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【Confirmation by Representative Director】

Confirmation and Signature of Representative Director

Letter of Confirmation

Based on the review and confirmation of this annual report with significant care as the representative director and others responsible for reporting, the Company confirms that all the important matters to be provided have been given without omission, falsification or any such signs and that nothing inducing critical misunderstanding of users of this report has been provided or expressed.

The Company also hereby confirm that the Company has established and manages its internal accounting management system based on Article 8 of the Act on External Auditors of Share Companies.

(Limited to the companies subject to external audit based on Article 8 of the same Act)

15 March 2023

LX Semicon Co., Ltd.

Representative Director Son Bo-Ik (Signature)

Director of Reporting Kim Hun (Signature)

I. Company Overview

1. Company Overview

A. Outline of consolidated subsidiaries

(1) Consolidated subsidiaries (Summary)

(Unit: Companies)

Division	Number of consolidated companies				Number of major subsidiaries
	1 January	Increase	Decrease	31 December	
Listed	-	-	-	-	-
Unlisted	3	-	-	3	-
Total	3	-	-	3	-

※ Refer to Table-1 Status (detailed) of consolidated subsidiaries.

*) For details of consolidated subsidiaries, refer to XII. Status (detailed) of consolidated subsidiaries in XII. Detailed Table

(2) Changes in consolidated companies

Division	Subsidiary	Reason
Newly appointed Consolidated	-	-
	-	-
Consolidated Excluded	-	-
	-	-

B. Legal and commercial name of the Company

The Company's name is LX Semicon Co., Ltd.

C. Date of establishment

The Company was established on 11 November 1999.

D. Address, telephone number and website of the headquarters

Address: (H.Q) 222 Techno 2-ro, Yuseong-gu, Daejeon (Tamnip-dong)

Tel: 02-6924-3114

Webpage: www.lxsemicon.com

Whether the Company is an SME

Whether the Company is an SME	Not applicable
Whether the Company is a venture company	Not applicable
Whether the Company is a middle-standing enterprise	Applicable

E. Major areas of businesses

As a fabless company specializing in semiconductor design and sales, the Company is engaged in design, manufacturing, and sales of system semiconductor as its main business and consists of a single display business division.

For details of the Company's major business activities, please refer to II. Business Activities.

F. Credit rating

In the past three years, the Company has not requested credit ratings to domestic or overseas credit rating agencies which offer ratings and private rating agency's interest rates not as in the credit inquiry business.

G. Stock listing (or registration and designation) and special listing of the Company

Share listing (or registered/designated)	Date of share listing (or registration / designation)	Special listing	Applicable regulations such as special listing
KOSPI market	03 November 2022	-	-

*) Transferred from the KOSDAQ market (listed in June 2010) to the KOSPI market.

2. Company History

A. The Company's major historical events are as follows:

Date	Major contents
October 2016	Awarded the prize of sales tower KRW 500 billion (Daejeon City)
March 2017	Changed the representative director (Han Dae-Keun --> Son Bo-Ik)
October 2017	Awarded the prize of sales tower KRW 600 billion (Daejeon City)
May 2018	Acquired part of the System IC business from LG Electronics Co., Ltd. (All of assets and personnel related to the business of T-Con chip for OLED TV)
June 2018	Awarded the 10th Korea KOSDAQ (KOSDAQ Association) (Best Job Creation Company Award)
October 2019	Awarded the prize of sales tower KRW 700 billion (Daejeon City)
May 2021	Changed the largest shareholder (LG Corp. → LX Holdings Co., Ltd.)
June 2021	Changed the name Silicon Works Co., Ltd. → LX Semicon Co., Ltd.
August 2022	Selected as the best company for job creation in 2022 (Ministry of Employment and Labor)
November 2022	Transferred listing on the KOSPI market (KOSDAQ — KOSPI)
December 2022	Awarded the One Billion Dollar Export Tower on the Trade Day (Ministry of Trade, Industry and Energy)
December 2022	Acquired a Certificate as an excellent family-friendly company (Ministry of Gender Equality and Family)

B. The major historical events of LX Semicon U.S.A., Inc (USA), one of the Company’s subsidiaries are as follows:

Date	Major contents
October 2012	Establishment of legal entity (Paid in capital USD 500,000)
July 2021	Changed the company name (SILICON WORKS, INC. — LX Semicon U.S.A., Inc)

C. The major historical events of LX Semicon China Co., Ltd., one of the Company’s subsidiaries are as follows:

Date	Major contents
March 2017	Establishment of legal entity (Paid in capital CNY 4,085,400)
May 2018	Capital increase with consideration (CNY 4,085,400— CNY 13,012,920)
December 2021	Changed the company name (Silicon Works China Co., Ltd. — LX Semicon China Co., Ltd.)

D. The major historical events of LX Semicon Japan Co., Ltd., one of the Company’s subsidiaries are as follows:

Date	Major contents
September 2021	Establishment of legal entity (Paid in capital JPY 30,000,000)
February 2022	Capital increase with consideration (JPY 30,000,000— JPY 60,000,000)
May 2022	Capital increase with consideration (JPY 60,000,000— JPY 120,000,000)
August 2022	Business relocation (address change)

E. The headquarters location and changes of the address

11 November 1999: 4th Fl., Jeil Bank Building, 1299 Dunsan-dong, Seo gu, Daejeon, Korea

15 December 2000: 5th Fl., Semyung Hoekwan Building, 1299 Dunsan-dong, Seo gu, Dae jeon, Korea

04 October 2005: 104-13 Munji-dong, Yuseong-gu, Daejeon, Korea

31 January 2011: 222 Techno 2-ro Yuseong gu, Daejeon , Korea

F. Major changes to the management

Date of change	Type of the general meeting of shareholders	Appointment		Expiration or dismissal
		Newly appointed	Reappointed	
17 Mar. 2017	Regular general meeting of shareholders	Representative director Son Bo-Ik, Non-executive director Min Byeong-Hun, External director Yoon Il-Goo	-	Representative director Han Dae-Keun, Non-executive director Son Bo-Ik, External director Lee Sang-Guk
16 Mar. 2018	Regular general meeting of shareholders	Internal director Choi Sung-Kwan, Non-executive director Jeong Hyeon-Ok, External director Shin Yeong-Soo	-	Internal director Bae Dong-Su, Non-executive director Min Byeong-Hun, External director Moon Geon-Woo
15 Mar. 2019	Regular general meeting of shareholders	Non-executive director Jeong Yeon-Chae, External director Wi Kyung-Woo	-	Non-executive director Jeong Hyeon-Ok, External director Lee Nam-Joo

26 Mar. 2020	Regular general meeting of shareholders	-	Representative director Son Bo-ik, External director Yoon Il-Goo	-
18. Mar. 2021	Regular general meeting of shareholders	Non-executive director Roh Jin-Seo	Internal director Choi Sung-Kwan, External director Shin Yeong-Soo	Non-executive director Jeong Yeon-Chae
22 Mar. 2022	Regular general meeting of shareholders	-	External director Wi Kyung-Woo	-

*1) Please refer to VIII. Executives and Employees for more details on change in management.

*2) External director Wi Kyung-Woo has been reappointed on 22 March 2022.

G. Changes of the largest shareholder

According to the spin-off of LG, which was the previous largest shareholder, the largest shareholder was changed from LG Corp. to LX Holdings Co., Ltd., and the changes in the largest shareholder, etc. are described in “2. Shareholding of the largest shareholder of VII. Shareholders”.

H. Change of company name

Date of change	Before change	After change	Reason for change
25 June 2021	Silicon Works Co., Ltd.	LX Semicon Co., Ltd.	Change of governance and improving image as a semiconductor company

*1) The date of change is the date of approval of the general meeting of shareholders for the change of Articles of Incorporation reflecting the change of company name.

*2) The effective date of the changed name is 1 July 2021.

3. Changes in Capital

The Company has not changed its capital for the last five years.

Changes in capital

(Unit: KRW, shares)

Types	Division	31 December 2022	31 December 2021	31 December 2020
Common shares	Total issued shares	16,264,300	16,264,300	16,264,300
	Par value	500	500	500
	Capital	8,132,150,000	8,132,150,000	8,132,150,000
Preferred shares	Total issued shares	-	-	-
	Par value	-	-	-
	Capital	-	-	-
Others	Total issued shares	-	-	-
	Par value	-	-	-
	Capital	-	-	-
Total	Capital	8,132,150,000	8,132,150,000	8,132,150,000

4. Total Number of Shares

The total issued and outstanding shares are 16,264,300 common shares as of 31 December 2022.

Status of the total number of shares

(As of 31 December 2022)

(Unit: shares)

Division	Type of share			Remarks
	Common shares	Preferred shares	Total	
I. Total number of shares to be issued	-	-	50,000,000	-
II. Total number of shares issued so far	16,264,300	-	16,264,300	-
III. Total number of shares decreased so far	-	-	-	-
	1. Capital decrease	-	-	-
	2. Interest distribution	-	-	-
	3. Redemption of redeemable shares	-	-	-
	4. Others	-	-	-
IV. Total issued shares (II-III)	16,264,300	-	16,264,300	-
V. Treasury shares	-	-	-	-
VI. Outstanding shares (IV-V)	16,264,300	-	16,264,300	-

*) The total shares of the Company to be issued is 50 million shares, of which the issuing limit of preferred stock is 7 million shares.

5. Articles of Incorporation

History of changes to the articles of incorporation

Changed date	Name of general meeting of shareholders	Major changes	Reason for change
15 Mar. 2019	The 20th ordinary general meeting of shareholders	Establishing electronic registration basis provisions, changing business handling details of transfer agent and adding notification contents	Preparing the basis for electronic registration and clarifying the contents of the provisions
18. Mar. 2021	The 22nd ordinary general meeting of shareholders	Revising of matters for the separate election of audit committee members and changing the wording to enable resolution through delegation of committees within the BOD	Revising of matters related to the separate election of auditors and flexible committee-related regulations
25 Jun. 2021	The 1st extraordinary general meeting of shareholders	Revising articles due to change of the company name, clarifying business purposes, and changing website in notification method according to name change	Revising articles due to change of the company name

II. Business Activities

1. Business Overview

The Company, as a fabless company, is engaged in design, manufacture and sales of core parts that drive display panels, and consists of a single display business division.

Among the display panel driving parts, the Company is growing with a focus on Driver-IC, Timing Controller (T-Con), and Power Management IC (PMIC) products, and is seeking to diversify its business portfolio by promoting MCU, power semiconductor, and heat sink substrate businesses as new growth engines.

The main products are Driver-IC and timing controllers that drive panels, and the Driver-IC account for 89.5% of total sales as of 31 December 2022 (87.9% as of 31 December 2021). Exports account for 98.6% of the total sales as of 31 December 2022 (99.1% in 2021).

The Company is designing semiconductors to meet the customer's requests for product types and specifications, and is producing them through OEM to foundries and assembly/packaging companies with sufficient production capacity and technology and deliver them to the customers after the semiconductor design.

2. Major Products and Services

[As of 31 December 2022]

(Unit: KRW 100 million)

Business sector	Products	Details	Major products	31 December 2022		31 December 2021		31 December 2020	
				Sales	Ratio(%)	Sales	Ratio(%)	Sales	Ratio(%)
Semi-conductor	System IC	Panel driver IC and others	Driver - IC	18,977	89.54	16,683	87.86	10,036	86.38
			Driver - IC, etc.	2,216	10.46	2,305	12.14	1,583	13.62
Total				21,193	100.00	18,988	100.00	11,619	100.00

3. Raw Materials and Facilities

A. Major raw materials

[As of 31 December 2022]

(Unit: KRW 100 million)

Raw material	Purchased amount	Major suppliers
Wafer, etc.	12,894	TSMC, SK hynix system ic(Wuxi),LG Innotek Co., Ltd., etc.
Processing cost, etc.	4,181	LB Semicon Co., Ltd., LB Lusem Co., Ltd., etc.

As the Company is a fabless company placing orders and commissioning semiconductor manufacturing processes and the cost for the purchase of wafers is a very important element for the management performance and it is considered to be confidential. Hence, the Company will not provide the unit cost and trends of wafer prices.

B. Manufacturing capacity and facilities

As a fabless company with no production facilities, the Company utilizes outsourcing for the manufacturing process after the semiconductor design. Accordingly, it has no separate manufacturing facilities and the details are not provided.

C. Commissioned Manufacturing

As a fabless company with no production facilities, the Company uses OEM for the manufacturing process after the semiconductor design. The OEM process can be largely classified into Foundry (wafer consignment production) and OSAT (test & packaging), and the Company consigns operations to them by selecting companies that have a long-term business relationship with the Company and can stably manufacture high-quality products as OEM process.

4. Sales and Orders

A. Sales performance

[As of 31 December 2022]

(Unit: KRW 100 million)

Business sector	Sales type	Products	31 December 2022	31 December 2021	31 December 2020	
Semi-conductor	Products and others	System IC	Exports	20,901	18,816	11,271
			Domestic	292	172	348
Total			Total	21,193	18,988	11,619

B. Sales channels, methods, strategies, and major customers

(1) Sales and mass production support organizations

As of 31 December 2022, the departments of the Company are composed of TI divisions (TV/IT/Display) and MS divisions (Mobile Solution), and TI and MS sales divisions under the TI department and MS department are in charge of domestic and overseas sales.

(2) Sales channels

Both domestic and international sales are made in the form of manufacturing and sales upon orders from customers. According to the customer's request, the Company develops products according to the specifications and characteristics required by the customers from the development stage, and delivers them to the customers through production by major OEM companies.

Division	Sales channels
Domestic	Order → LX Semicon (OEM → release → delivery)
Overseas	

*) Domestic sales are sales within Korea

(3) Sales strategy

The Company is expected to maintain its competitiveness in the market through the development of new products and technologies as well as differentiated customer support to strengthen the customer base and to expand subjects of new customers. Also, it will keep its market status by providing the optimum solutions requested by customers as tailor made products.

(4) Main source of sales

There are two customers whose sales from a single external customer accounted for more than 10% of the Group's sales as of 31 December 2022, the sales were KRW 1,202.6 billion (KRW 1,352.6 billion in 2021) KRW 452.0 billion (KRW 312.4 billion in 2021), respectively.

C. Order situation

Driver chips for displays manufactured by the Company vary according to the size and characteristics of display panels. Due to the nature of the purchasing policies of major panel makers, orders for necessary quantities are usually made every 10 weeks with additional requests at any given time thereafter. This is not applicable as the work is not performed according to the mid- to long-term contract.

5. Risk Management and Derivatives

The Group is exposed to credit risk, liquidity risk and market risk with regard to financial instruments. Information on the aforesaid risk to which the Group is exposed is disclosed in the notes with the goal, policy, risk evaluation and management procedure, and capital management of the Group. Additional quantitative information is also disclosed throughout these financial statements.

A. Credit risk management

Credit risk refers to risk where the Group may have financial losses as customers or transactional counterpart fails to fulfill contractual obligations for financial instruments, and it may mainly break out from trade receivables for customers and investment assets. The Company is trading with customers with the certain level or higher of credit rating in an effort to reduce financial losses due to default, while reviewing the credit ratings of customers with exposure to credit risk periodically. Credit risk may break out even from transactions with financial institutions as well, and the Company is in principle trading only with the banks of higher credit ranking in an effort to reduce this risk. The Company ensures that new transactions are carried out for deposits with the higher likelihood of credit risk such as trust deposits only after approval by the executive in charge. The exposure level of the Group to credit risk in 2022 is maximum KRW 508.3 billion, including cash, cash equivalents, trade receivables and other receivables.

B. Management of liquidity risk

Maintaining and managing adequate liquidity is a very important matter for the Company. The Company currently maintains non-debt management and has an adequate cash level. In addition, the Company is making every effort to maintain and manage appropriate liquidity through periodic forecasting of funds balance, estimating the required cash level, and managing income and expenses.

Separately, the Company is actively communicating with the financial market to secure early liquidity in preparation for liquidity risks. The Company is actively reviewing overdraft and other borrowing limits to secure abundant liquidity.

C. Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices.

(1) Currency risk

The Group is exposed to the currency risk related to the sales profits and costs indicated in KRW, which is the functioning currency. The major currencies in these transactions are USD.

The book values of the cash assets and liabilities presented in major currencies other than the functioning currency for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW 100 million)

Division	31 December 2022		31 December 2021	
	USD	JPY	USD	JPY
Assets in foreign currency	1,598.2	-	853.2	-
Liabilities in foreign currency	783.8	8.2	910.4	19.1

The effect of the changes in foreign exchange rate for Korean won (before income tax) for the current and the last years on the losses and gains are as follows:

(Unit: KRW 100 million)

Division	31 December 2022	31 December 2021
	(If 5% changed)	(If 5% changed)
USD	±40.7	±2.9
JPY	± 0.4	±1.0

(2) Interest rate risk

The Group is not recognizing the fixed interest rate financial instruments as the financial instruments for which the profits or losses should be recognized in the current business year. Therefore, the revenues and operating cash flows of the Group are actually independent of variations in the market interest rate.

D. Capital risk management

The capital management of the Group is for maintaining the existence of the Company as a going concern, minimizing the capital cost for funding, maximizing the profits of the shareholders, and maintaining an appropriate equity structure. The Group is managing its capital based on the liability ratio. The Group manages the capital based on the ratio of liability, which is calculated by dividing the total liability in the statement of financial position with capital. The Group maintains a proper liability ratio at 35.7% as of 31 December 2022.

E. Transaction of Derivatives

As of the reporting date, there is no relevant information.

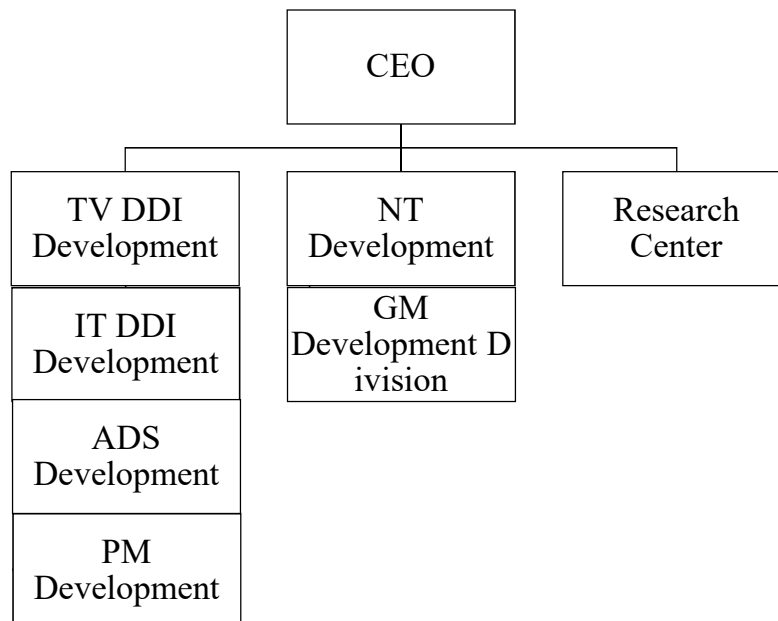
6. Major Contracts and Research

A. Major contracts in management

As of the reporting date, there is no relevant information.

B. Research and development

(1) Research and development organization



(2) Research and development expenses

(Unit: KRW 100 million)

Category		31 December 2022	31 December 2021	31 December 2020
Total R&D expenses		2,108	1,714	1,209
(Government subsidies)		-	(0.4)	(0.7)
Total R&D expenses after deducting government subsidies		2,108	1,714	1,209
Accounting	Selling and general administrative expenses	2,108	1,714	1,209
	Costs of goods manufactured	-	-	-
	Development expenses (intangible assets)	-	-	-
R&D expenses/sales ratio [R&D expenses ÷ current sales × 100]		9.9%	9.0%	10.4%

*) The percentage of sales was calculated based on the total amount of R&D expenses before deducting government subsidies.

(3) Performances in research and development

The Company is specialized in display components and has secured a variety of product technological power over the entire area of displays from components for IT products such as laptops, monitors and tablet PCs to other components for TV and mobile devices during the recent years.

Main products of the Company are Driver-IC, T-CON, and PMIC, and the Company is growing sales by expanding our product lineup with mobile-oriented P-OLED DDI and Touch Controller, etc. In addition, the Company is developing system IC for home appliances and electronic devices by expanding our technological power to various application areas other than displays.

7. Other References

A. Intellectual property rights

The Company has 1,407 applications (before acquisition of patent) and 847 patents regarding semiconductor as of 31 December 2022. The above number of applications can vary anytime by new applications, acquisition, expiration, waiver, etc.

The patents are managed by a dedicated organization composed of experts, who are in charge of patent development, registration, follow-up management, and dispute response.

[As of 31 December 2022]

(Unit: cases)

Division	Status	Patent right	Total
Domestic	633	322	955
Overseas	774	525	1,299
Total	1,407	847	2,254

B. System IC

(1) Characteristics of the industry

As System IC, which performs information processing functions such as calculation and control, forms a market specialized for each use, such as home appliances, mobile, communication, and automobiles, it is a multi-species customized market, which consists of thousands of different products, so design and production are mostly divided. In addition, due to the complex chip structure, it requires excellent design manpower and technical skills.

The main product, Display Driver IC (DDI), is a key component used in display panels, and the Company is affected by the display industry's business.

Currently, the trend of the display industry is shifting from LCD panels to OLED panels.

Since OLED requires a higher level of technology than LCD and the input of more parts, the DDI market is expected to grow further once the display panel transition is implemented.

Starting with products applied to displays in the IT field, the Company is currently growing continuously by expanding the portfolio of various products related to TV, IT, and mobile.

(2) Market scale and growth

The DDI market, the main product of the Company, has grown at an average annual rate of 18% from 2019 to 2022 in value, and new demand is expected to continue to be created due to changes in panel form factors in the mid- to long-term.

[DDI market size]

(Unit: USD billion)

Division	2014	2015	2016	2017	2018	2019	2020	2021	2022
DDI	6.6	6.0	5.6	6.4	6.7	7.1	8.5	13.2	11.8

Source: Omdia

In the display industry, which is the mainstream industry, the mid to large-sized (TV/IT/automobile) panels are achieving qualitative growth through an increase in the proportion of premium products such as high-resolution (8K) LCD and OLED TV, as well as scale growth thanks to aggressive investments by Chinese panel makers. In addition, in the small (smart phone/smart watch) panels starting with Apple's first P-OLED phone release (2017), Chinese panel producers are accelerating their entry into the P-OLED market, and growth centered on P-OLED products is expected to continue in the future. As such, the display industry is expected to grow continuously due to the rapid growth of Chinese panel makers and the trend of panel generation transition.

[Annual panel sales]

(Unit: M units)	2020	2021	2022(E)	2023(E)	2024(E)	2025(E)	2026(E)	2027(E)	2028(E)
TV	276.2	266.8	270.1	258.3	264.9	266.4	270.0	270.7	273.4
Monitor	165.0	171.0	159.9	161.7	164.6	168.3	166.1	163.8	166.6
Notebook	228.9	290.1	215.8	203.9	220.6	247.4	260.5	266.7	271.2
Tablet	278.6	278.1	255.8	230.0	234.7	242.8	250.5	256.0	260.2
Automotive Display	182.4	2603	249.4	260.0	272.9	286.2	294.0	297.5	302.4
Large Panel Total	1,131.1	1,266.3	1,151.1	1,114.0	1,157.7	1,211.2	1,241.1	1,254.7	1,273.9
Featurephone	229.2	177.9	181.8	171.8	158.0	143.0	128.3	114.0	101.6
Smartphone	1,544.7	1,740.6	1,380.3	1,411.1	1,487.6	1,544.4	1,592.8	1,644.9	1,663.4
Smartwatch	177.4	215.9	259.6	278.2	299.7	310.4	318.2	325.8	331.2
HeadMountDisplay	5.9	8.5	13.2	23.2	31.4	42.9	53.9	64.6	74.9
Small Panel Total	1,957.2	2,142.8	1,834.8	1,884.3	1,976.6	2,040.7	2,093.2	2,149.5	2,171.1

① Medium and large sized (TV/ IT/automobile) display IC

The display IC market for LCD TVs is growing due to the increase in the number of IC required per panel as the proportion of UHD panels increases. The penetration rate of UHD TVs in 2021 is about 61% on a global average, and is expected to reach about 65% in 2022. In particular, the spread of 8K TVs is also growing, leading the growth of display ICs for LCD TVs.

In addition, the proportion of OLED TVs in the premium TV market is increasing steadily, and the number of TV set makers who have selected OLED panels as a strategy for product differentiation is increasing. The display IC market for large OLED TVs is also showing high growth. The market size is small as LG Display and Samsung Display are the only companies that is mass-producing OLED TV panels so far. However, rapid growth is expected in the future as Chinese panel producers are making aggressive facility investments based on enormous capital power. Unlike LCD products, display IC for OLED TVs are based on panel compensation technology in addition to driving technology, so companies with competitive power are expected to lead the market.

In addition, some premium brands are increasing the added value by adding new functions such as increasing the resolution and utilizing the touch panel.

② Small (smart phone/smart watch) display IC

The smartphone market has entered the stage of maturity. The size of the smartphone panel market grew by recording about 1.7 billion units in 2021, but the demand is expected to reach about 1.4 billion units in 2022. The smartphone market in developed countries is expected to grow less than that of the emerging market, and the growth of the emerging market is driving the growth of the overall smartphone market.

Major global set makers are actively pursuing form factor evolution strategies to create new demand, so the proportion of smartphones equipped with P-OLED panels is expected to continue to increase. Currently, domestic panel makers are leading the P-OLED market due to the technological gap between Korean and Chinese panel makers, but Chinese makers' share in the P-OLED panel market is expected to gradually increase as the makers expand their capacity.

The smart watch market is expected to continue to grow at a high level every year after the great growth in 2020, and the size of the related market is expected to increase continuously through services linked to various devices such as IoT in the future.

(3) Characteristics of economic fluctuations and competitive elements

The core competitive element in the display component market is the market entry at the initial stage with the development of display, as well as the strengthening technological competitiveness based on original technologies. It is to create a barrier to entry through differentiation through technological competitiveness by securing a meaningful share in a new market where new technologies are applied.

The display industry is a field that requires both technology and capital-intensive characteristics and economies of scale, and has the characteristic that the barrier to entry increases as the degree of technical completion increases. In the past, the supply capacity has improved through fierce competition among panel makers, and in line with the increase in demand, the overall display industry has recorded a high growth rate. However, in recent years, due to the high maturity of the market and limited demand, it has entered a low-growth phase. Due to its high sensitivity to economic fluctuations, replacement demand does not increase significantly.

According to market trends changing from such as LCD to OLED and from OLED to Mini LED, Micro LED, Micro OLED, the Company is trying to preemptively respond to the transition of the display industry through the development of related technologies.

(4) Market share

According to a market research firm Omdia, based on the year 2022, the Company has ranked the 42nd place in the global semiconductor companies ranking, and in the top 3 among display driver IC companies. In recent years, securing competitive power in new technologies rather than the size of sales itself has become an important criterion for determining the Company's competitive advantage. Thus, the Company is successfully entering the premium market such as OLED/P-OLED through close cooperation with panel and set customers. In addition to the display, the Company is also continuing to expand our business to new areas such as home appliances, automobiles and batteries etc.

(5) Strength of the Company

Company not only provide the core components of Display System Semiconductor as a total solution, but also localize the products that have been highly dependent on imports, contributing to stable parts procurement and price competitiveness of domestic downstream companies. The Company are also actively supporting customer's market by providing customized premium products through continuous technology development. The win-win strategy based on trust with forward looking companies plays a major role in our competitiveness.

