178,844	₩ 575,766
Incidental business	871,477	871,477	42,782
Supporting business	245,916	245,916	-
Construction business	5,238,835	5,238,835	-
	₩ 10,535,072	₩ 10,535,072	₩ 618,548

All of the Group's revenues are generated in Korea.

The Government is a major customer of the Group's supporting business and construction business with revenue amounting to ₩5,474,716 million and ₩5,484,751 million for the years ended December 31, 2022 and 2021, respectively. No other major customer exceeds 10% of the Group's revenue.

**5. Cash and cash equivalents**

Cash and cash equivalents of the consolidated statements of cash flows include cash and bank deposits, net of bank overdrafts. Cash and cash equivalents as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022	December 31, 2021
Cash	₩ 802,386	₩ 697,174
Cash equivalents	28,926	243,200
	831,312	940,374
Less: government grants for consignment management service	(324,072)	(382,897)
	₩ 507,240	₩ 557,477

## 5. Cash and cash equivalents (cont'd)

Meanwhile, as of December 31, 2022, the amount of cash expected to be returned to the government (restricted in use) due to the sale of idle land is ₩2,406 million (December 31, 2021, ₩13,006 million).

## 6. Short-term financial instruments

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

	December 31, 2022	December 31, 2021
Short-term financial instruments	₩ 60,000	₩ 60,000

## 7. Derivatives

Details of derivative instruments as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Financial assets at FVTPL:				
Interest rate swap	₩ -	-	₩ 486	₩ 3,766
	₩ -	-	₩ 486	₩ 3,766
Derivatives assets:				
Currency swap	₩ 28,692	191,431	₩ 10,990	₩ 159,693
Interest rate swap	1,965	40,520	4,882	6,056
	₩ 30,657	231,951	₩ 15,872	₩ 165,749
Financial liabilities at FVTPL:				
Non-derivative financial liabilities (*)	₩ -	-	₩ 103,135	₩ -
Interest rate swap	-	17,741	1,990	6,446
	₩ -	17,741	₩ 105,125	₩ 6,446
Derivatives liabilities:				
Currency swap	₩ -	72,305	₩ -	₩ 5,407
Interest rate swap	-	33,490	180	18,248
	₩ -	105,795	₩ 180	₩ 23,655

(\*) The Group has entered into an interest rate swap contract to hedge risk of fair value fluctuations of bonds due to changes in interest rates. The Group may eliminate or reduce an accounting mismatch arising from classification of bonds and derivative instruments at amortized cost and fair value, respectively, through designating bonds as financial liabilities at fair value through profit or loss.

Details of currency swaps as of December 31, 2022 are as follows (In millions of Korean won, EUR, USD, HKD, CHF, SEK, CAD and AUD):

	Bank	Contract period	Contract amount		Contract interest rate		Contract exchange rate	
			Selling amount	Buying amount	Sell	Buy		
Cash flow hedge	Deutsche Bank Group	2012.05.07–2024.05.07	EUR	45	67,733	3.88%	3.98%	1,505.17
Cash flow hedge	Deutsche Bank Group	2012.05.07–	EUR	23	34,619	4.00%	4.06%	1,505.17

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

	Bank	Contract period	Contract amount		Contract interest rate		Contract exchange rate	
			Selling amount	Buying amount	Sell	Buy		
		2027.05.07						
Cash flow hedge	NH Investment & Securities Co., Ltd.	2015.03.18–2027.03.18	USD	50	56,150	3.02%	2.42%	1,123.00
Cash flow hedge	Korea EXIM Bank	2015.11.30–2030.11.30	USD	50	58,000	3.21%	2.41%	1,160.00
Cash flow hedge	Nomura Securities Co.	2015.12.08–2026.06.08	USD	100	115,000	3.10%	2.33%	1,150.00
Cash flow hedge	Nomura Securities Co.	2016.04.26–2026.10.26	USD	200	232,000	2.70%	1.84%	1,160.00
Cash flow hedge	Korea EXIM Bank	2016.07.05–2031.07.05	USD	100	116,000	2.57%	1.71%	1,160.00
Cash flow hedge	Nomura Securities Co.	2017.04.28–2032.04.28	SEK	720	92,304	2.31%	2.32%	128.20
Cash flow hedge	Korea EXIM Bank.	2017.05.11–2032.05.11	CAD	135	112,725	3.03%	2.32%	835.00
Cash flow hedge	Korea Development Bank	2017.06.07–2024.06.07	CHF	100	112,200	0.25%	2.24%	1,122.00
Cash flow hedge	IBK Bank	2017.06.07–2024.06.07	CHF	50	56,100	0.25%	2.24%	1,122.00
Cash flow hedge	Korea Development Bank.	2017.06.07–2024.06.07	CHF	80	89,760	0.25%	2.24%	1,122.00
Cash flow hedge	Nomura Securities Co	2018.03.05–2023.03.05	HKD	800	110,320	3.02%	2.45%	137.90
Cash flow hedge	Woori Bank	2020.06.02–2025.06.02	USD	100	123,000	3m LIBOR+1.20%	1.07%	1,230.00
Cash flow hedge	Korea Development Bank	2020.09.02–2023.09.02	AUD	125	106,813	0.93%	0.51%	854.50
Cash flow hedge	Hana Bank.	2020.09.02–2023.09.02	AUD	100	85,450	0.93%	0.51%	854.50
Cash flow hedge	Kookmin Bank	2020.09.02–2023.09.02	AUD	225	192,263	BBSW+0.72%	0.52%	854.50
Cash flow hedge	Kookmin Bank	2021.05.17–2026.05.17	USD	150	165,880	1.125%	0.99%	1,113.80
Cash flow hedge	Shinhan Bank	2021.05.17–2026.05.17	USD	100	110,587	1.125%	0.99%	1,113.80
Cash flow hedge	Hana Bank	2021.05.17–2026.05.17	USD	150	165,880	1.125%	0.99%	1,113.80
Cash flow hedge	Korea Development Bank	2021.05.17–2026.05.17	USD	100	110,587	1.125%	1.025%	1,113.80
Cash flow hedge	Korea EXIM Bank	2022.05.18–2025.05.18	USD	400	510,000	3.625%	3.105%	1,275.00
Cash flow hedge	Hana Bank	2022.05.18–2025.05.18	USD	100	127,500	3.625%	3.100%	1,275.00
Cash flow hedge	Hana Bank	2022.10.28–2027.10.28	USD	50	72,000	SOFR+1.40%	4.755%	1,440.00
Cash flow hedge	Kookmin Bank	2022.11.04–2024.11.04	HKD	500	91,250	5.400%	4.200%	182.50
Cash flow hedge	Kookmin Bank	2022.11.07–2024.11.07	HKD	680	123,352	5.280%	4.190%	181.40
Cash flow hedge	Kookmin Bank	2022.11.07–2024.11.07	SGD	20	20,160	5.000%	4.640%	1,008.00
Cash flow hedge	Korea Development Bank	2022.11.07–2024.11.07	SGD	100	100,800	5.000%	4.800%	1,008.00

Details of currency swaps as of December 31, 2021 are as follows (In millions of Korean won, EUR, USD, HKD, CHF, CNY, SEK, CAD and AUD):

	Bank	Contract period	Contract amount		Contract interest rate		Contract exchange rate	
			Selling amount	Buying amount	Sell	Buy		
Cash flow hedge	Woori Bank	2012.03.02–2022.03.02	HKD	452	₩ 65,856	4.00%	3.96%	145.70
Cash flow hedge	Deutsche Bank Group	2012.05.07–2024.05.07	EUR	45	67,733	3.88%	3.98%	1,505.17
Cash flow hedge	Deutsche Bank Group	2012.05.07–2027.05.07	EUR	23	34,619	4.00%	4.06%	1,505.17

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

	Bank	Contract period	Contract amount		Contract interest rate		Contract exchange rate
			Selling amount	Buying amount	Sell	Buy	
Cash flow hedge	NH Investment & Securities Co., Ltd.	2015.03.18–2027.03.18	USD 50	56,150	3.02%	2.42%	1,123.00
Cash flow hedge	Korea EXIM Bank	2015.11.30–2030.11.30	USD 50	58,000	3.21%	2.41%	1,160.00
Cash flow hedge	Nomura Securities Co.	2015.12.08–2026.06.08	USD 100	115,000	3.10%	2.33%	1,150.00
Cash flow hedge	Nomura Securities Co.	2016.04.26–2026.10.26	USD 200	232,000	2.70%	1.84%	1,160.00
Cash flow hedge	Korea EXIM Bank	2016.07.05–2031.07.05	USD 100	116,000	2.57%	1.71%	1,160.00
Cash flow hedge	Nomura Securities Co.	2017.04.28–2032.04.28	SEK 720	92,304	2.31%	2.32%	128.20
Cash flow hedge	Korea EXIM Bank.	2017.05.11–2032.05.11	CAD 135	112,725	3.03%	2.32%	835.00
Cash flow hedge	Korea Development Bank	2017.06.07–2024.06.07	CHF 100	112,200	0.25%	2.24%	1,122.00
Cash flow hedge	IBK Bank	2017.06.07–2024.06.07	CHF 50	56,100	0.25%	2.24%	1,122.00
Cash flow hedge	Korea Development Bank.	2017.06.07–2024.06.07	CHF 80	89,760	0.25%	2.24%	1,122.00
Cash flow hedge	Nomura Securities Co	2018.03.05–2023.03.05	HKD 800	110,320	3.02%	2.45%	137.90
Cash flow hedge	Societe Generale	2018.03.28–2021.03.28	CNY 1,300	219,570	4.73%	2.12%	168.90
Cash flow hedge	Kookmin Bank	2018.10.22–2021.10.22	USD 200	226,860	3.63%	1.73%	1,134.30
Cash flow hedge	Korea EXIM Bank	2018.10.22–2021.10.22	USD 100	113,430	3.63%	1.73%	1,134.30
Cash flow hedge	Korea Development Bank	2019.07.25–2022.07.25	USD 150	177,150	3M LIBOR+0.64%	1.07%	1,181.00
Cash flow hedge	Korea Development Bank	2019.11.25–2022.11.25	USD 70	81,410	3M LIBOR+0.60%	1.21%	1,163.00
Cash flow hedge	Hana Bank.	2019.11.25–2022.11.25	USD 100	116,300	3M LIBOR+0.60%	1.21%	1,163.00
Cash flow hedge	Kookmin Bank	2019.11.25–2022.11.25	USD 100	116,300	3M LIBOR+0.60%	1.21%	1,163.00
Cash flow hedge	Woori Bank	2020.06.02–2025.06.02	USD 100	123,000	3m LIBOR+1.20%	1.07%	1,230.00
Cash flow hedge	Korea Development Bank	2020.09.02–2023.09.02	AUD 125	106,813	0.93%	0.51%	854.50
Cash flow hedge	Hana Bank.	2020.09.02–2023.09.02	AUD 100	85,450	0.93%	0.51%	854.50
Cash flow hedge	Kookmin Bank	2020.09.02–2023.09.02	AUD 225	192,263	BBSW+0.72%	0.52%	854.50
Cash flow hedge	Shinhan Bank	2021.05.17–2026.05.17	USD 100	111,380	1.125%	0.99%	1,113.80
Cash flow hedge	Hana Bank	2021.05.17–2026.05.17	USD 150	167,070	1.125%	0.99%	1,113.80
Cash flow hedge	Korea Development Bank	2021.05.17–2026.05.17	USD 100	111,380	1.125%	0.99%	1,113.80

Details of interest rate swaps as of December 31, 2022 are as follows (Korean won in millions):

	Bank	Contract period	Notional amount	Interest rate	
				Sell	Buy
Cash flow hedge	Nomura Securities Co.	2013.12.09–2023.12.09	30,000	4.35%x n/N, 30/360 n: KRW CMS10 rate<6% & USD CMS10 <6% N:365 1 year-2 years: 4.25%, 30/630	3.81%
Cash flow hedge	Nomura Securities Co.	2014.04.04–2024.04.04	30,000	3-10 years: 3%, 30/360 reference average spread for specified periods 0.00% (minimum), 5.50% (maximum) Spread Reference daily spread calculation: 20Y EUR Swap interest rate 0% (minimum), 6% (maximum) 1) Before switch options are exercised. One year: 4.00%, 2Y-10Y: Annual Min (4.20%, 3.00x(average spread (20 EUR CMS – 2 EUR CMS))xN/M), (minimum 0.00%) 2) After switch options are exercised.	3.56%
Cash flow hedge	Morgan Stanley	2014.09.04–2024.09.04	100,000	Annual 3.65% (Fixed rate) - Two year after the date of issue, it is possible to exercise switch options annually to the issuer –	3.08%

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

	Bank	Contract period	Notional amount	Sell	Buy
				before exercising switch options, the written notice has to be submitted to Korea Securities Depository	
Cash flow hedge	Deutsche Bank Group	2015.05.15–2030.05.15	30,000	One year: 4.50% 2Y-:8.0% - 0.1 x (average SIFMA/average 3M LIBOR) (Cap 5.50%, Floor 0.01%) or 5% fixed rate (Swap bank switch option)	2.69%
Cash flow hedge	Nomura Securities Co.	2015.08.19–2030.08.19	50,000	1) Before switch options are exercised One year: 3.80% 2Y-15Y: 2.11x (USD 30Y CMS -USD 2Y CMS)+0.2% (Cap 5.50%, Floor 0.00% ) Or 2.8% fixed rate (Swap bank switch option)	2.46%
Cash flow hedge	Nomura Securities Co.	2015.09.23–2030.09.23	50,000	2) After switch options are exercised. Annual 2.8% (Fixed rate) – One year after the date of issue, it is possible to exercise switch options annually to the issuer – before exercising switch options, the written notice has to be submitted to Korea Securities Depository	
Cash flow hedge	Nomura Securities Co.	2015.10.28–2030.10.28	50,000	1) Before switch options are exercised. One year: 4.00% 4.0%*(KRW 10Y CMS -USD 1Y CMS) (Cap 4.50%, Floor 0.25%) or 3.0% fixed rate (Swap bank switch option)	2.28%
Cash flow hedge	Nomura Securities Co.	2015.10.28–2030.10.28	50,000	2) After switch options are exercised. Annual 3.0% (Fixed rate) – One year after the date of issue, it is possible to exercise switch options annually to the issuer – before exercising switch options, the written notice has to be submitted to Korea Securities Depository	
Cash flow hedge	NH Investment & Securities Co., Ltd.	2016.06.23–2031.06.23	30,000	One year: 3.90% 3.3%*(KRW 10Y CMS -USD 1Y CMS) (Cap 4.50%, Floor 0.00%) or 2.8% fixed rate (Swap bank switch option)	1.60%
Cash flow hedge	Hana Bank	2018.02.26–2023.02.24	150,000	2) After switch options are exercised. Annual 3.0% (Fixed rate) – One year after the date of issue, it is possible to exercise switch options annually to the issuer – before exercising switch options, the written notice has to be submitted to Korea Securities Depository	2.18%
Cash flow hedge	Hana Bank	2018.03.21–2023.03.21	150,000	One year: 2.80%, 2.3%*(EUR 30Y CMS - EUR 5Y CMS) (Cap 3.00%, Floor 0.00%)	1.60%
Cash flow hedge	Hana Bank	2018.11.08–2023.11.08	100,000	CD91+0.34%	2.68%
Cash flow hedge	Hana Bank	2020.06.25–2025.06.24	100,000	CD91+0.34%	2.65%
Cash flow hedge	Hana Bank	2021.03.24–2026.03.24	100,000	CD91+0.16%	2.20%
Cash flow hedge	Hana Bank	2021.08.09–2026.08.09	100,000	CD+0.23%	1.24%
Cash flow hedge	Hana Bank	2021.11.24–2026.11.24	200,000	CD+0.23%	1.71%
Trading	Societe Generale	2015.12.17–2024.03.17	90,000	CD+0.23%	1.82%
Trading	Societe Generale	2016.12.08–2025.03.08	100,000	CD+0.23%	2.40%
Trading	IBK Bank	2018.12.29–2038.11.29	50,000	CD+0.23%	4.48%+7.76% x(1-n/N) (n: days of USD CMS 10Y-2Y rate difference≥0, N: days for interest) 4.54%+a% x(1-n/N) n: [ USDCMS3 0y- USDCMS2y ≥0.00% 1Y~10Y: 2.134% 11Y~20Y: CD91+0.15%
Cash flow hedge	Nomura Securities Co.	2022.04.14–2032.04.14	40,000	1)1.5 years:4.27% 2)After: 4.27*AccrualFactor(n/N)(n:CD-KTB≥0&KRWIRS10y-2y≥-0.2%, 30/360 (but,n/N>=75%,100%)	3.25%

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

	Bank	Contract period	Notional amount	Sell	Buy
				1)1.5 years:4.20%	
				2)After: $4.20 \times \text{AccrualFactor}(n/N)$ (n: Days when conditions 1 and 2 are both met, - condition 1:KRW10YCMS-KRW2YCMS>=-0.2%-condition 2:KRWCD3M<=5.0%) N: interest calculation days 30/360 (but,n/N>=75%,100%)	
Cash flow hedge	Hana Investment & Securities Co., Ltd.	2022.06.02–2032.06.02	50,000		3.28%
Cash flow hedge	Hana Bank	2022.03.10–2027.03.10	100,000	CD+0.24%	2.73%
Cash flow hedge	Hana Bank	2022.04.26–2027.04.26	100,000	CD+0.31%	3.33%
Cash flow hedge	Hana Bank	2022.08.09–2027.08.09	100,000	CD+0.57%	3.65%
Cash flow hedge	Shinhan Bank	2022.09.30–2027.09.30	100,000	CD+0.59%	4.97%
Cash flow hedge	Hana Bank	2022.10.18–2027.10.18	100,000	CD+0.87%	5.11%

Details of interest rate swaps as of December 31, 2021 are as follows (Korean won in millions):

	Bank	Contract period	Notional amount	Sell	Buy
Fair value hedge	Nonghyup bank	2007.07.27–2022.07.27	100,000	5.60%	CD91+0.08%
Cash flow hedge	Deutsche Bank Group	2012.09.20–2022.09.20	100,000	One year: 4.00%, 2–10 years: 2.24% + 0.10 × (70%-Average SIFMA/Average USD 3M LIBOR) minimum 0%, maximum 6%	2.97%
Cash flow hedge	Nomura Securities Co.	2013.12.09–2023.12.09	30,000	4.35%× n/N, 30/360 n: KRW CMS10 rate<6% & USD CMS10 <6% N:365 1 year-2 years: 4.25%, 30/630	3.81%
Cash flow hedge	Nomura Securities Co.	2014.04.04–2024.04.04	30,000	3-10 years: 3%, 30/360 reference average spread for specified periods 0.00% (minimum), 5.50% (maximum) Spread Reference daily spread calculation: 20Y EUR Swap interest rate 0% (minimum), 6% (maximum) 1) Before switch options are exercised. One year: 4.00%, 2Y-10Y: Annual Min (4.20%, 3.00x(average spread (20 EUR CMS – 2 EUR CMS))xN/M), (minimum 0.00%)	3.56%
Cash flow hedge	Morgan Stanley	2014.09.04–2024.09.04	100,000	2) After switch options are exercised. Annual 3.65% (Fixed rate) - Two year after the date of issue, it is possible to exercise switch options annually to the issuer – before exercising switch options, the written notice has to be submitted to Korea Securities Depository	3.08%
Cash flow hedge	Deutsche Bank Group	2015.05.15–2030.05.15	30,000	One year: 4.50% 2Y-8.0% - 0.1 x (average SIFMA/average 3M LIBOR) (Cap 5.50%, Floor 0.01%) or 5% fixed rate (Swap bank switch option) 1) Before switch options are exercised One year: 3.80%	2.69%
Cash flow hedge	Nomura Securities Co.	2015.08.19–2030.08.19	50,000	2Y-15Y: 2.11x (USD 30Y CMS -USD 2Y CMS)+0.2% (Cap 5.50%, Floor 0.00% ) Or 2.8% fixed rate (Swap bank switch option) 2) After switch options are exercised. Annual 2.8% (Fixed rate) – One year after the date of issue, it is possible to exercise switch options annually to the issuer – before exercising switch options, the written notice has to be submitted to Korea Securities Depository	2.46%
Cash flow hedge	Nomura Securities Co.	2015.09.23–2030.09.23	50,000	1) Before switch options are exercised. One year: 4.00% 4.0%*(KRW 10Y CMS -USD 1Y CMS) (Cap 4.50%, Floor 0.25%) or 3.0% fixed rate (Swap bank switch option) 2) After switch options are exercised. Annual 3.0% (Fixed rate) – One year after the date of issue, it is possible to exercise switch options annually to the issuer – before exercising switch options, the written notice has to be submitted to Korea Securities Depository	2.28%
Cash flow hedge	Nomura Securities Co.	2015.10.28–2030.10.28	50,000	One year: 3.90% 3.3%*(KRW 10Y CMS -USD 1Y CMS) (Cap 4.50%, Floor 0.00%) or 2.8% fixed rate (Swap bank switch option) 2) After switch options are exercised.	2.18%

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

	Bank	Contract period	Notional amount	Sell	Buy
				Annual 3.0% (Fixed rate) – One year after the date of issue, it is possible to exercise switch options annually to the issuer – before exercising switch options, the written notice has to be submitted to Korea Securities Depository	
				One year: 2.80%, 2.3%*(EUR 30Y CMS - EUR 5Y CMS) (Cap 3.00%, Floor 0.00%)	
Cash flow hedge	NH Investment & Securities Co., Ltd.	2016.06.23–2031.06.23	30,000		1.60%
Cash flow hedge	Hana Bank	2017.03.22–2022.03.22	200,000	CD91+0.22%	2.00%
Cash flow hedge	Hana Bank	2018.02.26–2023.02.24	150,000	CD91+0.34%	2.68%
Cash flow hedge	Hana Bank	2018.03.21–2023.03.21	150,000	CD91+0.34%	2.65%
Cash flow hedge	Hana Bank	2018.11.08–2023.11.08	100,000	CD91+0.16%	2.20%
Cash flow hedge	Hana Bank	2020.06.25–2025.06.24	100,000	CD91+0.34%	1.24%
Cash flow hedge	Hana Bank	2021.03.24–2026.03.24	100,000	CD91+0.23%	1.71%
Cash flow hedge	Hana Bank	2021.08.09–2026.08.09	100,000	CD91+0.23%	1.82%
Cash flow hedge	Hana Bank	2021.11.24–2026.11.24	100,000	CD91+0.23%	2.40%
Trading	JP Morgan Chase & Co.	2009.05.21–2022.07.27	50,000	CD91+0.08%	4.08%
Trading	Deutsche Bank Group	2009.05.21–2022.07.27	50,000	CD91+0.08%	4.08%
					4.92%+7.85% ×(1-n/N)
Trading	Societe Generale	2015.07.30–2022.10.30	70,000	5.82%	(n: days of USD CMS 10Y-2Y rate difference ≥0, N: days of interest)
					4.48%+7.76% ×(1-n/N)
Trading	Societe Generale	2015.12.17–2024.03.17	90,000	5.38%	(n: days of USD CMS 10Y-2Y rate difference ≥0, N: days for interest)
					4.6%+ [ a%×(1-n/N) ]
Trading	Nomura Securities Co.	2017.01.11–2022.04.11	100,000	5.30%	n: [ KRW CMS 10y - USD CMS 10y ≥ -1.25% 4.54%+a% ×(1-n/N)
					n:
Trading	Societe Generale	2016.12.08–2025.03.08	100,000	5.24%	[ USDCMS30y -USDCMS2y≥0.00%
					1Y~10Y: 2.134% 11Y~20Y: CD91+0.15%
Trading	IBK Bank	2018.12.29–2038.11.29	50,000	2.40%	

Derivatives transaction gain (loss) for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	Gain (loss) on valuation		Gain (loss) on transaction		Other comprehensive income	
	2022	2021	2022	2021	2022	2021
Hedge accounting applied:						
Currency swap	₩ 66,597	₩ 183,964	₩ 9,611	₩ 16,412	₩ (73,065)	₩ 23,245
Interest rate swap	(3,135)	(5,103)	-	-	19,621	17,317
	₩ 63,462	₩ 178,861	₩ 9,611	₩ 16,412	₩ (53,444)	₩ 40,562

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**7. Derivatives (cont'd)**

	Gain (loss) on valuation		Gain (loss) on transaction		Accumulated comprehensive income (loss)	
	2022	2021	2022	2021	2022	2021
Financial instruments at FVTPL:						
Interest rate swap	₩ (13,558)	₩ (8,406)	₩ (8,405)	₩ (472)	₩ -	₩ -
Bonds	3,135	5,103	5,103	-	-	-
	<u>₩ (10,423)</u>	<u>₩ (3,303)</u>	<u>₩ 3,302</u>	<u>₩ (472)</u>	<u>₩ -</u>	<u>₩ -</u>

**8. Trade and other receivables**

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

	December 31, 2022			
	Receivables	Allowance for doubtful accounts	Present value of discount	Carrying amount
Current:				
Other receivables	₩ 399,747	₩ (6,142)	₩ (84)	₩ 393,521
Non-current:				
Other receivables	124,857	-	(263)	124,594
	<u>₩ 524,604</u>	<u>₩ (6,142)</u>	<u>₩ (347)</u>	<u>₩ 518,115</u>
	December 31, 2021			
	Receivables	Allowance for doubtful accounts	Present value of discount	Carrying amount
Current:				
Other receivables	₩ 358,690	₩ (8,853)	₩ (180)	₩ 349,657
Non-current:				
Other receivables	113,209	-	(302)	112,907
	<u>₩ 471,899</u>	<u>₩ (8,853)</u>	<u>₩ (482)</u>	<u>₩ 462,564</u>

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

	December 31, 2022			
	Receivables	Allowance for doubtful accounts	Present value discount	Carrying amount
Current:				
Other accounts receivable	₩ 389,486	₩ (6,142)	₩ -	₩ 383,344
Accrued income	1,580	-	-	1,580
Short-term deposits	8,681	-	(84)	8,597
	399,747	(6,142)	(84)	393,521
Non-current:				
Long-term deposits	124,857	-	(263)	124,594
	<u>₩ 524,604</u>	<u>₩ (6,142)</u>	<u>₩ (347)</u>	<u>₩ 518,115</u>

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**8. Trade and other receivables (cont'd)**

	December 31, 2021			
	Receivables	Allowance for doubtful accounts	Present value discount	Carrying amount
Current:				
Other accounts receivable	₩ 343,186	₩ (8,853)	₩ -	₩ 334,333
Accrued revenue	928	-	-	928
Short-term deposits	14,576	-	(180)	14,396
	<u>358,690</u>	<u>(8,853)</u>	<u>(180)</u>	<u>349,657</u>
Non-current:				
Long-term deposits	113,209	-	(302)	112,907
	<u>₩ 471,899</u>	<u>₩ (8,853)</u>	<u>₩ (482)</u>	<u>₩ 462,564</u>

**Credit risk and allowance for doubtful accounts**

The above trade and other receivables consist of other accounts receivable, accrued income and deposits which are measured at amortized cost.

The credit period for other accounts receivable is one month; so, the Group does not recognize an allowance for doubtful accounts for other accounts receivable that are not past due or past due but not impaired because of the collateral. The Group's allowance for doubtful accounts is computed based on the average collection rates and history of bad debts for the past five years. The Group recognizes 99% of allowance for doubtful accounts where the aging is more than 30 months past due as these other accounts receivable are not likely to be recovered based on past experiences.

Ageing analysis of other accounts receivable as of December 31, 2022 and 2021 is as follows (Korean won in millions):

	2022	2021
Neither past due nor impaired	₩ 162,402	₩ 134,309
Past due nor impaired:		
- 1 month–7 months	24,570	12,071
- 7–13 months	26,679	28,716
- 13–19 months	10,687	6,724
- 19–25 months	23,077	24,984
- 25–31 months	6,659	8,184
- 31–37 months	12,019	5,943
- More than 37 months	8,877	14,419
Impaired (individually assessed)	-	-
Impaired (collectively assessed):		
- 1–7 months	33,981	31,912
- 7–13 months	15,577	19,292
- 13–19 months	127	988
- 19–25 months	16,183	15,154
- 25–31 months	877	167
- 31–37 months	13,377	9,435
- More than 37 months	34,394	30,888
Deduction: allowance for doubtful accounts	<u>(6,142)</u>	<u>(8,853)</u>
	<u>₩ 383,344</u>	<u>₩ 334,333</u>

The above ageing analysis relates to the current other accounts receivable.

The Group considers changes in credit ratings of the receivables from the beginning of the credit period to the end of the reporting period in determining the recoverability of the receivables. The concentration of credit risk is limited because the number of the customers are very large and the correlation among them is low.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**8. Trade and other receivables (cont'd)**

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

	2022		2021	
Beginning balance	₩	8,853	₩	8,901
Bad debt expenses, net		1,222		2,109
Write-off		(3,933)		(2,157)
Ending balance	₩	6,142	₩	8,853

**9. Financial assets at fair value**

Financial assets at fair value as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		December 31, 2021	
Current financial instruments:				
Financial assets at fair value through profit or loss (*)	₩	72,765	₩	-
Non-current financial instruments:				
Financial assets at fair value through profit or loss (*)	₩	658,387	₩	60,202
Financial assets at fair value through other comprehensive income		24,221		22,181

(\*) ₩486 million of derivatives classified as current and ₩3,766 million of derivatives classified as non-current are excluded from financial assets at fair value through current and non-current profit or loss for the year ended December 31, 2021.

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

	Shares	Percentage of ownership	2022		2021			
			Acquisition cost	Carrying amount	Acquisition cost	Carrying amount		
Seoul-Choonchun Highway	-	-	₩	-	₩	9,880	15,753	
The 2nd Seoul-Incheon Linking Highway Co., Ltd	1,602,230	4.76%		8,011		8,011	3,294	
Seoul-north Highway	4,876,000	10.00%		24,380		24,380	5,007	
Beneficiary certificates	-	-		771,453		20,154	36,148	
			₩	803,844	₩	731,152	62,425	60,202

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

	Shares	Percentage of ownership	2022		2021			
			Acquisition cost	Carrying amount	Acquisition cost	Carrying amount		
DREAMLINE Corporation	181,549	0.83%	₩	44,028	₩	44,028	937	
Korea Overseas Infrastructure & Urban Development Corporation	4,154,400	4.68%		20,772		20,772	21,137	
BAKAD Investment & Operation LLP	-	0.10%		187		107	107	
			₩	64,987	₩	24,221	64,907	22,181

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**9. Financial assets at fair value (cont'd)**

Changes in financial assets at fair value as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022					
	Beginning balance	Acquisition	Disposals	Valuation	Reclassification	Ending balance
Current:						
Financial assets at fair value through profit or loss	₩ -	₩ -	₩ -	₩ -	₩ 72,765	₩ 72,765
Non-current:						
Financial assets at fair value through profit or loss	60,202	751,254	(15,827)	(64,477)	(72,765)	658,387
Financial instruments at fair value through other comprehensive income	22,181	79	-	1,961	-	24,221
	2021					
	Beginning balance	Acquisition (reclassification)	Disposals	Valuation	Ending balance	
Non-current:						
Financial assets at fair value through profit or loss	₩ 42,258	₩ 15,753	₩ (146)	₩ 2,337	₩	₩ 60,202
Financial instruments at fair value through other comprehensive income		21,601	43	-	537	22,181

**10. Loans**

Details of loans as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		
	Nominal value	Present value of discount	Carrying amount
	Loans for tuition (*1)	₩ 2,782	₩ (150)
Loans for housing (*2)	37,435	(5,270)	32,165
Loans for rental housing	325	-	325
	₩ 40,542	₩ (5,420)	₩ 35,122
	December 31, 2021		
	Nominal value	Present value of discount	Carrying amount
Loans for tuition (*1)	₩ 3,027	₩ (204)	₩ 2,823
Loans for housing (*2)	40,486	(5,722)	34,764
Loans for rental housing	447	-	447
	₩ 43,960	₩ (5,926)	₩ 38,034

(\*1) The Group provides loans to its employees, who have worked for more than a year, for the purpose of paying tuition of their children at zero interest rate. Repayment is made in four years (a total of 16 installments), with a two-year grace period after graduation.

(\*2) The Group provides loans at market interest rates to employees without houses in order to stabilize their housing. The loan's repayment period is less than twenty years, with a grace period of less than five years.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

## 11. Inventories

Details of inventories as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		December 31, 2021	
	Acquisition cost	Carrying amounts	Acquisition cost	Carrying amounts
Merchandise	₩ 2,535	₩ 2,535	₩ 1,418	₩ 1,418
Supplies	28,960	28,960	24,103	24,103
Others	1,220	1,220	1,045	1,045
	₩ 32,715	₩ 32,715	₩ 26,566	₩ 26,566

## 12. Non-financial assets

Details of non-financial assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Advance payments	1	-	-	-
Prepaid expenses	₩ 7,278	₩ 7,762	₩ 13,481	₩ 8,292
Greenhouse gas emission rights	129	-	316	-
Other non-financial assets	-	1,676	-	1,676
	₩ 7,408	₩ 9,438	₩ 13,797	₩ 9,968

## 13. Investments in associates and joint ventures

Investments in associates and joint ventures as of December 31, 2022 and 2021 are as follows (Korean won in millions, except percentage of ownership):

Company	Major business activity	Location of incorporation	Percentage of ownership	December 31, 2022	
				Acquisition cost	Carrying amount
Associates:					
Korea Construction Management Corp. (*2)	Building, civil engineering service	Korea	42.50%	₩ 56	₩ -
Highway solar Co., Ltd	New renewable energy service	Korea	29.00%	653	917
BARR O&M LLP	Road and facility operating service	Kazakhstan	40.00%	27	-
				736	917
Joint venture:					
Busan-Ulsan Expressway Co., Ltd. (*1)	Road and facility operating service	Korea	51.00%	839	-
Expressway Solar Power Co., Ltd.(*3)	Expressway solar power projects	Korea	50.00%	1,856	4,741
				2,695	4,741
				₩ 3,431	₩ 5,658

(\*1) The Group and the National Pension Service makes decision on financial policies in accordance with the Implementation Agreement and participate in decision-making on its business policies related to economic activities through the board of directors. Their participation in decision-making, however, could be seen as the share of control, instead of the direct control over Busan-Ulsan Expressway Co., Ltd.'s activities, thereby the investment is classified as a joint venture. The shares of the Group are provided as collateral in relation to the borrowings of the invested company.

(\*2) For the year ended December 31, 2022, the paid-in capital reduction was conducted to maintain proper levels of capital in response to downsize of business and organization scale and improve financial solvency of the Group by recovering from the investment at an early stage. The face value was reduced from ₩10,000 per share to ₩100, resulting in a capital reduction of ₩2,277 million. The difference between the paid-in capital reduction consideration and the carrying amount was recognized as a loss on the disposal of investment stocks of related companies.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**13. Investments in associates and joint ventures(cont'd)**

(\*3) For the year ended December 31, 2022, Expressway Solar Power Co., Ltd. liquidated its stake in Expressway Solar Power No. 1 Limited Company (hereinafter referred to as 'financial investor') in order to improve business profits through fund restructuring. Due to the reduction in paid-in capital of the total shares of financial investors, the number of stocks held by the Group remains unchanged, but the share ratio has changed from 29% to 50%. Group and Korea South-East Power Co., Ltd. are classified as a joint venture because they share control in accordance with the shareholder agreement.