Through these efforts, the Company has secured technological response power to comply with market change in more prompt and flexible ways than other companies from new product development to delivery. Accordingly, the Company is realizing customer diversification through securing domestic and overseas customers based on our unique designing technological power.

C. Contents and prospects of new business

The Company fostering various automotive products, such as semiconductors for automotive infotainment displays and next-generation power semiconductors, and is developing heat dissipation substrates that support high strength and high heat dissipation performance for use in electric vehicles.

The heat dissipation substrate is a core material that has a great influence on the operational lifespan and stability of the power semiconductor. It refers to a substrate with high thermal conductivity to diffuse the heat of the power device to the outside, and has a form of bonding Cu (copper) to an insulating ceramic (alumina, silicon nitride, aluminum nitride) substrate. The heat dissipation substrate market is a field that is expected to grow along with the eco-friendly electric vehicle and new and renewable energy markets, and is expected to grow at a CAGR of 15% from 2022 to 2026.

The Company plan to secure profitability through continuous technology development to supply heat dissipation substrates centered on silicon nitride and aluminum nitride markets with high growth potential by securing differentiated technology.

III. Finances

1. Summarized Financial Information

A. Summarized consolidated financial information

The consolidated financial statements for the 2022 business year have been prepared in accordance with the Korean International Financial Reporting Standards (K-IFRS) and reviewed by an external auditor. The consolidated financial statements for the years ended 31 December 2022 and 2021 presented for comparison were prepared in accordance with the K-IFRS.

(Unit: KRW million)

Division	31 December 2022	31 December 2021	31 December 2020
[Current assets]	1,009,649	1,031,063	629,332
•Quick assets	527,093	829,946	494,067
•Inventories	482,556	201,117	135,265
[Non-current assets]	279,969	141,468	121,270
•Tangible assets	122,180	57,942	41,793
•Intangible assets	63,799	50,216	52,145
•Other non-current assets	93,990	33,310	27,332
Total assets	1,289,618	1,172,531	750,602
[Current liabilities]	324,402	363,583	209,089
[Non-current liabilities]	14,856	8,616	9,229
Total liabilities	339,258	372,199	218,318
[Capital]	8,132	8,132	8,132
[Capital surplus]	76,343	76,343	76,343
[Other capital items]	(782)	15	(455)
[Retained earnings]	866,667	715,842	448,264
[Non-controlling interest]	-	-	-
Total equities	950,360	800,332	532,284
	(01 January 2022 ~ 31 December 2022)	(01 January 2021 ~ 31 December 2021)	(01 January 2020 ~ 31 December 2020)
Sales	2,119,345	1,898,846	1,161,896
Operating profit	310,624	369,622	94,227
Net income	233,693	296,424	72,529
Owners of the controlling company	233,693	296,424	72,529
Non-controlling interest	-	-	-
Net earnings per share (KRW)	14,368	18,225	4,459
Net diluted earnings per share (KRW)	14,368	18,225	4,459
Number of companies included in the consolidation	3	3	2

B. Summarized Financial Information

The 2022 financial statements have been prepared in accordance with the K-IFRS and reviewed by an external auditor. The comparative financial statements for the years ended 31 December 2022 and 2021 were prepared in accordance with the K-IFRS.

(Unit: KRW million)

Division	31 December 2022	31 December 2021	31 December 2020
[Current assets]	1,006,089	1,028,631	627,617
•Quick assets	523,533	827,514	492,352
•Inventories	482,556	201,117	135,265
[Non-current assets]	276,313	140,903	122,271
•Tangible assets	117,624	55,552	40,476
•Intangible assets	63,621	50,060	51,962
•Other non-current assets	95,068	35,291	29,833
Total assets	1,282,402	1,169,534	749,888
[Current liabilities]	324,485	363,973	209,675
[Non-current liabilities]	13,107	8,491	9,195
Total liabilities	337,592	372,464	218,870
[Capital]	8,132	8,132	8,132
[Capital surplus]	76,343	76,343	76,343
[Other capital items]	(381)	(381)	(381)
[Retained earnings]	860,716	712,976	446,924
Total equities	944,810	797,070	531,018
Evaluation method for investment shares in subsidiaries, associates, joint ventures	Cost method	Cost method	Cost method
	(01 January 2022 ~ 31 December 2022)	(01 January 2021 ~ 31 December 2021)	(01 January 2020 ~ 31 December 2020)
Sales	2,119,345	1,898,846	1,161,896
Operating profit	309,046	368,630	93,723
Net income	230,608	294,898	72,291
Net earnings per share (KRW)	14,179	18,132	4,445
Net diluted earnings per share (KRW)	14,179	18,132	4,445

2. Consolidated Financial Statements

Consolidated Statement of Financial Position

As of 31 December 2022

As of 31 December 2021

As of 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Assets			
Current assets	1,009,649,198,828	1,031,063,337,504	629,332,380,326
Cash and cash equivalents	188,365,134,297	135,613,700,789	100,567,267,243
Short-term financial instruments	130,501,257,585	470,000,000,000	150,846,049,384
Trade receivables	143,347,796,852	175,265,047,069	210,368,392,594
Other receivables	30,339,286,252	20,459,407,455	14,492,581,250
Other current assets	34,539,288,607	28,607,668,627	17,630,142,242
Financial assets at FVPL	0	0	163,039,267
Inventories	482,556,435,235	201,117,513,564	135,264,908,346
Non-current assets	279,969,343,305	141,467,644,416	121,269,958,547
Investments in associates and joint ventures	39,730,521,788	11,668,130,191	4,088,947,195
Non-current other receivables	15,729,501,307	12,361,412,928	13,157,235,410
Tangible assets	105,170,569,415	50,262,602,385	33,160,184,544
Right-of-use assets	17,009,677,694	7,679,130,585	8,632,767,975
Intangible assets	63,798,898,823	50,215,624,104	52,144,579,630
Non-current other assets	10,161,318,572	879,900,722	1,124,251,174
Defined benefit assets	18,301,443,497	0	0
Deferred tax assets	10,067,412,209	8,400,843,501	8,961,992,619
Total assets	1,289,618,542,133	1,172,530,981,920	750,602,338,873
Liabilities			
Current liabilities	324,401,670,974	363,583,458,447	209,088,958,240
Trade payables	196,211,140,403	213,463,276,070	144,000,394,513
Other payables	68,951,899,343	59,424,740,446	36,200,157,048
Current lease liabilities	8,158,860,041	3,576,706,160	2,857,091,653
Other current liabilities	10,732,740,461	12,793,771,468	9,852,133,137
Current tax liabilities	40,347,030,726	74,324,964,303	16,179,181,889
Non-current liabilities	14,856,222,405	8,614,815,226	9,228,876,340
Non-current other payables	2,001,160,000	20,000,000	20,000,000
Non-current lease liabilities	7,727,740,706	3,927,949,636	5,380,313,919
Defined benefit obligations	0	620,647,109	763,045,298
Non-current other liabilities	5,127,321,699	4,046,218,481	3,065,517,123
Total liabilities	339,257,893,379	372,198,273,673	218,317,834,580
Equity			
Equity attributable to owners of the parent	950,360,648,754	800,332,708,247	532,284,504,293
Capital	8,132,150,000	8,132,150,000	8,132,150,000
Capital surplus	76,343,170,500	76,343,170,500	76,343,170,500
Other capital items	(781,710,611)	15,303,715	(454,724,156)
Retained earnings (loss)	866,667,038,865	715,842,084,032	448,263,907,949
Non-controlling interest	0	0	0
Total equities	950,360,648,754	800,332,708,247	532,284,504,293
Total equities and liabilities	1,289,618,542,133	1,172,530,981,920	750,602,338,873

Consolidated Income Statement

From 01 January to 2022 to 31 December 2022

From 01 January to 2021 to 31 December 2021

From 01 January to 2020 to 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Revenue (sales)	2,119,345,363,613	1,898,845,716,028	1,161,896,286,020
COGS	1,443,672,300,059	1,240,353,258,754	865,870,102,742
Gross profit	675,673,063,554	658,492,457,274	296,026,183,278
Selling and administrative expenses	365,049,100,804	288,870,505,140	201,799,544,122
Operating profit (loss)	310,623,962,750	369,621,952,134	94,226,639,156
Finance income	11,958,230,104	4,111,403,212	2,806,106,787
Financial cost	12,873,979,866	2,998,580,902	1,251,981,014
Other non-operating income	44,572,977,627	20,909,117,134	10,840,104,740
Other non-operating losses	52,214,122,387	11,710,952,976	15,498,650,234
Equity method gains and losses	1,903,503,922	743,409,996	(206,987,879)
Income before tax expenses	303,970,572,150	380,676,348,598	90,915,231,556
Income tax expenses	70,278,031,741	84,252,328,037	18,386,320,992
Net income (loss)	233,692,540,409	296,424,020,561	72,528,910,564
Attribution of net income (loss)			
Net income (loss) attributable to the owners of the Group	233,692,540,409	296,424,020,561	72,528,910,564
Earnings per share			
Basic earnings (loss) per share (Unit: KRW)	14,368	18,225	4,459
Diluted earnings (loss) per share (Unit: KRW)	14,368	18,225	4,459

Consolidated Comprehensive Income Statement

From 01 January to 2022 to 31 December 2022

From 01 January to 2021 to 31 December 2021

From 01 January to 2020 to 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Net income (loss)	233,692,540,409	296,424,020,561	72,528,910,564
Other comprehensive income	4,162,620,098	(6,419,011,607)	1,048,167,235
Items that are not reclassified to profit or loss (other comprehensive income before tax)			
Gains or losses on remeasurement of defined benefit plans (other comprehensive income before tax)	6,543,053,329	(9,088,442,583)	1,411,449,763
Income tax related to items that are not reclassified to profit or loss	(1,583,418,905)	2,199,403,105	(341,570,843)
Items that can be reclassified to current profit or loss (other comprehensive income before tax)			
Foreign exchange difference in translation at overseas business sites (other comprehensive income before tax)	(185,852,001)	470,027,871	(21,711,685)
Gain on valuation of investment stock by the equity method	(611,162,325)	0	0
Total comprehensive income	237,855,160,507	290,005,008,954	73,577,077,799
Attribution of total comprehensive income			
Total comprehensive income, equity attributable to the owners of the parent	237,855,160,507	290,005,008,954	73,577,077,799

Consolidated Statement of Changes in Equity

From 01 January to 2022 to 31 December 2022

From 01 January to 2021 to 31 December 2021

From 01 January to 2020 to 31 December 2020

(Unit: KRW)

		Equity						
		Equity attributable to owners of the parent					Non-controlling interest	Total capital
		Capital	Capital surplus	Other components of capital	Retained earnings	Total equity attributable to owners of the parent		
01 January 2020		8,132,150,000	76,343,170,500	(433,012,471)	388,164,487,465	472,206,795,494	0	472,206,795,494
Total comprehensive income	Net Income	0	0	0	72,528,910,564	72,528,910,564	0	72,528,910,564
	Remeasurements of defined benefit plan	0	0	0	1,069,878,920	1,069,878,920	0	1,069,878,920
	Overseas business profit and loss	0	0	(21,711,685)	0	(21,711,685)	0	(21,711,685)
	Gain on valuation of investment stock by the equity method	0	0	0	0	0	0	0
Transactions with shareholders recognized directly in equity	Annual dividends	0	0	0	(13,499,369,000)	(13,499,369,000)	0	(13,499,369,000)
31 December 2020		8,132,150,000	76,343,170,500	(454,724,156)	448,263,907,949	532,284,504,293	0	532,284,504,293
01 January 2021		8,132,150,000	76,343,170,500	(454,724,156)	448,263,907,949	532,284,504,293	0	532,284,504,293
Total comprehensive income	Net Income	0	0	0	296,424,020,561	296,424,020,561	0	296,424,020,561
	Remeasurements of defined benefit plan	0	0	0	(6,889,039,478)	(6,889,039,478)	0	(6,889,039,478)
	Gain (loss) on overseas business translation	0	0	470,027,871	0	470,027,871	0	470,027,871
	Gain on valuation of investment stock by the equity method	0	0	0	0	0	0	0
Transactions with shareholders recognized directly in equity	Annual dividends	0	0	0	(21,956,805,000)	(21,956,805,000)	0	(21,956,805,000)
31 December 2021		8,132,150,000	76,343,170,500	15,303,715	715,842,084,032	800,332,708,247	0	800,332,708,247
01 January 2022		8,132,150,000	76,343,170,500	15,303,715	715,842,084,032	800,332,708,247	0	800,332,708,247
Total comprehensive income	Net Income	0	0	0	233,692,540,409	233,692,540,409	0	233,692,540,409
	Remeasurements of defined benefit plan	0	0	0	4,959,634,424	4,959,634,424	0	4,959,634,424
	Overseas business profit and loss	0	0	(185,852,001)	0	(185,852,001)	0	(185,852,001)
	Gain on valuation of investment stock by the equity method	0	0	(611,162,325)	0	(611,162,325)	0	(611,162,325)
Transactions with shareholders recognized directly in equity	Annual dividends	0	0	0	(87,827,220,000)	(87,827,220,000)	0	(87,827,220,000)
31 December 2022		8,132,150,000	76,343,170,500	(781,710,611)	866,667,038,865	950,360,648,754	0	950,360,648,754

Consolidated Cash Flow Statement

From 01 January to 2022 to 31 December 2022

From 01 January to 2021 to 31 December 2021

From 01 January to 2020 to 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Operating cash flows	(81,731,299,021)	421,502,665,587	82,955,981,196
Cash from operating activities	14,917,644,305	441,930,890,928	85,702,950,983
Net income (loss)	233,692,540,409	296,424,020,561	72,528,910,564
Increase or decrease for adjustment to current net profit	153,434,770,945	125,440,233,092	49,986,116,015
Change to equities/liabilities on sales operations	(372,209,667,049)	20,066,637,275	(36,812,075,596)
Gain on interest (sales)	11,280,425,657	3,092,416,977	3,018,502,520
Payment on interest (sales)	(430,595,529)	(174,344,490)	(216,065,535)
Payment of income tax (return)	(107,498,773,454)	(23,346,297,828)	(5,549,406,772)
Cash flows from investing activities	230,799,913,907	(361,251,241,958)	(75,441,378,163)
Increase in short-term financial instruments	(210,529,243,362)	(550,000,000,000)	(250,865,913,505)
Decrease in short term financial instruments	550,000,000,000	230,899,104,829	200,000,000,000
Increase in other receivables	(7,914,973,390)	(3,171,707,813)	(5,907,800,500)
Decrease in other receivables	3,058,190,745	2,350,106,212	2,549,772,938
Decrease in other liabilities	(20,000,000)	0	0
Increase in advanced payments	0	0	(577,903,883)
Increase in other non-current liabilities	0	0	20,000,000
Acquisition of tangible assets	(59,871,816,458)	(31,025,024,629)	(17,272,943,553)
Acquisition of intangible assets	(19,489,413,628)	(4,999,488,735)	(3,683,737,075)
Proceeds from tangible assets	937,220,000	1,401,138,014	10,747,415
Proceeds from intangible assets	1,400,000,000	0	286,400,000
Disposition of financial assets at FVPL	0	130,403,164	0
Acquisition of investments in associates	(26,770,050,000)	(6,835,773,000)	0
Cash flows from financing activities	(94,554,985,039)	(25,277,580,616)	(16,610,251,300)
Payment of dividends	(87,827,220,000)	(21,956,805,000)	(13,499,369,000)
Payment of lease fee	(6,727,765,039)	(3,320,775,616)	(3,110,882,300)
Net increase in cash and cash equivalents before the effect of exchange rate fluctuations	54,513,629,847	34,973,843,013	(9,095,648,267)
Cash and cash equivalents as of 1 January	135,613,700,789	100,567,267,243	109,686,194,681
Effects of exchange rate changes on cash and cash equivalents	(1,762,196,339)	72,590,533	(23,279,171)
Cash and cash equivalents as of 31 December	188,365,134,297	135,613,700,789	100,567,267,243

3. Notes on Consolidated Financial Statements

From 01 January 2022 to 31 December 2022
From 01 January 2021 to 31 December 2021

LX Semicon Co., Ltd. and its subsidiaries

1. Company overview

(1) Summary of the parent

LX Semicon Co., Ltd. (hereinafter referred to as the “the parent”) was established on 11 November 1999 for the purpose of designing and manufacturing FPD (flat panel display) semiconductor IC. The Company is located in 222 Techno 2-ro, Daedeok-gu, Daejeon, Republic of Korea. The parent has been certified by the Korea Institute for Advancement of Technology as a corporate subsidiary research facility in accordance with Article 16 of the Technology Development Promotion Act and Clause 1 of Article 15 of the Enforcement Decree of the same Act on 19 October 2001. The Company has also been designated as a high-tech company in accordance with Clause 1 of Article 9 of the Special Law on the Cultivation of the Special Research and Development Daedeok-gu and more on 23 October 2011.

After the parent listed its stock on the KOSDAQ market on 8 June 2010, it was delisted from the KOSDAQ market and transferred to the KOSPI on 3 November 2022. The amount of paid-in capital of the parent as of 31 December 2022 is KRW 8,132,150,000 (16,264,300 issued shares and 50,000,000 authorized shares).

The parent changed the name from Silicon Works Co., Ltd. to LX Semicon Co., Ltd. on 1 July 2021.

The shareholders of the controlling company as of 31 December 2022 are as follows;

(Unit: shares)			
Shareholders	No. of shares held	Ratio	Remarks
LX Holdings Co., Ltd.	5,380,524	33.08%	Largest shareholder
Others	10,883,776	66.92%	-
Total	16,264,300	100.00%	

The current consolidated financial statements for the reporting period ending on 31 December 2022 are comprised of shares in the controlling company and its subsidiaries (hereinafter the “Group”).

(2) Overview of subsidiaries as of 31 December 2022 and 2021

Company name	Location	Main sales activities	Month of account closing	Controlling interest rate as of 31 December 2022	Controlling interest rate as of 31 December 2021
LX Semicon U.S.A., Inc.	USA	Semiconductor manufacturing and designing	December	100.00%	100.00%
LX Semicon China Co., Ltd.	China	Semiconductor manufacturing and designing	December	100.00%	100.00%
LX Semicon Japan Co., Ltd.	Japan	Semiconductor manufacturing and designing	December	100.00%	100.00%

(3) Summarized financial information of subsidiaries

The financial information of subsidiaries as of 31 December 2022 and 2021, is as follows:

(Unit: KRW)						
Division	LX Semicon U.S.A., Inc		LX Semicon China Co., Ltd.		LX Semicon Japan Co., Ltd.	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Assets	1,088,167,006	840,960,849	7,181,245,127	5,696,797,384	2,846,949,810	317,427,329
Liabilities	158,286,239	147,226,926	1,795,903,927	1,173,187,625	1,794,338,893	60,857,647
Equity	929,880,767	693,733,923	5,385,341,200	4,523,609,759	1,052,610,917	256,569,682
Sales	3,314,965,217	2,102,017,269	13,311,512,612	9,255,323,187	2,312,770,196	-
Net income	191,941,082	107,799,993	1,033,439,624	728,264,021	(43,983,185)	(53,073,595)
Total comprehensive income	236,146,844	159,540,743	861,731,441	1,154,019,865	(102,332,765)	(60,542,318)

2. Standards for the preparation

(1) Standards for preparing consolidated financial statements

The consolidated financial statements of the parent and its subsidiaries (hereinafter referred to as the “Group”) have been prepared in accordance with the Korean International Financial Reporting Standards (K-IFRS).

The significant accounting policies applied to the preparation of the consolidated financial statements are described below, and the accounting policies used in the preparation of the consolidated financial statements in 2022 are the same as those adopted in the preparation of the consolidated financial statements for the last year, except for the impacts related to the introduction of the standards and interpretations described below.

The consolidated financial statements have been prepared on a historical cost basis, excluding certain non-current assets and financial assets that are measured at revaluation or fair value at the end of each reporting period, as described in the accounting policies below. Historical cost is generally measured at the fair value of the consideration paid to acquire the asset.

Fair value is the price that would be received to sell assets or paid to transfer liabilities in an ordinary transaction between market participants at the measurement date, regardless of whether the price is directly observable or estimated using valuation techniques. In estimating the fair value of an asset or liability, the Group takes into account the characteristics of the assets or liabilities that the market participant considers when determining the price of the assets or liabilities at the measurement date. For measurement or disclosure purposes, fair value is determined in accordance with the principles described above with the exception of measurements that are similar to fair value but not fair value such as share-based compensation transactions included in the scope of IAS 1102 Share-based compensation, lease transactions included in the scope of IAS 1116 Lease, net realizable value of IAS 1002 Inventories, and value in use of IAS 1036 Asset impairment.

The management has a reasonable expectation at the time of approving the financial statements that the Group has sufficient resources to continue as a going concern for the foreseeable future period. Therefore, the management has prepared the financial statements on the assumption of going concern.

The Group's financial statements is approved by the board of directors on 26 January 2023 and will further be finally approved by the general meeting of shareholders held on 23 March 2023.

1) The new standards and interpretations introduced in 2022 and the resulting changes in accounting policies are as follows:

- IAS 1103 Business combination - Reference to conceptual framework (amendment)

The amendments include the contents that IAS 1103 refers to the Conceptual framework (2018) instead of the previous framework (2007). The amendments also add a requirement that in the case of provisions or contingent liabilities that fall within the scope of application of IAS 1037, the acquirer applies IAS 1037 to determine whether a current obligation exists as a result of past events at the acquisition date. In the case of contributions that fall within the scope of application of Interpretation of IAS 2121, the acquirer applies interpretation of IAS 2121 to determine whether an obligatory event that creates a payment liability for the contribution has occurred by the acquisition date. The amendments add an explicit statement that the acquirer does not recognize contingent assets in a business combination.

- IAS 1016 Tangible assets - The sale amount and related costs of goods produced before they are used in their intended manner (amendment)

The amendments prohibit deducting from the cost of tangible assets the sale of goods produced in the process of bringing them to the location and condition necessary to operate in the manner intended by management. Accordingly, such sales and related costs are recognized in profit or loss, and the costs are measured in accordance with IAS 1002.

Unless the goods produced are the output of the entity's ordinary activities and the sale amount and costs included in profit or loss are separately indicated in the statement of comprehensive income, the Company should disclose an account in the statement of comprehensive income that includes the size of the amount and cost of the sale, and the amount and cost of the sale.

The amendments apply retrospectively only to tangible assets that has reached a location and condition capable of operating in the manner intended by management after the commencement date of the earliest period indicated in the financial statements for which the amendments is first applied. The cumulative effect of the initial application of the amendments is recognized by adjusting the opening balance of retained earnings (or other components of equity, if appropriate) at the beginning of the earliest indicated period.

- IAS 1037 Provisions, contingent liabilities and contingent assets - Loss-bearing contract and contract execution cost (amendment)

The amendments clarify that the cost of executing a contract consists of costs directly related to the contract. The costs directly related to a contract consist of the incremental costs (e.g. direct labor cost and direct material cost) to perform the contract and any other cost allocations (e.g. depreciation of tangible assets used in the performance of the contract) directly related to the performance of the contract.

The amendments apply to contracts for which all obligations have not been fulfilled on the commencement date of the business year in which the amendments are first applied. The comparative financial statements are not rewritten, but instead, the cumulative effect by the first adoption of the amendments is recognized as retained earnings at the date of initial application or, as appropriate, other elements of equity.

- Annual improvements of 2018-2020 cycle based on K-IFRS

This annual improvement includes some amendments to the first adoption of K-IFRS under IAS 1101, IAS 1109 Financial instruments, IAS 1116 Lease and IAS 1041 Agriculture, forestry and fisheries.

① IAS 1101 First adoption of K-IFRS

The amendments provide an additional exemption from accounting for cumulative translation differences in subsidiaries that become first adopters later than the parent. Subsidiaries subject to the exemption provisions in paragraph D16(1) of IAS 11 may choose to measure the cumulative translation difference of all overseas operations at the carrying amount to be included in the parent's consolidated financial statements on the basis of the date of transition of the parent to the K-IFRS. However, the effect of the business combination in which the parent acquires a subsidiary and adjustments in accordance with the consolidation procedure are excluded. A similar choice may be made if an associate or joint venture applies the exemption provisions in paragraph D16(1) of IAS 1101.

② IAS 1109 Financial Instruments

This amendment includes only fees received or paid between the entity (borrower) and the lender when applying the 10% test to assess whether financial liabilities have been derecognized, which clarifies that it includes fees paid or received by businesses or lenders on behalf of other parties. The amendments will be applied prospectively to changes and exchanges that have occurred after the initial application date.

③ IAS 1116 Lease

The amendments have deleted the contents of the lease improvement reimbursement amount in case 13 of IAS 1116.

④ IAS 1041 Agriculture, forestry and fisheries

The amendments removed the requirement to exclude tax-related cash flows when measuring the fair value of biological assets. This ensures that the fair value measurement in IAS 1041 is consistent with the requirement in IAS 1113 to use internally consistent cash flows and discount rates., and entities can choose to use pre- or post-tax cash flows and discount rates to determine the most appropriate fair value measurement.

2) The financial statements have been enacted and published as of the date of approval, but the effective date has not yet arrived, and the details of the K-IFRS that the Group has not applied early are as follows:

- IAS 1001 Presentation of financial statements - Classification of the current and non-current liabilities (amendment)

The amendments only affect the indication of current and non-current liabilities in the financial statements, and does not affect the amount of assets, liabilities and gains or losses, the time of recognition, or the disclosure information for those items.

The amendments clarify that the classification of the current and non-current liabilities is based on the entity's rights that exist at the end of the reporting period, and also highlights that it is irrelevant to expectations of whether the entity will exercise its right to defer settlement of the debt. At the end of the reporting period, if the loan agreement is complied with, the right exists, and settlement is clarified as the transfer of cash, equity instruments, or other assets or services to the counterparty.

The amendments are applied retrospectively after the beginning of financial years beginning on or after 1 January 2023, with early application permitted.

- IAS 1001 Presentation of financial statements and IFRS Practice 2 Making materiality judgments (amendment)- Disclosure of accounting policies

These amendments change the requirements of IAS 1001 for the disclosure of accounting policies, and replace all the terms Significant accounting policies with Material accounting policy information. Accounting policy information is significant if, when considered together with other information contained in an entity's financial statements, it can reasonably be expected to influence the decisions that primary users of general purpose financial statements make on the basis of those financial statements.

The paragraph relating to IAS 1001 is also amended to clarify that accounting policy information relating to non-material transactions, other events or circumstances is not material and does not need to be disclosed. Accounting policy information, although insignificant in amount, can be material because of the nature of the transaction, other event or circumstance with which it is involved. However, not all accounting policy information relating to a material transaction, other event or situation is material in itself.

Guidelines and examples have been also developed to explain and apply the application of the four stages of the materiality process described in IFRS Practice 2.

The amendments are effective prospectively for annual periods beginning on or after 1 January 2023, with early adoption permitted. The amendments to IFRS Practice 2 do not include the effective date or transitional provisions.

– IAS 1001 Presentation of financial statements (amendment)- Disclosure of gains and losses on valuation of financial liabilities with exercise price adjustment conditions

If all or part of financial instruments subject to the condition that the exercise price is adjusted in accordance with changes in the stock price of the issuer are classified as financial liabilities in accordance with (2) of the definition of financial liabilities in paragraph 11 of Korean IAS 1032 Financial instruments: Presentation, the amendments require the disclosure of valuation gains and losses (limited to those included in current profit or loss) incurred during the reporting period for the conversion rights or warrants (or financial liabilities including them).

The amendments are effective for annual periods beginning on or after 1 January 2023, with early adoption permitted.