Company	Major business activity	Location of incorporation	December 31, 2021		
			Percentage of ownership	Acquisition cost	Carrying amount
Associates:					
Korea Construction Management Corp. (*2)	Building, civil engineering service	Korea	42.50%	₩ 5,648	₩ -
Expressway Solar Power Co., Ltd.	Expressway solar power projects	Korea	29.00%	1,856	3,084
Highway solar Co., Ltd	New renewable energy service	Korea	29.00%	653	926
				8,157	4,010
Joint venture:					
Busan-Ulsan Expressway Co., Ltd. (1*)	Road and facility operating service	Korea	51.00%	839	-
				839	-
				₩ 8,996	₩ 4,010

(\*1) The Group classified the investee as a joint venture as all financial and operating policies of the investee require joint approval by the Group and the other investors.

(\*2) For the year ended December 31, 2021, paid-in capital reduction was conducted to maintain proper levels of capital in response to downsize of business and organization scale and to improve financial solvency of the Group by recovering from the investment at an early stage. As a result, 169,861 shares among 400,000 shares owned by the Group were reduced by ₩10,000 per share, and ₩1,700 million was received as consideration. The Group recognized a difference in consideration received for capital reduction and carrying amount as a loss on disposal of investments in associates.

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

	2022					
	Beginning balance	Acquisition & transfer.	Share of profit	Change in equity	Dividend	Ending balance
Associates:						
Korea Construction Management Corp. (*1)	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -
Expressway Solar Power Co., Ltd.	3,084	(3,084)	-	-	-	-
Highway solar Co., Ltd	926	-	165	-	(174)	917
BARR OPERATION & MAINTENANCE	-	27	-	(27)	-	-
	4,010	(3,057)	165	(27)	(174)	917
Joint venture:						
Busan-Ulsan Expressway Co., Ltd. (*2)	-	-	-	-	-	-
Expressway Solar Power Co., Ltd.	-	3,084	864	793	-	4,741
	₩ 4,010	₩ 27	₩ 1,029	₩ 766	₩ (174)	₩ 5,658

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**13. Investments in associates and joint ventures (cont'd)**

(\*1) Korea Construction Management Corp.'s, an associate, investments balance became nil due to the cumulative loss; thus, the application of equity method was suspended. As of December 31, 2022, the change in equity amount of ₩7,067 million (share of loss of ₩7,067 million) was not recognized.

(\*2) The balance of investments in Busan-Ulsan Expressway Co., Ltd. amounts to nil due to the cumulative losses, and the equity method was suspended. As a result, the share of loss not recognized is ₩169,379 million as of December 31, 2022. In addition, the Group's shares were provided as collateral in connection with the borrowings of the investee.

	2021					
	Beginning balance	Acquisition (disposal)	Share of profit (loss)	Change in equity	Dividend	Ending balance
Associates:						
Korea Construction Management Corp. (*1)	₩ -	₩ -	₩ -	₩ -	₩ -	-
Expressway Solar Power Co., Ltd.	3,019	-	135	(70)	-	3,084
Highway solar Co., Ltd	855	-	71	-	-	926
	<u>3,874</u>	<u>-</u>	<u>206</u>	<u>(70)</u>	<u>-</u>	<u>4,010</u>
Joint venture:						
Busan-Ulsan Expressway Co., Ltd. (*2)	-	-	-	-	-	-
	<u>₩ 3,874</u>	<u>₩ -</u>	<u>₩ 206</u>	<u>₩ (70)</u>	<u>₩ -</u>	<u>₩ 4,010</u>

(\*1) Korea Construction Management Corp.'s, an associate, investments balance became nil due to the cumulative loss; thus, the application of equity method was suspended. As of December 31, 2021, the change in equity amount of ₩1,224 million (share of loss of ₩1,224 million) was not recognized.

(\*2) The balance of investments in Busan-Ulsan Expressway Co., Ltd. amounts to nil due to the cumulative losses, and the equity method was suspended. As a result, the share of loss not recognized is ₩169,389 million as of December 31, 2021. In addition, the Group's shares were provided as collateral in connection with the borrowings of the investee.

Financial information of associates and joint ventures is as follows (Korean won in millions):

	December 31, 2022			
	Assets	Liabilities	Revenue	Profit (loss) for the year
Associates:				
Korea Construction Management Corp.	₩ 5,346	₩ 824	₩ 3,387	₩ (7,586)
Highway solar Co., Ltd	14,743	11,581	2,952	662
BARR OPERATION & MAINTENANCE	66	158	-	(157)
Joint venture:				
Busan-Ulsan Expressway Co., Ltd.	540,114	872,230	80,290	(3,613)
Expressway Solar Power Co., Ltd.	14,583	5,101	4,116	1,627

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**13. Investments in associates and joint ventures (cont'd)**

	December 31, 2021			
	Assets	Liabilities	Revenue	Profit (loss) for the year
Associates:				
Korea Construction Management Corp.	₩ 28,533	₩ 9,706	₩ 23,264	₩ (4,292)
Expressway Solar Power Co., Ltd.	13,747	3,113	2,637	466
Highway solar Co., Ltd	15,500	12,306	2,331	287
Joint venture:				
Busan-Ulsan Expressway Co., Ltd.	583,216	915,350	72,897	(10,282)

**14. Property and equipment**

Property and equipment as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022			
	Acquisition cost	Government grant	Accumulated depreciation	Carrying amount
Land	₩ 131,029	₩ -	₩ -	₩ 131,029
Buildings	1,042,432	(723)	(399,314)	642,395
Structures	116,026	(142)	(66,439)	49,445
Machinery	117,955	(11)	(87,931)	30,013
Information technology equipment	654,218	-	(479,312)	174,906
Vehicles	149,711	(208)	(107,775)	41,728
Furniture and fixtures	145,087	(10)	(104,975)	40,102
Tools and equipment	36,470	-	(29,442)	7,028
Right-of-use assets (vehicles)	6,904	-	(4,571)	2,333
Right-of-use assets (buildings)	1,263	-	(529)	734
Construction-in-progress	49,587	-	-	49,587
	₩ 2,450,682	₩ (1,094)	₩ (1,280,288)	₩ 1,169,300
	December 31, 2021			
	Acquisition cost	Government grant	Accumulated depreciation	Carrying amount
Land	₩ 130,958	₩ -	₩ -	₩ 130,958
Buildings	947,740	(235)	(359,386)	588,119
Structures	105,769	(158)	(58,942)	46,669
Machinery	115,246	-	(86,438)	28,808
Information technology equipment	607,510	-	(458,671)	148,839
Vehicles	146,105	(255)	(102,123)	43,727
Furniture and fixtures	135,297	(4)	(97,275)	38,018
Tools and equipment	36,618	-	(27,641)	8,977
Right-of-use assets (vehicles)	11,676	-	(8,261)	3,415
Right-of-use assets (buildings)	4,004	-	(2,788)	1,216
Construction-in-progress	93,936	-	-	93,936
	₩ 2,334,859	₩ (652)	₩ (1,201,525)	₩ 1,132,682

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**14. Property and equipment (cont'd)**

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

	Beginning balance	2022				Ending balance
		Acquisition (*1)	Disposals	Depreciation	Others (*2)	
Land	₩ 130,957	₩ -	₩ -	₩ -	₩ 72	₩ 131,029
Buildings	588,354	791	(144)	(33,192)	87,309	643,118
(Government grant)	(235)	(500)	-	12	-	(723)
Structures	46,827	-	(14)	(3,066)	5,840	49,587
(Government grant)	(158)	-	-	16	-	(142)
Machinery	28,809	35	(95)	(8,261)	9,536	30,024
(Government grant)	-	(11)	-	-	-	(11)
Information technology equipment	148,839	-	(70)	(46,506)	72,643	174,906
Vehicles	43,982	-	(51)	(15,883)	13,888	41,936
(Government grant)	(255)	(43)	-	90	-	(208)
Furniture and fixtures	38,021	2,982	(5)	(13,754)	12,868	40,112
(Government grant)	(4)	(8)	-	2	-	(10)
Tools and equipment	8,977	-	-	(3,804)	1,855	7,028
Right-of-use assets	4,631	1,442	-	(3,458)	452	3,067
Construction-in-progress	93,936	133,484	-	-	(177,833)	49,587
	₩ 1,132,681	₩ 138,172	₩ (379)	₩ (127,804)	₩ 26,630	₩ 1,169,300

(\*1) Increase due to asset contributions of ₩826 million is included.

(\*2) Other changes are due to reclassification of construction-in-progress to depreciable assets and transfers to investment properties.

	Beginning balance	2021				Ending balance
		Acquisition (*1)	Disposals	Depreciation	Others (*2)	
Land	₩ 133,762	₩ -	₩ -	₩ -	₩ (2,805)	₩ 130,957
Buildings	609,082	1,931	(895)	(32,274)	10,510	588,354
(Government grant)	(245)	-	-	10	-	(235)
Structures	46,929	359	(114)	(3,086)	2,739	46,827
(Government grant)	(175)	-	-	17	-	(158)
Machinery	27,196	-	(90)	(7,930)	9,633	28,809
Information technology equipment	121,733	105	(101)	(42,071)	69,173	148,839
Vehicles	45,949	-	(27)	(16,108)	14,168	43,982
(Government grant)	(346)	-	-	91	-	(255)
Furniture and fixtures	36,496	1,213	(6)	(15,112)	15,430	38,021
(Government grant)	(5)	-	-	1	-	(4)
Tools and equipment	11,430	-	-	(3,888)	1,435	8,977
Right-of-use assets	6,058	2,897	(12)	(4,144)	(168)	4,631
Construction-in-progress	72,179	143,700	-	-	(121,943)	93,936
	₩ 1,110,043	₩ 150,205	₩ (1,245)	₩ (124,494)	₩ (1,828)	₩ 1,132,681

(\*1) Increase due to asset contributions of ₩2,036 million is included.

(\*2) Other changes are due to recognition of right-of-use assets, reclassification of construction-in-progress to depreciable assets and transfers to investment properties and intangible assets.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**15. Investment properties**

Investment properties as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022			
	Acquisition cost	Government grant	Accumulated depreciation	Carrying amount
Land	₩ 306,574	₩ -	₩ -	₩ 306,574
Buildings	1,249,374	-	(536,103)	713,271
Structures	626,683	-	(376,959)	249,724
Construction-in-progress	436,171	(4,653)	-	431,518
	₩ 2,618,802	₩ (4,653)	₩ (913,062)	₩ 1,701,087

	December 31, 2021			
	Acquisition cost		Accumulated depreciation	Carrying amount
Land	₩ 306,571	₩ -	₩ -	₩ 306,571
Buildings	1,163,193	-	(500,959)	662,234
Structures	622,054	-	(360,023)	262,031
Construction-in-progress	464,415	-	-	464,415
	₩ 2,556,233	₩ (860,982)	₩ -	₩ 1,695,251

Changes in investment properties for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022					
	Beginning balance	Acquisition (*1)	Disposals	Depreciation	Other (*2)	Ending balance
Land	₩ 306,571	₩ -	₩ -	₩ -	₩ 3	₩ 306,574
Buildings	662,234	1,531	(354)	(42,190)	92,050	713,271
Structures	262,031	96	(151)	(21,827)	9,575	249,724
Construction-in-progress	464,415	102,270	-	-	(130,514)	436,171
(Government grant)	-	(4,653)	-	-	-	(4,653)
	₩ 1,695,251	₩ 99,244	₩ (505)	₩ (64,017)	₩ (28,886)	₩ 1,701,087

(\*1) Increase due to asset contributions of ₩1,627 million is included.

(\*2) Other changes are due to reclassification of construction-in-progress and others.

	2021					
	Beginning balance	Acquisition (*1)	Disposals	Depreciation	Other (*2)	Ending balance
Land	₩ 262,239	₩ -	₩ -	₩ -	₩ 44,332	₩ 306,571
Buildings	677,046	818	(2,560)	(40,073)	27,003	662,234
Structures	274,477	50	(1,179)	(22,525)	11,208	262,031
Construction-in-progress	348,843	194,625	-	-	(79,053)	464,415
	₩ 1,562,605	₩ 195,493	₩ (3,739)	₩ (62,598)	₩ 3,490	₩ 1,695,251

(\*1) Increase due to asset contributions of ₩867 million is included.

(\*2) Other changes are due to reclassification of construction-in-progress and others.

The amounts recognized in profit or loss from investment properties for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Rental income from investment properties	₩ 247,478	₩ 162,208
Operation expenses arising directly from investment properties	(120,990)	(114,421)
	₩ 126,488	₩ 47,787

## 15. Investment properties (cont'd)

All investment properties of the Group are directly owned by the Group, and there are no plans to sell them to date. It is not possible to apply an alternative estimation method because the transactions in the markets is not frequent, and the difference in use with neighboring areas and expected cash flows are not reliably predictable, thus making it impossible to apply an alternative estimation method. Due to the unpredictability, as of December 31, 2022, the fair value of investment properties were not measured.

## 16. Intangible assets

Intangible assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022			
	Acquisition cost	Accumulated amortization	Accumulated impairment	Carrying amount
Software	₩ 217,043	₩ (177,741)	₩ -	₩ 39,302
Industrial property rights	1,669	(663)	-	1,006
Development cost	386	(386)	-	-
Intangible assets under development	17,705,450	-	(262,588)	17,442,862
Expressway operating rights (*1)	89,920,119	(34,699,650)	-	55,220,469
Others	13,305	-	-	13,305
	<u>₩ 107,857,972</u>	<u>₩ (34,878,440)</u>	<u>₩ (262,588)</u>	<u>₩ 72,716,944</u>

(\*1) The Group mainly engages in the construction and management of roads. The Group considers the entire road as one cash-generating unit and determines that there is no indication of impairment on the right to operate toll roads.

	December 31, 2021			
	Acquisition cost	Accumulated amortization	Accumulated impairment	Carrying amount
Software	₩ 201,174	₩ (164,891)	₩ -	₩ 36,283
Industrial property rights	1,490	(587)	-	903
Development cost	386	(386)	-	-
Intangible assets under development	15,126,197	-	(262,588)	14,863,609
Expressway operating rights (*1)	87,018,818	(33,218,323)	-	53,800,495
Others	12,318	-	-	12,318
	<u>₩ 102,360,383</u>	<u>₩ (33,384,187)</u>	<u>₩ (262,588)</u>	<u>₩ 68,713,608</u>

(\*1) The Group mainly engages in the construction and management of roads. The Group considers the entire road as one cash-generating unit and determines that there is no indication of impairment on the right to operate toll roads.

Changes in intangible assets for years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022					
	Beginning balance	Acquisition (*1)	Disposals	Amortization	Other (*2)	Ending balance
Software	₩ 36,283	₩ 935	₩ -	₩ (12,469)	₩ 14,553	₩ 39,302
Industrial property rights	903	-	-	(76)	179	1,006
Intangible assets under development	14,863,609	5,519,701	-	-	(2,940,448)	17,442,862
Expressway operating rights	53,800,495	-	(23,126)	(1,481,326)	2,924,426	55,220,469
Others	12,318	-	-	(6)	993	13,305
	<u>₩ 68,713,608</u>	<u>₩ 5,520,636</u>	<u>₩ (23,126)</u>	<u>₩ (1,493,877)</u>	<u>₩ (297)</u>	<u>₩ 72,716,944</u>

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**16. Intangible assets (cont'd)**

(\*1) Acquisition of intangible assets under development includes ₩210,230 million of capitalized interest.  
(\*2) Other changes are due to reclassification of intangible assets under development.

	2021					
	Beginning balance	Acquisition (*1)	Disposals	Amortization	Other (*2)	Ending balance
Software	₩ 27,206	₩ 424	₩ -	₩ (12,992)	₩ 21,645	₩ 36,283
Industrial property rights	841	-	-	(68)	130	903
Intangible assets under development	10,263,844	5,413,263	-	-	(813,498)	14,863,609
Expressway operating rights	54,727,218	-	(15,575)	(1,700,153)	789,005	53,800,495
Others	10,214	114	-	-	1,990	12,318
	<u>₩ 65,029,323</u>	<u>₩ 5,413,801</u>	<u>₩ (15,575)</u>	<u>₩ (1,713,213)</u>	<u>₩ (728)</u>	<u>₩ 68,713,608</u>

(\*1) Acquisition of intangible assets under development includes ₩159,118 million of capitalized interest.  
(\*2) Other changes are due to reclassification of intangible assets under development.

Major individual intangible assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	Detail	December 31,	December 31,
		2022	2021
Expressway operating rights	Right to highway management	<u>₩ 55,220,469</u>	<u>₩ 53,800,495</u>

(\*) The Group amortizes service and operating rights using the investment cost recovery method.

**17. Trade and other payables**

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

	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Other accounts payable	₩ 930,171	₩ -	₩ 724,364	₩ -
Accrued expenses	222,412	203	210,259	203
Leasehold deposits received	33,123	203,406	27,461	203,472
Other deposits received	1,589	-	3,213	-
Lease liabilities	2,882	154	2,930	1,772
	<u>₩ 1,190,177</u>	<u>₩ 203,763</u>	<u>₩ 968,227</u>	<u>₩ 205,447</u>

**18. Borrowings and bonds**

Borrowings and bonds as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31,	December 31,
	2022	2021
Current:		
Short-term borrowings	₩ 465,200	₩ -
Current portion of long-term borrowings	400,000	200,000
Current portion of bonds	3,066,324	3,036,628
Less: discount on bonds	(294)	(268)
Financial assets at fair value through profit or loss (*)	-	103,135
	<u>3,931,230</u>	<u>3,339,495</u>

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**18. Borrowings and bonds (cont'd)**

	December 31, 2022	December 31, 2021
Non-current:		
Long-term borrowings	1,000,000	900,000
Bonds	28,067,187	26,741,853
Less: discount on bonds	(13,084)	(10,116)
	<u>29,054,103</u>	<u>27,631,737</u>
	<u>₩ 32,985,333</u>	<u>₩ 30,971,232</u>

(\*) The Company has entered into an interest rate swap contract to hedge risk of fair value fluctuations due to changes in interest rates. The Company may eliminate or reduce an accounting mismatch arising from classification of bonds and derivative instruments at amortized cost and fair value, respectively, through designating bonds as financial liability at fair value through profit or loss.

Short-term borrowings as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Type	Lenders	Interest rates	December 31, 2022	December 31, 2021
			Carrying amount	Carrying amount
Loan operating funds	BNK Securities	4.50%	₩ 160,000	₩ -
Loan operating funds	DB Financial Investment	4.71%	100,000	-
Loan operating funds	DB Financial Investment	4.91%	120,000	-
Loan operating funds	KEB Hana Bank	4.76%	85,200	-
			<u>₩ 465,200</u>	<u>₩ -</u>

Long-term borrowings as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Type	Lenders	Interest rates	December 31, 2022	December 31, 2021
			Carrying amount	Carrying amount
Loan operating funds	KEB Hana Bank	CD+0.22%	₩ -	₩ 200,000
Loan operating funds	KEB Hana Bank	CD+0.34%	-	150,000
Loan operating funds	KEB Hana Bank	CD+0.34%	150,000	150,000
Loan operating funds	KEB Hana Bank	CD+0.16%	150,000	100,000
Loan operating funds	KEB Hana Bank	CD+0.23%	100,000	100,000
Loan operating funds	KEB Hana Bank	CD+0.23%	100,000	100,000
Loan operating funds	KEB Hana Bank	CD+0.24%	100,000	200,000
Loan operating funds	KEB Hana Bank	CD+0.34%	100,000	100,000
Loan operating funds	KEB Hana Bank	CD+0.24%	200,000	-
Loan operating funds	KEB Hana Bank	CD+0.24%	100,000	-
Loan operating funds	KEB Hana Bank	CD+0.31%	100,000	-
Loan operating funds	KEB Hana Bank	CD+0.57%	100,000	-
Loan operating funds	KEB Hana Bank	CD+0.59%	100,000	-
Loan operating funds	KEB Hana Bank	CD+0.87%	100,000	-
			<u>1,400,000</u>	<u>1,100,000</u>
Less: current portion			<u>(400,000)</u>	<u>(200,000)</u>
			<u>₩ 1,000,000</u>	<u>₩ 900,000</u>

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**18. Borrowings and bonds (cont'd)**

Details of bonds as of December 31, 2022 and 2021 are as follows (Korean won, USD, HKD, EUR, CHF, CNY, SEK, CAD and AUD in millions):

Series	Annual interest rate (%)	Maturity	December 31, 2022		December 31, 2021	
			Foreign currency	Local currency	Foreign currency	Local currency
408 <sup>th</sup>	5.35	2027.02.14		₩ 180,000		₩ 180,000
410 <sup>th</sup>	5.29	2027.02.27		80,000		80,000
411 <sup>st</sup>	5.39	2037.02.27		50,000		50,000
416 <sup>th</sup>	5.3	2022.04.11		-		100,000
419 <sup>th</sup>	5.6	2022.07.27		-		103,135
425 <sup>th</sup>	5.82	2022.10.30		-		70,000
464 <sup>th</sup>	5.38	2024.03.17		90,000		90,000
466 <sup>th</sup>	5.45	2029.04.02		150,000		150,000
468 <sup>th</sup>	5.35	2039.04.21		60,000		60,000
486 <sup>th</sup>	5.24	2025.03.08		100,000		100,000
496 <sup>th</sup>	5.21	2025.07.13		140,000		140,000
497 <sup>th</sup>	5.25	2030.07.20		90,000		90,000
498 <sup>th</sup>	5.12	2025.07.27		100,000		100,000
500 <sup>th</sup>	4.98	2040.08.26		120,000		120,000
503 <sup>rd</sup>	4.57	2025.09.29		130,000		130,000
505 <sup>th</sup>	4.58	2025.10.25		130,000		130,000
515 <sup>th</sup>	4.91	2030.12.17		100,000		100,000
522 <sup>nd</sup>	4.62	2026.05.20		120,000		120,000
526 <sup>th</sup>	4.52	2026.06.28		130,000		130,000
530 <sup>th</sup>	4.27	2031.08.23		200,000		200,000
532 <sup>nd</sup>	4.31	2031.09.23		180,000		180,000
534 <sup>th</sup>	4.40	2026.10.25		100,000		100,000
541 <sup>st</sup>	4.04	2022.01.18		-		100,000
542 <sup>nd</sup>	4.13	2027.01.31		150,000		150,000
543 <sup>rd</sup>	4.25	2027.03.21		250,000		250,000
544 <sup>th</sup>	4.14	2022.03.27		-		100,000
546 <sup>th</sup>	4.00	2022.04.12		-		150,000
549 <sup>th</sup>	3.99	2027.05.11		100,000		100,000
550 <sup>th</sup>	3.83	2022.05.22		-		100,000
551 <sup>st</sup>	4.05	2032.05.25		150,000		150,000
553 <sup>rd</sup>	3.90	2027.06.15		70,000		70,000
554 <sup>th</sup>	4.02	2032.06.27		150,000		150,000
555 <sup>th</sup>	3.25	2022.07.24		-		150,000
556 <sup>th</sup>	3.10	2027.08.30		100,000		100,000
558 <sup>th</sup>	2.24%+0.10x(70%-Avg SIFMA/Avg USD 3m LIBOR)	2022.09.20		-		100,000
559 <sup>th</sup>	3.14	2022.09.25		-		200,000
560 <sup>th</sup>	3.48	2062.09.26		100,000		100,000
562 <sup>nd</sup>	3.21	2022.12.11		-		150,000
563 <sup>rd</sup>	3.37	2027.12.18		190,000		190,000
564 <sup>th</sup>	3.22	2028.01.22		150,000		150,000
565 <sup>th</sup>	3.13	2023.01.28		150,000		150,000
567 <sup>th</sup>	3.28	2033.02.13		150,000		150,000
568 <sup>th</sup>	3.17	2028.02.27		100,000		100,000
569 <sup>th</sup>	3.03	2023.03.21		150,000		150,000
570 <sup>th</sup>	3.16	2033.03.27		150,000		150,000
573 <sup>rd</sup>	3.25	2023.06.05		100,000		100,000
574 <sup>th</sup>	3.42	2025.06.13		100,000		100,000
578 <sup>th</sup>	3.76	2023.09.05		100,000		100,000
579 <sup>th</sup>	3.56	2023.09.26		50,000		50,000
580 <sup>th</sup>	3.62	2023.10.02		60,000		60,000
582 <sup>nd</sup>	3.73	2028.10.10		100,000		100,000
588 <sup>th</sup>	4.35%X n/N n: Korea CMS 10-year interest rate <(or =) 6% and US CMS 10-year interest rate <(or =) 6% N: Total calendar days (365)	2023.12.09		30,000		30,000
592 <sup>nd</sup>	3.68	2024.02.13		100,000		100,000
596 <sup>th</sup>	3.64	2024.03.13		100,000		100,000
599 <sup>th</sup>	3.65	2024.03.27		60,000		60,000
600 <sup>th</sup>	3.65	2024.04.02		50,000		50,000

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**18. Borrowings and bonds (cont'd)**

Series	Annual interest rate (%)	Maturity	December 31, 2022		December 31, 2021	
			Foreign currency	Local currency	Foreign currency	Local currency
601 <sup>st</sup>	3 X Spread Reference Average spread over a specific period Spread Reference Daily spread between calculators: 20Y EUR Swap interest rate-2Y EUR Swap interest rate	2024.04.04	₩	30,000	₩	30,000
603 <sup>rd</sup>	3.66	2024.04.16		120,000		120,000
605 <sup>th</sup>	3.24	2029.07.16		50,000		50,000
606 <sup>th</sup>	Annual Min (4.20%, 3.00 × (avg spread (20 EUR CMS-2 EUR CMS)) × N / M), (Lower limit 0.00%)	2024.09.04		100,000		100,000
607 <sup>th</sup>	2.95	2029.10.02		100,000		100,000
608 <sup>th</sup>	3.00	2029.10.15		100,000		100,000
609 <sup>th</sup>	2.96	2034.10.30		170,000		170,000
610 <sup>th</sup>	2.69	2024.11.06		250,000		250,000
611 <sup>st</sup>	2.86	2026.11.13		100,000		100,000
612 <sup>nd</sup>	2.69	2022.11.20		-		100,000
614 <sup>th</sup>	2.78	2024.12.24		50,000		50,000
615 <sup>th</sup>	2.46	2025.02.13		190,000		190,000
616 <sup>th</sup>	2.55	2030.02.27		200,000		200,000
617 <sup>th</sup>	2.45	2025.03.06		100,000		100,000
619 <sup>th</sup>	2.33	2030.04.16		100,000		100,000
620 <sup>th</sup>	2.36	2025.04.24		90,000		90,000
622 <sup>nd</sup>	2.80	2030.05.14		170,000		170,000
623 <sup>rd</sup>	8.55% - 0.1 × [Average SIFMA / average 3month LIBOR] (Cap 5.50%, Floor 0.01% per year)	2030.05.15		30,000		30,000
625 <sup>th</sup>	2.56	2025.05.28		70,000		70,000
626 <sup>th</sup>	2.64	2025.06.19		130,000		130,000
627 <sup>th</sup>	2.57	2025.07.22		150,000		150,000
631 <sup>st</sup>	2.11*(USD 30Y CMS -USD 2Y CMS)+0.2%(Cap 5.50%, Floor 0.00% annual payment) 2) After the switch option exercise: 2.8% per year(fixed interest rate)	2030.08.19		50,000		50,000
632 <sup>nd</sup>	2.37	2025.08.19		80,000		80,000
633 <sup>rd</sup>	2.55	2035.09.15		130,000		130,000
634 <sup>th</sup>	4.0%*(KRW 10Y CMS -USD 1Y CMS)+0.2%(Cap 4.50%, Floor 0.25% per year) /Actual/365 2) 2) After the switch option exercise: 3.0 % per year (fixed interest rate)	2030.09.23		50,000		50,000
635 <sup>th</sup>	2.24	2025.09.24		50,000		50,000
636 <sup>th</sup>	3.3%*(KRW 10Y CMS -USD 1Y CMS) (Cap 4.50%, Floor 0.00% per year) 2) After the switch option exercise: 2.8% per year(fixed interest rate)	2030.10.28		50,000		50,000
637 <sup>th</sup>	2.40	2025.11.12		150,000		150,000
639 <sup>th</sup>	2.49	2030.11.30		200,000		200,000
641 <sup>st</sup>	2.35	2030.12.16		120,000		120,000
642 <sup>nd</sup>	1.98	2036.02.18		190,000		190,000
643 <sup>rd</sup>	1.74	2021.03.04		-		100,000
644 <sup>th</sup>	2.01	2046.05.25		150,000		150,000
645 <sup>th</sup>	2.3%*(EUR 30Y CMS - EUR 5Y CMS) (Cap 3.00%, Floor 0.00% per year)	2031.06.23		30,000		30,000
646 <sup>th</sup>	1.54	2036.07.20		150,000		150,000
648 <sup>th</sup>	1.57	2046.08.26		100,000		100,000
651 <sup>st</sup>	1.85	2046.10.24		130,000		130,000
652 <sup>nd</sup>	1.90	2046.11.10		140,000		140,000
655 <sup>th</sup>	2.30	2047.02.17		150,000		150,000
656 <sup>th</sup>	2.02	2022.02.27		-		140,000
657 <sup>th</sup>	2.35	2047.03.17		110,000		110,000
658 <sup>th</sup>	2.16	2024.03.29		50,000		50,000
659 <sup>th</sup>	2.24	2027.03.29		20,000		20,000
660 <sup>th</sup>	2.03	2022.04.18		-		100,000
661 <sup>st</sup>	2.38	2037.04.19		110,000		110,000
662 <sup>nd</sup>	2.31	2047.06.21		120,000		120,000
663 <sup>rd</sup>	2.42	2037.08.24		140,000		140,000

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**18. Borrowings and bonds (cont'd)**

Series	Annual interest rate (%)	Maturity	December 31, 2022		December 31, 2021	
			Foreign currency	Local currency	Foreign currency	Local currency
664 <sup>th</sup>	2.33	2027.08.31		₩ 70,000	₩	70,000
665 <sup>th</sup>	2.09	2022.09.07		-		60,000
666 <sup>th</sup>	2.37	2032.09.08		160,000		160,000
667 <sup>th</sup>	2.32	2027.09.15		160,000		160,000
668 <sup>th</sup>	2.35	2047.09.21		150,000		150,000
669 <sup>th</sup>	2.40	2037.09.27		100,000		100,000
670 <sup>th</sup>	2.47	2037.10.12		150,000		150,000
671 <sup>st</sup>	2.64	2037.11.03		150,000		150,000
672 <sup>nd</sup>	2.63	2027.11.10		90,000		90,000
673 <sup>rd</sup>	2.57	2022.11.16		-		110,000
675 <sup>th</sup>	2.66	2047.11.24		170,000		170,000
676 <sup>th</sup>	2.54	2047.12.08		100,000		100,000
677 <sup>th</sup>	2.889	2048.02.21		150,000		150,000
678 <sup>th</sup>	2.855	2038.03.09		130,000		130,000
679 <sup>th</sup>	2.73	2023.03.14		170,000		170,000
680 <sup>th</sup>	2.869	2048.05.10		100,000		100,000
681 <sup>st</sup>	2.882	2033.05.18		110,000		110,000
682 <sup>nd</sup>	2.669	2023.05.31		90,000		90,000
683 <sup>rd</sup>	2.664	2048.06.28		90,000		90,000
684 <sup>th</sup>	2.543	2023.06.28		110,000		110,000
685 <sup>th</sup>	2.607	2038.07.19		120,000		120,000
686 <sup>th</sup>	2.299	2023.08.24		110,000		110,000
687 <sup>th</sup>	2.301	2048.09.14		70,000		70,000
688 <sup>th</sup>	2.361	2023.10.11		130,000		130,000
689 <sup>th</sup>	2.349	2038.10.25		70,000		70,000
690 <sup>th</sup>	2.202	2023.10.31		90,000		90,000
691 <sup>st</sup>	2.183	2023.11.14		150,000		150,000
692 <sup>nd</sup>	2.195	2048.11.22		90,000		90,000
694 <sup>th</sup>	2.4	2038.11.29		50,000		50,000
695 <sup>th</sup>	2	2048.12.07		110,000		110,000
696 <sup>th</sup>	2.029	2023.12.13		110,000		110,000
697 <sup>th</sup>	1.954	2024.02.20		150,000		150,000
698 <sup>th</sup>	2.147	2049.02.22		130,000		130,000
699 <sup>th</sup>	2.151	2039.02.27		100,000		100,000
700 <sup>th</sup>	2.143	2049.03.08		150,000		150,000
701 <sup>st</sup>	2.129	2049.03.19		120,000		120,000
702 <sup>nd</sup>	1.823	2022.04.04		-		150,000
703 <sup>rd</sup>	1.963	2049.04.11		170,000		170,000
704 <sup>th</sup>	1.976	2049.04.25		100,000		100,000
705 <sup>th</sup>	1.89	2029.05.23		90,000		90,000
706 <sup>th</sup>	1.787	2049.05.30		130,000		130,000
707 <sup>th</sup>	1.672	2024.06.05		170,000		170,000
708 <sup>th</sup>	1.589	2024.06.14		110,000		110,000
709 <sup>th</sup>	1.512	2024.06.21		160,000		160,000
710 <sup>th</sup>	1.593	2029.07.05		80,000		80,000
711 <sup>st</sup>	1.531	2024.07.17		140,000		140,000
712 <sup>nd</sup>	1.318	2049.08.22		120,000		120,000
713 <sup>rd</sup>	1.416	2024.09.05		130,000		130,000
714 <sup>th</sup>	1.467	2049.09.25		130,000		130,000
715 <sup>th</sup>	1.454	2022.10.16		-		100,000
716 <sup>th</sup>	1.522	2022.10.23		-		130,000
717 <sup>th</sup>	1.802	2024.11.06		110,000		110,000
718 <sup>th</sup>	1.833	2026.11.14		100,000		100,000
719 <sup>th</sup>	1.665	2024.11.21		90,000		90,000
720 <sup>th</sup>	1.715	2024.11.27		90,000		90,000
721 <sup>st</sup>	1.556	2022.12.05		-		180,000
722 <sup>nd</sup>	1.627	2024.12.12		190,000		190,000
723 <sup>rd</sup>	1.666	2026.12.18		100,000		100,000
724 <sup>th</sup>	1.298	2025.03.05		200,000		200,000
725 <sup>th</sup>	1.518	2050.03.12		150,000		150,000
726 <sup>th</sup>	1.567	2027.03.19		110,000		110,000
727 <sup>th</sup>	1.658	2025.03.26		170,000		170,000

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**18. Borrowings and bonds (cont'd)**