– IAS 1008 Accounting policy, changes and errors in accounting estimates (amendment) - Definition of accounting estimates

The amendments replace the definition of a change in an accounting estimate with the definition of an accounting estimate. Under the new definition, an accounting estimate is a monetary amount in the financial statements that is subject to measurement uncertainty.

Although the definition of changes in accounting estimates has been deleted, the concept of changes in accounting estimates has been maintained by clarifying the following in the standard.

- The changes in accounting estimates may result from new information or developments in new circumstances and are not considered corrections of errors.
- The effect of a change in inputs or measurement techniques used to develop an accounting estimate is a change in accounting estimate unless it results from the correction of the previous error.

The amendments will be applied from the first business year beginning on or after 1 January 2023 and early application is permitted. The amendments are applied to changes in accounting estimates and changes in accounting policies that occur after the beginning of the business year in which this amendment is first applied.

- IAS 1012 Income tax - Deferred tax related to assets and liabilities arising from a single transaction

The amendments narrow the scope of application of the first recognition exception. According to the amendment, the exception to initial recognition does not apply to transactions that give rise to a taxable temporary difference and a deductible temporary difference in the same amount.

Under relevant tax laws, the same amount of taxable and deductible temporary differences may arise when an asset or liability is initially recognized in a transaction that is not a business combination and does not affect accounting or taxable income. For example, this situation may arise when a lease liability and a corresponding right-of-use asset are recognized by applying IAS 1116 at the commencement date of the lease.

In accordance with the amendments of IAS 1012, related deferred tax assets and deferred tax liabilities should be recognized. Recognition of deferred tax assets is subject to the recoverability requirements of IAS 1012.

The amendments apply to transactions after the start date of the earliest comparison period presented. It also recognizes the following as of 1 January of the earliest period to be compared:

- Deferred tax assets (limited to cases where it is highly probable that taxable income will be available against which the deductible temporary differences can be utilized) and deferred tax liabilities for all deductible temporary differences and taxable temporary differences relating to:
 - Right-of-use assets and lease liabilities
 - Liabilities related to decommissioning and recovery, and the amounts recognized as part of the cost of related assets in response to these liabilities.
 - The cumulative effect of the initial application of the amendment is recognized by adjusting the opening balance of retained earnings (or other items of equity, as appropriate) at the beginning of the earliest period presented for comparison.

The amendments are effective for annual periods beginning on or after 1 January 2023, with early adoption permitted.

The Group is reviewing the impact of the enactments and amendments listed above on the financial statements.

3. Significant accounting policies

Significant accounting policies applied by the Group in the preparation of consolidated financial statements in accordance with K-IFRS are described below, and the consolidated financial statements for the years ended 31 December 2022 and 2021 for comparison have been prepared by applying the same accounting policies.

(1) Sales division

The Group classifies divisions based on internal reporting data periodically reviewed by the chief operating decision maker to make decisions on resources to be allocated to divisions and to evaluate division performance. The Group identifies and reports the operating segment as a single segment.

(2) Consolidated

① Business combination

Business combinations are accounted for using the acquisition method, except for combinations of entities and businesses under common control.

Transfer considerations are generally measured at fair value as the same way that identifiable net assets are measured at fair value. When goodwill is generated as a result of a business combination, impairment tests are conducted annually, and the excess is recognized immediately in net income as a bargain purchase gain. Acquisition-related costs are expensed in the period in which they are incurred and provided for services, except for the cost of issuance of debt securities and equity securities, which are recognized in accordance with IFRS 1032 and IFRS 1109.

Transfer considerations do not include any amounts related to the settlement of existing relationships. The settlement of existing relationships is generally recognized in profit or loss.

Contingent consideration is measured at fair value on the acquisition date. Contingent consideration classified as equity is not remeasured and subsequent settlements are accounted for within equity. When the contingent consideration is not classified as equity, the change in fair value of the conditional consideration is subsequently recognized in profit or loss.

In the case of an acquirer's share-based payment exchanged for compensation held by the acquiree's employees, all or part of the market-based measurement of the acquirer's replacement compensation is included in the transfer consideration of the business combination. Substitutional remuneration and remuneration for post-combination services, which are part of the consideration transferred to the acquiree, are determined by comparing market-based measurements of the acquiree's remuneration with the amount of replacement compensation for pre-combination services.

② Non-controlling interest

Non-controlling interests are measured as the proportionate share of the current equity instruments among recognized amounts of the acquiree's identifiable net assets at the acquisition date. The changes in the ownership interest of a parent to a subsidiary that do not lose control are accounted for as equity transactions.

③ Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an investee when it is exposed, 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. Subsidiaries' financial statements are included in consolidated financial statements from the date the parent acquires control over the subsidiaries until they lose control.

④ Loss of control

If the parent loses control of a subsidiary, the Group derecognizes assets and liabilities of the previous subsidiary from the consolidated statement of financial position and recognizes gains and losses on control of the control. Remaining investments in subsidiaries are recognized at fair value when control is lost.

⑤ Equity in the investee under equity method

The Group's equity interest in the equity investments consists of equity interests of associates and joint ventures.

Associates are those entities in which the Group has significant influence, but not control or joint control, over financial and operating policies. Joint ventures are entities in which the Group does not have a right to assets or liabilities for contracts, but rather net assets to the contracts.

Investments in associates and joint ventures are initially recognized at cost including transaction costs, and are accounted for using the equity method after acquisition. In other words, the carrying amount of the investee's profit or loss and other comprehensive income after the acquisition date is added to or subtracted from the carrying amount. The distribution received from the investee is deducted from its carrying amount.

⑥ Derecognition of internal transactions

Transactions in the Group, related balances, income and expenses, and unrealized gains and losses are derecognized when the consolidated financial statements are prepared. On the other hand, the Group derecognizes the unrealized gains from unrealized gains from transactions with equity-invested companies. Unrealized losses are derecognized in the same manner as unrealized gains unless there is evidence of impairment.

⑦ Business combinations under common control

Combinations of entities or businesses under common control are recognized at the carrying amount of the acquired assets and assumed liabilities in the consolidated financial statements of the ultimate parent. The difference between the consideration transferred and the carrying amount of net assets acquired is added or subtracted from the capital surplus.

(3) Cash and cash equivalents

Cash and bank balances in the consolidated statement of financial position consist of cash (i.e. cash on hand and demand deposits) and cash equivalents. Cash equivalents are highly liquid, short-term (generally maturities of less than three months) investments that are easily convertible to a fixed amount of cash and are subject to an insignificant risk of changes in value. Cash equivalents are held to meet short-term cash needs and not for investment or other purposes.

Bank balances that are restricted from the Group's use under contractual arrangements with third parties are included as part of cash unless such restrictions prevent the bank balances from further meeting the definition of cash. Contractual restrictions affecting the use of bank balances are described in note 33. If a contractual restriction on the use of cash exceeds 12 months after the end of the reporting period, the related amount is classified as a non-current asset in the statement of financial position.

For the purposes of the consolidated statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above and the net amount of overdrafts that are due immediately upon demand from financial institutions and form part of the Group's cash management. Such bank overdrafts are presented as short-term borrowings in the statement of financial position.

(4) Inventories

The unit cost of inventories is determined by the moving average method. The cost of acquisition includes acquisition costs, conversion costs and other costs necessary to prepare the inventory for use.

The inventories are measured at the lower of cost and net realizable value. The valuation losses and net loss on the reduction of inventories to net realizable value are recognized as expenses in the period in which the reduction or loss occurs, and reversal of the loss on the valuation of inventories resulting from the increase in net realizable value of the inventory is reversed. It is deducted from the cost of sales of the inventory recognized as an expense in the period in which it occurred.

(5) Non-derivative financial assets

① Recognition and initial measurement

Trade receivables and debt securities are recognized for the first time as they are issued. Other financial instruments and financial liabilities are recognized only when the Group becomes a contracting party for financial instruments.

Except for trade receivables that do not include any significant financial elements, financial assets or liabilities are measured at fair value at the date of initial recognition, and are not measured at fair value through profit or loss or financial assets at fair value through profit or loss. In such cases, transaction costs that are directly attributable to the acquisition of the financial asset or the issue of that financial liability are added to or deducted from fair value. Trade receivables that do not contain significant financial factors are initially measured at the transaction price.

② Classification and follow-up measurement

At initial recognition, financial assets are classified as measured at amortized cost, other comprehensive income-fair value debt instruments, other comprehensive income-fair value equity instruments, or at FVPL.

Financial assets are not reclassified after initial recognition unless the Group changes the business model that manages them. In this case, all affected financial assets are reclassified on the first day of the first reporting period after the change in the business model.

When a financial asset meets both of the following conditions and is not designated as at FVPL, the asset is measured at amortized cost.

- Debt instruments that are held within a business model whose objective is to collect the contractual cash flows.
- Debt instruments that have contractual cash flows that are solely payments of principal and interest on the principal outstanding.

When a debt instrument meets both of the following conditions and is not designated as at FVPL, the instrument is measured at FVOCI:

- The Company holds financial assets under a business model that serves the purpose of both contractual cash flows and the sale of financial assets.
- Debt instruments that have contractual cash flows that are solely payments of principal and interest on the principal outstanding.

Upon initial recognition of an equity instrument that is not held for trading, the Group may choose to present, in other comprehensive income, the subsequent change in the fair value of the investment. However, the designation is irrevocable. These designations are made on a per-investment basis.

All financial assets that are not carried at amortized cost or other comprehensive income-fair value, measured above, are measured at FVPL. These financial assets include all derivative financial assets. If a financial asset carried at amortized cost or FVOCI at initial recognition is designated as at FVPL and the accounting inconsistency is derecognized or significantly reduced, the Group may designate the financial asset as measured at FVPL. However, the designation is irrevocable.

1) Business model

The Group evaluates the way business is being managed, and the purpose of the business model for managing a financial asset best reflects the way information is provided to the management at its portfolio level. Such information takes into account:

- The accounting policies and objectives stated for the portfolio and the actual operation of these policies; This includes the acquisition of contractual interest income and the duration of the liability to raise the financial asset to maintain a specified level of interest rate, and management's strategy focused on matching the duration of the financial asset and the outflow or realization of expected cash flows from the sale of the asset.
- The way the performance of a financial asset held under the business model is evaluated, and the way such evaluation is being reported to the management.
- The risk affecting the performance of the business model (and financial assets held under the business model), and the way such risk is being managed.
- The compensation plan for the management (e.g., whether the management is being compensated based on the fair value of assets or based on contractual cash flows received).
- The frequency, amount, timing, reason, and forecast of future selling activities of financial assets in the past periods

For this purpose, a transaction that transfers a financial asset to a third party in a transaction that does not qualify for derecognition is not considered a sale.

Financial asset portfolios that meet the definition of short-term trading or whose performance is measured at fair value, are measured at FVPL.

2) Assessment of whether contractual cash flows consist of principal and interest only

The principal is defined to be the fair value of a financial asset at initial recognition. Interest is not only composed of consideration for the time value of money, consideration for the credit risk related to remaining principal at a certain period of time and consideration for other cost (e.g., liquidity risk and cost of operation) and fundamental risk associated with lending but also profit.

When evaluating whether contractual cash flows are solely payments of principal and interest, the Group considers the contractual terms of the financial instrument. When a financial asset contains contractual conditions that modify the timing and amount of contractual cash flows, the Group is required to determine whether contractual cash flows that arise during the remaining life of the financial instrument due to such contractual condition are solely payments of principal and interest.

The Group considers the following elements when evaluating the above:

- Conditional situation that changes the amount or timing of cash flows
- Clauses that adjust the contractual par interest rate, including the variable interest rate characteristic
- Characteristics of interim repayment and maturity extension
- Contractual terms that limit the Group's claim on cash flows arising from certain asset

If the prepayment amount represents interest on principal and outstanding principal, which is substantially outstanding, and includes reasonable additional compensation for early settlement of the contract, the early repayment characteristics are consistent with the terms of payment of principal and interest on a particular day.

Also, for financial assets acquired by significant discounts or premiums on contractual par value, the intermediate repayment amount substantially represents the contractual par value and contractual interest accruals (but not paid) (in this case, upon early settlement of the contract). If the fair value of the characteristic is minor at the time of initial recognition, the condition is determined to be satisfied.

③ Subsequent measurement and profit and loss

1) Financial assets at FVPL

These assets are subsequently valued at fair value. Net gain or loss (including interest or dividend income) is recognized in net income.

2) Financial assets measured at amortized cost

These are subsequently measured at amortized cost using the effective interest method. Amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and losses are recognized in profit or loss. Gains or losses arising from removals are recognized in net income.

3) Debt instruments at FVOCI

These assets are subsequently measured at fair value. Interest income is calculated using the effective interest method and impairment loss in foreign exchange translation is recognized in profit or loss. Other net income is recognized in other comprehensive income. Gains or losses on disposal are reclassified to profit or loss from other comprehensive income.

4) Equity instruments at FVOCI

These assets are subsequently measured at fair value. Dividends are recognized in net income unless they expressly recover the investment. Other net income is recognized in other comprehensive income and will not be reclassified to profit or loss.

④ Derecognition of financial assets

When the contractual right to cash flows of a financial asset expires, the Group transfers the contractual right to receive the cash flows of the financial asset and substantially transfers most of the risks and rewards of ownership of the transferred financial asset, or derecognizes financial assets if the Group does not control its financial assets without retaining or transferring most of its risks and rewards.

If the Group transfers assets recognized in the consolidated statement of financial position, but retains most of the risks and rewards of ownership of the transferred assets, the transferred assets are not derecognised.

⑤ Offset of financial assets

Only if it currently has a legally enforceable right of offset for the recognized assets and liabilities and intend to either settle on a net basis or to realize the assets and settle the liabilities at the same time, the Group offsets financial assets and financial liabilities and presents them in net amounts in the consolidated statement of financial position.

⑥ Impairment of financial assets

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

- Financial assets measured at amortized cost
- Debt instruments at FVOCI
- Lease receivables

Provisions for loss on trade receivables and other receivables measured at amortized cost are always measured at an amount equivalent to lifetime expected credit loss.

When determining whether the credit risk of a financial asset has increased significantly since the initial recognition and when estimating expected credit losses, the Group considers information that is available, reasonable and supportable without excessive cost or effort. This includes qualitative and quantitative information and analysis based on past experiences and known credit ratings of the Group, including forward-looking information.

Expected credit loss for the entire period is expected credit loss for all defaults that can occur during the expected life of a financial instrument.

The longest period the Group considers when measuring expected credit loss is the longest contract period in which it is exposed to credit risk.

2) Measurement of expected credit loss

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

3) Financial assets with damaged credit

At the end of each reporting period, the Group evaluates financial assets measured at amortized cost for impairment. If events that adversely affect the estimated future cash flows of a financial asset have occurred, the financial asset is impaired.

Evidence of impaired credit on financial assets includes the following observable information:

- Significant financial difficulties for issuers or borrowers

4) Indication of allowance for credit loss in the consolidated statement of financial position

Financial assets at amortized cost, debt instruments at FVOCI and loss allowance on lease receivables are deducted from the carrying amount of the assets.

5) Write-off

Financial assets are derecognized when there is no reasonable expectation of recovery of all or part of its contractual cash flows. The Group evaluates each period and amount individually by assessing whether there are reasonable expectations for recovery from corporate customers. The Group has no expectation that the write-off will be significantly recovered. However, the retired financial assets may be subject to retrieval activities in accordance with the recovery procedures for the maturity of the Group.

(6) Tangible assets

Tangible assets are initially measured at cost. The cost of tangible assets includes costs that are directly attributable to the management's intentional method of bringing the asset to its place and condition, and what is estimated to be incurred in the decommissioning, removal, or restoration of the property.

After initial recognition, the tangible assets are stated at cost less accumulated depreciation and accumulated impairment losses.

When it is probable that future economic benefits arising from the asset will flow to the Group and its cost can be measured reliably, costs incurred when replacing parts of tangible assets are included in the asset's carrying amount or recognized as a separate asset, as appropriate. The carrying amount of the replaced part is derecognized. The general costs occurred in maintenance and repair are recorded as the net income as it occurs.

Land is not depreciated among tangible assets, and other tangible assets are amortized using the straight-line method, which best reflects the expected consumption pattern of future economic benefits inherent in the asset over its useful life.

If the cost of a part of a tangible asset is significant compared to the total cost of that tangible asset, when the tangible asset is depreciated, that part is depreciated separately.

The gain or loss arising from the derecognition of tangible assets is determined as the difference between the net disposal proceeds and the carrying amount, and the difference is recognized as other non-operating income and other non-operating expenses.

The estimated useful lives of tangible assets for the years ended 31 December 2022 and 2021, are as follows:

Division	Useful lives
Buildings and structures	20, 40 years
Machinery	5 years
Office equipment	4 years
Other tangible assets	2~5 years

The Group reviews the residual value, useful life and depreciation method of assets at the end of each reporting period, and if any change is deemed appropriate as a result of the review, it is treated as a change in accounting estimate.

(7) Intangible assets

Intangible assets are initially measured at cost, and after initial recognition, the carrying amount is recognized at cost less accumulated amortization and accumulated impairment losses.

Intangible assets are amortized using the straight-line method with no residual value over their estimated useful lives as of the date of their availability. However, as there are no foreseeable limits on the period over which some intangible assets are expected to be used, they are evaluated as having indefinite useful lives and not amortized.

The estimated useful lives of intangible assets for the years ended 31 December 2022 and 2021, are as follows:

Division	Useful lives
Goodwill	Unlimited
Industrial rights	10 years
Software	5 years
Rights of membership	Unlimited
Other intangible assets	5 years

Amortization period and amortization method for finite intangible assets are reviewed at the end of each reporting period. Intangible assets with indefinite useful lives are reviewed at the end of each reporting period to determine whether the assessment of their useful life is indefinite. If it is deemed appropriate to change this, it is treated as a change in the accounting estimate.

The subsequent expenditures are capitalized only if the future economic benefits of the related asset are increased. Other expenses, including internally generated goodwill and trade names, are immediately expensed.

(8) Goodwill

Goodwill is the consideration paid in excess of the fair value of the net identifiable assets acquired at the time of the business combination and is recognized as intangible assets. Goodwill is not amortized, but is tested for impairment annually and presented at cost less accumulated impairment losses.

(9) Government subsidies

Government subsidies are recognized only if the Group has reasonable assurance that the Group will comply with the conditions attached to it.

① Asset-related subsidies

The Group receives a government subsidy with the basic condition that it must be used to acquire or construct non-current assets. When calculating the carrying amount of the asset, the Group recognizes it in net income over the useful life of the depreciable asset, after deducting government subsidies.

② Income-related subsidies

The Group recognizes net income by subtracting the relevant expenses from the relevant expense over the period in which the related costs that it intends to preserve as government grants are recognized as expenses.

(10) Impairment of non-financial assets

In the end of each reporting period for all non-financial assets, except for non-current assets classified as assets, inventories and deferred tax assets, the Group examines whether there are any indications of impairment and, if so, estimates the recoverable amount of the asset. However, intangible assets acquired in a business combination with indefinite useful lives and intangible assets that are not yet available for use are tested for impairment annually by comparing their recoverable amount with their carrying amount, regardless of any indication of impairment.

Recoverable amount is estimated for each asset or if the recoverable amount of an individual asset cannot be estimated, recoverable amount is estimated for each cash-generating unit to which the asset belongs. Recoverable amount is decided as the higher between the pure fair value or value in use. The value in use is discounted by discounting future cash flows expected to be generated from the asset or cash-generating unit at an appropriate discount rate that reflects the current market's assessment of the specific risks of the asset that have not been adjusted in estimating the time value of the money and future cash flows.

If the recoverable amount of an asset or cash generating unit is less than its carrying amount, the carrying amount of the asset is reduced and recognized immediately in profit or loss.

At the end of each reporting period, the Group reviews for assets, excluding goodwill, that there are indications that the impairment loss recognized between and no longer exists or has been reduced. Subsequently, reversal is made only if there is a change in the estimate used to determine recoverable amount since the date of the impairment loss. The carrying amount increased by reversal of an impairment loss cannot exceed the depreciation or amortization of the carrying amount before the impairment loss is recognized in the past.

Goodwill acquired in a business combination is allocated to each cash-generating unit that is expected to benefit from the synergies of the business combination. Impairment losses on cash-generating units reduce the carrying amount of goodwill allocated to the cash-generating unit first, and then reduce the carrying amount of the asset in proportion to the carrying amount of each of the other assets in the cash-generating unit. The impairment losses recognized for goodwill cannot be reversed later. At the end of each reporting period, the Group reviews for assets, excluding goodwill, that there are indications that the impairment loss recognized between and no longer exists or has been reduced. Subsequently, reversal is made only if there is a change in the estimate used to determine recoverable amount since the date of the impairment loss. The carrying amount increased by reversal of an impairment loss cannot exceed the depreciation or amortization of the carrying amount before the impairment loss is recognized in the past.

(11) Lease

1) If the Group is a lessee

The Group evaluates whether a contract is a lease or contains a lease at the contract inception date. In the case of lessees, the Group recognizes right-of-use assets and corresponding lease liabilities in relation to all lease agreements, except for short-term leases (with a lease term of 12 months or less) and leases on small-value basic assets. The Group recognizes lease payments related to short-term leases and leases of small underlying assets as expenses on a straight-line basis over the lease term, unless other systematic criteria better represent the form of the lessee's benefits.

Lease liabilities are initially measured at the present value of the lease payments that have not been paid as of the date of commencement of the lease, discounted using the implied interest rate of the lease. If the implied interest rate of the lease cannot be easily calculated, the incremental borrowing rate of the lessee is used.

The incremental borrowing interest rate varies depending on the lease term, currency and the initiation of the lease, and is determined based on inputs, including:

- Risk-free interest rate based on KTB interest rate
- Company-specific risk management
- Credit risk adjustment based on bond yield
- If the risk attribute of the entity entering into the lease is different from the risk attribute of the Group and the lease does not receive benefits from the Group's guarantee, the company-specific risk management

The lease payments included in the lease liability measurement consist of the following items:

- Fixed lease (including actual fixed lease and deducting lease incentives to be received)
- Fluctuating lease rates that depend on the index or Rate(interest rate). Initially measured using an index or rate(interest rate) on the starting day of lease
- Amount expected to be paid in accordance with the residual value guarantee
- If it is evident that purchase option will be carried out, then the purchase option's event price
- If the lease term reflects the lessee's exercise of the termination option, amount paid to terminate the lease

The Group presents lease liabilities separately from other liabilities in the statement of financial position. Lease liabilities are subsequently measured by increasing (using the effective interest rate method) the carrying amount by reflecting interest on the lease liabilities and decreasing the carrying amount by reflecting the lease payments paid.

The Group remeasures lease liabilities and makes corresponding adjustments to the related right-of-use assets in the following cases:

- When the lease term changes, the circumstances that give rise to a change in the valuation of the exercise of the purchase option change, or a significant event occurs. In this case, the lease liabilities are measured again by discounting the adjusted lease payments at the adjusted discount rate.
- When the lease payment is changed due to a change in the index or rate (interest rate) or the amount expected to be paid under the residual value guarantee. In this case, the lease liabilities are measured again by discounting the adjusted lease payments at the unchanged discount rate. However, if there is a change in lease payments due to a change in the variable interest rate, an adjusted discount rate that reflects the change in the interest rate is used.
- When the lease agreement is changed and not accounted for as a separate lease. In this case, the lease liabilities are measured again by discounting the adjusted lease payments at the adjusted discount rate as of the effective date of the lease change based on the lease term of the changed lease.

The right-of-use assets consist of the initial measurement of the lease liabilities, the lease payments paid on or before the commencement of the lease (received lease incentives are deducted) and the direct cost of initiating the lease borne by the lessee. The right-of-use assets are subsequently measured at cost less accumulated depreciation and accumulated impairment losses.

For the estimated cost of dismantling and removing the underlying asset, restoring the site on which the underlying asset is located, or restoring the underlying asset itself as required by the terms of the lease, the Group recognizes and measures in accordance with IAS 1037. If those costs relate to right-of-use assets, unless those costs are incurred to produce inventories, those costs are recognized as part of the cost of the right-of-use assets.

If ownership of the underlying asset is transferred to the lessee prior to the end of the lease term, or if the cost of the right-of-use assets reflect that the lessee will exercise the purchase option, the lessee depreciates the right-of-use assets from the commencement of the lease to the end of the useful life of the right-of-use asset. In other cases, the lessee depreciates the right-of-use assets from the commencement of the lease until the end of the useful lives of the assets and the end of the lease term, whichever is earlier.

The Group presents right-of-use assets separately from other assets in the statement of financial position.

The Group applies IAS 1036 to determine whether the right-of-use assets are impaired, and the accounting for the identified impairment loss is described in the accounting policy for 'tangible assets' (refer to Note 3.(6)).

The Group does not include variable lease payments (except for variable lease payments that depend on an index or rate (interest rate)) in the measurement of right-of-use assets and lease liabilities, and such lease payments are recognized in profit or loss in the period in which the event or condition giving rise to the variable lease payments arises.

As a practical and simple method, the lessee may choose to account for each lease element and the related non-lease element as a single lease element for each type of underlying asset, rather than separating the non-lease element from the lease element, but the Group does not use this practical and simple method. In a contract containing one lease element and one or more additional lease or non-lease elements, the lessee allocates the contract consideration to each lease element based on the relative stand-alone price of the lease element and the total stand-alone price of the non-lease element.

2) If the Group is a lessor

The Group classifies each lease as either an operating lease or a finance lease. A lease that transfers most of the risks and rewards of ownership of the underlying asset is classified as a finance lease, and a lease that does not transfer most of the risks and rewards of ownership of the underlying asset is classified as an operating lease.

If the Group is an intermediate lessor, the Group accounts for the upper lease and the sub-lease as two separate contracts. The Group classifies sub-leases as finance leases or operating leases according to the right-of-use assets arising from the parent lease rather than the underlying asset.

The Group recognizes lease payments from operating leases as revenue on a straight-line or other systematic basis. If other systematic standards better represent the pattern in which the benefits resulting from the use of the underlying asset are diminished, the Group applies that standard. The Group adds the direct cost of establishing a lease to the carrying amount of the underlying asset and recognizes it as an expense over the lease term on the same basis as the rental income.

In finance leases, the amount received from lessees is recognized as receivables as net investment in the lease of the Group. The Group allocates financial revenue over the lease term in such a way that a certain period of return is reflected in the Group's net investment in lease.

After initial recognition, the Group periodically reviews the estimated unguaranteed residual value, and recognizes expected credit loss on lease receivables as a loss allowance by applying the requirements for derecognition and impairment of IAS 1109.

Finance lease income is calculated by referring to the total carrying amount of lease receivables. However, in the case of financial lease receivables with impaired credit, financial income is calculated by referring to amortized cost (i.e. amount after deducting loss allowance).

If both the lease and non-lease elements are included in the agreement, the Group allocates the contract consideration by applying IAS 1115.

(12) Non-derivative financial liabilities

The Group classifies financial liabilities as financial liabilities at FVPL and other financial liabilities, and recognizes them in the statement of financial position as part of the contract.

① Financial liabilities at FVPL

Financial liabilities at FVPL include short-term trading financial liabilities or financial liabilities designated at financial liabilities at FVPL or loss on initial recognition. Financial liabilities at FVPL are measured at fair value after initial recognition, and changes in fair value are recognized in profit or loss. On the other hand, at the time of initial recognition, transaction expenses incurred in connection with the issuance of financial liabilities at FVPL are recognized immediately in profit or loss.

② Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at FVPL are classified as other financial liabilities. Other financial liabilities are initially measured at fair value less transaction costs directly attributable to issuance. Subsequently, other financial liabilities are measured at amortized cost using the effective interest method and related interest expense is recognized.