Series	Annual interest rate (%)	Maturity	December 31, 2022		December 31, 2021	
			Foreign currency	Local currency	Foreign currency	Local currency
728 <sup>th</sup>	1.749	2030.04.02		₩ 100,000	₩	100,000
729 <sup>th</sup>	1.780	2040.04.02		110,000		110,000
730 <sup>th</sup>	1.469	2025.04.09		150,000		150,000
731 <sup>st</sup>	1.705	2050.04.09		120,000		120,000
732 <sup>nd</sup>	1.122	2023.04.17		190,000		190,000
733 <sup>rd</sup>	1.598	2030.04.17		70,000		70,000
734 <sup>th</sup>	1.271	2023.04.24		170,000		170,000
735 <sup>th</sup>	1.727	2040.04.24		100,000		100,000
736 <sup>th</sup>	1.101	2023.05.14		160,000		160,000
737 <sup>th</sup>	1.578	2040.05.21		140,000		140,000
738 <sup>th</sup>	1.504	2030.05.28		130,000		130,000
739 <sup>th</sup>	1.628	2040.06.18		160,000		160,000
740 <sup>th</sup>	1.437	2027.07.16		70,000		70,000
742 <sup>nd</sup>	0.985	2023.07.23		130,000		130,000
743 <sup>rd</sup>	1.431	2027.09.24		110,000		110,000
744 <sup>th</sup>	0.979	2022.10.14		-		180,000
745 <sup>th</sup>	1.648	2030.10.22		150,000		150,000
746 <sup>th</sup>	1.706	2050.10.29		130,000		130,000
747 <sup>th</sup>	1.678	2030.11.05		100,000		100,000
748 <sup>th</sup>	1.731	2040.11.05		100,000		100,000
749 <sup>th</sup>	1.467	2025.11.12		110,000		110,000
750 <sup>th</sup>	1.809	2050.11.12		80,000		80,000
751 <sup>st</sup>	1.101	2023.11.19		100,000		100,000
752 <sup>nd</sup>	1.577	2027.11.19		80,000		80,000
753 <sup>rd</sup>	1.453	2025.11.26		190,000		190,000
754 <sup>th</sup>	1.789	2030.12.03		170,000		170,000
755 <sup>th</sup>	1.121	2023.12.11		150,000		150,000
756 <sup>th</sup>	1.859	2050.12.23		150,000		150,000
757 <sup>th</sup>	2.182	2051.03.11		150,000		150,000
758 <sup>th</sup>	1.826	2026.03.18		120,000		120,000
759 <sup>th</sup>	2.239	2031.03.18		160,000		160,000
760 <sup>th</sup>	2.084	2031.03.26		100,000		100,000
761 <sup>st</sup>	2.15	2041.03.26		50,000		50,000
762 <sup>nd</sup>	1.283	2024.04.02		150,000		150,000
763 <sup>rd</sup>	1.735	2026.04.08		160,000		160,000
764 <sup>th</sup>	2.281	2051.04.08		140,000		140,000
765 <sup>th</sup>	2.146	2041.04.15		140,000		140,000
766 <sup>th</sup>	2.197	2051.06.17		130,000		130,000
767 <sup>th</sup>	1.823	2026.07.09		130,000		130,000
768 <sup>th</sup>	2.137	2051.07.09		230,000		230,000
769 <sup>th</sup>	2.024	2031.07.23		50,000		50,000
770 <sup>th</sup>	2.066	2041.07.23		110,000		110,000
771 <sup>st</sup>	2.036	2051.08.13		130,000		130,000
772 <sup>nd</sup>	1.543	2024.08.20		160,000		160,000
773 <sup>rd</sup>	2.096	2051.09.09		220,000		220,000
774 <sup>th</sup>	1.993	2024.10.14		90,000		90,000
775 <sup>th</sup>	2.391	2051.10.14		140,000		140,000
776 <sup>th</sup>	2.326	2026.10.21		150,000		150,000
777 <sup>th</sup>	2.408	2041.10.21		80,000		80,000
778 <sup>th</sup>	1.999	2024.10.21		50,000		50,000
779 <sup>th</sup>	2.549	2026.10.28		80,000		80,000
780 <sup>th</sup>	2.592	2051.10.28		130,000		130,000
781 <sup>st</sup>	2.427	2026.11.05		130,000		130,000
782 <sup>nd</sup>	2.523	2041.11.05		70,000		70,000
783 <sup>rd</sup>	2.417	2041.11.11		60,000		60,000
784 <sup>th</sup>	2.403	2051.11.11		160,000		160,000
785 <sup>th</sup>	2.43	2051.11.19		120,000		120,000
786 <sup>th</sup>	2.074	2024.12.03		150,000		150,000
787 <sup>th</sup>	2.303	2051.12.03		90,000		90,000
788 <sup>th</sup>	2.05	2024.12.09		50,000		50,000
789 <sup>th</sup>	2.304	2041.12.09		100,000		100,000
790 <sup>th</sup>	2.312	2041.12.16		70,000		70,000

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**18. Borrowings and bonds (cont'd)**

Series	Annual interest rate (%)	Maturity	December 31, 2022		December 31, 2021	
			Foreign currency	Local currency	Foreign currency	Local currency
791 <sup>st</sup>	2.35	2051.12.16		₩ 30,000		₩ 30,000
792 <sup>nd</sup>	2.547	2027.01.21		60,000		-
793 <sup>rd</sup>	2.577	2052.01.21		110,000		-
794 <sup>th</sup>	2.771	2052.02.11		90,000		-
795 <sup>st</sup>	2.816	2052.03.04		170,000		-
796 <sup>th</sup>	2.339	2024.03.11		170,000		-
797 <sup>th</sup>	2.807	2042.03.11		60,000		-
798 <sup>th</sup>	2.856	2027.03.24		80,000		-
799 <sup>th</sup>	2.909	2042.03.24		110,000		-
800 <sup>th</sup>	3.238	2042.04.07		70,000		-
801 <sup>st</sup>	4.27(1.5years)	2032.04.14		40,000		-
802 <sup>nd</sup>	3.323	2027.04.15		60,000		-
803 <sup>rd</sup>	3.256	2052.04.15		140,000		-
804 <sup>th</sup>	3.449	2042.04.22		80,000		-
805 <sup>th</sup>	3.172	2025.04.27		50,000		-
806 <sup>th</sup>	3.321	2052.04.27		100,000		-
807 <sup>th</sup>	3.266	2025.05.13		50,000		-
808 <sup>th</sup>	3.409	2042.05.20		100,000		-
809 <sup>th</sup>	4.20(1.5years)	2032.06.02		50,000		-
810 <sup>th</sup>	3.385	2052.06.10		100,000		-
811 <sup>st</sup>	3.81	2042.06.24		100,000		-
812 <sup>nd</sup>	3.364	2052.07.07		90,000		-
813 <sup>rd</sup>	3.457	2052.07.21		100,000		-
814 <sup>th</sup>	3.363	2052.07.29		80,000		-
815 <sup>th</sup>	3.403	2052.08.11		120,000		-
816 <sup>th</sup>	3.463	2042.08.19		80,000		-
817 <sup>th</sup>	3.842	2052.09.08		80,000		-
818 <sup>th</sup>	3.954	2042.09.16		90,000		-
819 <sup>th</sup>	4.151	2052.09.26		50,000		-
820 <sup>th</sup>	4.391	2042.09.28		40,000		-
821 <sup>st</sup>	4.54	2023.09.29		50,000		-
822 <sup>nd</sup>	5.012	2024.10.07		70,000		-
823 <sup>rd</sup>	5.889	2024.10.27		140,000		-
824 <sup>th</sup>	5.915	2025.10.27		50,000		-
825 <sup>th</sup>	5.498	2025.11.11		170,000		-
826 <sup>th</sup>	5.38	2025.11.17		50,000		-
827 <sup>th</sup>	5.407	2027.11.17		70,000		-
828 <sup>th</sup>	4.78	2025.12.01		160,000		-
7 <sup>th</sup> foreign bond	4.00	2022.03.02	-	-	HKD 452	68,718
9 <sup>th</sup> foreign bond	3.88	2024.05.07	EUR 45	60,804	EUR 45	60,405
10 <sup>th</sup> foreign bond	4.00	2027.05.07	EUR 23	31,078	EUR 23	30,874
18 <sup>th</sup> foreign bond	3.02	2027.03.18	USD 50	63,365	USD 50	59,275
19 <sup>th</sup> foreign bond	3.21	2030.11.30	USD 50	63,365	USD 50	59,275
20 <sup>th</sup> foreign bond	3.10	2026.06.08	USD 100	126,730	USD 100	118,550
21 <sup>st</sup> foreign bond	2.70	2026.10.26	USD 200	253,460	USD 200	237,100
22 <sup>nd</sup> foreign bond	2.57	2031.07.05	USD 100	126,730	USD 100	118,550
27 <sup>th</sup> foreign bond	2.31	2032.04.28	SEK 720	87,242	SEK 720	94,349
28 <sup>th</sup> foreign bond	3.03	2032.05.11	CAD 135	126,276	CAD 135	125,632
29 <sup>th</sup> foreign bond	0.25	2024.06.07	CHF 230	315,760	CHF 230	298,418
30 <sup>th</sup> foreign bond	3.02	2022.03.05	HKD 800	130,040	HKD 800	121,624
33 <sup>rd</sup> foreign bond	3M USD LIBOR +0.64%	2022.07.25	-	-	USD 150	177,825
34 <sup>th</sup> foreign bond	3M USD LIBOR +0.60%	2022.11.25	-	-	USD 70	82,985
35 <sup>th</sup> foreign bond	3M USD LIBOR +0.60%	2022.11.25	-	-	USD 200	237,100
36 <sup>th</sup> foreign bond	3M USD LIBOR +1.20%	2025.06.02	USD 100	126,730	USD 100	118,550
37 <sup>th</sup> foreign bond	0.928	2023.09.02	AUD 225	193,142	AUD 225	193,250
38 <sup>th</sup> foreign bond	BBSW+0.72%	2023.09.02	AUD 225	193,142	AUD 225	193,250
39 <sup>th</sup> foreign bond	1.125	2026.05.17	USD 500	633,650	USD 500	592,750
40 <sup>th</sup> foreign bond	3.625%(T+85)	2025.05.18	USD 500	633,650	-	-
41 <sup>st</sup> foreign bond	SOFR+1.40%	2027.10.28	USD 50	63,365	-	-
42 <sup>nd</sup> foreign bond	0.054	2024.11.04	HKD 500	81,275	-	-
43 <sup>rd</sup> foreign bond	0.0528	2024.11.07	HKD 680	110,534	-	-
44 <sup>th</sup> foreign bond	0.05	2024.11.07	SGD 120	113,173	-	-

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**18. Borrowings and bonds (cont'd)**

Series	Annual interest rate (%)	Maturity	December 31, 2022		December 31, 2021	
			Foreign currency	Local currency	Foreign currency	Local currency
Less: discount on bonds				₩ 31,133,512		₩ 29,881,616
				(13,379)		(10,384)
				31,120,133		29,871,232
Less: current portion of bonds				(3,066,324)		(3,036,628)
Less: current portion of discount on bonds				294		268
Less: financial liabilities at fair value through profit or loss				-		(103,135)
				₩ 28,054,103		₩ 26,731,737

The repayment schedule of borrowings and bonds as of December 31, 2022 and 2021 is as follows (Korean won in millions):

	December 31, 2022		
	Borrowings	Bonds	Total
Within 1 year	₩ 865,200	₩ 3,066,324	₩ 3,931,524
1 year–5 years	1,000,000	12,713,574	13,713,574
More than 5 years	-	15,353,614	15,353,614
	₩ 1,865,200	₩ 31,133,512	₩ 32,998,712

	December 31, 2021		
	Borrowings	Bonds	Total
Within 1 year	₩ 200,000	₩ 3,139,763	₩ 3,339,763
1 year–5 years	900,000	11,373,898	12,273,898
More than 5 years	-	15,367,955	15,367,955
	₩ 1,100,000	₩ 29,881,616	₩ 30,981,616

**19. Leases**

The Group has lease contracts for buildings and vehicles used for its operations. Leases of buildings and vehicles generally have lease terms between 2 and 4 years.

The Group also has certain leases of machinery, furniture and fixtures with lease terms of 12 months or less and leases with low-value assets of office supplies less than ₩5 million. The Group applies the short-term leases and leases of low-value assets recognition exemptions for these leases.

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

	December 31, 2022		
	Acquisition cost	Accumulated depreciation	Carrying amount
Buildings	₩ 1,263	₩ (529)	₩ 734
Vehicles	6,904	(4,571)	2,333
	₩ 8,167	₩ (5,100)	₩ 3,067

	December 31, 2021		
	Acquisition cost	Accumulated depreciation	Carrying amount
Buildings	₩ 4,004	₩ (2,788)	₩ 1,216
Vehicles	11,676	(8,261)	3,415
	₩ 15,680	₩ (11,049)	₩ 4,631

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**19. Leases (cont'd)**

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

	Building		Vehicles		Total
As of January 1, 2022	₩	1,216	₩	3,415	₩ 4,631
Acquisition		152		1,289	1,441
Depreciation		(646)		(2,811)	(3,457)
Disposals		-		-	-
Others		12		440	452
As of December 31, 2022	₩	734	₩	2,333	₩ 3,067
	Building		Vehicles		Total
As of January 1, 2021	₩	1,460	₩	4,598	₩ 6,058
Acquisition		1,082		1,815	2,897
Depreciation		(1,158)		(2,986)	(4,144)
Disposals		-		(12)	(12)
Others		(168)		-	(168)
As of December 31, 2021	₩	1,216	₩	3,415	₩ 4,631

Details of maturity analysis of lease liabilities as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022		2021	
Not later than one year	₩	1,957	₩	2,937
Later than one year and not later than five years		1,157		1,862
Later than five years		-		-
Total undiscounted lease payments		3,114		4,799
Less: present value adjustment, etc.		(77)		(97)
Present value of lease payments	₩	3,037	₩	4,702

Current and non-current classification of lease liabilities as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	2021		2020	
Current	₩	2,883	₩	2,930
Non-current		154		1,772
	₩	3,037	₩	4,702

The amount recognized in profit or loss during the years ended December 31, 2022 and 2021 from the position of the lessee is as follows (Korean won in millions):

	2022		2021	
Depreciation expense of right-of-use assets (buildings)	₩	646	₩	1,158
Depreciation expense of right-of-use assets (vehicles)		2,811		2,986
Expense relating to short-term leases		15,946		14,521
Expense relating to leases of low-value assets		2,804		1,672
Interest expense on lease liabilities		198		165
Total amount recognized in profit or loss	₩	22,405	₩	20,502

## 19. Leases (cont'd)

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

	Current	Non-current
As of January 1, 2022	₩ 2,930	₩ 1,772
Increase	-	1,442
Decrease	(3,561)	-
Interest expenses on lease liabilities	57	141
Others	3,457	(3,201)
As of December 31, 2022	₩ 2,883	₩ 154
	Current	Non-current
As of January 1, 2021	₩ 3,624	₩ 2,510
Increase	1,154	1,744
Decrease	(3,800)	(363)
Interest expenses on lease liabilities	73	92
Others	1,879	(2,211)
As of December 31, 2021	₩ 2,930	₩ 1,772

The Group, as a lessee, recognized total lease-related cash outflows of ₩3,561 million in 2022 and ₩4,163 million in 2021 in the consolidated statements of cash flows.

## 20. Retirement benefits plan

### Defined contribution plan

The Group operates a defined contribution plan, which requires contributions to be made to separately administered funds. If employees retire prior to meeting the conditions of the defined contribution plan, the Group's contribution reduces by the amount of contribution forfeited.

Contribution amounting to ₩ 11,607 million (2021: ₩11,406 million) recognized in the consolidated statements of profit or loss and other comprehensive income represents the amount to be contributed by the Group, which is calculated based on the rates stated under the pension plan. The Group made all contributions to be paid for the year ended December 31, 2022. On the other hand, profit or loss from the defined contribution pension plan during the years ended December 31, 2022 and 2021 was recognized as the following in the consolidated financial statements (Korean won in millions):

	2022	2021
Cost of sales	₩ 7,648	₩ 7,513
Direct cost of business	1,873	1,516
Selling and administrative expenses (retirement benefits)	1,677	1,951
Selling and administrative expenses (others)	409	426
	₩ 11,607	₩ 11,406

### Defined benefit plan

The Group operates a defined benefit plan for employees. A recent valuation on actuarial assumptions for plan assets and defined benefit obligation was performed by Dlog, an actuary consulting firm, on January 11, 2023. The present value of defined benefit obligation and related service costs are determined using the projected unit credit method.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**20. Retirement benefits plan (cont'd)**

The component of net defined benefit liabilities(assets) as of December 31, 2022 and 2021 is as follows (Korean won in millions):

	December 31, 2022	December 31, 2021
Present value of defined benefit obligation	₩ 364,076	₩ 366,738
Fair value of plan assets	(438,632)	(340,019)
Net defined benefit liabilities(assets)	₩ (74,556)	₩ 26,719

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

	2022	2021
Defined benefit obligation at beginning of year	₩ 366,738	₩ 311,909
Current service cost	64,996	63,392
Interest expenses on the DBO (*)	9,514	6,232
Transfer effect of newcomer	1,623	1,429
Remeasurements of defined benefit plan	(57,418)	(1,970)
Benefits paid	(21,377)	(14,254)
Defined benefit obligation at end of year	₩ 364,076	₩ 366,738

(\*) The rate used to discount DBO was determined by reference to market yields at the end of the reporting period on high quality corporate bonds (AAA).

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

	2022	2021
Fair value of plan assets at beginning of year	₩ 340,019	₩ 269,955
Interest income on plan assets (*)	8,246	5,074
Remeasurements of defined benefit plan	(950)	309
Benefits paid	(17,209)	(12,613)
Contributions	108,526	77,294
Fair value of plan assets at end of year	₩ 438,632	₩ 340,019

(\*) Interest income on plan assets was determined by reference to market yields at the end of the reporting period on high quality corporate bonds (AAA).

Expenses recognized in profit or loss for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Current service costs	₩ 64,996	₩ 63,392
Interest expenses on liabilities	9,514	6,232
Transfer effect of newcomer	1,623	1,429
Interest income on plan assets	(8,246)	(5,074)
	₩ 67,886	₩ 65,979

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**20. Retirement benefits plan (cont'd)**

The above profit or loss was recognized in the consolidated financial statements as follows:

	2022		2021	
Cost of sales	₩	51,371	₩	50,708
Direct cost of business		4,173		3,955
Selling and administrative expenses (retirement benefit)		10,851		10,015
Selling and administrative expenses (others)		1,491		1,301
Total	₩	67,886	₩	65,979

Re-measurements recognized in other comprehensive income for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022		2021	
Actuarial gain/loss	₩	57,418	₩	1,970
Return on plan assets		(950)		309
	₩	56,468	₩	2,279

The Group expects to make a contribution of ₩108,526 million in the next year in related to the defined benefit plan.

**21. Provisions**

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

	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Provisions for litigation	₩ 146	₩ 735,752	₩ 109	₩ 619,280
Provisions for employee benefits	126,989	-	126,162	-
Provisions for GHG emission	363	-	664	-
	₩ 127,498	₩ 735,752	₩ 126,935	₩ 619,280

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

	2022				
	Beginning balance	Additional provisions made	Amount used	Reversal	Ending balance
Provisions for litigation	₩ 619,389	₩ 118,591	₩ -	₩ (2,081)	₩ 735,899
Provisions for employee benefits	126,162	126,989	(126,162)	-	126,989
Provisions for GHG emission	664	363	(484)	(180)	363
	₩ 746,215	₩ 245,943	₩ (126,646)	₩ (2,261)	₩ 863,251

  

	2021				
	Beginning balance	Additional provisions made	Amount used	Reversal	Ending balance
Provisions for litigation	₩ 592,735	₩ 91,675	₩ -	₩ (65,021)	₩ 619,389
Provisions for employee benefits	127,945	126,162	(127,945)	-	126,162
Provisions for GHG emission	850	664	(698)	(152)	664
	₩ 721,530	₩ 218,501	₩ (128,643)	₩ (65,173)	₩ 746,215

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**22. Government grants**

**Accounting for government grants**

The Group presents government grants in the form of deductions from the related assets in accordance with the Article 44 of the Government Accounting Standards.

Government grants presented as a deduction to each related assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022	December 31, 2021
Buildings	₩ 723	₩ 235
Structures	142	158
Machineries	11	-
Vehicles	207	255
Furniture and fixtures	10	4
Construction-in-progress(Investment properties)	4,653	-
	<u>₩ 5,746</u>	<u>₩ 652</u>

Changes in government grants presented as a deduction to each related assets for the years ended December 31 2022 and 2021 are as follows (Korean won in millions):

	2022			
	Beginning balance	Increase	Decrease	Ending balance
Buildings	₩ 235	₩ 500	₩ (12)	₩ 723
Structures	158	-	(16)	142
Machineries	-	11	-	11
Vehicles	255	42	(90)	207
Furniture and fixtures	4	8	(2)	10
Construction-in-progress (Investment properties)	-	4,653	-	4,653
	<u>₩ 652</u>	<u>₩ 5,214</u>	<u>₩ (120)</u>	<u>₩ 5,746</u>

  

	2021			
	Beginning balance	Increase	Decrease	Ending balance
Buildings	₩ 245	₩ -	₩ (10)	₩ 235
Structures	175	-	(16)	158
Vehicles	346	-	(91)	255
Furniture and fixtures	5	-	(1)	4
	<u>₩ 771</u>	<u>₩ -</u>	<u>₩ (118)</u>	<u>₩ 652</u>

Income relates to government grants recognized during the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Offset of depreciation	₩ 120	₩ 118

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**23. Non-financial liabilities**

Non-financial liabilities as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		December 31, 2021	
	Current	Non-current	Current	Non-current
Advances received	₩ 322,074	₩ -	₩ 187,494	₩ -
Unearned revenue	630	28,853	1,141	30,231
Withholdings	20,240	-	28,373	-
Other non-financial liabilities	77	-	77	-
	<u>₩ 343,021</u>	<u>₩ 28,853</u>	<u>₩ 217,085</u>	<u>₩ 30,231</u>

**24. Consignment management service**

In accordance with Article 12 of *Korea Expressway Corporation Act*, the Group constructs, maintains and repairs expressways and other works related to expressways on behalf of the Government and local governments.

In accordance with Article 44-3 of the Government Accounting Standards, the Group recognizes the fund received from the Government but unused at the year-end for the consignment management service as a deduction to cash and cash equivalents.

Unused funds or funds to be returned related to the consignment management service as of December 31 2022 and 2021 are as follows (Korean won in millions):

Accounts	Type	Counter parts	December 31, 2022	December 31, 2021
Consignment management service fund	Unexecuted deposit fund	Government	₩ 88,251	₩ 131,476
Consignment management service fund	Unexecuted deposit fund	Public institutions	235,821	251,421
			<u>₩ 324,072</u>	<u>₩ 382,897</u>

Changes in unused funds or funds to be returned related to the consignment management service for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

Accounts	Counter-party	2022					Ending balance
		Beginning balance	Increase	Decrease	Others		
Consignment management service fund	Government	₩ 131,476	₩ 100,731	₩ (143,956)	₩ -	₩ 88,251	
Consignment management service fund	Public institutions	251,421	124,457	(140,057)	-	235,821	
		<u>₩ 382,897</u>	<u>₩ 225,188</u>	<u>₩ (284,013)</u>	<u>₩ -</u>	<u>₩ 324,072</u>	
Accounts	Counter-party	2021					Ending balance
		Beginning balance	Increase	Decrease	Others		
Consignment management service fund	Government	₩ 80,031	₩ 116,462	₩ (65,017)	₩ -	₩ 131,476	
Consignment management service fund	Public institutions	268,286	193,349	(210,214)	-	251,421	
		<u>₩ 348,317</u>	<u>₩ 309,811</u>	<u>₩ (275,231)</u>	<u>₩ -</u>	<u>₩ 382,897</u>	

(\*) Revenue and expenses of the consignment management service are amounts that reflect the effect of applying special accounting for transportation facilities, transfer between accounts and others, and may differ from those in the details on execution of funds.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**25. Consignment management service (cont'd)**

Revenue and expenses recognized related to the consignment management service in the separate financial statements for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022		2021	
	Revenue	Expense	Revenue	Expense
Construction	₩ 172,303	₩ 172,303	₩ 239,386	₩ 239,386
Purchase of lots for expressways	433	433	842	842
Operation of Incheon Bridge	6,343	6,343	4,052	4,052
Safety inspection service for non-management authority	1,254	1,254	1,636	1,636
	<u>₩ 180,333</u>	<u>₩ 180,333</u>	<u>₩ 245,916</u>	<u>₩ 245,916</u>

**25. Share capital**

The number of authorized shares of the Company is 5,000,000,000 shares, and the number of shares issued as of December 31, 2022 and 2021 is 4,097,404,873 shares and 3,865,608,773 shares, respectively. The par value is ₩10,000 and share capital as of December 31, 2022 and 2021 is as follows (Korean won in billions):

	December 31, 2022		December 31, 2021	
	Government	Non-government	Government	Non-government
Common share	₩ 35,797	₩ 5,177	₩ 33,928	₩ 4,728

Changes in the number of shares issued for the years ended December 31, 2022 and 2021 are as follows (In shares):

	2022	2021
Beginning number of shares	3,865,608,773	3,659,957,373
Capital increase by issuing new shares	231,796,100	205,651,400
Ending number of shares	<u>4,097,404,873</u>	<u>3,865,608,773</u>

**26. Retained earnings and dividends**

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

	December 31, 2022	December 31, 2021
Legal reserve (*)	₩ 471,001	₩ 464,911
Other reserve	991,581	990,574
Unappropriated retained earnings	111,316	22,686
	<u>₩ 1,573,898</u>	<u>₩ 1,478,171</u>

(\*) The *Korea Expressway Corporation Act* requires the Group to appropriate, as a legal reserve, at least 20% of net income for each period, until the reserve equals 50% of share capital. The legal reserve may not be utilized for cash dividends but may be used to offset a future deficit, if any, or may be transferred to share capital.

Details of other reserves as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022	December 31, 2021
Reserve for business expansion	₩ 991,581	₩ 990,574

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**26. Retained earnings and dividends (cont'd)**

Changes in retained earnings for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Beginning balance	₩ 1,478,171	₩ 1,455,835
Profit for the year attributable to owners of the parent	63,715	33,635
Dividends paid	(15,244)	(13,579)
Remeasurements of defined benefit plans	56,468	2,279
Amortization of share discount	(9,212)	-
Ending balance	<u>₩ 1,573,898</u>	<u>₩ 1,478,171</u>

Dividends paid by the Company for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions, except dividends per share):

	2022	2021
Dividends paid (₩4 per share in 2022 and 2021, respectively)	<u>₩ 15,244</u>	<u>₩ 13,579</u>

Changes in remeasurements of defined benefit plans for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Beginning balance	₩ (97,961)	₩ (100,240)
Changes	56,468	2,279
Ending balance	<u>₩ (41,493)</u>	<u>₩ (97,961)</u>

**27. Other components of equity**

Details of other components of equity as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022	December 31, 2021
Accumulated other comprehensive income (loss):		
Loss on valuation of financial assets at fair value through other comprehensive income	(39,952)	(41,913)
Gain on hedging instruments in cash flow hedges	(14,301)	40,522
Share of other comprehensive income of associates and joint ventures	3,859	3,093
	<u>(50,394)</u>	<u>1,702</u>
Others	(3)	(3)
	<u>₩ (50,397)</u>	<u>₩ 1,699</u>

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

	2022	2021
Beginning balance	₩ 1,702	₩ (25,708)
Gain (loss) on valuation of financial assets at fair value through other comprehensive income	1,961	537
Gain on hedging instruments in cash flow hedges	(54,823)	26,943
Share of other comprehensive loss of associates and joint ventures	766	(70)
Non-controlling interests	-	-
Ending balance	<u>₩ (50,394)</u>	<u>₩ 1,702</u>

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**28. Revenue**

Details of revenue from continuing operations, which excludes other income, other gains and finance income, for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Revenue from product sales:		
Sales of oil	₩ 323,864	₩ 286,633
Sales of goods	848	-
	<u>324,712</u>	<u>286,633</u>
Revenue from services:		
Operation of toll expressways	4,202,650	4,174,098
Operation of other expressways	5,331	4,746
Rental income from service areas	162,006	98,676
Rental income from gas stations	89,933	65,819
Others incidental business	12,607	12,131
Management of privately funded expressways	61,801	62,175
Indemnity for loss on land	103	-
Operation of information centers	371,316	284,227
Others	74,300	61,816
	<u>4,980,047</u>	<u>4,763,688</u>
Construction contract revenue:		
Construction business	5,294,383	5,238,835
	<u>5,294,383</u>	<u>5,238,835</u>
Revenue from consignment management service:		
Income from privately funded land purchase map supporting business	433	842
Other map supporting business	7,597	5,688
Consignment construction business	172,303	239,386
	<u>180,333</u>	<u>245,916</u>
	<u>₩ 10,779,475</u>	<u>₩ 10,535,072</u>

**29. Selling and administrative expenses**

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

	2022	2021
Contribution to the employee welfare fund	₩ 945	₩ -
Salaries	126,405	118,634
Retirement benefits	12,528	11,966
Termination benefits	624	3,045
Employee welfares	19,161	20,016
Insurance	117	104
Depreciation	27,276	28,338
Amortization	12,131	12,621
Bad debt expenses	1,176	2,226
Service fees	5,682	5,601
Advertising	5,010	4,513
Training	5,481	5,548
Vehicles maintenance	589	584
Publication	589	670
Business promotion	145	120
Rents	3,143	2,894
Communications	653	637

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**29. Selling and administrative expenses (cont'd)**

	2022	2021
Taxes and dues	39,974	38,427
Supplies	2,067	1,722
Utilities	2,964	2,491
Repairs	2,513	2,367
Development expenses	6,958	6,867
Travel	3,115	2,867
Clothing fee	269	445
Survey and analysis	873	1,602
Other	55,877	56,974
	<u>₩ 336,265</u>	<u>₩ 331,279</u>

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

	2022	2021
Research salaries	₩ 23,320	₩ 22,770
Research expenses	28,354	30,986
Others	4,203	3,218
	<u>₩ 55,877</u>	<u>₩ 56,974</u>

**30. Other income and expenses**

Details of other income for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

	2022	2021
Reversal of other provisions	₩ 2,081	₩ 65,022
Reversal of other allowance for doubtful accounts	551	349
Gain on contribution of assets	2,453	3,222
Gain on exemption of debts	112	166
Compensation and reparation income	6,492	6,355
Rental income	46,483	43,565
Others (*1)	34,024	25,027
	<u>₩ 92,196</u>	<u>₩ 143,706</u>

(\*1) Details of "others" in other income for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Reverse of short-term employee benefits (paid annual leave)	₩ 5,599	₩ 6,453
Cause deductible income	8,215	6,005
Value-added tax refund	25	118
Other income	20,185	12,451
	<u>₩ 34,024</u>	<u>₩ 25,027</u>

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

	2022	2021
Increase in other provisions	₩ 118,591	₩ 91,675
Other bad debt expenses	596	232
Compensation and reparation expenses	5,613	3,981
Donations	3,840	3,823
Others (*2)	42,591	18,563
	<u>₩ 171,231</u>	<u>₩ 118,274</u>

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**30. Other income and expenses (cont'd)**

(\*2) Details of "others" in other expenses for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Short-term employee benefits (paid annual leave)	₩ 5,377	₩ 6,033
Attributable fee	6,486	6,319
Parking lot communication facility use charges	44	24
Other expenses	30,684	6,187
	<u>₩ 42,591</u>	<u>₩ 18,563</u>

**31. Other loss, net**

Details of net other loss for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Gain on disposal of property and equipment	₩ 1,112	₩ 1,454
Gain on disposal of intangible assets	6,582	11,688
Gain on insurance settlements	49	12
Gain on disposal of investment properties	1	56
Gain on foreign currency translations	1,661	476
Gain on foreign currency transactions	2	33
Other gain (*1)	3,228	1,935
Loss on disposal of property and equipment	(158)	(478)
Loss on disposal of investment properties	(504)	(3,834)
Loss on foreign currency translations	(1,170)	(46)
Loss on foreign currency transactions	(2)	(14)
Other loss (*2)	(31,458)	(18,048)
	<u>₩ (20,657)</u>	<u>₩ (6,766)</u>

(\*1) Details of other gain for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Gain on disposal of wastes	₩ 3,228	₩ 1,935

(\*2) Details of other loss for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Loss on disasters	₩ 31,452	₩ 18,048
Inventory obsolescence loss	6	-
	<u>₩ 31,458</u>	<u>₩ 18,048</u>

**32. Finance income**

Details of finance income for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Interest income	₩ 26,760	₩ 9,183
Dividend income	425	231
Gain on disposal of financial assets	885	2,840
Gain on valuation of financial assets at fair value through profit or loss	7,297	14,236

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**32. Finance income (cont'd)**

	2022	2021
Gain on valuation of derivative instruments	116,985	185,210
Gain on transaction of derivative instruments	-	16,412
Gain on foreign currency translations	50,715	1,905
Gain on foreign currency transactions	9,611	-
Other finance income	-	-
	<u>₩ 212,678</u>	<u>₩ 230,017</u>

Details of interest income included in finance income for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Cash and cash equivalents	₩ 23,114	₩ 6,867
Loans and receivables	2,135	1,190
Trade and other receivables	1,511	1,126
	<u>₩ 26,760</u>	<u>₩ 9,183</u>

**33. Finance costs**

Details of finance costs for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Interest expenses	₩ 602,351	₩ 602,491
Loss on disposal of financial assets	14,170	3,312
Loss on valuation of financial assets at fair value through profit or loss	82,197	15,201
Loss on valuation of derivative instruments	50,387	1,245
Loss on transaction of derivative instruments	9,611	-
Loss on hedged item related to fair value hedge	3,135	5,103
Loss on foreign currency translations	117,061	185,211
Loss on foreign currency transactions	-	16,412
	<u>₩ 878,913</u>	<u>₩ 828,975</u>

Details of interest expenses included in finance costs for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Trade and other payables	₩ 4,838	₩ 6,437
Financial liabilities at fair value through profit or loss	1,135	1,494
Short-term borrowings	8,964	1,002
Long-term borrowings	28,847	22,652
Bonds	768,676	729,312
Lease interest	121	75
	<u>812,581</u>	<u>760,972</u>
Less: capitalization of borrowing costs	<u>(210,230)</u>	<u>(158,481)</u>
	<u>₩ 602,351</u>	<u>₩ 602,491</u>

The weighted-average capitalization rates for borrowings for the years ended December 31, 2022 and 2021 are 2.51% and 2.65%, respectively.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**34. Income tax expense**

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

	2022		2021	
Current income taxes	₩	27,808	₩	6,527
Adjustments of taxes of prior periods		-		-
Income tax expense	₩	27,808	₩	6,527

The reconciliation between profit before income tax and income tax expense for the years ended December 31, 2022 and 2021 is as follows (Korean won in millions):

	2022		2021	
Profit before income tax	₩	91,523	₩	40,162
Applicable tax rates		24.2%		24.2%
Income tax at the Group's statutory tax rates		22,149		9,719
Adjustment:				
Effect of step-up tax rates		(462)		(462)
Adjustments of taxes of prior periods				-
Non-taxable income		(166)		(1)
Non-deductible expenses		294		460
Tax credit		(635)		(1,279)
Effect of changes in temporary differences unrecognized for deferred taxes		6,628		(1,910)
		5,659		(3,192)
Income tax expense	₩	27,808	₩	6,527
Effective tax rate		30.38%		16.25%

As of December 31, 2022 and 2021, the Group has not recognized deferred tax assets on net deductible temporary differences and unused tax losses as it is not probable that taxable profit will be available against which the temporary differences and unused tax losses can be utilized.