The financial liabilities are derecognized from the statement of financial position only when it is extinguished, i.e. when the contractual obligation is discharged, canceled or expires.

(13) Employee benefits

① Short-term employee benefits

Short-term employee benefits that will be settled within 12 months from the end of the reporting period when an employee provides related service are recognized in profit or loss when the service is provided. Short-term employee benefits are measured at undiscounted amount.

② Other long-term employee benefits

Other long-term employee benefits that will not be paid within 12 months after the end of the reporting period for which the employee provided the related service are discounted to present value of future salaries earned in exchange for the service provided in the current and past periods. The changes from remeasurement are recognized in profit or loss in the period in which they arise.

③ Severance payments: Defined benefit plan

The defined benefit obligations related to the defined benefit plan are recognized at the end of the reporting period less the fair value of plan assets.

The defined benefit obligations are calculated under the predictive unit accumulation method annually by an independent public accountant. Where the net amount calculated by subtracting the fair value of plan assets from the present value of defined benefit obligations is an asset, the asset is recognized only to the extent of its present value of available annual benefits, either in the form of a refund from the plan or a reduction in future contributions to the plan.

The remeasurement component of net defined benefit obligations is a change in the upper limit on recognition of assets, except for actuarial gains and losses, net interest on net defined benefit obligations, and net interest on defined benefit obligations. It is immediately recognized in other comprehensive income. The Group's net interest in the defined benefit obligations (assets) is determined by multiplying the net defined benefit obligations (assets) by the discount rate determined at the beginning of the annual reporting period. During in consideration of changes in net defined benefit obligations (assets) due to contributions and payments. Net interest expense and other expenses related to the defined benefit plan are recognized in profit or loss.

In the event of amendment or reduction of the plan, gains or losses on changes or reductions in benefits for the past service are recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined benefit plan when the cumulative settlement occurs.

(14) Provisions

Provisions are present (legal or statutory) obligation that exists as a result of a past event, and it is recognized that resources with economic benefits are likely to be leaked in order to fulfill the obligation, and the amount of money required to fulfill the obligation can be estimated reliably.

The amount recognized as provisions is the best estimate of the expenditures required to carry out the present obligation at the end of the reporting period, taking into account the inevitable risks and uncertainties associated with the events and circumstances. When the time value effect of money is significant, the provisions are valued at the present value of the expenditures expected to settle the obligation.

When a third party is expected to reimburse some or all of the expenditure required to settle the provision, the reimbursement amount is recognized and accounted for as a separate asset only when it is almost certain that reimbursement will be received.

The balance of the provisions is reviewed at the end of each reporting period and adjusted to reflect the best estimate as of the reporting date. If the possibility of the outflow of resources in which economic benefits are embedded for the performance of the obligation is no longer high, the related provisions are reversed.

Provisions for warranty are recognized when products or services are sold or provided, and are estimated by weighted average of all possible outcomes and related probabilities based on historical warranty data.

The provisions are used only for expenditures related to initial recognition.

(15) Foreign currency transaction

In the preparation of the financial statement, transactions in foreign currencies other than KRW functional currencies are recorded at the exchange rate on the trading day. At the end of each reporting period, foreign currency monetary items are translated at the closing rate at the end of the reporting period. Non-monetary items measured at fair value are translated at the exchange rate on the day at which the fair value is determined, and non-monetary items measured at historical cost are translated at the exchange rate on the trading day.

Foreign exchange differences at the time of settlement of monetary items and foreign exchange differences resulting from the translation of monetary items are recognized in profit or loss as other non-operating income and other non-operating expenses when they are related to operating activities, and non-operating activities are recognized in profit or loss as finance income and finance expenses.

When gains or losses on non-monetary items are recognized in other comprehensive income, the effect of foreign exchange fluctuations included in the gain or loss is recognized in other comprehensive income, and any gains or losses are recognized in profit or loss.

(16) Paid-in capital

Common shares are classified as capital, and incremental costs that arise in direct relation to capital transactions (the net amount that reflects the tax effect) are deducted from the capital.

If the Group reacquires its own equity instruments, such instruments are directly deducted from the capital as reacquired shares. If the company buys, sells, issues, or cancels its own equity instruments, the profit or loss is not recognized as that as of 31 December 2022. When the Group acquires and retains treasury stock, the consideration paid or received is recognized directly in equity.

(17) Revenue from contracts with customers

The Group recognizes revenue by applying IAS 1115 for the first time on 1 January 2018 and applying the 5-step (① Contract identification → ② Performance obligation identification → ③ Transaction price calculation → ④ Allocating transaction price to performance obligation → ⑤ Revenue recognition when performance obligation is fulfilled) revenue recognition model to all types of contracts.

① Contract identification

The Group identifies a contract with a customer when all of the following criteria are met:

- The contracting parties accept the contract and commit to performing their respective obligations;
- The rights of each party in relation to the goods or services to be transferred can be identified;
- The terms of payment for the goods or services to be transferred can be identified;
- The contract has commercial performances;
- It is probable that the entity will recover the consideration to which it would be entitled for the goods or services transferred to the customer.

The Group identifies contracts with customers for the supply of products and services that satisfy all of the above criteria as contracts with customers.

② Identification of performance obligation

At the inception of the contract, the Group identifies the promise to transfer any of the following to the customer as a performance obligation by reviewing the goods or services promised in the contract with the customer.

- Distinct goods or services (or a bundle of goods or services)
- A set of distinct goods or services' that are substantially the same and have the same method of transfer to the customer

The performance obligations of the Group to customers identified in contracts with customers are the supply of promised products and provision of services.

③ Calculation of transaction price

The Group refers to the terms of the contract and the company's business practices to calculate the transaction price. The transaction price is the amount the entity expects to be entitled to receive in exchange for transferring promised goods or services to the customer, excluding amounts collected on behalf of a third party.

The Group calculates the consideration to be received from customers for the supply of products and services as the transaction price. However, the consideration to be received from customers may change because the Group allows returns in the contract to supply the product. The Group estimates variable consideration using the expected value method, which it expects to better predict the consideration to which it will be entitled, and recognizes revenue by including variable consideration in the transaction price only to the amount that is highly unlikely to cause a significant reversal of the accumulated revenue recognized

when the return deadline has elapsed. Any consideration received or receivable by the Group for which the Group does not expect to be entitled is recognized as a refund liability and recognized as a new asset for the right to recover the returned asset.

④ Allocating transaction price to performance obligation

The Group allocates the transaction price to each performance obligation at an amount representing the right to receive in exchange for the promised goods or services to the customer.

In contracts entered into by the Group with customers, the performance obligations of the Group consist of a single performance obligation identified as distinct goods and services, such as the supply of products and services, and thus the transaction price is not allocated.

⑤ Revenue recognition when performance obligation is fulfilled

When the Group fulfills a performance obligation by transferring the promised goods or services to the customer, the transaction price allocated to the performance obligation is recognized as revenue when the customer controls the goods or services.

The Group recognizes revenue as if the performance obligations to supply products and provide services are satisfied at a point in time. In particular, in the case of the provision of services, the assets created by the performance of the obligations of the Group have no alternative use for the company itself, and satisfy the requirements of performance obligations over a period in which there must be an enforceable right to payment for the parts that have been performed so far. Revenue is recognized as a performance obligation to be satisfied at a point in time.

(18) Financial income and expenses

Financial income includes interest income, foreign exchange gains and losses on foreign currency financial instruments, and net profit or loss on financial assets at FVPL. Interest income is recognized in profit or loss by applying the effective interest method over the period.

Financial expenses include interest expense on borrowings, translation losses and foreign exchange losses on foreign currency financial instruments, and net profit or loss on financial assets at FVPL. Interest expense on borrowings is recognized in profit or loss over the period by applying the effective interest method.

The effective interest method accurately matches the future cash payment estimated during the expected duration of the financial instrument or the current value of the received amount with the total carrying amount of the financial asset or the amortized cost of the financial liability.

When calculating the interest income or interest expenses, the effective interest is applied to the total carrying amount of the assets (if the credit of the asset is undamaged) or to the amortized cost of the liabilities. However, for financial assets whose credit has been damaged after the initial recognition, the interest income is calculated by applying the effective interest to the amortized cost of the financial assets. If such assets' credit can no longer be deemed to be damaged, the interest income is calculated by applying the effective interest to the total carrying amount.

(19) Corporate tax

Corporate tax expenses consist of current tax and deferred tax expenses, and they are all recognized for the profit or loss as of 31 December 2022 except the tax amounts that occur from transactions or incidents directly recognized for other comprehensive income or capital or from business combination.

① Current tax

The current tax is calculated on the basis of taxable income for the year ended 31 December 2022. Taxable income is different from profit and loss on the consolidated statement of income as it excludes gains and losses to be added or deducted in other taxable periods and non-taxable items or non-deductible items from pre-tax income on the consolidated statement of income. The current tax liabilities related to the Group's current tax are calculated using the tax rates actually enacted.

② Deferred tax

When measuring the deferred tax liabilities and the deferred tax assets, the Group reflects the tax effects based on the expected method of collecting or paying the carrying amount of the assets or liabilities at the end of the reporting period. For the temporary differences to add for subsidiaries, associates and joint venture investment equity, the Group can control the extinction time point of the temporary differences, and deferred tax liabilities are recognized for all cases except where there is a high possibility that the temporary differences would not be extinct within the predictable future. Also, deferred tax assets that arise due to temporary differences to deduct are recognized in cases where there is a high possibility that the temporary differences will be extinct in predictable future and that taxable income for which the temporary differences can be used will occur.

The carrying amount of the deferred tax assets is reviewed at the end of each reporting period and is lowered when there is no longer a high possibility that taxable income will occur sufficiently enough for the benefits due to deferred tax assets can be used.

Deferred tax assets and liabilities are being measured using the tax rate expected to be applied to the period when the assets would be realized or the liabilities be paid based on the tax law enacted or virtually enacted at the end of the reporting period.

Deferred tax assets and liabilities are the corporate tax levied by the same tax office and are offset only when the Group has the right to offset the recognized amounts and is willing to pay the net amount of the income tax liabilities and assets as of 31 December 2022. If there exists income tax amount that additionally occur from dividend payment, it is recognized at the time point when the liabilities related to dividend payment are recognized.

(20) Earnings per share

The Group calculates basic earnings per share and diluted earnings per ordinary share with respect to net profit or loss and presents them in the income statement. Basic earnings per share is calculated by dividing the net profit or loss for the common shares by the weighted-average common shares of the common shares circulated during the reporting period. Diluted earnings per share by adjusting the profit or loss attributable to ordinary shareholders and the weighted-average No. of common shares outstanding, taking into account the effects of all dilutive potential common shares, including share-based compensation granted to employees.

(21) Business combination

Business combinations are accounted for using the acquisition method, except for combinations of entities and businesses under common control.

Transfer considerations are generally measured at fair value as the same way that identifiable net assets are measured at fair value. When goodwill is generated as a result of a business combination, impairment tests are conducted annually, and the excess is recognized immediately in net income as a bargain purchase gain. Acquisition-related costs are expensed in the period in which they are incurred and provided for services, except for the cost of issuance of debt securities and equity securities, which are recognized in accordance with IAS 1032 and IAS 1109.

Transfer considerations do not include any amounts related to the settlement of existing relationships. The settlement of existing relationships is generally recognized in profit or loss.

Contingent consideration is measured at fair value on the acquisition date. Contingent consideration classified as equity is not remeasured and subsequent settlements are accounted for within equity. When the contingent consideration is not classified as equity, the change in fair value of the conditional consideration is subsequently recognized in profit or loss.

4. Significant decisions and major source of estimation uncertainty

In preparing the consolidated financial statements, management should make judgments that have a significant effect on the amounts recognized in the financial statements (excluding matters related to estimates), and the carrying amount of assets and liabilities that are not readily identifiable from other sources. Estimates and assumptions must be made. Estimates and related assumptions are based on past experiences and other factors deemed relevant. In addition, actual results may differ from these estimates.

Estimates and underlying assumptions are continually reviewed. Revisions to accounting estimates are recognized in the period in which the revision is made if the revision affects only that period, and in the period in which the adjustment is made and in future periods if they affect both current and future periods.

(1) Management's judgments

The following notes include information on the management's main judgments related to application of accounting policies that significantly affect the amounts recognized in the consolidated financial statements:

- Note 3: Significant accounting policies

(2) Uncertainty of assumptions and estimates

The information on the uncertainty of premise and estimation with significant risk that may cause major adjustment on the next reporting term is included in the following notes:

- Note 12: Inventories - Assumptions for inventory valuation allowance
- Note 16: Lease liabilities - Determination of lease term
- Note 18: Provisions - Possibility of resource leak and amount assumption
- Note 30: Measurement of the defined benefit obligation - Actuarial assumptions

(3) Fair value measurement

The Group's accounting policy and disclosures require measurement of various financial and non-financial assets and debts at fair values, and the Group has established fair value evaluation policies and procedures. The policies and procedures include the operation of the evaluation department responsible for reviewing all significant fair value measurements, including those classified as Level 3 in the fair value hierarchy, and the results are reported directly to the finance executive.

The evaluation department regularly reviews significant unobservable inputs and valuation adjustments. When fair value measurement uses third-party information such as broker prices or rating agencies, the evaluation based on information obtained from third parties by the rating department includes classification by level within the fair value hierarchy, and determines whether it can be concluded that the requirements of the standard are met.

When measuring the fair values of assets and debts, the Group uses input variables that are as observable in the market as possible. Fair values are classified within the fair value hierarchy based on the input variables used in the valuation method as follows:

- Level 1: The unadjusted declared value of the same asset or liability in the accessible active market on the measurement date
- Level 2: Input variables directly or indirectly observable with regard to the asset or liability apart from the declared value of Level 1
- Level 3: Input variables unobservable with regard to the asset or liability

In case where various input variables used to measure assets or debts at fair values are classified into different levels within the fair value hierarchy, the Group classifies all the fair value measurements by the lowest-level input variable within the significant fair value hierarchy for the entire measurements and recognizes movements along the fair value hierarchy at the end of the reporting period in which changes occurred.

The details of the assumptions used in measuring fair value are included in the notes below:

- Note 7: Management of financial risk

5. Sales division

- (1) General information regarding business division

The Group consists of a single research and development organization while applying the same marketing strategy. It also identifies the sales division as a single division and provides reporting on such a basis.

- (2) There are two companies whose sales from a single external customer account for more than 10% of the Group's sales, and their sales for the years ended 31 December 2022 were KRW 1,202,606 million and KRW 451,992 million, and KRW 1,352,588 million and KRW 312,403 million in 2021, respectively.

6. Classification of financial instruments by category

(1) Financial instruments by category

The details of the carrying amount of financial instruments by category for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Financial assets:		
Items at FVOCI		
Trade receivables	36,817,123,476	55,832,162,670
Financial assets at amortized cost		
Cash and cash equivalents	188,365,134,297	135,613,700,789
Short-term financial instruments	130,501,257,585	470,000,000,000
Trade receivables	106,530,673,376	119,432,884,399
Other receivables(*1)	43,849,965,617	29,272,763,246
Subtotal	469,247,030,875	754,319,348,434
Lease receivables	2,218,821,942	3,548,057,137
Total	508,282,976,293	813,699,568,241
Financial liabilities:		
Financial liabilities at amortized cost		
Trade payables	196,211,140,403	213,463,276,070
Other payables(*2)	44,672,049,559	14,411,648,102
Subtotal	240,883,189,962	227,874,924,172
Lease liabilities	15,886,600,747	7,504,655,796
Total	256,769,790,709	235,379,579,968

(*1) Lease receivables are excluded.

(*2) Employee-related debts that are not included in financial liabilities are excluded.

(2) Financial incomes and costs by category

The details of financial incomes and financing costs recognized in the net income for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	Interest income (interest expense)		Other income(*)	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Financial liabilities at FVPL	-	-	-	(32,636,103)
Financial assets at FVOCI	-	-	(3,313,057,808)	13,311,927,152
Financial assets at amortized cost	11,842,606,319	4,021,780,756	(1,980,447,225)	(1,109,296,234)
Lease receivables	65,884,805	89,622,456	-	-
Financial liabilities at amortized cost	-	-	(15,537,727,956)	(5,173,959,094)
Lease liabilities	(430,595,529)	(174,344,490)	-	-
Total	11,477,895,595	3,937,058,722	(20,831,232,989)	6,996,035,721

(*) Other gains and losses consist of gains and losses on financial assets at FVPL, financial assets at FVOCI, financial assets at amortized cost and financial liabilities at amortized cost, and losses on disposal of trade receivables, foreign currency translation gains and losses and foreign exchange differences form gains or losses on foreign exchange.

(3) Transfer of financial assets

The Group transferred trade receivables according to the account receivable factoring contract with the Export-Import Bank, etc. In this transaction, if the relevant trade receivables are not recovered at maturity, the Group is not obligated to pay the unrecovered amount of trade receivables to banks.

There is no carrying amount of trade receivables accounted for as collateralized borrowing as the Group transferred all or part of the transferred financial assets through factoring of accounts receivable as of 31 December 2022.

7. Management of financial risk

(1) Credit risk

Credit risk refers to the risk that the Group will suffer financial loss as a result of a customer or counterparty not fulfilling its contractual obligations for a financial instrument. It mainly arises from trade receivables and investment assets to customers.

① Exposure to credit risk

The carrying amount of financial assets represents the maximum exposure to credit risk. The maximum exposure to credit risk of the Group for the years ended 31 December 2022 and 2021, is as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Cash and cash equivalents	188,365,134,297	135,613,700,789
Short-term financial instruments	130,501,257,585	470,000,000,000
Trade receivables (*1)	143,347,796,852	175,265,047,069
Other receivables(*2)	46,068,787,559	32,820,820,383
Total	508,282,976,293	813,699,568,241

(*1) Includes trade receivables classified as financial assets at FVOCI.

(*2) Includes lease receivables.

② Impairment loss

The Group has established an allowance for losses expected to occur on trade receivables. The allowance for a group of financial assets is determined based on historical data on the recovery of similar financial assets.

The trade receivables are net amount after loss allowance is deducted, and as indicated in the consolidated statement of financial position, details of trade receivables and related loss allowances based on the total amount before loss allowance for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Trade receivables	143,347,796,852	175,265,047,069
Loss allowance	-	-
Net carrying amount of trade receivables	143,347,796,852	175,265,047,069

As of 31 December 2022 and 2021, the age of trade receivables and the amount impaired by each year are as follows:

(Unit: KRW)						
Division	31 December 2022			31 December 2021		
	Total amount of receivables	Impaired amount	Carrying amount	Total amount of receivables	Impaired amount	Carrying amount
Within the due date	143,583,211,020	-	143,583,211,020	170,544,442,333	-	170,544,442,333
Due date ~ 3 months	(235,414,168)	-	(235,414,168)	4,735,821,767	-	4,735,821,767
3 ~ 6 months	-	-	-	(15,217,031)	-	(15,217,031)
Total	143,347,796,852	-	143,347,796,852	175,265,047,069	-	175,265,047,069

There is no change in allowance for bad debts for trade receivables for the years ended 31 December 2022 and 2021.

(2) Liquidity risk

Liquidity risk refers to the risk that the Group will have difficulty in meeting its obligations related to financial liabilities that are settled through the delivery of cash or other financial assets. The Group's liquidity management method is to generate abnormally excessive losses even in difficult financial situations, or to maintain sufficient liquidity to repay debts at maturity without risk of damaging the Group's reputation.

The Group manages liquidity risk by maintaining sufficient cash and cash equivalents and short-term financial instruments.

The contractual maturity of financial liabilities for the years ended 31 December 2022 and 2021, is as follows. The amount does not include the effect of trade agreements.

① 31 December 2022

(Unit: KRW)				
Division	Carrying amount	Contractual cash flow	Less than 1 year	1 ~ 5 years
Trade payables	196,211,140,403	196,211,140,403	196,211,140,403	-
Other payables(*)	44,672,049,559	44,672,049,559	42,670,889,559	2,001,160,000
Total	240,883,189,962	240,883,189,962	238,882,029,962	2,001,160,000

(*) Employee-related liabilities not included in financial liabilities are excluded, and the contractual maturity of lease liabilities is indicated in Note 16.

② 31 December 2021

(Unit: KRW)				
Division	Carrying amount	Contractual cash flow	Less than 1 year	1 ~ 5 years
Trade payables	213,463,276,070	213,463,276,070	213,463,276,070	-
Other payables(*)	14,411,648,102	14,411,648,102	14,391,648,102	20,000,000
Total	227,874,924,172	227,874,924,172	227,854,924,172	20,000,000

(*) Employee-related liabilities not included in financial liabilities are excluded, and the contractual maturity of lease liabilities is indicated in Note 16.

The contractual maturity is based on the earliest date on which the Group can be demanded for payment.

(3) Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices.

① Currency risk

The Group is exposed to the currency risk related to the sales profits and costs indicated in KRW, which is the functioning currency. The major currencies in these transactions are USD.

A. Exposure to foreign exchange risk

The carrying amounts of monetary assets and liabilities denominated in foreign currencies other than the functional currency as of for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)											
Division	31 December 2022						31 December 2021				
	USD	JPY	CNY	EUR	NR	TWD	USD	JPY	CNY	EUR	INR
Assets in foreign currency:											
Cash and cash equivalents	60,654,903,501	-	-	-	64,743,150	110,919,033	629,258,175	-	-	-	-
Advanced payments	-	-	-	-	-	-	-	-	-	-	57,180,894
Trade receivables	98,704,983,637	-	-	-	-	-	84,127,890,315	-	-	-	-
Receivables	458,338,309	-	-	-	-	-	559,325,456	-	-	-	-
Total	159,818,225,447	-	-	-	64,743,150	110,919,033	85,316,473,946	-	-	-	57,180,894
Liabilities in foreign currency:											
Trade payables	73,874,367,352	-	-	-	-	-	89,222,219,441	-	-	-	-
Payables	4,508,630,034	817,885,631	202,368	68,627,448	121,571,366	156,046,204	1,819,938,881	1,911,477,975	176,946	14,067,723	53,862,389
Total	78,382,997,386	817,885,631	202,368	68,627,448	121,571,366	156,046,204	91,042,158,322	1,911,477,975	176,946	14,067,723	53,862,389

The exchange rates applied to the conversion of monetary assets and liabilities denominated in foreign currencies are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
USD	1,267.30	1,185.50
JPY	9.53	10.30
CNY	181.44	186.26
EUR	1,351.20	1,342.34
INR	15.31	15.93
TWD	41.27	-

B. Sensitivity analysis

As of 31 December 2022 and 2021, if the exchange rate of the Korean won against major foreign currencies constituting financial assets and liabilities of the Group increased, the Group's equity and profit or loss would have increased or decreased. The analysis assumes a degree of variance that the Group considers to be reasonably possible at the end of the period. It has been also assumed that other variables such as interest rate do not fluctuate during the sensitivity analysis. The effect of the changes in foreign exchange rate for Korean won (before income tax) for the current and the last years on the losses and gains are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Increase by 5%	Decrease by 5%	Increase by 5%	Decrease by 5%
USD	4,071,761,403	(4,071,761,403)	(286,284,219)	286,284,219
JPY	(40,894,282)	40,894,282	(95,573,899)	95,573,899
CNY	(10,118)	10,118	(8,847)	8,847
EUR	(3,431,372)	3,431,372	(703,386)	703,386
INR	(2,841,411)	2,841,411	165,925	(165,925)
TWD	(2,256,359)	2,256,359	-	-

② Interest rate risk

The Group's interest-bearing assets are fixed at a fixed interest rate, and the Group does not treat fixed interest rate financial instruments as financial instruments measured at fair value. Therefore, the revenues and operating cash flows of the Group are actually independent of variations in the market interest rate.

(4) Fair value

The carrying amount and fair value of financial assets and liabilities include current fair value rank system for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)					
Division	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:					
Trade receivables (*1)	36,817,123,476	-	-	-	36,817,123,476
Financial assets not measured at fair value:					
Cash and cash equivalents	188,365,134,297	-	-	-	188,365,134,297
Short-term financial instruments	130,501,257,585	-	-	-	130,501,257,585
Trade receivables	106,530,673,376	-	-	-	106,530,673,376
Other receivables(*2)	43,849,965,617	-	-	-	43,849,965,617
Sub-total	469,247,030,875	-	-	-	469,247,030,875
Total	506,064,154,351	-	-	-	506,064,154,351
Financial liabilities not measured at fair value:					
Trade payables	196,211,140,403	-	-	-	196,211,140,403
Other payables(*2,*3)	44,672,049,559	-	-	-	44,672,049,559
Total	240,883,189,962	-	-	-	240,883,189,962

(*1) Since the carrying amount is a reasonable approximation of the fair value, the fair value hierarchy and measurement method are not included in the disclosure.

(*2) Lease receivables and lease liabilities are excluded.

(*3) Employee-related debts that are not included in financial liabilities are excluded.

② 31 December 2021

(Unit: KRW)					
Division	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:					
Trade receivables (*1)	55,832,162,670	-	-	-	55,832,162,670
Financial assets not measured at fair value:					
Cash and cash equivalents	135,613,700,789	-	-	-	135,613,700,789
Short-term financial instruments	470,000,000,000	-	-	-	470,000,000,000
Trade receivables	119,432,884,399	-	-	-	119,432,884,399
Other receivables(*2)	29,272,763,246	-	-	-	29,272,763,246
Sub-total	754,319,348,434	-	-	-	754,319,348,434
Total	810,151,511,104	-	-	-	810,151,511,104
Financial liabilities not measured at fair value:					
Trade payables	213,463,276,070	-	-	-	213,463,276,070
Other payables(*2,*3)	14,411,648,102	-	-	-	14,411,648,102
Total	227,874,924,172	-	-	-	227,874,924,172

(*1) Since the carrying amount is a reasonable approximation of the fair value, the fair value hierarchy and measurement method are not included in the disclosure.

(*2) Lease receivables and lease liabilities are excluded.

(*3) Employee-related debts that are not included in financial liabilities are excluded.

(5) Capital management

The capital management of the Group is for maintaining the existence as a going concern, minimizing the capital cost for funding, maximizing the profits of the shareholders, and maintaining an appropriate equity structure. The Group is managing its capital based on the liability ratio. The Group manages the capital based on the ratio of liability, which is calculated by dividing the total liability in the consolidated statement of financial position with capital. The debt-to-equity ratio of the Group for the years ended 31 December 2022 and 2021, is as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Total liabilities	339,257,893,379	372,198,273,673
Total equities	950,360,648,754	800,332,708,247
Debt-to-equity ratio	35.70%	46.51%

8. Cash and cash equivalents

The details of cash and cash equivalents for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Demand deposits	79,065,134,297	30,313,700,789
Term deposit, etc.(*)	109,300,000,000	105,300,000,000
Total	188,365,134,297	135,613,700,789

(*) This is a financial instrument whose maturity is within 3 months from the acquisition date, has very high liquidity, is easy to convert to a fixed amount, and has a slight risk of value fluctuation.

9. Short-term financial instruments

The details of short-term financial instruments for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Term deposit	130,501,257,585	470,000,000,000

10. Trade and other receivables

(1) The trade and other receivables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Trade receivables	143,347,796,852	-	175,265,047,069	-
Receivables	24,817,795,084	-	15,703,271,449	-
Accrued income	2,371,598,882	-	1,743,516,473	-
Loan	1,790,574,626	6,091,320,171	1,683,384,338	7,650,673,846
Deposits	-	8,778,676,854	-	2,491,917,140
Lease receivables	1,359,317,660	859,504,282	1,329,235,195	2,218,821,942
Total	173,687,083,104	15,729,501,307	195,724,454,524	12,361,412,928

(2) The changes in lease receivables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
1 January	3,548,057,137	4,853,554,681
Interest income	65,884,805	89,622,456
Collection	(1,395,120,000)	(1,395,120,000)
31 December	2,218,821,942	3,548,057,137

(3) The maturity analysis of lease receivables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Less than 1 year	1,395,120,000	1,395,120,000
1-2 years	866,324,509	1,395,120,000
2-3 years	-	866,324,509
Total undiscounted lease	2,261,444,509	3,656,564,509
Unrealized financial income	(42,622,567)	(108,507,372)
Lease net investment	2,218,821,942	3,548,057,137

11. Other assets

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

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Advanced payments	8,270,140,223	9,367,236,340	1,796,148,736	186,959,330
Prepaid expenses	26,254,951,669	794,082,232	26,807,033,814	692,941,392
VAT refundable	14,196,715	-	4,486,077	-
Total	34,539,288,607	10,161,318,572	28,607,668,627	879,900,722

12. Inventories

(1) The details of inventories for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Finished goods	184,831,476,664	68,414,211,584
Work in process	335,608,127,172	142,699,548,169
Inventory return allowance	165,108,909	367,742,961
Inventory valuation allowance	(38,095,660,661)	(10,363,989,150)
Products	47,383,151	-
Total	482,556,435,235	201,117,513,564

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Cost of goods sold:		
(Reversal) establishment of allowance for return of inventories	202,634,052	(178,626,586)
Establishment (reversal) of provision for inventory valuation	27,731,671,511	(11,454,885,479)

13. Investments of associates and joint ventures

(1) The investments of associates and joint ventures for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)							
Company name	Location	Main sales activities	Month of account closing	31 December 2022		31 December 2021	
				Ratio (%)	Carrying amount	Ratio(%)	Carrying amount
Advance Power Device Technologies Co. ltd.	Korea	R&D and design of semiconductor devices	March	49.00	4,403,026,225	49.00	4,229,627,079
FJ Composite Materials Co., LTD	Japan	Research and manufacture of heat spreader	May	29.98	7,296,459,614	29.98	7,438,503,112
Telechips(*)	Korea	Manufacture of electronic integrated circuit	December	10.93	28,031,035,949	-	-
Total					39,730,521,788		11,668,130,191

(*) Newly acquired as of 31 December 2022, and although the share of the Group is less than 20%, it is exerting significant influence through the contractual right to appoint directors.

(2) The changes in the investments in associates and joint ventures as of 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)					
Company name	1 January	Acquisition	Equity method gains and losses	Gain on valuation of investment stock by the equity method	31 December
Advanced Power Device Technology Co., Ltd.	4,229,627,079	-	173,399,146	-	4,403,026,225
FJ Composite Materials Co., LTD	7,438,503,112	-	508,680,596	(650,724,094)	7,296,459,614
Telechips Inc.	-	26,770,050,000	1,221,424,180	39,561,769	28,031,035,949
Total	11,668,130,191	26,770,050,000	1,903,503,922	(611,162,325)	39,730,521,788

② 31 December 2021

(Unit: KRW)				
Company name	1 January	Acquisition	Equity method gains and losses	31 December
Advance Power Device Technologies Co. ltd.	4,088,947,195	-	140,679,884	4,229,627,079
FJ Composite Materials Co., LTD	-	6,835,773,000	602,730,112	7,438,503,112
Total	4,088,947,195	6,835,773,000	743,409,996	11,668,130,191

(3) The financial position of associates and joint ventures for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)							
Company name	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities	Total equities
Advance Power Device Technologies Co. Ltd.	8,759,269,885	590,710,921	9,349,980,806	160,338,027	203,874,972	364,212,999	8,985,767,807
FJ Composite Materials Co., LTD	4,167,835,425	10,751,432,004	14,919,267,429	748,082,143	4,315,770,906	5,063,853,049	9,855,414,380
Telechips Inc.	143,745,356,847	175,909,051,084	319,654,407,931	91,677,311,993	56,313,910,558	147,991,222,551	171,663,185,380

② 31 December 2021

(Unit: KRW)							
Company name	Current assets	Non-current assets	Total assets	Current liabilities	Non-current liabilities	Total liabilities	Total equities
Advance Power Device Technologies Co. Ltd.	8,197,680,024	808,815,562	9,006,495,586	184,230,102	190,373,485	374,603,587	8,631,891,999
FJ Composite Materials Co., LTD	4,229,805,505	8,896,860,639	13,126,666,144	875,952,350	3,904,393,250	4,780,345,600	8,346,320,544

(4) The profit and loss in the investments in associates for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)					
Company name	Sales	Operating income	Income tax expenses	Net income	Total comprehensive income
Advance Power Device Technologies Co. Ltd.	2,550,251,212	231,841,018	7,622,521	353,147,042	353,147,042
FJ Composite Materials Co., LTD	3,851,938,353	749,681,367	235,533,654	2,201,109,947	1,509,393,060
Telechips(*)	38,993,560,861	4,055,055,218	5,758,297,013	44,597,536,980	44,259,773,138

(*) Sales, net profit or loss, and comprehensive income are amounts after incorporation into associates.

② 31 December 2021

(Unit: KRW)					
Company name	Sales	Operating income	Income tax expenses	Net income	Total comprehensive income
Advance Power Device Technologies Co. Ltd.	2,801,913,354	254,719,394	28,520,362	287,101,805	287,101,805
FJ Composite Materials Co., LTD(*)	2,852,191,075	2,056,323,955	-	2,052,759,763	2,052,759,763

(*) Sales, net profit or loss, and comprehensive income are amounts after incorporation into associates.

(5) The adjustments of the financial information amount of investment in associates and joint ventures to the carrying amount of equity in associates and joint ventures for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)						
Company name	Net asset as of 31 December (A)	Group's share (B)	Net asset equity (A*B)	(+)Goodwill	(±)Others	Carrying amount as of 31 December
Advance Power Device Technologies Co. Ltd.	8,985,767,807	49.00%	4,403,026,225	-	-	4,403,026,225
FJ Composite Materials Co., LTD	9,855,414,380	29.98%	2,954,513,947	3,718,653,849	623,291,818	7,296,459,614
Telechips Inc.	171,663,185,380	10.93%	18,769,586,919	7,357,926,160	1,903,522,870	28,031,035,949

② 31 December 2021

(Unit: KRW)						
Company name	Net asset as of 31 December (A)	Group's share (B)	Net asset equity (A*B)	(+)Goodwill	(±)Others	Carrying amount as of 31 December
Advance Power Device Technologies Co. Ltd.	8,631,891,999	49.00%	4,229,627,079	-	-	4,229,627,079
FJ Composite Materials Co., LTD	8,346,320,544	29.98%	2,502,226,899	4,075,123,848	861,152,365	7,438,503,112

14. Tangible assets

(1) The details of tangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets(*)	Construction in-progress	Total
Acquisition cost	35,051,121,092	21,054,366,791	188,300,000	63,813,635,814	23,946,416,194	9,631,076,240	9,712,038,822	163,396,954,953
Accumulated amortization	-	(3,047,630,728)	(21,183,768)	(34,314,804,334)	(15,015,349,732)	(5,446,671,430)	-	(57,845,639,992)
Accumulated impairment loss	-	-	-	(239,798,395)	-	-	-	(239,798,395)
Government subsidies	-	-	-	(38,922)	(5,908,229)	(135,000,000)	-	(140,947,151)
Carrying amount	35,051,121,092	18,006,736,063	167,116,232	29,258,994,163	8,925,158,233	4,049,404,810	9,712,038,822	105,170,569,415

(*) Other tangible assets include facility equipment, leasehold improvements, and vehicles.

② 31 December 2021

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets (+)	Construction in-progress	Total
Acquisition cost	6,419,595,262	6,043,324,341	188,300,000	56,560,490,481	17,166,431,234	6,225,601,125	1,660,946,817	94,264,689,260
Accumulated amortization	-	(2,714,191,507)	(16,476,264)	(24,380,737,654)	(12,412,009,661)	(4,033,159,176)	-	(43,556,574,262)
Accumulated impairment loss	-	-	-	(239,798,395)	-	-	-	(239,798,395)
Government subsidies	-	-	-	(38,922)	(10,675,296)	(195,000,000)	-	(205,714,218)
Carrying amount	6,419,595,262	3,329,132,834	171,823,736	31,939,915,510	4,743,746,277	1,997,441,949	1,660,946,817	50,262,602,385

(*) Other tangible assets include facility equipment, leasehold improvements, and vehicles.

(2) The changes in the carrying amount of tangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets(*)	Construction in-progress	Total
Carrying amount as of 1 January	6,419,595,262	3,329,132,834	171,823,736	31,939,915,510	4,743,746,277	1,997,441,949	1,660,946,817	50,262,602,385
Acquisition cost during the period	318,549,000	-	-	4,614,517,669	7,039,673,872	1,840,448,312	57,088,920,718	70,902,109,571
Disposal cost during the period	-	-	-	(6,001)	(845,796)	-	-	(851,797)
Substitution of assets under construction	28,312,976,830	15,011,042,450	-	4,135,309,433	-	1,578,500,000	(49,037,828,713)	-
Depreciation	-	(333,439,221)	(4,707,504)	(11,416,025,856)	(2,847,316,912)	(1,358,383,186)	-	(15,959,872,679)
Others	-	-	-	(14,716,592)	(10,099,208)	(8,602,265)	-	(33,418,065)
Carrying amount as of 31 December	35,051,121,092	18,006,736,063	167,116,232	29,258,994,163	8,925,158,233	4,049,404,810	9,712,038,822	105,170,569,415

(*) Other tangible assets include facility equipment, leasehold improvements, and vehicles.

② 31 December 2021

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets(*)	Construction in-progress	Total
Carrying amount as of 1 January	5,015,382,334	2,395,354,729	176,531,240	7,419,787,405	4,837,818,795	1,715,411,841	11,599,898,200	33,160,184,544
Acquisition cost during the period	1,404,212,928	1,196,075,160	-	5,534,445,750	2,171,393,204	1,031,980,856	19,734,259,163	31,072,367,061
Disposal cost during the period	-	-	-	(12,806)	(2,696,584)	-	(1,319,130,944)	(1,321,840,334)
Substitution of assets under construction	-	-	-	28,047,579,602	92,500,000	214,000,000	(28,354,079,602)	-
Depreciation	-	(262,297,055)	(4,707,504)	(9,201,774,512)	(2,376,659,274)	(966,243,085)	-	(12,811,681,430)
Others	-	-	-	139,890,071	21,390,136	2,292,337	-	163,572,544
Carrying amount as of 31 December	6,419,595,262	3,329,132,834	171,823,736	31,939,915,510	4,743,746,277	1,997,441,949	1,660,946,817	50,262,602,385

(*) Other tangible assets include facility equipment, leasehold improvements, and vehicles.

15. Intangible assets

(1) The details of intangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Construction in-progress	Total
Acquisition cost	27,913,122,677	6,080,962,005	23,765,964,649	4,354,074,600	35,114,460,000	11,689,695,760	108,918,279,691
Accumulated amortization	-	(2,148,048,751)	(9,624,562,340)	-	(33,075,765,007)	-	(44,848,376,098)
Accumulated impairment loss	-	-	-	(243,581,400)	-	-	(243,581,400)
Government subsidies	-	(19,481,639)	-	-	-	(7,941,731)	(27,423,370)
Carrying amount	27,913,122,677	3,913,431,615	14,141,402,309	4,110,493,200	2,038,694,993	11,681,754,029	63,798,898,823

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

② 31 December 2021

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Construction in-progress	Total
Acquisition cost	27,913,122,677	4,469,422,204	14,303,854,103	4,513,064,600	35,092,460,000	3,531,914,928	89,823,838,512
Accumulated amortization	-	(1,680,563,449)	(8,597,594,514)	-	(29,056,391,672)	-	(39,334,549,635)
Accumulated impairment loss	-	-	-	(243,581,400)	-	-	(243,581,400)
Government subsidies	-	(22,141,642)	-	-	-	(7,941,731)	(30,083,373)
Carrying amount	27,913,122,677	2,766,717,113	5,706,259,589	4,269,483,200	6,036,068,328	3,523,973,197	50,215,624,104

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

(2) The changes in the carrying amount of intangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Construction in-progress	Total
Carrying amount as of 1 January	27,913,122,677	2,766,717,113	5,706,259,589	4,269,483,200	6,036,068,328	3,523,973,197	50,215,624,104
Acquisition cost during the period	-	-	813,252,067	1,260,810,000	22,000,000	20,425,039,997	22,521,102,064
Disposal cost during the period	-	(18,475,464)	-	(1,419,800,000)	-	(123,754,087)	(1,562,029,551)
Substitution of assets under construction	-	1,677,516,678	10,465,988,400	-	-	(12,143,505,078)	-
Amortization of intangible assets	-	(512,326,712)	(2,838,611,184)	-	(4,019,373,335)	-	(7,370,311,231)
Others	-	-	(5,486,563)	-	-	-	(5,486,563)
Carrying amount as of 31 December	27,913,122,677	3,913,431,615	14,141,402,309	4,110,493,200	2,038,694,993	11,681,754,029	63,798,898,823

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

② 31 December 2021

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Construction in-progress	Total
Carrying amount as of 1 January	27,913,122,677	1,979,074,675	5,797,665,322	3,349,533,200	10,064,741,660	3,040,442,096	52,144,579,630
Acquisition cost during the period	-	48,669,002	448,643,277	919,950,000	-	3,290,518,618	4,707,780,897
Disposal cost during the period	-	(1,688,805)	-	-	-	(91,936,055)	(93,624,860)
Substitution of assets under construction	-	1,108,771,462	1,606,280,000	-	-	(2,715,051,462)	-
Amortization of intangible assets	-	(368,109,221)	(2,165,163,178)	-	(4,028,673,332)	-	(6,561,945,731)
Others	-	-	18,834,168	-	-	-	18,834,168
Carrying amount as of 31 December	27,913,122,677	2,766,717,113	5,706,259,589	4,269,483,200	6,036,068,328	3,523,973,197	50,215,624,104

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

(3) Intangible assets with indefinite useful life

The Group classifies goodwill and membership among intangible assets as intangible assets with indefinite useful lives and is not amortized, and reviews impairment annually along with intangible assets construction in-progress, which are intangible assets that have not yet been used. There is no impairment recognized for goodwill, intangible assets construction in-progress, and memberships as of 31 December 2022 and 2021.

16. Lease

(1) The Group leased buildings and vehicles, and the average lease period is about two years.

(2) The carrying amount of right-of-use assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)

Division	Buildings	Vehicles	Total
Acquisition amount	30,434,824,136	1,536,666,177	31,971,490,313
Accumulated depreciations	(14,237,660,846)	(724,151,773)	(14,961,812,619)
Carrying amount	16,197,163,290	812,514,404	17,009,677,694

② 31 December 2021

(Unit: KRW)

Division	Buildings	Vehicles	Total
Acquisition amount	14,612,259,352	1,357,570,289	15,969,829,641
Accumulated depreciations	(7,877,987,172)	(412,711,884)	(8,290,699,056)
Carrying amount	6,734,272,180	944,858,405	7,679,130,585

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

① 31 December 2022

(Unit: KRW)

Division	Buildings	Vehicles	Total
Amount as of 1 January	6,734,272,180	944,858,405	7,679,130,585
Acquisition amount	16,367,885,528	470,366,656	16,838,252,184
Decrease (contract termination)	(61,998,902)	(83,626,361)	(145,625,263)
Depreciation	(6,733,950,680)	(520,113,380)	(7,254,064,060)
Others	(109,044,836)	1,029,084	(108,015,752)
Amount as of 31 December	16,197,163,290	812,514,404	17,009,677,694

② 31 December 2021

(Unit: KRW)

Division	Buildings	Vehicles	Total
Amount as of 1 January	8,354,595,193	278,172,782	8,632,767,975
Acquisition amount	1,567,384,949	1,272,049,429	2,839,434,378
Decrease (contract termination)	(30,552,418)	(187,108,676)	(217,661,094)
Depreciation	(3,165,277,602)	(416,614,048)	(3,581,891,650)
Others	8,122,058	(1,641,082)	6,480,976
Amount as of 31 December	6,734,272,180	944,858,405	7,679,130,585

(4) The amounts recognized in profit or loss as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)

Division	31 December 2022	31 December 2021
Depreciation of right-of-use assets	7,254,064,060	3,581,891,650
Interest cost on lease liabilities	430,595,529	174,344,490
Expenses related to short-term leases and small assets lease	1,900,593,554	906,198,448

(5) The Group's total cash outflows due to leases as of 31 December 2022 and 2021 are KRW 9,059 million and KRW 4,401 million, respectively.

(6) The details of lease liabilities for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)

Division	31 December 2022		31 December 2021	
	Minimum lease	Present value of minimum lease	Minimum lease	Present value of minimum lease
Less than 1 year	8,546,023,350	8,158,860,041	3,709,908,605	3,576,706,160
1 to 5 years	8,164,056,206	7,616,956,182	3,895,865,745	3,815,727,544
5 to 10 years	120,236,710	110,784,524	121,745,160	112,222,092
Total	16,830,316,266	15,886,600,747	7,727,519,510	7,504,655,796

(7) The current components of lease liabilities for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)

Division	31 December 2022	31 December 2021
Current liabilities	8,158,860,041	3,576,706,160
Non-current liabilities	7,727,740,706	3,927,949,636
Total	15,886,600,747	7,504,655,796

17. Trade and other receivables

The details of trade and other payables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Trade payables	196,211,140,403	-	213,463,276,070	-
Payables	59,103,275,904	-	45,953,977,593	-
Accrued expenses	9,848,623,439	-	13,470,762,853	-
Rental deposits	-	-	-	20,000,000
Deposits received	-	2,001,160,000	-	-
Total	265,163,039,746	2,001,160,000	272,888,016,516	20,000,000

18. Other liabilities

(1) The details of other liabilities as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Advances	5,395,555,618	-	7,673,013,672	-
Withholdings	4,199,152,896	-	2,983,973,941	-
Provisions	1,138,031,947	2,502,515,452	2,136,783,855	1,031,415,452
Long-term employee salary liabilities	-	2,624,806,247	-	3,014,803,029
Total	10,732,740,461	5,127,321,699	12,793,771,468	4,046,218,481

(2) The changes in the provisions as of 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)					
Division	1 January	Setting	De-recognition	Paid	31 December
Provision for sales warrant	1,578,936,322	1,125,699,703	(1,437,110,490)	(354,545,917)	912,979,618
Provision for return	557,847,533	225,052,329	(557,847,533)	-	225,052,329
Provision for restoration	1,031,415,452	1,471,100,000	-	-	2,502,515,452
Total	3,168,199,307	2,821,852,032	(1,994,958,023)	(354,545,917)	3,640,547,399

② 31 December 2021

(Unit: KRW)					
Division	1 January	Setting	De-recognition	Paid	31 December
Provision for sales warrant	3,332,437,307	1,541,176,166	(647,873,599)	(2,646,803,552)	1,578,936,322
Provision for return	244,771,260	6,055,530,653	(5,742,454,380)	-	557,847,533
Provision for restoration	929,455,452	101,960,000	-	-	1,031,415,452
Total	4,506,664,019	7,698,666,819	(6,390,327,979)	(2,646,803,552)	3,168,199,307

The Group recognizes warranty expense in the provision for product warranties as expected to be borne by the Group related to sales guarantee for the products and recognizes the corresponding transferred amount in selling and administrative expenses. On the other hand, the Group recognizes the amount corresponding to the portion of revenue to be canceled at the time of product return as allowance liability for return and deduction to sales in accordance with the IAS 1115.

19. Capital and capital surplus

(1) The details of capital as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Number of authorized shares	50,000,000	50,000,000
Par value	500	500
Number of shares issued	16,264,300	16,264,300
Capital	8,132,150,000	8,132,150,000

(2) There are no changes in the number of shares outstanding (16,264,300 shares) as of 31 December 2022 and 2021.

(3) The details of capital surplus as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Paid-in capital in excess of par value	66,560,617,129	66,560,617,129
Other capital surplus	9,782,553,371	9,782,553,371
Total	76,343,170,500	76,343,170,500

20. Other capital items

The details of other capital items as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Exchange differences on translation of foreign operations	210,259,445	396,111,446
Gain on valuation of investment stock by the equity method	(611,162,325)	-
Gain (loss) on valuation of financial assets at FVOCI	(380,807,731)	(380,807,731)
Total	(781,710,611)	15,303,715

21. Retained earnings

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Statutory reserves	4,066,075,000	4,066,075,000
Unappropriated retained earnings	862,600,963,865	711,776,009,032
Total	866,667,038,865	715,842,084,032

(2) The changes in the unappropriated retained earnings as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Amount as of 1 January	711,776,009,032	444,197,832,949
Dividends paid	(87,827,220,000)	(21,956,805,000)
Net income	233,692,540,409	296,424,020,561
Remeasurement for defined benefit plans	4,959,634,424	(6,889,039,478)
Amount as of 31 December	862,600,963,865	711,776,009,032

22. Dividends

The details of dividends for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022(*)	31 December 2021
No. of shares to be distributed	16,264,300	16,264,300
Face value per share	500	500
Par dividend	900%	1080%
Dividend per share	4,500	5,400
Dividends	73,189,350,000	87,827,220,000

(*) It is scheduled to be put on the agenda at the general meeting of shareholders scheduled on 22 March 2022.

23. Earnings per share

(1) Basic earnings per share

① The calculation of basic earnings per share for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW, shares)		
Division	31 December 2022	31 December 2021
Net income attributable to shareholders of the parent	233,692,540,409	296,424,020,561
Weighted average No. of common shares outstanding	16,264,300	16,264,300
Basic earnings per share	14,368	18,225

② Calculation of weighted average No. of common shares outstanding as of 31 December 2022

Division	Number of shares issued (1)	Number of treasury shares (2)	No. of outstanding common shares (1-2)	Weighting	Weighted average number of common shares outstanding
1 January	16,264,300	-	16,264,300	365 days/365 days	16,264,300

③ Calculation of weighted average No. of common shares outstanding as of 31 December 2021

Division	Number of shares issued (1)	Number of treasury shares (2)	No. of outstanding common shares (1-2)	Weighting	Weighted average number of common shares outstanding
1 January	16,264,300	-	16,264,300	365 days/365 days	16,264,300

(2) Diluted EPS from continuing operations

The Group does not have any dilutive securities as of 31 December 2022 and 2021. Therefore, the diluted earnings per share is the same as the basic earnings per share.

24. Financial revenues and expenses

(1) The details of financial income for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Interest income	11,908,491,124	4,111,403,212
Gain on foreign exchange (financial)	195	-
Gain on foreign currency translation (financial)	49,738,785	-
Total	11,958,230,104	4,111,403,212

(2) The details of financial expenses for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Interest expenses	430,595,529	174,344,490
Loss on foreign exchange (financial)	8,079	-
Loss on foreign exchange (financial)	1,625,174,727	11,229,058
Loss on disposal of trade receivables	10,818,201,531	2,780,371,251
Loss on disposal of financial assets at FVPL	-	32,636,103
Total	12,873,979,866	2,998,580,902

25. Other non-operating income and expenses

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Profit on foreign exchange (non-financial)	40,251,489,821	20,279,910,594
Profit on foreign currency conversion (non-financial)	3,309,084,399	406,329,768
Gain on disposal of tangible assets	938,784,374	83,374,772
Miscellaneous income	73,619,033	139,502,000
Total	44,572,977,627	20,909,117,134

(2) The details of other non-operating expenses for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Loss on foreign exchange (non-financial)	47,993,023,382	10,520,346,491
Loss on foreign currency conversion (non-financial)	3,959,780,511	345,621,738
Loss on disposal of tangible assets	590,294	19,510,474
Loss on disposal on intangible assets	162,029,551	93,624,860
Donation	85,856,381	9,957,583
Miscellaneous losses	12,842,268	721,891,830
Total	52,214,122,387	11,710,952,976

26. Sales

(1) The details of sales for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Key geographic markets:		
Domestic	381,815,520,403	465,127,993,967
China	1,044,391,022,127	825,043,499,064
Vietnam	276,016,749,709	415,855,606,590
Taiwan	222,353,097,356	163,128,718,052
Japan	36,796,221,867	26,187,933,597
Others	157,972,752,151	3,501,964,758
Total	2,119,345,363,613	1,898,845,716,028
Main service lines:		
Products	2,096,004,814,994	1,892,600,857,598
Services	20,832,938,355	3,808,946,060
Other sales	2,396,390,012	2,347,518,399
Merchandise	111,220,252	88,393,971
Total	2,119,345,363,613	1,898,845,716,028
When revenue is recognized:		
Implementation to one point	2,118,566,363,613	1,898,004,516,028
Implementation over time	779,000,000	841,200,000
Total	2,119,345,363,613	1,898,845,716,028

(2) Contract balance

The details of contract liabilities arising from contracts with customers for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Contract liabilities	5,369,555,618	6,173,093,982

As of 31 December 2022, there are no contract assets arising from contracts with customers, and contract liabilities of KRW 5,370 million are classified as advance payment accounts for other liabilities. The amount recognized as revenue is KRW 6,173 million of the outstanding contract liabilities of KRW 5,636 million as of 31 December 2021. In addition, the timing of conversion of contract liabilities into revenue as of 31 December 2022 is subject to uncertainty. However, the Company expects that most contract liabilities will be recognized as revenue within one year.

(3) Contract performance costs

The Group recognized costs incurred prior to the conclusion of a contract with a customer as a prepaid expense because it is directly related to the contract and the feasibility and recoverability of the contract are very high. The asset is recognized as cost of sales over the period in which the related sales are generated after the contract is entered into. The changes in the contract performance costs for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
1 January	7,175,451,587	1,250,350,646
Generation	9,449,522,329	8,099,295,953
Decrease	(14,298,210,822)	(2,174,195,012)
31 December	2,326,763,094	7,175,451,587

27. Operating profit

The main items and amounts included in operating profit calculation for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Sales	2,119,345,363,613	1,898,845,716,028
Sales from sales of goods	2,096,004,814,994	1,892,600,857,598
Other sales	23,340,548,619	6,244,858,430
COGS	1,443,672,300,059	1,240,353,258,754
Cost of finished goods sold	1,428,973,942,830	1,237,931,936,455
Other COGS	14,698,357,229	2,421,322,299
Selling and administrative expenses	365,049,100,804	288,870,505,140
Salary and bonuses	67,943,564,869	58,545,329,329
Severance payments	4,454,321,994	3,022,256,095
Employee benefits	16,281,795,590	11,155,434,103
Travel expenses	2,064,275,529	1,647,425,099
Rent	2,937,833,112	2,085,493,839
Service fees	33,521,858,662	22,051,484,375
Depreciation	11,792,222,477	6,710,205,637
Amortization of intangible assets	2,708,283,818	2,185,220,808
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Ordinary R&D expenses	210,778,523,351	171,356,511,946
Others	12,877,832,189	9,217,841,342
Operating profit	310,623,962,750	369,621,952,134

28. Selling and general administrative expenses

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Salaries	41,198,636,254	29,285,192,657
Bonus	26,744,928,615	29,260,136,672
Severance payments	4,454,321,994	3,022,256,095
Meeting	2,578,269	3,284,562
Employee benefits	16,281,795,590	11,155,434,103
Travel	2,064,275,529	1,647,425,099
Communication	791,660,223	580,575,224
Consumables	3,246,290,600	1,969,512,364
Taxes and dues	1,273,869,592	806,084,628
Rent	2,937,833,112	2,085,493,839
Service fees	33,521,858,662	22,051,484,375
Depreciation	11,792,222,477	6,710,205,637
Repairs	200,248,608	157,885,126
Insurance	1,284,794,559	1,559,242,526
Entertainment	1,549,424,433	893,917,803
Advertisement	144,880,984	79,455,425
Printing	23,333,463	22,791,702
Transportation	1,137,344,982	1,036,248,902
Samples	1,103,786,114	774,434,084
Training	1,369,237,017	871,056,289
Vehicle maintenance	474,377,513	276,142,279
Gas, water, oil	276,005,832	187,210,428
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Ordinary R&D expenses	210,778,523,351	171,356,511,946
Amortization of intangible assets	2,708,283,818	2,185,220,808
Total	365,049,100,804	288,870,505,140

29. Disclosure by nature of expenses

The details of disclosure by nature of expenses for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Changes in inventories	(281,438,921,671)	(65,852,605,218)
Employee cost	190,370,913,334	166,689,893,973
Depreciation and amortization of intangible assets	30,584,247,970	22,955,518,811
Outsourcing process	1,691,270,770,332	1,298,894,263,313
Process cost	16,211,634,279	(3,070,630,947)
R&D	107,966,554,678	68,735,378,790
Rent	2,937,833,112	2,085,493,839
Service fees	40,229,906,746	26,635,069,837
Transportation	7,109,768,325	6,839,952,032
Travel expenses	3,658,788,153	3,672,642,330
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Samples	1,103,786,114	774,434,084
Others	(972,469,722)	(28,949,517)
Total	1,808,721,400,863	1,529,223,763,894

(*) It is the sum of the cost of sales and sales and administrative expenses in the income statement.