**35. Expenses by nature**

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

	Change in inventories		Selling and administrative expenses		Cost of sales		Total	
	2022	2021	2022	2021	2022	2021	2022	2021
Changes in inventories	₩ (6,149)	₩ (5,474)	₩ -	₩ -	₩ -	₩ -	₩ (6,149)	₩ (5,474)
Inventories purchased	685,319	586,373	-	-	-	-	685,319	586,373
Contribution to the employee welfare fund	-	-	945	-	-	-	945	-
Salaries	-	-	126,405	118,634	684,565	652,699	810,970	771,333
Retirement benefits	-	-	12,528	11,966	54,392	55,857	66,920	67,823
Termination benefits	-	-	624	3,045	1,880	2,587	2,504	5,632
Employee welfare	-	-	19,161	20,016	103,199	98,856	122,360	118,872
Insurance	-	-	117	104	2,996	2,165	3,113	2,269
Depreciation	-	-	27,276	28,338	164,545	158,757	191,821	187,095
Amortization	-	-	12,131	12,621	1,481,746	1,700,592	1,493,877	1,713,213
Bad debt expenses	-	-	1,176	2,226	-	-	1,176	2,226
Service fees	-	-	5,682	5,601	99,030	97,712	104,712	103,313
Advertisement	-	-	5,010	4,513	8,927	10,216	13,937	14,729
Training	-	-	5,481	5,548	5,679	4,295	11,160	9,843

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**35. Expenses by nature (Cont'd)**

	Change in inventories		Selling and administrative expenses		Cost of sales		Total	
	2022	2021	2022	2021	2022	2021	2022	2021
Vehicles								
maintenance	-	-	589	584	26,264	23,463	26,853	24,047
Publication	-	-	589	670	1,986	2,164	2,575	2,834
Business promotion	-	-	145	120	215	159	360	279
Rents	-	-	3,143	2,894	1,305	3,319	4,448	6,213
Communication	-	-	653	637	4,004	2,953	4,657	3,590
Taxes and dues	-	-	39,974	38,427	60,419	55,627	100,393	94,054
Supplies	-	-	2,067	1,722	6,726	6,705	8,793	8,427
Utilities	-	-	2,964	2,491	88,248	80,869	91,212	83,360
Repairs	-	-	2,513	2,367	370,207	443,238	372,720	445,605
Development expenses	-	-	6,958	6,867	3,065	2,986	10,023	9,853
Travel	-	-	3,115	2,867	2,631	2,043	5,746	4,910
Clothes	-	-	269	445	3,353	3,904	3,622	4,349
Survey and analysis	-	-	873	1,602	1,779	1,771	2,652	3,373
Sales promotion expenses	-	-	-	-	776	604	776	604
Other selling and administrative expenses	-	-	55,877	56,974	-	-	55,877	56,974
Other cost of sales	-	-	-	-	5,731,960	5,590,805	5,731,960	5,590,805
	<u>₩ 679,170</u>	<u>₩ 580,899</u>	<u>₩ 336,265</u>	<u>₩ 331,279</u>	<u>₩ 8,909,897</u>	<u>₩ 9,004,346</u>	<u>₩ 9,925,322</u>	<u>₩ 9,916,524</u>

**36. Earnings per share**

There are no dilutive securities, and the Group's basic earnings per share for the years ended December 31, 2022 and 2021 are as follows (Korean won):

	2022	2021
Profit for the year attributable to owners of the parent	₩ 63,715,147,143	₩ 33,635,134,141
Weighted-average number of common shares outstanding (in shares) (*)	4,001,770,242	3,784,248,210
Basic earnings per share	₩ 16	₩ 9

(\*) the weighted-average number of common shares outstanding during this reporting period

	Shares	Dates	Accumulated number
As of January 1, 2022	3,865,608,773	365	1,410,947,202,145
1 <sup>st</sup> Acquisition of governmental investment	31,890,000	311	9,917,790,000
2 <sup>nd</sup> Acquisition of governmental investment	57,253,000	282	16,145,346,000
3 <sup>rd</sup> Acquisition of governmental investment	18,678,000	277	5,173,806,000
4 <sup>th</sup> Acquisition of governmental investment	26,570,200	249	6,615,979,800
5 <sup>th</sup> Acquisition of governmental investment	50,000,000	181	9,050,000,000
6 <sup>th</sup> Acquisition of governmental investment	2,425,100	157	380,740,700
7 <sup>th</sup> Acquisition of governmental investment	3,688,700	124	457,398,800
8 <sup>th</sup> Acquisition of governmental investment	5,864,000	94	551,216,000
9 <sup>th</sup> Acquisition of governmental investment	14,391,400	66	949,832,400
10 <sup>th</sup> Acquisition of governmental investment	12,125,800	34	412,277,200
11 <sup>th</sup> Acquisition of governmental investment	8,909,900	5	44,549,500
			÷365
The weighted average number of common shares			4,001,770,242

	Shares	Dates	Accumulated number
As of January 1, 2021	3,659,957,373	365	1,335,884,441,145
1 <sup>st</sup> Acquisition of governmental investment	37,390,000	309	11,553,510,000
2 <sup>nd</sup> Acquisition of governmental investment	55,540,000	276	15,329,040,000
3 <sup>rd</sup> Acquisition of governmental investment	23,000,000	248	5,704,000,000

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**38. Earnings per share (cont'd)**

	Shares	Dates	Accumulated number
4 <sup>th</sup> Acquisition of governmental investment	23,790,000	219	5,210,010,000
5 <sup>th</sup> Acquisition of governmental investment	29,100,000	191	5,558,100,000
6 <sup>th</sup> Acquisition of governmental investment	1,140,000	158	180,120,000
7 <sup>th</sup> Acquisition of governmental investment	1,700,000	127	215,900,000
8 <sup>th</sup> Acquisition of governmental investment	12,840,000	95	1,219,800,000
9 <sup>th</sup> Acquisition of governmental investment	2,550,000	65	165,750,000
10 <sup>th</sup> Acquisition of governmental investment	4,860,000	36	174,960,000
11 <sup>th</sup> Acquisition of governmental investment	13,741,400	4	54,965,600
12 <sup>th</sup> Acquisition of governmental investment	13,110,000	63	825,930,000
13 <sup>th</sup> Acquisition of governmental investment	6,250,000	32	200,000,000
14 <sup>th</sup> Acquisition of governmental investment	3,541,900	9	31,877,100
			÷366
The weighted average number of ordinary shares			3,784,248,210

**37. Financial instruments by category**

Financial assets and liabilities by categories as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022				Total
	Financial assets at FVPL	Financial assets at amortized cost	Financial assets at FVOCI	Financial assets designated as hedge accounting	
Current financial assets:					
Cash and cash equivalents	₩ -	₩ 507,240	₩ -	₩ -	₩ 507,240
Derivative assets	-	-	-	30,657	30,657
Financial assets at FVPL	72,765	-	-	-	72,765
Loans and receivables	-	1,358	-	-	1,358
Short-term financial instruments	-	60,000	-	-	60,000
Other financial assets	-	452,635	-	-	452,635
	72,765	1,021,233	-	30,657	1,124,655
Trade and other receivables	-	393,521	-	-	393,521
	₩ 72,765	₩ 1,414,754	₩ -	₩ 30,657	₩ 1,518,176

	December 31, 2022				Total
	Financial assets at FVPL	Financial assets at amortized cost	Financial assets at FVOCI	Financial assets designated as hedge accounting	
Non-current financial assets:					
Derivative assets	₩ -	₩ -	₩ -	₩ 231,951	₩ 231,951
Financial assets at FVPL	658,387	-	-	-	658,387
Financial assets at FVOCI	-	-	24,221	-	24,221
Loans and receivables	-	33,764	-	-	33,764
	658,387	33,764	24,221	231,951	948,323
Trade and other receivables	-	124,594	-	-	124,594
	₩ 658,387	₩ 158,358	₩ 24,221	₩ 231,951	₩ 1,072,917

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**37. Financial instruments by category (cont'd)**

	December 31, 2022			
	Financial liabilities at FVPL	Financial liabilities at amortized cost	Financial liabilities designated as hedge accounting	Total
Current financial liabilities:				
Short-term borrowings	₩ -	₩ 465,200	₩ -	₩ 465,200
Current portion of long-term borrowings	-	400,000	-	400,000
Current portion of bonds	-	3,066,030	-	3,066,030
	-	3,931,230	-	3,931,230
Trade and other payables	-	1,190,177	-	1,190,177
	₩ -	₩ 5,121,407	₩ -	₩ 5,121,407

	December 31, 2022			
	Financial liabilities at FVPL	Financial liabilities at amortized cost	Financial liabilities designated as hedge accounting	Total
Non-current financial liabilities:				
Financial liabilities at FVPL	₩ 17,741	₩ -	₩ -	₩ 17,741
Long-term borrowings	-	1,000,000	-	1,000,000
Bonds	-	28,054,103	-	28,054,103
Derivative liabilities	-	-	105,795	105,795
	17,741	29,054,103	105,795	29,177,639
Trade and other payables	-	203,763	-	203,763
	₩ 17,741	₩ 29,257,866	₩ 105,795	₩ 29,381,402

	December 31, 2021				
	Financial assets at FVPL	Financial assets at amortized cost	Financial assets at FVOCI	Financial assets designated as hedge accounting	Total
Current financial assets:					
Cash and cash equivalents	₩ -	₩ 557,477	₩ -	₩ -	₩ 557,477
Derivative assets	-	-	-	15,872	15,872
Financial assets at FVPL	486	-	-	-	486
Loans and receivables	-	1,468	-	-	1,468
Short-term financial instruments	-	60,000	-	-	60,000
Other financial assets	-	419,906	-	-	419,906
	486	1,038,851	-	15,872	1,055,209
Trade and other receivables	-	349,657	-	-	349,657
	₩ 486	₩ 1,388,508	₩ -	₩ 15,872	₩ 1,404,866

	December 31, 2021				
	Financial assets at FVPL	Financial assets at amortized cost	Financial assets at FVOCI	Financial assets designated as hedge accounting	Total
Non-current financial assets:					
Derivative assets	₩ -	₩ -	₩ -	₩ 165,749	₩ 165,749
Financial assets at FVPL	63,968	-	-	-	63,968
Financial assets at FVOCI	-	-	22,181	-	22,181
Loans and receivables	-	36,566	-	-	36,566
	63,968	36,566	22,181	165,749	288,464
Trade and other receivables	-	112,907	-	-	112,907
	₩ 63,968	₩ 149,473	₩ 22,181	₩ 165,749	₩ 401,371

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**37. Financial instruments by category (cont'd)**

	December 31, 2021			
	Financial liabilities at FVPL	Financial liabilities at amortized cost	Financial liabilities designated as hedge accounting	Total
Current financial liabilities:				
Financial liabilities at FVPL	₩ 105,125	₩ -	₩ -	₩ 105,125
Current portion of long-term borrowings	-	200,000	-	200,000
Current portion of bonds	-	3,036,360	-	3,036,360
Derivative liabilities	-	-	180	180
	105,125	3,236,360	180	3,341,665
Trade and other payables	-	968,227	-	968,227
	₩ 105,125	₩ 4,204,587	₩ 180	₩ 4,309,892

  

	December 31, 2021			
	Financial liabilities at FVPL	Financial liabilities at amortized cost	Financial liabilities designated as hedge accounting	Total
Non-current financial liabilities:				
Financial liabilities at FVPL	₩ 6,446	₩ -	₩ -	₩ 6,446
Long-term borrowings	-	900,000	-	900,000
Bonds	-	26,731,737	-	26,731,737
Derivative liabilities	-	-	23,656	23,656
	6,446	27,631,737	23,656	27,661,839
Trade and other payables	-	205,447	-	205,447
	₩ 6,446	₩ 27,837,184	₩ 23,656	₩ 27,867,286

Gain and loss on financial instruments by category for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Financial assets at fair value through profit or loss:		
Loss on valuation, net	₩ (62,973)	₩ (9,668)
Gain (loss) on transaction, net	(1,847)	2,840
Dividend income	425	231
Financial assets at amortized cost:		
Interest income	26,759	9,183
Financial assets at fair value other comprehensive income:		
Comprehensive income	1,961	537
Derivative assets designated as hedge:		
Gain (loss) on transaction, net	(9,611)	2,522
Gain on valuation, net	113,031	178,582
Comprehensive income (loss)	(25,598)	16,705
Financial liabilities at fair value through profit or loss:		
Interest expenses (*)	(1,135)	(1,494)
Loss on transaction, net	(11,438)	(3,312)
Gain (loss) on valuation, net	(11,926)	8,702
Financial liabilities at amortized cost:		
Interest expenses (*)	(601,216)	(600,997)
Gain (loss) on foreign currency transactions, net	9,611	(16,412)
Loss on foreign currency translations, net	(66,346)	(183,305)
Derivative liabilities designated as hedge:		
Gain on transaction, net	-	13,890
Gain (loss) on valuation, net	(49,569)	279
Comprehensive income (loss)	(26,225)	10,238

(\*) Amount after deducting the capitalization of borrowing costs

### 38. Risk management

#### Risk management policy

The Group manages various risks that may arise from each field of business, and main risks are credit risk, market risk, interest risk and liquidity risk. These risks are recognized, measured and reported according to the basic policies established by the Group.

#### Capital risk management

The Group's capital management purpose is to maintain a strong capital base, so as to maintain investor, creditor and market confidence, and to sustain future development of the business. The Group's capital management is to maintain as a going concern and minimize the cost of capital, so as to maximize shareholder's return. The management of the Group also monitors periodically the level of capital structure and maintains the optimal capital structure.

The Group manages its capital based on debt-to-equity ratio. The net debt-to-equity ratio is calculated by dividing net debt by total equity plus net debt. Net debt are total borrowings less cash and cash equivalents, and total equity plus net debt is the "total equity" in the consolidated statement of financial position plus net debt.

The Group's strategy for 2022, which is line with 2021, is to maintain its net debt-to-equity ratio between 45% and 50%, and its credit rating at AAA (domestic credit rating). Its credit rating was maintained for 2022.

As of December 31, 2022 and 2021, net debt-to-equity ratio is as follows (Korean won in millions):

	<u>December 31, 2022</u>	<u>December 31, 2021</u>
Total borrowings	₩ 32,985,333	₩ 30,971,232
Less: cash and cash equivalents	<u>(507,240)</u>	<u>(557,477)</u>
Net debt	32,478,093	30,413,755
Total equity	<u>42,478,212</u>	<u>40,118,767</u>
Total equity plus net debt	74,956,305	70,532,522
Net debt-to-equity ratio	<u>₩ 43.33%</u>	<u>₩ 43.12%</u>

#### Financial risk management

##### 1) Purpose of financial risk management

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The Board of Directors has established the Risk Management Committee, which is responsible for developing and monitoring the Group's risk management policies. The committee reports regularly to the Board of Directors on its activities.

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

The Group's Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. The Group's Audit Committee is assisted in its oversight role by Internal Audit. Internal Audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit Committee

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**38. Risk management (Cont'd)**

2) Credit risk

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022	December 31, 2021
Financial assets at fair value through profit or loss	₩ 731,152	₩ 64,455
Financial assets at fair value through other comprehensive income	24,221	22,181
Trade and other receivables, loans, short-term financial instruments and other financial assets	1,065,872	980,504
Cash and cash equivalents	507,240	557,477
Interest rate swap for hedge	42,485	10,938
Currency swap for hedge	220,123	170,684
	<u>₩ 2,591,093</u>	<u>₩ 1,806,239</u>

**Impairment loss**

Allowance for doubtful accounts is used to record impairment loss before the Group can have assurance of uncollectable of assets. If the Group determined that assets cannot be recovered, allowance for doubtful accounts is offset with financial assets. Impairment analysis of trade and other receivables are described in Note 8.

3) Liquidity risk

The contractual maturities of financial liabilities as of December 31, 2022 and 2021, excluding the impact of netting agreements, are as follows. Meanwhile, derivative liabilities were excluded because they were presented separately (Korean won in millions):

	December 31, 2022						
	Carrying amount	Contractual cash flow	Within 6 months	6–12 months	1 year–2 years	2–5 years	More than 5 years
Non-derivative financial liabilities:							
Trade and other payables	₩ 1,393,940	₩ 1,406,022	₩ 873,896	₩ 316,907	₩ 92,096	₩ 123,123	₩ -
Unsecured bonds	31,120,133	31,120,133	1,419,990	1,646,040	4,050,725	8,503,401	15,499,997
Unsecured long-term borrowings	1,865,200	1,865,200	765,200	100,000	-	1,000,000	-
	<u>₩ 34,379,273</u>	<u>₩ 34,391,355</u>	<u>₩ 3,059,086</u>	<u>₩ 2,062,947</u>	<u>₩ 4,142,821</u>	<u>₩ 9,626,524</u>	<u>₩ 15,499,997</u>
	December 31, 2021						
	Carrying amount	Contractual cash flow	Within 6 months	6–12 months	1 year–2 years	2–5 years	More than 5 years
Non-derivative financial liabilities:							
Trade and other payables	₩ 1,173,674	₩ 1,187,574	₩ 740,693	₩ 228,174	₩ 92,827	₩ 125,880	₩ -
Unsecured bonds	29,871,232	29,871,232	1,008,710	2,130,785	6,355,771	5,011,552	15,364,414
Unsecured long-term borrowings	1,100,000	1,100,000	200,000	-	400,000	500,000	-
	<u>₩ 32,144,906</u>	<u>₩ 32,158,806</u>	<u>₩ 1,949,403</u>	<u>₩ 2,358,959</u>	<u>₩ 6,848,598</u>	<u>₩ 5,637,432</u>	<u>₩ 15,364,414</u>

The Group does not expect the cash flows included in the maturity analysis to occur significantly earlier or at significantly different amounts.

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**38. Risk management (Cont'd)**

The periods in which the cash flows associated with cash flow hedges are expected to occur as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022						
	Carrying amount	Contractual cash flow	Within 6 months	6–12 months	1 year–2 years	2–5 years	More than 5 years
Currency swap:							
Assets	₩ 220,123	₩ 220,123	₩ 21,428	₩ 7,265	₩ 56,938	₩ 103,133	₩ 31,359
Liabilities	(72,305)	(72,305)	-	-	(37,402)	(27,672)	(7,231)
Interest rate swap:							
Assets	₩ 42,485	₩ 42,485	₩ 566	₩ 1,399	₩ -	₩ 36,432	₩ 1,088
Liabilities	(51,231)	(51,231)	-	-	(11,240)	(17,624)	(22,367)

  

	December 31, 2021						
	Carrying amount	Contractual cash flow	Within 6 months	6–12 months	1 year–2 years	2–5 years	More than 5 years
Currency swap:							
Assets	₩ 170,683	₩ 170,683	₩ 3,092	₩ 7,899	₩ 22,878	₩ 92,519	₩ 44,296
Liabilities	(5,407)	(5,407)	-	-	-	(4,218)	(1,189)
Interest rate swap:							
Assets	₩ 15,190	₩ 15,190	₩ 347	₩ 5,021	₩ 303	₩ 5,753	₩ 3,766
Liabilities	(26,864)	(26,864)	(180)	(1,990)	(2,654)	(11,987)	(10,053)

4) Currency risk

As of December 31, 2022 and 2021, the Group entered into a currency swap contract to hedge the risk of exchange rate fluctuations for foreign currency bonds and designated it as effective hedging instruments. Currency swaps, designated as effective hedging instruments, are designed to offset fluctuations in the exchange rate of foreign currency bonds. Therefore, assuming that all other variables are constant, the exchange rate change does not have an impact on profit or loss although fluctuations may occur with the functional currency against each foreign currency.