30. Employee benefits

The Group pays retirement benefits to employees in a lump sum, which are determined according to the wage level and number of years of service upon retirement, and this is classified as a defined benefit plan. Such retirement benefit can be withdrawn before the resignation of the employee as interim settlement when the legal requirements apply, and the number of years of service for calculating severance pay after the interim settlement is newly calculated from the time of settlement.

(1) The details of defined benefit obligations as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Present value of defined benefit liability	68,723,266,014	66,233,664,676
Fair value of plan assets	(87,024,709,511)	(65,613,017,567)
Defined benefit obligations (assets)	(18,301,443,497)	620,647,109

(2) The major estimates used for the actuarial evaluation as of 31 December 2022 and 2021, are as follows.

Division	31 December 2022	31 December 2021
Future wage increase rate	4.95%	4.60%
Discount rate	5.28%	2.83%

The discount rate is calculated based on the Group's credit rating and corporate bond yield similar to the expected payment period of the defined benefit obligation as of 31 December 2022, the future wage increase rate is calculated in consideration of the Group's empirical promotion index and wage increase rate reflecting inflation and wage agreements.

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Defined benefit obligation as of 1 January	66,233,664,676	43,512,383,794
Current service cost	10,609,433,582	7,482,452,487
Interest cost	1,811,298,547	965,490,307
Remeasurement (before tax):		
Demographic assumptions	16,910,107	296,977,113
Financial assumption	(12,591,176,183)	(1,083,296,821)
Experience adjustment, etc.	5,545,037,255	9,706,940,378
Transfer between affiliates	958,453,780	8,195,050,138
Payment of severance payment	(3,860,355,750)	(2,842,332,720)
Defined benefit obligation at the end	68,723,266,014	66,233,664,676

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Plan assets as of 1 January	65,613,017,567	42,749,338,496
Payments of plan assets	24,000,000,000	25,000,000,000
Interest income	1,793,584,253	947,808,505
Plan assets remeasurement (before tax)	(486,175,492)	(167,821,913)
Payment of severance payment form plan assets	(3,859,975,120)	(2,842,054,910)
Others	(35,741,697)	(74,252,611)
Plan assets at the end	87,024,709,511	65,613,017,567

For the defined benefit plan, a reasonable estimate of the employer's contribution expected to be paid in 2023 is KRW 11,675,383,000.

(5) Expenses recognized in the current profit or loss regarding the defined benefit plans as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Current service cost	10,609,433,582	7,482,452,487
Net interest cost	17,714,294	17,681,802
Others	35,741,697	74,252,611
Total	10,662,889,573	7,574,386,900

(6) The details of plan assets as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Short-term financial product, etc.	87,024,709,511	65,613,017,567

(7) Sensitivity analysis

With all other assumptions remaining for the year ended 31 December 2022, if meaningful actuarial assumptions change in reasonable and possible range, the effects to definite benefit liabilities are as follows:

(Unit: KRW)		
Division	Increase	Decrease
Discount rate (1% change)	(4,928,121,971)	5,641,505,447
Expected wage growth rate (1% change)	5,609,220,312	(4,992,536,774)

The sensitivity analysis does not take into account the variance of all cash flows expected to arise from the plan, but provides an approximation of the sensitivity to the assumptions used.

As of 31 December 2022 and 2021, the weighted average durations of defined benefit obligations were 8.2 years and 9.6 years, respectively.

(8) The remeasurement factors for defined benefit plan recognized in other comprehensive income for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Cumulative remeasurement factor as of the beginning of year	11,782,486,406	4,893,446,928
Current change amount	(6,543,053,329)	9,088,442,583
Income tax effect on changes	1,583,418,905	(2,199,403,105)
Cumulative remeasurement factor as of the ending of year	6,822,851,982	11,782,486,406

31. Income tax expenses

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Current tax	74,666,024,991	82,789,091,205
Adjustments recognized in 2022 in relation to the tax expense of the previous periods	(1,138,005,637)	(1,297,315,391)
Changes in deferred tax expense (income) relating to the temporary differences	(1,666,568,708)	561,149,118
Tax expense (income) related to items not recognized in profit or loss	(1,583,418,905)	2,199,403,105
Income tax expenses	70,278,031,741	84,252,328,037

(2) The deferred taxes related to items not recognized in profit or loss for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Deferred tax:		
Actuarial gains and losses	(1,583,418,905)	2,199,403,105
Income tax expense (income) reflected directly in equity	(1,583,418,905)	2,199,403,105

(3) The relationship between income tax expense and accounting profit for the years ended 31 December 2022 and 2021, is as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Net income before tax	303,970,572,150	380,676,348,598
Applicable tax rate	24.09%	24.78%
Tax burden according to the applicable tax rate	73,229,907,341	94,323,995,864
Adjustments		
Non-taxable income	(19,861,695)	(5,456,559)
Non-deductible expenses	371,719,830	2,121,291,120
Tax credits	(6,336,885,483)	(8,718,470,558)
Adjustments recognized in 2022 in relation to the tax expense of previous periods	(1,138,005,637)	(1,297,315,391)
Changes in unrecognized deferred tax	125,836,642	(1,774,751,249)
Others (effect of change in tax rate, etc.)	4,045,320,743	(396,965,190)
Income tax expenses	70,278,031,741	84,252,328,037
Average effective tax rates	23.12%	22.13%

(4) The changes in deferred tax assets and liabilities for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)				
Division	Amount as of 1 January	Reflecting net income	Reflecting other comprehensive income	Amount as of 31 December
Accrued income	(421,444,426)	(126,236,668)	-	(547,681,094)
Net defined benefit obligations	-	(2,286,572,604)	(1,583,418,905)	(3,869,991,509)
Impairment loss on intangible assets	58,946,699	(2,679,396)	-	56,267,303
Loss valuation of inventories	2,419,091,577	6,342,865,878	-	8,761,957,455
Exceeded amortization limit	1,326,680,617	539,573,066	-	1,866,253,683
Impairment loss on tangible assets	58,031,212	(2,637,783)	-	55,393,429
Accrued expenses	3,256,483,522	(998,399,133)	-	2,258,084,389
Prepaid expenses	35,047,840	(16,300,092)	-	18,747,748
Provisions	766,704,232	74,262,217	-	840,966,449
Financial assets at FVOCI	121,000,000	(5,500,000)	-	115,500,000
Long-term employee salary liabilities	729,582,333	(123,252,090)	-	606,330,243
Others	50,719,895	(145,135,782)	-	(94,415,887)
Total	8,400,843,501	3,249,987,613	(1,583,418,905)	10,067,412,209

② 31 December 2021

(Unit: KRW)				
Division	Amount as of 1 January	Reflecting net income	Reflecting other comprehensive income	Amount as of 31 December
Accrued income	(173,275,315)	(248,169,111)	-	(421,444,426)
Net defined benefit obligations	-	(2,199,403,105)	2,199,403,105	-
Impairment loss on intangible assets	58,946,699	-	-	58,946,699
Loss valuation of inventories	5,234,401,497	(2,815,309,920)	-	2,419,091,577
Exceeded amortization limit	542,099,996	784,580,621	-	1,326,680,617
Impairment loss on tangible assets	136,501,555	(78,470,343)	-	58,031,212
Accrued expenses	1,423,519,394	1,832,964,128	-	3,256,483,522
Prepaid expenses	51,712,636	(16,664,796)	-	35,047,840
Provisions	1,090,612,693	(323,908,461)	-	766,704,232
Financial assets at FVPL	(22,515,503)	22,515,503	-	-
Financial assets at FVOCI	121,000,000	-	-	121,000,000
Long-term employee salary liabilities	516,926,924	212,655,409	-	729,582,333
Others	(17,937,957)	68,657,852	-	50,719,895
Total	8,961,992,619	(2,760,552,223)	2,199,403,105	8,400,843,501

(5) The temporary differences between items not recognized as deferred tax assets for the years ended 31 December 2022 and 2021, is as follows:

(Unit: KRW)

Division	31 December 2022	31 December 2021
Investments in subsidiaries	162,875,083	418,177,955
	(3,580,407,967)	-
Transfer price (subsidiaries)	807,301,385	807,301,385
Investments in associates	6,973,775	-
	(6,974,315,681)	(6,132,588,099)

As of 31 December 2022, the Group judges that it is unlikely that temporary differences related to investment assets and transfer prices (subsidiaries) will disappear in the foreseeable future.

32. Statement of cash flow

(1) The details of reconciliation of income and expenses during business activities as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Income tax expenses	70,278,031,741	84,252,328,037
Depreciation	23,213,936,739	16,393,573,080
Establishment (reversal) of provision for inventory valuation	27,731,671,511	(11,454,885,479)
(Reversal) establishment of allowance for return of inventories	202,634,052	(178,626,586)
Establishment (reversal) of provisions for returns	(332,795,204)	313,076,273
Loss on disposal of inventories	16,041,776,701	21,945,232,603
Gain on disposal of tangible assets	(938,784,374)	(83,374,772)
Loss on disposal of tangible assets	590,294	19,510,474
Loss on disposal on intangible assets	162,029,551	93,624,860
Amortization of intangible assets	7,370,311,231	6,561,945,731
Severance payments	10,662,889,573	7,574,386,900
Gain on foreign currency translation	(3,358,823,184)	(406,329,768)
Loss on foreign currency translation	5,584,955,238	356,850,796
Interest income	(11,908,488,994)	(4,111,403,212)
Interest expenses	430,595,529	174,344,490
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Long-term employee benefits	(309,296,782)	946,441,358
Loss on disposal of financial assets at FVPL	-	32,636,103
Gains on equity method	(1,903,503,922)	(743,409,996)
Transfer of provision for restoration	-	60,650,000
Loss on disposal of trade receivables	10,818,201,531	2,780,371,251
Others	250,501	-
Miscellaneous losses	-	19,988,382
Total	153,434,770,945	125,440,233,092

(2) The changes in assets and liabilities during sales as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Trade receivables	17,134,560,916	32,683,101,520
Other receivables	(9,017,766,524)	(4,635,134,354)
Other current assets	(15,238,229,938)	(10,684,698,562)
Inventories	(325,415,003,935)	(76,164,325,756)
Trade payables	(14,186,356,161)	69,299,182,802
Other current liabilities	(1,405,540,345)	1,734,230,756
Long-term employee salary liabilities	(80,700,000)	(67,700,000)
Other payables	(4,289,099,407)	23,401,710,997
Non-current other payables	2,001,160,000	-
Net defined benefit obligations	(23,041,926,850)	(16,805,227,672)
Lease receivables	1,329,235,195	1,305,497,544
Total	(372,209,667,049)	20,066,637,275

(3) The Group has prepared the cash flows based on operating activities on the cash flow statement using the indirect method. The significant transactions that do not involve cash inflows and outflows as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Substitution of tangible assets under construction	49,037,828,713	28,354,079,602
Substitution of intangible assets under construction	12,143,505,078	2,715,051,462
Increase in right-of-use assets due to restoration obligations	1,471,100,000	41,310,000
Increase in payables related to acquisition of tangible assets	11,030,293,113	61,976,432
Increase (decrease) in payables related to acquisition of intangible assets	3,031,688,436	(291,707,838)
Recognition of lease liabilities and licensed assets under the lease agreement	15,367,152,184	2,774,111,738
Liquidity substitution of lease liabilities	5,449,922,739	4,234,490,578
Liquidity substitution of lease receivables	1,359,317,660	1,335,042,797
Liquidity substitution of loans	1,608,015,296	1,677,991,974

(4) Financial activity cash flow

The changes in liabilities arising from financial activities as of 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)				
Division	1 January	Financial activity cash flow	Non-cash transaction	31 December 2022
Dividends payable	-	(87,827,220,000)	87,827,220,000	-
Lease liabilities(current)	3,576,706,160	(6,727,765,039)	11,309,918,920	8,158,860,041
Lease liabilities (non-current)	3,927,949,636	-	3,799,791,070	7,727,740,706

② 31 December 2021

(Unit: KRW)				
Division	1 January	Financial activity cash flow	Non-cash transaction	31 December 2021
Dividends payable	-	(21,956,805,000)	21,956,805,000	-
Lease liabilities(current)	2,857,091,653	(3,320,775,616)	4,040,390,123	3,576,706,160
Lease liabilities (non-current)	5,380,313,919	-	(1,452,364,283)	3,927,949,636

33. Financial instruments with the restricted use

The financial instruments restricted for use as of 31 December 2022, are as follows:

(Unit: KRW)			
Items	Category	31 December 2022	31 December 2021
Long-term other receivables	Checking deposit	2,000,000	2,000,000

34. Insured assets

The details of insured assets of the Group as of 31 December 2022, are as follows:

(Unit: KRW)				
Insurance type	Assets	Carrying amount	Insured amount	Insurance company
Gas accident liability insurance	Buildings and structures	18,173,852,295	1,180,000,000	KB Insurance Co., Ltd.
Fire insurance			Machinery	
	Office equipment	8,672,245,609	2,659,000,000	
	Other tangible assets	3,672,000,716	500,000,000	
Total		58,655,834,837	12,998,000,000	

In addition to the above insurance, the Group is also subscribed to workers' compensation insurance and fire liability insurance.

35. Related parties

(1) The details of related parties as of 31 December 2022 and 2021, are as follows:

Type of related parties	31 December 2022	31 December 2021
Associates and joint ventures	Advance Power Device Technologies Co. Ltd.	Advance Power Device Technologies Co. Ltd.
	FJ Composite Material Co., Ltd.	FJ Composite Material Co., Ltd.
	Telechips Inc.(*1)	-
Companies exercising significant influence on the Group (*2)	LX Holdings Co., Ltd.	LX Holdings Co., Ltd.
Others	Joint ventures of LX Holdings Co., Ltd.	Joint ventures of LX Holdings Co., Ltd.
	Large corporate group affiliates(*2)	Large corporate group affiliates(*2)

(*1) Acquired a 10.93% ratio in Telechips Inc. as of 31 December 2022.

(*2) As LX Holdings Co., Ltd. is separated from LG Corporate Group based on the Monopoly Regulation and Fair Trade Act on 21 June 2022, the Group is excluded from LG affiliates, which are large corporate groups, and affiliates of LX Holdings Co., Ltd. are equivalent to affiliates of large corporate groups.

(2) The details of specially related parties with the Group for the years ended 31 December 2022 and 2021, are as follows:

① Transactions with related parties after separation of affiliates

(Unit: KRW)			
Division	Name	Details	31 December 2022
Associates and joint ventures	FJ Composite Material Co., Ltd.	Sales expenses	1,520,908,675
Companies exercising significant influence on the Group	LX Holdings Co., Ltd.	Sales expenses	212,401,000
Other large corporate group affiliates	LX Pantos Co., Ltd.	Sales expenses	2,787,090,240

② Transactions with related parties before separation of affiliates

(Unit: KRW)				
Division	Name	Details	31 December 2022 (*1)	31 December 2021
Associates and joint ventures	FJ Composite Material Co., Ltd.	Sales expenses	64,447,770	2,064,280,000
Others(*1)	LX Hausys Co., Ltd.	Sales expenses	1,379,533,243	42,955,051
		Acquisition of tangible and intangible assets	1,170,054,257	210,644,949
	LX INTERNATIONAL JAPAN LTD.	Sales expenses	4,647,333	-
	LX Pantos Co., Ltd.	Other incomes	-	1,456,540
		Sales expenses	2,648,362,055	5,568,158,144
	LG CNS Co., Ltd.	Sales expenses	2,982,071,802	4,553,117,056
		Acquisition of tangible and intangible assets	1,328,911,400	1,278,460,700
	D&O Co., Ltd.(*2)	Sales expenses	1,530,391,236	792,670,132
		Acquisition of tangible and intangible assets	413,700,000	-
	S&I Corp.(*3)	Sales expenses	721,786,300	148,941,200
		Acquisition of tangible and intangible assets	-	18,924,000
	LG Management Development Institute	Sales expenses	468,762,000	1,345,575,000
	LG Display (China) Co., Ltd.	Sales	11,845,896,102	16,415,502,521
	LG Display (Guangzhou) Co., Ltd.	Sales	277,535,172,867	452,334,379,878
	LG Display Vietnam Haiphong Co. Ltd.	Sales	129,005,911,232	355,226,978,520
	LG Display Yantai	Sales	21,360,454,279	60,628,628,070
	LG Display High-Tech(China)Co., Ltd.	Sales	18,556,438	29,149,667
	LG Display (Nanjing) Co., Ltd.	Sales	41,702,811,192	29,575,793,575
LG Display Co., Ltd.	Sales	241,683,107,009	442,477,851,076	
	Other incomes	-	175,747,619	

		Sales expenses	-	2,550,934,059
	LG Electronics USA Inc.	Sales	1,063,817,806	1,774,875,632
	LG Electronics Indonesia	Sales	2,110,470,138	-
	LG Electronics Co., Ltd.	Sales	6,509,289,131	15,645,978,167
		Other incomes	-	411,450,851
		Sales expenses	3,324,593,936	5,921,428,184
		Acquisition of tangible and intangible assets	95,350,000	43,742,000
	LG Innotek Co., Ltd.	Sales	700,000,000	-
		Other incomes	-	829,931
		Sales expenses	24,494,558,720	78,578,605,083
		Acquisition of tangible and intangible assets	-	1,500,000,000
	LG U Plus Co., Ltd.	Sales	-	3,800,000
		Sales expenses	108,397,044	144,862,208
	Biztech Partners Co., Ltd.	Sales expenses	164,996,000	250,000,000
	Hi-Teleservice Co., Ltd.	Sales expenses	302,273	1,614,547
	LG Chemicals Co., Ltd.	Acquisition of tangible and intangible assets	(746,875)	164,227,000
	HS Ad Co., Ltd.	Sales expenses	-	510,918,000

(*1) Transactions before the Group are excluded from the LG affiliates, a large corporate group.

(*2) S&I Corp. changed its names to D&O Co., Ltd. dated on 23 March 2022. The existing S&I Corp. brand is succeeded and used by S&I atxpert.

(*3) S&I atxpert Co., Ltd. is a newly established corporation through a physical division from S&I Corp. as of 31 December 2021. It changed its names to S&I Corp. dated on 23 March 2022.

(3) The receivables and payables of related parties as of 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)			
Division	Name	31 December 2022	
		Receivables, etc.	Payables, etc.
Associates and joint ventures	FJ Composite Material Co., Ltd.	-	26,178,448
Other large corporate group affiliates	LX Pantos Co., Ltd.	-	942,232,840

② 31 December 2021

(Unit: KRW)			
Division	Name	31 December 2021	
		Receivables, etc.	Payables, etc.
Associates and joint ventures	FJ Composite Material Co., Ltd.	-	1,854,432,000
Other large corporate group affiliates(*1)	LX Pantos Co., Ltd.	-	928,500,869
	LG Display (China) Co., Ltd.	5,604,645,589	-
	LG Display (Guangzhou) Co., Ltd.	5,796,094,580	-
	LG Display (Nanjing) Co., Ltd.	1,518,674,461	-
	LG Display High-Tech(China)Co., Ltd.	11,587,456	-
	LG Display Vietnam	5,069,403,435	-
	LG Display Yantai	8,225,912,949	-
	LG Electronics USA Inc.	439,327,332	-
	LG Display Co., Ltd.	84,582,694,139	116,758,229
	LG Electronics Co., Ltd.	6,046,280,481	224,000
	HS Ad Co., Ltd.	-	4,026,000
	LG Innotek Co., Ltd.	-	9,109,574,607
	LG CNS Co., Ltd.	-	431,090,795
	LG Management Development Institute	-	11,487,300
	Biztech Partners Co., Ltd.	-	22,920,700
	S&I Corp.	-	71,706,580
D&O Co., Ltd.	900,000,000	13,558,585	

(*1) It is the details of receivables and liabilities with LG affiliates, a large corporate group as of 31 December 2021.

(4) The details on major fund transactions with the related parties as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)					
Division	Name	31 December 2022		31 December 2021	
		Dividends paid	Cash contribution, etc.	Dividends paid	Purchase of investments
Companies exercising significant influence on the Group	LX Holdings Co., Ltd.	29,054,829,600	-	-	-
Associates	Telechips Inc.	-	19,260,300,000	-	-
Others(*1)	LG Corp.	-	-	7,263,707,400	-
	LG Chemicals Co., Ltd.	-	-	-	6,835,773,000
Total		29,054,829,600	19,260,300,000	7,263,707,400	6,835,773,000

(*1) The largest shareholder of the Group was changed from LG Co., Ltd. to LX Holdings Co., Ltd., and the LX affiliates have been separated from LG's corporate group as of 31 December 2022 and classified as others.

(5) The details of the compensation for major management as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Short-term salaries	8,133,620,830	10,197,880,206
Severance payments	1,508,694,740	735,154,445
Total	9,642,315,570	10,933,034,651

The major management of the Group includes directors (including external directors) who are registered executives and members of the audit committee.

(6) The Group has no security and guarantee detail providing to or provided by special interest parties as of 31 December 2022 and 2021.

36. Commitments and contingencies

(1) The Group is receiving payment and payment guarantee of KRW 557 million from Seoul Guarantee Insurance as of 31 December 2022.

(2) The Group has a credit limit contract with some financial institutions such as Shinhan Bank, and the Group's credit limit details as of 31 December 2022, are as follows:

(Unit: USD)		
Division	Financial institutions	Foreign currency
Bills bought	Shinhan Bank	16,000,000
Bills bought	NH Bank	15,000,000
Bills bought	Mizuho Bank	60,000,000

(3) The Group has an export receivable transfer transaction agreement with the Export-Import Bank and two banks in relation to the collection of trade receivables as below. The limit details of the Group as of 31 December 2022 are as follows:

(Unit: USD)		
Division	Financial institutions	Foreign currency
Factoring	Export-Import Bank	300,000,000
Factoring	BNP Paribas	80,000,000
Factoring	MUFG	220,000,000

(4) The Group has no details of providing collateral for financial assets as of 31 December 2022.

(5) The Group has no ongoing litigation or disputes as of 31 December 2022.

4. Financial Statements

Statement of Financial Position

As of 31 December 2022

As of 31 December 2021

As of 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Assets			
Current assets	1,006,088,865,246	1,028,631,447,764	627,616,746,055
Cash and cash equivalents	186,352,407,000	133,729,223,245	100,049,526,121
Short-term financial instruments	130,000,000,000	470,000,000,000	150,000,000,000
Trade receivables	143,347,796,852	175,265,047,069	210,368,392,594
Other receivables	30,218,862,758	20,456,050,261	14,486,382,161
Other current assets	33,613,363,401	28,063,613,625	17,284,497,566
Financial assets at FVPL	0	0	163,039,267
Inventories	482,556,435,235	201,117,513,564	135,264,908,346
Non-current assets	276,313,175,716	140,902,576,244	122,271,171,730
Non-current other receivables	15,013,066,616	12,156,860,570	13,020,381,435
Investments in subsidiaries	3,532,122,045	2,633,748,045	2,316,636,045
Investments in associates and joint ventures	38,015,823,000	11,245,773,000	4,410,000,000
Tangible assets	103,418,994,751	48,275,114,268	32,014,043,860
Right-of-use assets	14,204,693,929	7,276,251,793	8,462,114,244
Intangible assets	63,621,254,908	50,060,179,549	51,961,752,353
Non-current other assets	10,161,318,572	879,900,722	1,124,251,174
Defined benefit assets	18,301,443,497	0	0
Deferred tax assets	10,044,458,398	8,374,748,297	8,961,992,619
Total assets	1,282,402,040,962	1,169,534,024,008	749,887,917,785
Liabilities			
Current liabilities	324,485,362,868	363,972,864,359	209,674,814,791
Trade payables	196,211,140,403	213,463,276,070	144,000,394,513
Other payables	70,217,680,214	60,211,350,802	36,948,461,153
Other current liabilities	10,742,259,927	12,781,810,552	9,839,933,991
Current lease liabilities	7,057,098,646	3,294,661,488	2,718,391,566
Current tax liabilities	40,257,183,678	74,221,765,447	16,167,633,568
Non-current liabilities	13,106,438,967	8,490,973,912	9,194,692,925
Non-current other payables	2,001,160,000	20,000,000	20,000,000
Non-current other liabilities	5,127,321,699	4,046,218,481	3,065,517,123
Non-current lease liabilities	5,977,957,268	3,804,108,322	5,346,130,504
Defined benefit obligations	0	620,647,109	763,045,298
Total liabilities	337,591,801,835	372,463,838,271	218,869,507,716
Equity			
Capital	8,132,150,000	8,132,150,000	8,132,150,000
Capital surplus	76,343,170,500	76,343,170,500	76,343,170,500
Other capital items	(380,807,731)	(380,807,731)	(380,807,731)
Retained earnings (loss)	860,715,726,358	712,975,672,968	446,923,897,300
Total equities	944,810,239,127	797,070,185,737	531,018,410,069
Total equities and liabilities	1,282,402,040,962	1,169,534,024,008	749,887,917,785

Income Statement

From 01 January to 2022 to 31 December 2022
From 01 January to 2021 to 31 December 2021
From 01 January to 2020 to 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Revenue (sales)	2,119,345,363,613	1,898,845,716,028	1,161,896,286,020
COGS	1,443,672,300,059	1,240,353,258,754	865,870,102,742
Gross profit	675,673,063,554	658,492,457,274	296,026,183,278
Selling and administrative expenses	366,627,487,034	289,862,890,738	202,302,921,814
Operating profit (loss)	309,045,576,520	368,629,566,536	93,723,261,464
Finance income	11,897,452,840	4,097,621,498	2,795,486,785
Financial cost	12,817,270,650	2,981,480,733	1,213,411,980
Other non-operating income	44,541,161,224	20,842,473,054	10,816,972,892
Other non-operating losses	52,212,833,773	11,708,026,546	15,496,039,953
Income before tax expenses	300,454,086,161	378,880,153,809	90,626,269,208
Income tax expenses	69,846,447,195	83,982,533,663	18,335,562,760
Net income (loss)	230,607,638,966	294,897,620,146	72,290,706,448
Earnings per share			
Basic earnings (loss) per share (Unit: KRW)	14,179	18,132	4,445
Diluted earnings (loss) per share (Unit: KRW)	14,179	18,132	4,445

Comprehensive Income Statement

From 01 January to 2022 to 31 December 2022
From 01 January to 2021 to 31 December 2021
From 01 January to 2020 to 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Net income (loss)	230,607,638,966	294,897,620,146	72,290,706,448
Other comprehensive income	4,959,634,424	(6,889,039,478)	1,069,878,920
Items that are not reclassified to profit or loss (other comprehensive income before tax)			
Gains or losses on remeasurement of defined benefit plans (other comprehensive income before tax)	6,543,053,329	(9,088,442,583)	1,411,449,763
Income tax related to items that are not reclassified to profit or loss	(1,583,418,905)	2,199,403,105	(341,570,843)
Total comprehensive income	235,567,273,390	288,008,580,668	73,360,585,368

Statement of Changes in Equity

From 01 January to 2022 to 31 December 2022

From 01 January to 2021 to 31 December 2021

From 01 January to 2020 to 31 December 2020

(Unit: KRW)

		Equity				
		Capital	Capital surplus	Other components of capital	Retained earnings	Total capital
01 January 2020		8,132,150,000	76,343,170,500	(380,807,731)	387,062,680,932	471,157,193,701
Total comprehensive income	Net Income	0	0	0	72,290,706,448	72,290,706,448
	Remeasurement loss on defined benefit plan	0	0	0	1,069,878,920	1,069,878,920
Transactions with shareholders recognized directly in equity	Annual dividends	0	0	0	(13,499,369,000)	(13,499,369,000)
31 December 2020		8,132,150,000	76,343,170,500	(380,807,731)	446,923,897,300	531,018,410,069
01 January 2021		8,132,150,000	76,343,170,500	(380,807,731)	446,923,897,300	531,018,410,069
Total comprehensive income	Net Income	0	0	0	294,897,620,146	294,897,620,146
	Remeasurement loss on defined benefit plan	0	0	0	(6,889,039,478)	(6,889,039,478)
Transactions with shareholders recognized directly in equity	Annual dividends	0	0	0	(21,956,805,000)	(21,956,805,000)
31 December 2021		8,132,150,000	76,343,170,500	(380,807,731)	712,975,672,968	797,070,185,737
01 January 2022		8,132,150,000	76,343,170,500	(380,807,731)	712,975,672,968	797,070,185,737
Total comprehensive income	Net Income	0	0	0	230,607,638,966	230,607,638,966
	Remeasurement loss on defined benefit plan	0	0	0	4,959,634,424	4,959,634,424
Transactions with shareholders recognized directly in equity	Annual dividends	0	0	0	(87,827,220,000)	(87,827,220,000)
31 December 2022		8,132,150,000	76,343,170,500	(380,807,731)	860,715,726,358	944,810,239,127

Statement of Cash Flows

From 01 January to 2022 to 31 December 2022

From 01 January to 2021 to 31 December 2021

From 01 January to 2020 to 31 December 2020

(Unit: KRW)

	31 December 2022	31 December 2021	31 December 2020
Operating cash flows	(83,590,345,859)	419,948,901,604	81,979,972,522
Cash from operating activities	12,584,036,672	440,186,821,975	84,686,257,009
Net income (loss)	230,607,638,966	294,897,620,146	72,290,706,448
Increase or decrease for adjustment to current net profit	153,265,712,593	125,115,494,680	49,053,820,204
Changes in assets and liabilities from business activities	(371,289,314,887)	20,173,707,149	(36,658,269,643)
Gain on interest (sales)	11,268,042,773	3,072,129,306	3,013,858,771
Payment on interest (sales)	(378,267,334)	(168,295,320)	(207,845,744)
Payment of income tax (return)	(107,064,157,970)	(23,141,754,357)	(5,512,297,514)
Cash flows from investing activities	231,627,388,222	(361,260,997,478)	(73,916,685,186)
Increase in short-term financial instruments	(210,000,000,000)	(550,000,000,000)	(250,000,000,000)
Decrease in short term financial instruments	550,000,000,000	230,000,000,000	200,000,000,000
Increase in other receivables	(7,380,904,739)	(3,121,793,184)	(5,896,000,000)
Decrease in other receivables	3,058,190,745	2,350,106,212	2,552,748,205
Decrease in other liabilities	(20,000,000)	0	0
Increase in advanced payments	0	0	(577,903,883)
Increase in other non-current liabilities	0	0	20,000,000
Acquisition of tangible assets	(59,302,383,368)	(29,868,477,949)	(16,786,515,250)
Acquisition of intangible assets	(19,396,310,416)	(4,999,488,735)	(3,524,632,758)
Proceeds from tangible assets	937,220,000	1,401,138,014	9,218,500
Proceeds from intangible assets	1,400,000,000	0	286,400,000
Disposition of financial assets at FVPL	0	130,403,164	0
Acquisition of investments in subsidiaries	(898,374,000)	(317,112,000)	0
Acquisition of investments in associates	(26,770,050,000)	(6,835,773,000)	0
Cash flows from financing activities	(93,793,056,823)	(25,008,028,943)	(16,341,212,839)
Payment of dividends	(87,827,220,000)	(21,956,805,000)	(13,499,369,000)
Repayment of lease liabilities	(5,965,836,823)	(3,051,223,943)	(2,841,843,839)
Net increase in cash and cash equivalents before the effect of exchange rate fluctuations	54,243,985,540	33,679,875,183	(8,277,925,503)
Cash and cash equivalents as of 1 January	133,729,223,245	100,049,526,121	108,327,650,225
Effects of exchange rate changes on cash and cash equivalents	(1,620,801,785)	(178,059)	(198,601)
Cash and cash equivalents as of 31 December	186,352,407,000	133,729,223,245	100,049,526,121

5. Notes on Financial Statements

From 01 January 2022 to 31 December 2022
From 01 January 2021 to 31 December 2021

LX Semicon Co., Ltd.

1. Company overview

LX Semicon Co., Ltd. (hereinafter referred to as the “Company”) was established on 11 November 1999 for the purpose of designing and manufacturing FPD (flat panel display) semiconductor IC. The Company is located in 222 Techno 2-ro, Daedeok-gu, Daejeon, Republic of Korea. The Company was certified by the Korea Institute for Advancement of Technology as a corporate subsidiary research facility in accordance with Article 16 of the Technology Development Promotion Act and Clause 1 of Article 15 of the Enforcement Decree of the same Act on 19 October 2001. The Company has also been designated as a high-tech company in accordance with Clause 1 of Article 9 of the Special Law on the Cultivation of the Special Research and Development Daedeok-gu and more on 23 October 2011.

After the Company listed its stock on the KOSDAQ market on 8 June 2010, it was delisted from the KOSDAQ market and transferred to the KOSPI on 3 November 2022. The amount of paid-in capital of the Company as of 31 December 2022 is KRW 8,132,150,000 (16,264,300 issued shares and 50,000,000 authorized shares).

The Company has changed its name from Silicon Works Co., Ltd. to LX Semicon Co., Ltd. as of 1 July 2021.

The shareholders of the Company as of 31 December 2022 are as follows;

(Unit: shares)			
Name of shareholders	No. of shares held	Ratio	Remarks
LX Holdings Co., Ltd.	5,380,524	33.08%	Largest shareholder
Others	10,883,776	66.92%	-
Total	16,264,300	100%	

2. Standards for the preparation

The Company prepares financial statements by applying the Korean International Financial Reporting Standards, and the financial statements are separate financial statements in accordance with IAS 1027 Separate financial statements, and are presented by applying any of the following: an investor with joint control or significant influence over the parent company or investee may transfer the investment to the cost method, or methods in accordance with IAS 1109 Financial instruments, or equity method stipulated in IAS 1028 Investment in associates and joint ventures

The significant accounting policies applied to the preparation of the financial statements are described below, and the accounting policies used in the preparation of the financial statements in 2022 are the same as those adopted in the preparation of the financial statements for the last year, except for the impacts related to the introduction of the standards and interpretations described below.

The financial statements have been prepared on a historical cost basis, excluding certain non-current assets and financial assets that are measured at revaluation or fair value at the end of each reporting period, as described in the accounting policies below. Historical cost is generally measured at the fair value of the consideration paid to acquire the asset.

Fair value is the price that would be received to sell assets or paid to transfer liabilities in an ordinary transaction between market participants at the measurement date, regardless of whether the price is directly observable or estimated using valuation techniques. In estimating the fair value of an asset or liability, the Company takes into account the characteristics of the assets or liabilities that the market participant considers when determining the price of the assets or liabilities at the measurement date. For measurement or disclosure purposes, fair value is determined in accordance with the principles described above with the exception of measurements that are similar to fair value but not fair value such as share-based compensation transactions included in the scope of IAS 1102 Share-based compensation, lease transactions included in the scope of IAS 1116 Lease, net realizable value of IAS 1002 Inventories, and value in use of IAS 1036 Asset impairment.

The management has a reasonable expectation at the time of approving the financial statements that the Company has sufficient resources to continue as a going concern for the foreseeable future period. Therefore, the management has prepared the financial statements on the assumption of going concern.

The Company's financial statements is approved by the board of directors on 26 January 2023 and will further be finally approved by the general meeting of shareholders held on 23 March 2023.

1) The new standards and interpretations introduced in 2022 and the resulting changes in accounting policies are as follows:

- IAS 1103 Business combination - Reference to conceptual framework (amendment)

The amendments include the contents that IAS 1103 refers to the Conceptual framework (2018) instead of the previous framework (2007). The amendments also add a requirement that in the case of provisions or contingent liabilities that fall within the scope of application of IAS 1037, the acquirer applies IAS 1037 to determine whether a current obligation exists as a result of past events at the acquisition date. In the case of contributions that fall within the scope of application of Interpretation of IAS 2121, the acquirer applies interpretation of IAS 2121 to determine whether an obligatory event that creates a payment liability for the contribution has occurred by the acquisition date. The amendments add an explicit statement that the acquirer does not recognize contingent assets in a business combination.

- IAS 1016 Tangible assets - The sale amount and related costs of goods produced before they are used in their intended manner (amendment)

The amendments prohibit deducting from the cost of tangible assets the sale of goods produced in the process of bringing them to the location and condition necessary to operate in the manner intended by management. Accordingly, such sales and related costs are recognized in profit or loss, and the costs are measured in accordance with IAS 1002.

Unless the goods produced are the output of the entity's ordinary activities and the sale amount and costs included in profit or loss are separately indicated in the statement of comprehensive income, the Company should disclose an account in the statement of comprehensive income that includes the size of the amount and cost of the sale, and the amount and cost of the sale.

The amendments apply retrospectively only to tangible assets that has reached a location and condition capable of operating in the manner intended by management after the commencement date of the earliest period indicated in the financial statements for which the amendments is first applied. The cumulative effect of the initial application of the amendments is recognized by adjusting the opening balance of retained earnings (or other components of equity, if appropriate) at the beginning of the earliest indicated period.

- IAS 1037 Provisions, contingent liabilities and contingent assets - Loss-bearing contract and contract execution cost (amendment)

The amendments clarify that the cost of executing a contract consists of costs directly related to the contract. The costs directly related to a contract consist of the incremental costs (e.g. direct labor cost and direct material cost) to perform the contract and any other cost allocations (e.g. depreciation of tangible assets used in the performance of the contract) directly related to the performance of the contract.

The amendments apply to contracts for which all obligations have not been fulfilled on the commencement date of the business year in which the amendments are first applied. The comparative financial statements are not rewritten, but instead, the cumulative effect by the first adoption of the amendments is recognized as retained earnings at the date of initial application or, as appropriate, other elements of equity.

- Annual improvements of 2018-2020 cycle based on K-IFRS

This annual improvement includes some amendments to the first adoption of K-IFRS under IAS 1101, IAS 1109 Financial instruments, IAS 1116 Lease and IAS 1041 Agriculture, forestry and fisheries.

① IAS 1101 First adoption of K-IFRS

The amendments provide an additional exemption from accounting for cumulative translation differences in subsidiaries that become first adopters later than the parent. Subsidiaries subject to the exemption provisions in paragraph D16(1) of IAS 11 may choose to measure the cumulative translation difference of all overseas operations at the carrying amount to be included in the parent's consolidated financial statements on the basis of the date of transition of the parent to the K-IFRS. However, the effect of the business combination in which the parent acquires a subsidiary and adjustments in accordance with the consolidation procedure are excluded. A similar choice may be made if an associate or joint venture applies the exemption provisions in paragraph D16(1) of IAS 1101.

② IAS 1109 Financial Instruments

This amendment includes only fees received or paid between the entity (borrower) and the lender when applying the 10% test to assess whether financial liabilities have been derecognized, which clarifies that it includes fees paid or received by businesses or lenders on behalf of other parties. The amendments will be applied prospectively to changes and exchanges that have occurred after the initial application date.

③ IAS 1116 Lease

The amendments have deleted the contents of the lease improvement reimbursement amount in case 13 of IAS 1116.

④ IAS 1041 Agriculture, forestry and fisheries

The amendments removed the requirement to exclude tax-related cash flows when measuring the fair value of biological assets. This ensures that the fair value measurement in IAS 1041 is consistent with the requirement in IAS 1113 to use internally consistent cash flows and discount rates., and entities can choose to use pre- or post-tax cash flows and discount rates to determine the most appropriate fair value measurement.

2) As of the date of approval for issuance of financial statements, the K-IFRS that have been enacted and announced but have not yet come into effect and which have not been early applied by the company are as follows:

- IAS 1001 Presentation of financial statements - Classification of the current and non-current liabilities (amendment)

The amendments only affect the indication of current and non-current liabilities in the financial statements, and does not affect the amount of assets, liabilities and gains or losses, the time of recognition, or the disclosure information for those items.

The amendments clarify that the classification of the current and non-current liabilities is based on the entity's rights that exist at the end of the reporting period, and also highlights that it is irrelevant to expectations of whether the entity will exercise its right to defer settlement of the debt. At the end of the reporting period, if the loan agreement is complied with, the right exists, and settlement is clarified as the transfer of cash, equity instruments, or other assets or services to the counterparty.

The amendments are applied retrospectively after the beginning of financial years beginning on or after 1 January 2023, with early application permitted.

- IAS 1001 Presentation of financial statements and IFRS Practice 2 Making materiality judgments (amendment)- Disclosure of accounting policies

These amendments change the requirements of IAS 1001 for the disclosure of accounting policies, and replace all the terms Significant accounting policies with Material accounting policy information. Accounting policy information is significant if, when considered together with other information contained in an entity's financial statements, it can reasonably be expected to influence the decisions that primary users of general purpose financial statements make on the basis of those financial statements.

The paragraph relating to IAS 1001 is also amended to clarify that accounting policy information relating to non-material transactions, other events or circumstances is not material and does not need to be disclosed. Accounting policy information, although insignificant in amount, can be material because of the nature of the transaction, other event or circumstance with which it is involved. However, not all accounting policy information relating to a material transaction, other event or situation is material in itself.

Guidelines and examples have been also developed to explain and apply the application of the four stages of the materiality process described in IFRS Practice 2.

The amendments are effective prospectively for annual periods beginning on or after 1 January 2023, with early adoption permitted. The amendments to IFRS Practice 2 do not include the effective date or transitional provisions.

- IAS 1001 Presentation of financial statements (amendment)- Disclosure of gains and losses on valuation of financial liabilities with exercise price adjustment conditions

If all or part of financial instruments subject to the condition that the exercise price is adjusted in accordance with changes in the stock price of the issuer are classified as financial liabilities in accordance with (2) of the definition of financial liabilities in paragraph 11 of Korean IAS 1032 Financial instruments: Presentation, the amendments require the disclosure of valuation gains and losses (limited to those included in current profit or loss) incurred during the reporting period for the conversion rights or warrants (or financial liabilities including them).

The amendments are effective for annual periods beginning on or after 1 January 2023, with early adoption permitted.

- IAS 1008 Accounting policy, changes and errors in accounting estimates (amendment) - Definition of accounting estimates

The amendments replace the definition of a change in an accounting estimate with the definition of an accounting estimate. Under the new definition, an accounting estimate is a monetary amount in the financial statements that is subject to measurement uncertainty.

Although the definition of changes in accounting estimates has been deleted, the concept of changes in accounting estimates has been maintained by clarifying the following in the standard.

- The changes in accounting estimates may result from new information or developments in new circumstances and are not considered corrections of errors.
- The effect of a change in inputs or measurement techniques used to develop an accounting estimate is a change in accounting estimate unless it results from the correction of the previous error.

The amendments will be applied from the first business year beginning on or after 1 January 2023 and early application is permitted. The amendments are applied to changes in accounting estimates and changes in accounting policies that occur after the beginning of the business year in which this amendment is first applied.

- IAS 1012 Income tax - Deferred tax related to assets and liabilities arising from a single transaction

The amendments narrow the scope of application of the first recognition exception. According to the amendment, the exception to initial recognition does not apply to transactions that give rise to a taxable temporary difference and a deductible temporary difference in the same amount.

Under relevant tax laws, the same amount of taxable and deductible temporary differences may arise when an asset or liability is initially recognized in a transaction that is not a business combination and does not affect accounting or taxable income. For example, this situation may arise when a lease liability and a corresponding right-of-use asset are recognized by applying IAS 1116 at the commencement date of the lease.

In accordance with the amendments of IAS 1012, related deferred tax assets and deferred tax liabilities should be recognized. Recognition of deferred tax assets is subject to the recoverability requirements of IAS 1012.

The amendments apply to transactions after the start date of the earliest comparison period presented. It also recognizes the following at the beginning of the earliest period to be compared:

- Deferred tax assets (limited to cases where it is highly probable that taxable income will be available against which the deductible temporary differences can be utilized) and deferred tax liabilities for all deductible temporary differences and taxable temporary differences relating to:
 - Right-of-use assets and lease liabilities
 - Liabilities related to decommissioning and recovery, and the amounts recognized as part of the cost of related assets in response to these liabilities.
- The cumulative effect of the initial application of the amendment is recognized by adjusting the opening balance of retained earnings (or other items of equity, as appropriate) at the beginning of the earliest period presented for comparison.

The amendments are effective for annual periods beginning on or after 1 January 2023, with early adoption permitted.

The Group is reviewing the impact of the enactments and amendments listed above on the financial statements.

3. Significant accounting policies

Significant accounting policies applied by the Company in the preparation of financial statements in accordance with K-IFRS are described below and the financial statements for the years ended 31 December 2022 and 2021 for comparison have been prepared by applying the same accounting policies.

(1) Cash and cash equivalents

Cash and bank balances in the statement of financial position consist of cash (i.e. cash on hand and demand deposits) and cash equivalents. Cash equivalents are highly liquid, short-term (generally maturities of less than three months) investments that are easily convertible to a fixed amount of cash and are subject to an insignificant risk of changes in value. Cash equivalents are held to meet short-term cash needs and not for investment or other purposes.

Bank balances that are restricted from the Company's use under contractual arrangements with third parties are included as part of cash unless such restrictions prevent the bank balances from further meeting the definition of cash. Contractual restrictions affecting the use of bank balances are described in note 32. If a contractual restriction on the use of cash exceeds 12 months after the end of the reporting period, the related amount is classified as a non-current asset in the statement of financial position.

For the purposes of the statement of cash flows, cash and cash equivalents consist of cash and cash equivalents as defined above and the net amount of overdrafts that are due immediately upon demand from financial institutions and form part of the Company's cash management. Such bank overdrafts are presented as short-term borrowings in the statement of financial position.

(2) Inventories

The unit cost of inventories is determined by the moving average method. The cost of acquisition includes acquisition costs, conversion costs and other costs necessary to prepare the inventory for use.

The inventories are measured at the lower of cost and net realizable value. The valuation losses and net loss on the reduction of inventories to net realizable value are recognized as expenses in the period in which the reduction or loss occurs, and reversal of the loss on the valuation of inventories resulting from the increase in net realizable value of the inventory is reversed. It is deducted from the cost of sales of the inventory recognized as an expense in the period in which it occurred.

(3) Non-derivative financial assets

① Recognition and initial measurement

Trade receivables and debt securities are recognized for the first time as they are issued. Other financial instruments and financial liabilities are recognized only when the Company becomes a contracting party for financial instruments.

Except for trade receivables that do not include any significant financial elements, financial assets or liabilities are measured at fair value at the date of initial recognition, and are not measured at fair value through profit or loss or financial assets at fair value through profit or loss. In such cases, transaction costs that are directly attributable to the acquisition of the financial asset or the issue of that financial liability are added to or deducted from fair value. Trade receivables that do not contain significant financial factors are initially measured at the transaction price.

② Classification and follow-up measurement

At initial recognition, financial assets are classified as measured at amortized cost, other comprehensive income-fair value debt instruments, other comprehensive income-fair value equity instruments, or at FVPL.

Financial assets are not reclassified after initial recognition unless the Company changes the business model that manages them. In this case, all affected financial assets are reclassified on the first day of the first reporting period after the change in the business model.

When a financial asset meets both of the following conditions and is not designated as at FVPL, the asset is measured at amortized cost.

- Debt instruments that are held within a business model whose objective is to collect the contractual cash flows.
- Debt instruments that have contractual cash flows that are solely payments of principal and interest on the principal outstanding.

When a debt instrument meets both of the following conditions and is not designated as at FVPL, the instrument is measured at FVOCI:

- The Company holds financial assets under a business model that serves the purpose of both contractual cash flows and the sale of financial assets.
- Debt instruments that have contractual cash flows that are solely payments of principal and interest on the principal outstanding.

Upon initial recognition of an equity instrument that is not held for trading, the Company may choose to present, in other comprehensive income, the subsequent change in the fair value of the investment. However, the designation is irrevocable. These designations are made on a per-investment basis.

All financial assets that are not carried at amortized cost or other comprehensive income-fair value, measured above, are measured at FVPL. These financial assets include all derivative financial assets. If a financial asset carried at amortized cost or FVOCI at initial recognition is designated as at FVPL and the accounting inconsistency is derecognized or significantly reduced, the Company may designate the financial asset as measured at FVPL. However, the designation is irrevocable.

1) Business model

The Company evaluates the way business is being managed, and the purpose of the business model for managing a financial asset best reflects the way information is provided to the management at its portfolio level. Such information takes into account:

- The accounting policies and objectives stated for the portfolio and the actual operation of these policies; This includes the acquisition of contractual interest income and the duration of the liability to raise the financial asset to maintain a specified level of interest rate, and management's strategy focused on matching the duration of the financial asset and the outflow or realization of expected cash flows from the sale of the asset.

- The way the performance of a financial asset held under the business model is evaluated, and the way such evaluation is being reported to the management.
- The risk affecting the performance of the business model (and financial assets held under the business model), and the way such risk is being managed.
- The compensation plan for the management (e.g., whether the management is being compensated based on the fair value of assets or based on contractual cash flows received).The compensation plan for the management (e.g., whether the management is being compensated based on the fair value of assets or based on contractual cash flows received).
- The frequency, amount, timing, reason, and forecast of future selling activities of financial assets in the past periods

For this purpose, a transaction that transfers a financial asset to a third party in a transaction that does not qualify for derecognition is not considered a sale.

Financial asset portfolios that meet the definition of short-term trading or whose performance is measured at fair value, are measured at FVPL.

2) Assessment of whether contractual cash flows consist of principal and interest only

The principal is defined to be the fair value of a financial asset at initial recognition. Interest is not only composed of consideration for the time value of money, consideration for the credit risk related to remaining principal at a certain period of time and consideration for other cost (e.g., liquidity risk and cost of operation) and fundamental risk associated with lending but also profit.

When evaluating whether contractual cash flows are solely payments of principal and interest, the Company considers the contractual terms of the financial instrument. When a financial asset contains contractual conditions that modify the timing and amount of contractual cash flows, the Group is required to determine whether contractual cash flows that arise during the remaining life of the financial instrument due to such contractual condition are solely payments of principal and interest.

The Company considers the following elements when evaluating the above:

- Conditional situation that changes the amount or timing of cash flows
- Clauses that adjust the contractual par interest rate, including the variable interest rate characteristic
- Characteristics of interim repayment and maturity extension
- Contractual terms that limit the Company's claim on cash flows arising from certain asset

If the prepayment amount represents interest on principal and outstanding principal, which is substantially outstanding, and includes reasonable additional compensation for early settlement of the contract, the early repayment characteristics are consistent with the terms of payment of principal and interest on a particular day.

Also, for financial assets acquired by significant discounts or premiums on contractual par value, the intermediate repayment amount substantially represents the contractual par value and contractual interest accruals (but not paid) (in this case, upon early settlement of the contract). If the fair value of the characteristic is minor at the time of initial recognition, the condition is determined to be satisfied.

③ Subsequent measurement and profit and loss

1) Financial assets at FVPL

These assets are subsequently valued at fair value. Net gain or loss (including interest or dividend income) is recognized in net income.

2) Financial assets measured at amortized cost

These are subsequently measured at amortized cost using the effective interest method. Amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and losses are recognized in profit or loss. Gains or losses arising from removals are recognized in net income.

3) Debt instruments at FVOCI

These assets are subsequently measured at fair value. Interest income is calculated using the effective interest method and impairment loss in foreign exchange translation is recognized in profit or loss. Other net income is recognized in other comprehensive income. Gains or losses on disposal are reclassified to profit or loss from other comprehensive income.

4) Equity instruments at FVOCI

These assets are subsequently measured at fair value. Dividends are recognized in net income unless they expressly recover the investment. Other net income is recognized in other comprehensive income and will not be reclassified to profit or loss.

④ Derecognition of financial assets

When the contractual right to cash flows of a financial asset expires, the Company transfers the contractual right to receive the cash flows of the financial asset and substantially transfers most of the risks and rewards of ownership of the transferred financial asset, or derecognizes financial assets if the Company does not control its financial assets without retaining or transferring most of its risks and rewards.

If the Company transfers assets recognized in the statement of financial position, but retains most of the risks and rewards of ownership of the transferred assets, the transferred assets are not derecognised.

⑤ Offset of financial assets

Only if it currently has a legally enforceable right of offset for the recognized assets and liabilities and intend to either settle on a net basis or to realize the assets and settle the liabilities at the same time, the Company offsets financial assets and financial liabilities and presents them in net amounts in the statement of financial position.

⑥ Impairment of financial assets

1) The Company recognizes loss allowance for expected credit losses on the following assets.

- Financial assets measured at amortized cost
- Debt instruments at FVOCI
- Lease receivables

Provisions for loss on trade receivables and other receivables measured at amortized cost are always measured at an amount equivalent to lifetime expected credit loss.

When determining whether the credit risk of a financial asset has increased significantly since the initial recognition and when estimating expected credit losses, the Company considers information that is available, reasonable and supportable without excessive cost or effort. This includes qualitative and quantitative information and analysis based on past experiences and known credit ratings of the Company, including forward-looking information.

Expected credit loss for the entire period is expected credit loss for all defaults that can occur during the expected life of a financial instrument.

The longest period the Company considers when measuring expected credit loss is the longest contract period in which it is exposed to credit risk.

2) Measurement of expected credit loss

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

3) Financial assets with damaged credit

At the end of each reporting period, the Company evaluates financial assets measured at amortized cost for impairment. If events that adversely affect the estimated future cash flows of a financial asset have occurred, the financial asset is impaired.

Evidence of impaired credit on financial assets includes the following observable information:

- Significant financial difficulties for issuers or borrowers

4) Indication of allowance for credit loss in the statement of financial position

Financial assets at amortized cost, debt instruments at FVOCI and loss allowance on lease receivables are deducted from the carrying amount of the assets.