**Exposure to currency risk**

The Group's exposure to foreign currency risk as of December 31, 2022 and 2021 is as follows (Korean won in millions):

	December 31, 2022						
	USD	EUR	HKD	CHF	SEK	CAD	AUD
Liabilities:							
Bonds	₩ 1,394,030	₩ 91,882	₩ 130,040	₩ 315,760	₩ 87,242	₩ 126,276	₩ 386,285

  

	December 31, 2021						
	USD	EUR	HKD	CHF	SEK	CAD	AUD
Liabilities:							
Bonds	₩ 1,801,960	₩ 91,279	₩ 190,342	₩ 298,418	₩ 94,349	₩ 125,632	₩ 386,501

Exchange rates applied as of and for the years ended December 31, 2022 and 2021 are as follows (Korean won):

	Average rate		Reporting date spot rate	
	2022	2021	December 31, 2022	December 31, 2021
USD	₩ 1,292.09	₩ 1,144.42	₩ 1,267.30	₩ 1,185.50
EUR	1,357.65	1,352.79	1,351.20	1,342.34
HKD	165.00	147.23	162.55	152.03
CHF	1,353.09	1,251.65	1,372.87	1,297.47

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**38. Risk management (Cont'd)**

	Average rate		Reporting date spot rate	
	2022	2021	December 31, 2022	December 31, 2021
SEK	127.68	133.35	121.17	131.04
CAD	991.75	913.26	935.38	930.61
AUD	895.47	859.42	858.41	858.89

**Sensitivity analysis**

If the foreign exchange rate against the Korean won was high as of December 31, 2022 and 2021, the Group's equity and profit or loss would have fluctuated. This analysis assumes a change in the degree to which the Group believes it is reasonably possible at the end of each term. In addition, it was assumed that other variables, such as interest rates, do not change when analyzing sensitivity. Specific equity and profit or loss variability effects, when the exchange rate increase 10% are as follows:

	December 31, 2022		December 31, 2021	
	Equity	Profit or loss	Equity	Profit or loss
USD	₩ (130,403)	₩ (130,403)	₩ (180,196)	₩ (180,196)
EUR	(9,188)	(9,188)	(9,128)	(9,128)
HKD	(13,004)	(13,004)	(19,034)	(19,034)
CHF	(31,576)	(31,576)	(29,842)	(29,842)
SEK	(8,724)	(8,724)	(9,435)	(9,435)
CAD	(12,628)	(12,628)	(12,563)	(12,563)
AUD	(38,628)	(38,628)	(38,650)	(38,650)

**5) Interest rate risk**

The Group's interest-bearing financial liabilities as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		December 31, 2021	
Fixed-rate instruments:				
Financial liabilities	₩	32,795,343	₩	30,611,250
Variable-rate instruments:				
Financial liabilities	₩	189,991	₩	359,982

**Cash flow sensitivity analysis for variable-rate instruments**

A change of 100 basis points ("bps") in interest rates as of December 31, 2022 and 2021 would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. The analysis is performed on the same basis for 2020 (Korean won in millions):

	Profit or loss		Equity	
	100 bp increase	100 bp decrease	100 bp increase	100 bp decrease
As of December 31, 2022:				
Variable-rate instruments	₩ (1,900)	₩ 1,900	₩ (1,900)	₩ 1,900
As of December 31, 2021:				
Variable-rate instruments	₩ (3,600)	₩ 3,600	₩ (3,600)	₩ 3,600

Meanwhile, the Group hedges interest rate risk by entering into currency swaps and interest rate swaps for a significant portion of variable-rate borrowings exposed to interest rate risk.

### 38. Risk management (cont'd)

#### 6) Major assets and liabilities with uncertainties in underlying assumptions

A sensitivity analysis on the Group's defined benefit obligation assuming a 1% increase or 1% decrease in various assumptions as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Assumptions	Accounts	December 31, 2022		December 31, 2021	
		1% increase	1% decrease	1% increase	1% decrease
Future salary increases	Defined benefit obligation	₩ (28,301)	₩ 32,107	₩ (34,322)	₩ 39,700
Discount rate	Defined benefit obligation	31,264	(27,153)	39,291	(33,448)

#### Fair value measurements

The fair value of financial instruments traded in active markets is calculated based on the notified market price at the end of the reporting period. Published market prices of financial assets that the Group retains are bid prices.

The fair value of financial instruments that are not traded in an active market is determined using valuation techniques. The Group uses a variety of assessment techniques and establishes a hypothesis based on current market conditions at the end of the reporting period.

The Group's fair value assessment techniques use recent transactions between independent parties that have reasonable judgment and willingness to deal with, referring the other financial instrument's present value that is substantially equal, discounting estimated cash flow method, option-pricing model, etc. For example, the fair value of interest rate swaps is calculated as the present value of estimated future cash flows, and the fair value of foreign exchange forward contracts is calculated by applying published forward rate at the end of the reporting period.

#### - Debt instruments, including bonds

The fair value of debt instruments, such as bonds, has been determined by applying the discounted cash flow method. The discount rate used to discount cash flows was determined by swap rate and credit spreads as a base that are published in market for debenture having similar credit rating and period like fair value measurement debt instruments, including bonds. As the inputs of the discount rate have a significant impact on the fair value of debt instruments, including bonds derived on the basis of the available information observed in the market, the Group has classified the fair value measurement of debt instruments, including bonds, in the Level 2 of the fair value hierarchy.

#### - Unmarketable shares

The fair value of unlisted shares is measured using cash flow discount model in order to estimate the future cash flows business plans and sales growth based on the industry situation and pretax operating margin using assumptions that are not based on observable market price or percentage of such weighted-average cost of capital assumption or estimations. The weighted-average cost of capital used to discount the future cash flow was estimated by utilizing the data of similar listed companies applying the capital asset pricing model. The Group has determined that as major assumptions and estimates mentioned above have a significant impact on the fair value of unlisted shares, the Group classifies the fair value measurement of unlisted shares in the Level 3 of the fair value hierarchy.

#### 1) Fair values versus carrying amount

The fair values of financial assets and liabilities, together with the carrying amounts shown in the consolidated statements of financial position, as of December 31, 2022 and 2021 are as follows (Korean won in millions):

	December 31, 2022		December 31, 2021	
	Carrying amount	Fair value	Carrying amount	Fair value
Assets carried at fair value:				
Current derivatives assets	₩ 30,657	₩ 30,657	₩ 15,872	₩ 15,872
Current financial assets at FVPL	72,765	72,765	486	486

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**38. Risk management (cont'd)**

	December 31, 2022		December 31, 2021	
	Carrying amount	Fair value	Carrying amount	Fair value
Non-current financial assets at FVPL	658,387	658,387	63,968	63,968
Non-current financial assets at FVOCI	24,221	24,221	22,181	22,181
Non-current derivatives assets	231,951	231,951	165,749	165,749
	<u>₩ 1,017,981</u>	<u>₩ 1,017,981</u>	<u>₩ 268,256</u>	<u>₩ 268,256</u>
Assets carried at amortized cost:				
Cash and cash equivalents	₩ 507,240	₩ 507,240	₩ 557,477	₩ 557,477
Short-term financial instruments	60,000	60,000	60,000	60,000
Short-term loans and receivables	1,358	1,358	1,468	1,468
Other financial assets	452,635	452,635	419,906	419,906
Trade and other receivables	393,521	393,521	349,657	349,657
Long-term loans and receivables	33,764	33,764	36,566	36,566
Long-term trade and other receivables	124,594	124,594	112,907	112,907
	<u>₩ 1,573,112</u>	<u>₩ 1,573,112</u>	<u>₩ 1,537,981</u>	<u>₩ 1,537,981</u>
Liabilities carried at fair value:				
Current financial liabilities at FVPL	₩ -	₩ -	₩ 105,125	₩ 105,125
Current derivatives liabilities	-	-	180	180
Non-current financial liabilities at FVPL	17,741	17,741	6,446	6,446
Non-current derivatives liabilities	105,795	105,795	23,656	23,656
	<u>₩ 123,536</u>	<u>₩ 123,536</u>	<u>₩ 135,407</u>	<u>₩ 135,407</u>
Liabilities carried at amortized cost:				
Trade and other payables	₩ 1,190,177	₩ 1,190,177	₩ 968,227	₩ 968,227
Short-term borrowings	465,200	465,200	-	-
Current portion of long-term borrowings	400,000	400,000	200,000	200,000
Current portion of bonds	3,066,030	3,066,030	3,036,360	3,036,360
Long-term trade and other payables	203,763	203,763	205,447	205,447
Long-term borrowings	1,000,000	1,000,000	900,000	900,000
Bonds	28,054,103	28,054,103	26,731,737	26,731,737
	<u>₩ 34,381,654</u>	<u>₩ 34,381,654</u>	<u>₩ 32,041,771</u>	<u>₩ 32,041,771</u>

### 38. Risk management (cont'd)

#### 2) Fair value hierarchy

The different levels of fair values of financial assets and liabilities have been defined as follows:

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

Financial instruments that are measured subsequent to initial recognition at fair value by fair value hierarchy levels as of December 31, 2022 and December 31, 2021 are as follows (Korean won in millions):

	December 31, 2022			
	Level 1	Level 2	Level 3	Total
Current derivatives assets	₩ -	₩ 30,657	₩ -	₩ 30,657
Current financial assets at FVPL	-	-	72,765	72,765
Non-current derivatives assets	-	231,951	-	231,951
Non-current financial assets at FVPL	-	-	658,387	658,387
Non-current financial assets at FVOCI	-	-	24,221	24,221
Non-current financial liabilities at FVPL	-	17,741	-	17,741
Non-current derivatives liabilities	-	105,795	-	105,795

  

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
Current derivatives assets	₩ -	₩ 15,872	₩ -	₩ 15,872
Current financial assets at FVPL	-	486	-	486
Non-current derivatives assets	-	165,749	-	165,749
Non-current financial assets at FVPL	-	3,766	60,202	63,968
Non-current financial assets at FVOCI	-	-	22,181	22,181
Current derivatives liabilities	-	180	-	180
Current financial liabilities at FVPL	-	105,125	-	105,125
Non-current financial liabilities at FVPL	-	6,446	-	6,446
Non-current derivatives liabilities	-	23,656	-	23,656

The method used for the valuation of financial assets at FVPL and financial assets at FVOCI measured at fair value as of December 31, 2022 is as follows:

#### ① Assumption (Korean won in millions)

	Valuation method	Discount rate
The 2nd Seoul-Incheon Linking Highway Co., Ltd	Dividend Discount method	10.66%
Seoul North Highway Corporation	Discounted cash flow method	14.50%
DREAMLINE Corporation	Discounted cash flow method	9.06%
Korea Overseas Infrastructure & Urban Development Corporation	Net Asset Value Evaluation Method	-

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**38. Risk management (cont'd)**

② Method (Korean won in millions)

	Book value before valuation	Valuation gain (before tax)	Book value	Fair value
The 2nd Seoul-Incheon Linking Highway Co., Ltd	3,294	(3,294)	-	-
Seoul North Highway Corporation	5,007	127	5,134	5,134
DREAMLINE Corporation	937	(145)	791	791
Korea Overseas Infrastructure & Urban Development Corporation	21,137	2,106	23,243	23,243

**39. Related-party transactions**

Details of the Group's related parties as of December 31, 2022 are as follows:

	Name
Parent company	Ministry of Land, Infrastructure and Transport
Associates	Korea Construction Management Corp. Highway solar Co., Ltd. BARR OPERATION&MAINTENANC
Joint venture	Busan-Ulsan Expressway Co., Ltd. Expressway Solar Power Co., Ltd.

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

Related parties	Transactions	2022	2021
Busan-Ulsan Expressway Co., Ltd.	Revenue	₩ 23,354	₩ 22,765
Korea Construction Management Corporation	Cost of sales	91	2,621
Expressway Solar Power Co., Ltd.	Revenue	1,341	1,336
Highway solar Co., Ltd.	Revenue	1,103	1,093
	Receipt of dividends	174	-

Receivables and payables with related parties as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Related parties	Receivables and payables	December 31, 2022	December 31, 2021
Busan-Ulsan Expressway Co., Ltd.	Other accounts receivable	₩ 13	₩ 4,328
	Other accounts payable	405	275
Korea Construction Management Corporation	Other accounts payable	-	907

There has been no impairment loss on receivables above with related parties for the years ended December 31, 2022 and 2021.

The Government of the Republic of Korea (Ministry of Land, Infrastructure and Transport and Ministry of Economy and Finance) controls the Group and participated in the capital increase of ₩2,318 million and ₩2,057 million for the years ended December 31, 2022 and 2021, respectively.

Details of key management personnel compensation for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Salaries	₩ 1,096	₩ 1,137

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**40. Consolidated statements of cash flows**

Significant non-cash investing activities and financing activities for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

	2022	2021
Reclassification of long-term borrowings to current portion	₩ 400,000	₩ 200,000
Reclassification of bonds to current portion	3,066,325	3,036,628
Reclassification of construction-in-progress (property and equipment)	177,833	121,943
Reclassification of construction-in-progress (investment properties)	130,514	79,053
Reclassification of intangible assets under development	2,940,448	813,496

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

	2022					
	Beginning balance	Cash flows	Transfer	Non-cash changes		Ending balance
				Changes in exchange rate	Others	
Short-term borrowings	₩ -	₩ 465,200	₩ -	₩ -	₩ -	₩ 465,200
Current portion of long-term borrowings	200,000	(200,000)	400,000	-	-	400,000
Current portion of bonds	3,036,360	(3,049,912)	3,066,030	-	13,552	3,066,030
Current financial liabilities at FVPL	103,135	(100,000)	-	-	(3,135)	-
Current lease liabilities	3,318	(3,561)	3,006	-	119	2,882
Long-term borrowings	900,000	500,000	(400,000)	-	-	1,000,000
Bonds	26,731,737	4,318,923	(3,066,030)	66,346	3,127	28,054,103
Non-current lease liabilities	1,958	-	(3,006)	-	1,203	155
	<u>₩ 30,976,508</u>	<u>₩ 1,930,650</u>	<u>₩ -</u>	<u>₩ 66,346</u>	<u>₩ 14,866</u>	<u>₩ 32,988,370</u>

  

	2021					
	Beginning balance	Cash flows	Transfer	Non-cash changes		Ending balance
				Changes in exchange rate	Others	
Current portion of long-term borrowings	₩ 300,000	₩ (300,000)	₩ 200,000	₩ -	₩ -	₩ 200,000
Current portion of bonds	2,852,760	(2,853,920)	3,036,360	-	1,160	3,036,360
Current financial liabilities at FVPL	108,238	-	-	-	(5,103)	103,135
Current lease liabilities	3,624	(4,163)	1,879	-	1,978	3,318
Long-term borrowings	700,000	400,000	(200,000)	-	-	900,000
Bonds	24,951,584	4,630,940	(3,036,360)	183,305	2,268	26,731,737
Non-current lease liabilities	2,510	-	(1,879)	-	1,327	1,958
	<u>₩ 28,918,716</u>	<u>₩ 1,872,857</u>	<u>₩ -</u>	<u>₩ 183,305</u>	<u>₩ 1,630</u>	<u>₩ 30,976,508</u>

**41. Contingent liabilities and assets**

Details of the Group's major pending lawsuits involved in as a defendant as of December 31, 2022 are as follows (Korean won in millions):

Court	Details	Litigation amount	Progress
Supreme Court	Claims for reimbursement	₩ 15,241	3st trial
Supreme Court	Claims for payment	8,493	3st trial
Changwon District Court – Jinju Branch	Claims for payment	7,817	1st trial
		<u>₩ 31,551</u>	

**Korea Expressway Corporation and its subsidiary**  
**Notes to the consolidated financial statements**  
**December 31, 2022 and 2021**

**41. Contingent liabilities and assets (cont'd)**

As of December 31, 2022, including the above litigation, there were a total of 481 litigations pending by the Group as defendants (Litigation amount: ₩947,523 million). Except for a recognized provision of ₩735,899 million, no other provision was recognized as the Group was not able to reasonably estimate the results of the lawsuits and their impacts on the consolidated financial statements as of December 31, 2022.

Significant agreements with financial institutions as of December 31, 2022 are as follows (Korean won in millions):

Financial institutions	Commitments	Limits	Amounts outstanding
KEB Hana Bank	Working capital loan	₩ 200,000	₩ -
	Bill acceptance	1,300,000	1,300,000
Shinhan Bank	Bill acceptance	100,000	100,000
Kookmin Bank	General loan	80,000	-

As of December 31, 2022, Seoul Guarantee Insurance Company provides performance guarantees of ₩50,913 million to the Group. In addition, KEB Hana Bank provides contract guarantees of ₩14,839 million (USD 2,481,246 , BDT 951,556,595) to the Group.

As of December 31, 2022, except for providing interests in a joint venture as collaterals (described in Note 13), the Group has not provided any guarantees to the third parties.

**42. Authorization for issue of the consolidated financial statements**

The Group's consolidated financial statements were authorized for issue at the Board of Directors' meeting on March 10, 2023 and are to be authorized for issue finally at the general meeting of shareholders on March 28, 2023.