5) Write-off

Financial assets are derecognized when there is no reasonable expectation of recovery of all or part of its contractual cash flows. The Company evaluates each period and amount individually by assessing whether there are reasonable expectations for recovery from corporate customers. The Company has no expectation that the write-off will be significantly recovered. However, the retired financial assets may be subject to retrieval activities in accordance with the recovery procedures for the maturity of the Company.

(4) Investments in subsidiaries and associates in separate financial statements

The Company's financial statements are separate financial statements in accordance with IAS 1027. For investments in subsidiaries and associates, the Company selected and accounted for the cost method in accordance with IAS 1027. However, the separate statement of financial position in the K-IFRS at the date of transition, IAS 1101 Initial adoption of K-IFRS was applied and the carrying amount in accordance with previous accounting standards was used as deemed cost. On the other hand, dividends received from subsidiaries are recognized in profit or loss when the right to receive dividends is established.

(5) Tangible assets

Tangible assets are initially measured at cost. The cost of tangible assets includes costs that are directly attributable to the management's intentional method of bringing the asset to its place and condition, and what is estimated to be incurred in the decommissioning, removal, or restoration of the property.

After initial recognition, the tangible assets are stated at cost less accumulated depreciation and accumulated impairment losses.

When it is probable that future economic benefits arising from the asset will flow to the Company and its cost can be measured reliably, costs incurred when replacing parts of tangible assets are included in the asset's carrying amount or recognized as a separate asset, as appropriate. The carrying amount of the replaced part is derecognized. The general costs occurred in maintenance and repair are recorded as the net income as it occurs.

Land is not depreciated among tangible assets, and other tangible assets are amortized using the straight-line method, which best reflects the expected consumption pattern of future economic benefits inherent in the asset over its useful life.

If the cost of a part of a tangible asset is significant compared to the total cost of that tangible asset, when the tangible asset is depreciated, that part is depreciated separately.

The gain or loss arising from the derecognition of tangible assets is determined as the difference between the net disposal proceeds and the carrying amount, and the difference is recognized as other non-operating income and other non-operating expenses.

The estimated useful lives of tangible assets for the years ended 31 December 2022 and 2021, are as follows:

Division	Useful lives
Buildings and structures	20, 40 years
Machinery	5 years
Office equipment	4 years
Other tangible assets	2~5 years

The Company reviews the residual value, useful life and depreciation method of assets at the end of each reporting period, and if any change is deemed appropriate as a result of the review, it is treated as a change in accounting estimate.

(6) Intangible assets

Intangible assets are initially measured at cost, and after initial recognition, the carrying amount is recognized at cost less accumulated amortization and accumulated impairment losses.

Intangible assets are amortized using the straight-line method with no residual value over their estimated useful lives as of the date of their availability. However, as there are no foreseeable limits on the period over which some intangible assets are expected to be used, they are evaluated as having indefinite useful lives and not amortized.

The estimated useful lives of intangible assets for the years ended 31 December 2022 and 2021, are as follows:

Division	Useful lives
Goodwill	Unlimited
Industrial rights	10 years
Software	5 years
Rights of membership	Unlimited
Other intangible assets	5 years

Amortization period and amortization method for finite intangible assets are reviewed at the end of each reporting period. Intangible assets with indefinite useful lives are reviewed at the end of each reporting period to determine whether the assessment of their useful life is indefinite. If it is deemed appropriate to change this, it is treated as a change in the accounting estimate.

The subsequent expenditures are capitalized only if the future economic benefits of the related asset are increased. Other expenses, including internally generated goodwill and trade names, are immediately expensed.

(7) Goodwill

Goodwill is the consideration paid in excess of the fair value of the net identifiable assets acquired at the time of the business combination and is recognized as intangible assets. Goodwill is not amortized, but is tested for impairment annually and presented at cost less accumulated impairment losses.

(8) Government subsidies

Government subsidies are recognized only if the Company has reasonable assurance that the Group will comply with the conditions attached to it.

① Asset-related subsidies

The Company receives a government subsidy with the basic condition that it must be used to acquire or construct non-current assets. When calculating the carrying amount of the asset, the Group recognizes it in net income over the useful life of the depreciable asset, after deducting government subsidies.

② Income-related subsidies

The Company recognizes net income by subtracting the relevant expenses from the relevant expense over the period in which the related costs that it intends to preserve as government grants are recognized as expenses.

(9) Impairment of non-financial assets

In the end of each reporting period for all non-financial assets, except for non-current assets classified as assets, inventories and deferred tax assets, the Company examines whether there are any indications of impairment and, if so, estimates the recoverable amount of the asset. However, intangible assets acquired in a business combination with indefinite useful lives and intangible assets that are not yet available for use are tested for impairment annually by comparing their recoverable amount with their carrying amount, regardless of any indication of impairment.

Recoverable amount is estimated for each asset or if the recoverable amount of an individual asset cannot be estimated, recoverable amount is estimated for each cash-generating unit to which the asset belongs. Recoverable amount is decided as the higher between the pure fair value or value in use. The value in use is discounted by discounting future cash flows expected to be generated from the asset or cash-generating unit at an appropriate discount rate that reflects the current market's assessment of the specific risks of the asset that have not been adjusted in estimating the time value of the money and future cash flows.

If the recoverable amount of an asset or cash generating unit is less than its carrying amount, the carrying amount of the asset is reduced and recognized immediately in profit or loss.

At the end of each reporting period, the Group reviews for assets, excluding goodwill, that there are indications that the impairment loss recognized between and no longer exists or has been reduced. Subsequently, reversal is made only if there is a change in the estimate used to determine recoverable amount since the date of the impairment loss. The carrying amount increased by reversal of an impairment loss cannot exceed the depreciation or amortization of the carrying amount before the impairment loss is recognized in the past.

Goodwill acquired in a business combination is allocated to each cash-generating unit that is expected to benefit from the synergies of the business combination. Impairment losses on cash-generating units reduce the carrying amount of goodwill allocated to the cash-generating unit first, and then reduce the carrying amount of the asset in proportion to the carrying amount of each of the other assets in the cash-generating unit. The impairment losses recognized for goodwill cannot be reversed later. At the end of each reporting period, the Group reviews for assets, excluding goodwill, that there are indications that the impairment loss recognized between and no longer exists or has been reduced. Subsequently, reversal is made only if there is a change in the estimate used to determine recoverable amount since the date of the impairment loss. The carrying amount increased by reversal of an impairment loss cannot exceed the depreciation or amortization of the carrying amount before the impairment loss is recognized in the past.

(10) Lease

1) If the Company is a lessee

The Company evaluates whether a contract is a lease or contains a lease at the contract inception date. In the case of lessees, the Company recognizes right-of-use assets and corresponding lease liabilities in relation to all lease agreements, except for short-term leases (with a lease term of 12 months or less) and leases on small-value basic assets. The Company recognizes lease payments related to short-term leases and leases of small underlying assets as expenses on a straight-line basis over the lease term, unless other systematic criteria better represent the form of the lessee's benefits.

Lease liabilities are initially measured at the present value of the lease payments that have not been paid as of the date of commencement of the lease, discounted using the implied interest rate of the lease. If the implied interest rate of the lease cannot be easily calculated, the incremental borrowing rate of the lessee is used.

The incremental borrowing interest rate varies depending on the lease term, currency and the initiation of the lease, and is determined based on inputs, including:

- Risk-free interest rate based on KTB interest rate
- Company-specific risk management
- Credit risk adjustment based on bond yield
- If the risk attribute of the entity entering into the lease is different from the risk attribute of the Company and the lease does not receive benefits from the Company's guarantee, the company-specific risk management

The lease payments included in the lease liability measurement consist of the following items:

- Fixed lease (including actual fixed lease and deducting lease incentives to be received)
- Fluctuating lease rates that depend on the index or Rate(interest rate). Initially measured using an index or rate(interest rate) on the starting day of lease
- Amount expected to be paid in accordance with the residual value guarantee
- If it is evident that purchase option will be carried out, then the purchase option's event price
- If the lease term reflects the lessee's exercise of the termination option, amount paid to terminate the lease

The Company presents lease liabilities separately from other liabilities in the statement of financial position.

Lease liabilities are subsequently measured by increasing (using the effective interest rate method) the carrying amount by reflecting interest on the lease liabilities and decreasing the carrying amount by reflecting the lease payments paid.

The Company remeasures lease liabilities and makes corresponding adjustments to the related right-of-use assets in the following cases:

- When the lease term changes, the circumstances that give rise to a change in the valuation of the exercise of the purchase option change, or a significant event occurs. In this case, the lease liabilities are measured again by discounting the adjusted lease payments at the adjusted discount rate.
- When the lease payment is changed due to a change in the index or rate (interest rate) or the amount expected to be paid under the residual value guarantee. In this case, the lease liabilities are measured again by discounting the adjusted lease payments at the unchanged discount rate. However, if there is a change in lease payments due to a change in the variable interest rate, an adjusted discount rate that reflects the change in the interest rate is used.
- When the lease agreement is changed and not accounted for as a separate lease. In this case, the lease liabilities are measured again by discounting the adjusted lease payments at the adjusted discount rate as of the effective date of the lease change based on the lease term of the changed lease.

The right-of-use assets consist of the initial measurement of the lease liabilities, the lease payments paid on or before the commencement of the lease (received lease incentives are deducted) and the direct cost of initiating the lease borne by the lessee. The right-of-use assets are subsequently measured at cost less accumulated depreciation and accumulated impairment losses.

For the estimated cost of dismantling and removing the underlying asset, restoring the site on which the underlying asset is located, or restoring the underlying asset itself as required by the terms of the lease, the Company recognizes and measures in accordance with IAS 1037. If those costs relate to right-of-use assets, unless those costs are incurred to produce inventories, those costs are recognized as part of the cost of the right-of-use assets.

If ownership of the underlying asset is transferred to the lessee prior to the end of the lease term, or if the cost of the right-of-use assets reflect that the lessee will exercise the purchase option, the lessee depreciates the right-of-use assets from the commencement of the lease to the end of the useful life of the right-of-use asset. In other cases, the lessee depreciates the right-of-use assets from the commencement of the lease until the end of the useful lives of the assets and the end of the lease term, whichever is earlier.

The Company presents right-of-use assets separately from other assets in the statement of financial position.

The Company applies IAS 1036 to determine whether the right-of-use assets are impaired, and the accounting for the identified impairment loss is described in the accounting policy for 'tangible assets' (refer to Note 3.(5)).

The Company does not include variable lease payments (except for variable lease payments that depend on an index or rate (interest rate)) in the measurement of right-of-use assets and lease liabilities, and such lease payments are recognized in profit or loss in the period in which the event or condition giving rise to the variable lease payments arises.

As a practical and simple method, the lessee may choose to account for each lease element and the related non-lease element as a single lease element for each type of underlying asset, rather than separating the non-lease element from the lease element, but the Company does not use this practical and simple method. In a contract containing one lease element and one or more additional lease or non-lease elements, the lessee allocates the contract consideration to each lease element based on the relative stand-alone price of the lease element and the total stand-alone price of the non-lease element.

2) If the Company is a lessor

The Company classifies each lease as either an operating lease or a finance lease. A lease that transfers most of the risks and rewards of ownership of the underlying asset is classified as a finance lease, and a lease that does not transfer most of the risks and rewards of ownership of the underlying asset is classified as an operating lease.

If the Company is an intermediate lessor, the Company accounts for the upper lease and the sub-lease as two separate contracts. The Company classifies sub-leases as finance leases or operating leases according to the right-of-use assets arising from the parent lease rather than the underlying asset.

The Company recognizes lease payments from operating leases as revenue on a straight-line or other systematic basis. If other systematic standards better represent the pattern in which the benefits resulting from the use of the underlying asset are diminished, the Company applies that standard. The Company adds the direct cost of establishing a lease to the carrying amount of the underlying asset and recognizes it as an expense over the lease term on the same basis as the rental income.

In finance leases, the amount received from lessees is recognized as receivables as net investment in the lease of the Company. The Company allocates financial revenue over the lease term in such a way that a certain period of return is reflected in the Company's net investment in lease.

After initial recognition, the Company periodically reviews the estimated unguaranteed residual value, and recognizes expected credit loss on lease receivables as a loss allowance by applying the requirements for derecognition and impairment of IAS 1109.

Finance lease income is calculated by referring to the total carrying amount of lease receivables. However, in the case of financial lease receivables with impaired credit, financial income is calculated by referring to amortized cost (i.e. amount after deducting loss allowance).

If both the lease and non-lease elements are included in the agreement, the Company allocates the contract consideration by applying IAS 1115.

(11) Non-derivative financial liabilities

The Company classifies financial liabilities as financial liabilities at FVPL and other financial liabilities, and recognizes them in the statement of financial position as part of the contract..

① Financial liabilities at FVPL

Financial liabilities at FVPL include short-term trading financial liabilities or financial liabilities designated at financial liabilities at FVPL or loss on initial recognition. Financial liabilities at FVPL are measured at fair value after initial recognition, and changes in fair value are recognized in profit or loss. On the other hand, at the time of initial recognition, transaction expenses incurred in connection with the issuance of financial liabilities at FVPL are recognized immediately in profit or loss.

② Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at FVPL are classified as other financial liabilities. Other financial liabilities are initially measured at fair value less transaction costs directly attributable to issuance. Subsequently, other financial liabilities are measured at amortized cost using the effective interest method and related interest expense is recognized.

The financial liabilities are derecognized from the statement of financial position only when it is extinguished, i.e. when the contractual obligation is discharged, canceled or expires.

(12) Employee benefits

① Short-term employee benefits

Short-term employee benefits that will be settled within 12 months from the end of the reporting period when an employee provides related service are recognized in profit or loss when the service is provided. Short-term employee benefits are measured at undiscounted amount.

② Other long-term employee benefits

Other long-term employee benefits that will not be paid within 12 months after the end of the reporting period for which the employee provided the related service are discounted to present value of future salaries earned in exchange for the service provided in the current and past periods. The changes from remeasurement are recognized in profit or loss in the period in which they arise.

③ Severance payments: Defined benefit plan

The defined benefit obligations related to the defined benefit plan are recognized at the end of the reporting period less the fair value of plan assets.

The defined benefit obligations are calculated under the predictive unit accumulation method annually by an independent public accountant. Where the net amount calculated by subtracting the fair value of plan assets from the present value of defined benefit obligations is an asset, the asset is recognized only to the extent of its present value of available annual benefits, either in the form of a refund from the plan or a reduction in future contributions to the plan.

The remeasurement component of net defined benefit obligations is a change in the upper limit on recognition of assets, except for actuarial gains and losses, net interest on net defined benefit obligations, and net interest on defined benefit obligations. It is immediately recognized in other comprehensive income. The Company's net interest in the defined benefit obligations (assets) is determined by multiplying the net defined benefit obligations (assets) by the discount rate determined at the beginning of the annual reporting period. During in consideration of changes in net defined benefit obligations (assets) due to contributions and payments. Net interest expense and other expenses related to the defined benefit plan are recognized in profit or loss.

In the event of amendment or reduction of the plan, gains or losses on changes or reductions in benefits for the past service are recognized immediately in profit or loss. The Company recognizes gains and losses on the settlement of a defined benefit plan when the cumulative settlement occurs.

(13) Provisions

Provisions are present (legal or statutory) obligation that exists as a result of a past event, and it is recognized that resources with economic benefits are likely to be leaked in order to fulfill the obligation, and the amount of money required to fulfill the obligation can be estimated reliably.

The amount recognized as provisions is the best estimate of the expenditures required to carry out the present obligation at the end of the reporting period, taking into account the inevitable risks and uncertainties associated with the events and circumstances. When the time value effect of money is significant, the provisions are valued at the present value of the expenditures expected to settle the obligation.

When a third party is expected to reimburse some or all of the expenditure required to settle the provision, the reimbursement amount is recognized and accounted for as a separate asset only when it is almost certain that reimbursement will be received.

The balance of the provisions is reviewed at the end of each reporting period and adjusted to reflect the best estimate as of the reporting date. If the possibility of the outflow of resources in which economic benefits are embedded for the performance of the obligation is no longer high, the related provisions are reversed.

Provisions for warranty are recognized when products or services are sold or provided, and are estimated by weighted average of all possible outcomes and related probabilities based on historical warranty data.

The provisions are used only for expenditures related to initial recognition.

(14) Foreign currency transaction

In the preparation of the financial statement, transactions in foreign currencies other than KRW functional currencies are recorded at the exchange rate on the trading day. At the end of each reporting period, foreign currency monetary items are translated at the closing rate at the end of the reporting period. Non-monetary items measured at fair value are translated at the exchange rate on the day at which the fair value is determined, and non-monetary items measured at historical cost are translated at the exchange rate on the trading day.

Foreign exchange differences at the time of settlement of monetary items and foreign exchange differences resulting from the translation of monetary items are recognized in profit or loss as other non-operating income and other non-operating expenses when they are related to operating activities, and non-operating activities are recognized in profit or loss as finance income and finance expenses.

When gains or losses on non-monetary items are recognized in other comprehensive income, the effect of foreign exchange fluctuations included in the gain or loss is recognized in other comprehensive income, and any gains or losses are recognized in profit or loss.

(15) Paid-in capital

Common shares are classified as capital, and incremental costs that arise in direct relation to capital transactions (the net amount that reflects the tax effect) are deducted from the capital.

If the Company reacquires its own equity instruments, such instruments are directly deducted from the capital as reacquired shares. If the company buys, sells, issues, or cancels its own equity instruments, the profit or loss is not recognized as that as of 31 December 2022. When the Company acquires and retains treasury stock, the consideration paid or received is recognized directly in equity.

(16) Revenue from contracts with customers

The Company recognizes revenue by applying IAS 1115 for the first time on 1 January 2018 and applying the 5-step (① Contract identification → — ② Performance obligation identification → — ③ Transaction price calculation → — ④ Allocating transaction price to performance obligation → — ⑤ Revenue recognition when performance obligation is fulfilled) revenue recognition model to all types of contracts.

① Contract identification

The Company identifies a contract with a customer when all of the following criteria are met:

- The contracting parties accept the contract and commit to performing their respective obligations;
- The rights of each party in relation to the goods or services to be transferred can be identified;
- The terms of payment for the goods or services to be transferred can be identified;
- The contract has commercial performances;
- It is probable that the entity will recover the consideration to which it would be entitled for the goods or services transferred to the customer.

The Company identifies contracts with customers for the supply of products and services that satisfy all of the above criteria as contracts with customers.

② Identification of performance obligation

At the inception of the contract, the Company identifies the promise to transfer any of the following to the customer as a performance obligation by reviewing the goods or services promised in the contract with the customer.

- Distinct goods or services (or a bundle of goods or services)
- A set of distinct goods or services' that are substantially the same and have the same method of transfer to the customer

The performance obligations of the Company to customers identified in contracts with customers are the supply of promised products and provision of services.

③ Calculation of transaction price

The Company refers to the terms of the contract and the company's business practices to calculate the transaction price. The transaction price is the amount the entity expects to be entitled to receive in exchange for transferring promised goods or services to the customer, excluding amounts collected on behalf of a third party.

The Company calculates the consideration to be received from customers for the supply of products and services as the transaction price. However, the consideration to be received from customers may change because the Company allows returns in the contract to supply the product. The Company estimates variable consideration using the expected value method, which it expects to better predict the consideration to which it will be entitled, and recognizes revenue by including variable consideration in the transaction price only to the amount that is highly unlikely to cause a significant reversal of the accumulated revenue recognized when the return deadline has elapsed. Any consideration received or receivable by the Group for which the Company does not expect to be entitled is recognized as a refund liability and recognized as a new asset for the right to recover the returned asset.

④ Allocating transaction price to performance obligation

The Company allocates the transaction price to each performance obligation at an amount representing the right to receive in exchange for the promised goods or services to the customer.

In contracts entered into by the Company with customers, the performance obligations of the Company consist of a single performance obligation identified as distinct goods and services, such as the supply of products and services, and thus the transaction price is not allocated.

⑤ Revenue recognition when performance obligation is fulfilled

When the Company fulfills a performance obligation by transferring the promised goods or services to the customer, the transaction price allocated to the performance obligation is recognized as revenue when the customer controls the goods or services.

The Company recognizes revenue as if the performance obligations to supply products and provide services are satisfied at a point in time. In particular, in the case of the provision of services, the assets created by the performance of the obligations of the Company have no alternative use for the company itself, and satisfy the requirements of performance obligations over a period in which there must be an enforceable right to payment for the parts that have been performed so far. Revenue is recognized as a performance obligation to be satisfied at a point in time.

(17) Financial income and expenses

Financial income includes interest income, foreign exchange gains and losses on foreign currency financial instruments, and net profit or loss on financial assets at FVPL. Interest income is recognized in profit or loss by applying the effective interest method over the period.

Financial expenses include interest expense on borrowings, translation losses and foreign exchange losses on foreign currency financial instruments, and net profit or loss on financial assets at FVPL. Interest expense on borrowings is recognized in profit or loss over the period by applying the effective interest method.

The effective interest method accurately matches the future cash payment estimated during the expected duration of the financial instrument or the current value of the received amount with the total carrying amount of the financial asset or the amortized cost of the financial liability.

When calculating the interest income or interest expenses, the effective interest is applied to the total carrying amount of the assets (if the credit of the asset is undamaged) or to the amortized cost of the liabilities. However, for financial assets whose credit has been damaged after the initial recognition, the interest income is calculated by applying the effective interest to the amortized cost of the financial assets. If such assets' credit can no longer be deemed to be damaged, the interest income is calculated by applying the effective interest to the total carrying amount.

(18) Corporate tax

Corporate tax expenses consist of current tax and deferred tax expenses, and they are all recognized for the profit or loss as of 31 December 2022 except the tax amounts that occur from transactions or incidents directly recognized for other comprehensive income or capital or from business combination.

① Current tax

The current tax is calculated on the basis of taxable income for the year ended 31 December 2022. Taxable income is different from profit and loss on the statement of income as it excludes gains and losses to be added or deducted in other taxable periods and non-taxable items or non-deductible items from pre-tax income on the statement of income. The current tax liabilities related to the Company's current tax are calculated using the tax rates actually enacted.

② Deferred tax

When measuring the deferred tax liabilities and the deferred tax assets, the Company reflects the tax effects based on the expected method of collecting or paying the carrying amount of the assets or liabilities at the end of the reporting period. For the temporary differences to add for subsidiaries, associates and joint venture investment equity, the Company can control the extinction time point of the temporary differences, and deferred tax liabilities are recognized for all cases except where there is a high possibility that the temporary differences would not be extinct within the predictable future. Also, deferred tax assets that arise due to temporary differences to deduct are recognized in cases where there is a high possibility that the temporary differences will be extinct in predictable future and that taxable income for which the temporary differences can be used will occur.

The carrying amount of the deferred tax assets is reviewed at the end of each reporting period and is lowered when there is no longer a high possibility that taxable income will occur sufficiently enough for the benefits due to deferred tax assets can be used.

Deferred tax assets and liabilities are being measured using the tax rate expected to be applied to the period when the assets would be realized or the liabilities be paid based on the tax law enacted or virtually enacted at the end of the reporting period.

Deferred tax assets and liabilities are the corporate tax levied by the same tax office and are offset only when the Company has the right to offset the recognized amounts and is willing to pay the net amount of the income tax liabilities and assets as of 31 December 2022. If there exists income tax amount that additionally occur from dividend payment, it is recognized at the time point when the liabilities related to dividend payment are recognized.

(19) Earnings per share

The Company calculates basic earnings per share and diluted earnings per ordinary share with respect to net profit or loss and presents them in the income statement. Basic earnings per share is calculated by dividing the net profit or loss for the common shares by the weighted-average common shares of the common shares circulated during the reporting period. Diluted earnings per share by adjusting the profit or loss attributable to ordinary shareholders and the weighted-average No. of common shares outstanding, taking into account the effects of all dilutive potential common shares, including share-based compensation granted to employees.

(20) Business combination

Business combinations are accounted for using the acquisition method, except for combinations of entities and businesses under common control.

Transfer considerations are generally measured at fair value as the same way that identifiable net assets are measured at fair value. When goodwill is generated as a result of a business combination, impairment tests are conducted annually, and the excess is recognized immediately in net income as a bargain purchase gain. Acquisition-related costs are expensed in the period in which they are incurred and provided for services, except for the cost of issuance of debt securities and equity securities, which are recognized in accordance with IAS 1032 and IAS 1109.

Transfer considerations do not include any amounts related to the settlement of existing relationships. The settlement of existing relationships is generally recognized in profit or loss.

Contingent consideration is measured at fair value on the acquisition date. Contingent consideration classified as equity is not remeasured and subsequent settlements are accounted for within equity. When the contingent consideration is not classified as equity, the change in fair value of the conditional consideration is subsequently recognized in profit or loss.

4. Significant decisions and major source of estimation uncertainty

In preparing the separate financial statements, management should make judgments that have a significant effect on the amounts recognized in the financial statements (excluding matters related to estimates), and the carrying amount of assets and liabilities that are not readily identifiable from other sources. Estimates and assumptions must be made. Estimates and related assumptions are based on past experiences and other factors deemed relevant. In addition, actual results may differ from these estimates.

Estimates and underlying assumptions are continually reviewed. Revisions to accounting estimates are recognized in the period in which the revision is made if the revision affects only that period, and in the period in which the adjustment is made and in future periods if they affect both current and future periods.

(1) Management's judgments

The following notes include information on the management's main judgments related to application of accounting policies that significantly affect the amounts recognized in the financial statements:

- Note 3: Significant accounting policies

(2) Uncertainty of assumptions and estimates

The information on the uncertainty of premise and estimation with significant risk that may cause major adjustment on the next reporting term is included in the following notes:

- Note 11: Inventories - Assumptions for inventory valuation allowance
- Note 15: Lease liabilities - Determination of lease term
- Note 17: Provisions - Possibility of resource leak and amount assumption
- Note 29: Measurement of the defined benefit obligation - Actuarial assumptions

(3) Fair value measurement

The Company's accounting policy and disclosures require measurement of various financial and non-financial assets and debts at fair values, and the Company has established fair value evaluation policies and procedures. The policies and procedures include the operation of the evaluation department responsible for reviewing all significant fair value measurements, including those classified as Level 3 in the fair value hierarchy, and the results are reported directly to the finance executive.

The evaluation department regularly reviews significant unobservable inputs and valuation adjustments. When fair value measurement uses third-party information such as broker prices or rating agencies, the evaluation based on information obtained from third parties by the rating department includes classification by level within the fair value hierarchy, and determines whether it can be concluded that the requirements of the standard are met.

When measuring the fair values of assets and debts, the Company uses input variables that are as observable in the market as possible. Fair values are classified within the fair value hierarchy based on the input variables used in the valuation method as follows:

- Level 1: The unadjusted declared value of the same asset or liability in the accessible active market on the measurement date
- Level 2: Input variables directly or indirectly observable with regard to the asset or liability apart from the declared value of Level 1
- Level 3: Input variables unobservable with regard to the asset or liability

In case where various input variables used to measure assets or debts at fair values are classified into different levels within the fair value hierarchy, the Company classifies all the fair value measurements by the lowest-level input variable within the significant fair value hierarchy for the entire measurements and recognizes movements along the fair value hierarchy at the end of the reporting period in which changes occurred.

The details of the assumptions used in measuring fair value are included in the notes below:

- Note 6: Management of financial risk

5. Classification of financial instruments by category

(1) Financial instruments by category

The details of the carrying amount of financial instruments by category for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Financial assets:		
Items at FVOCI		
Trade receivables	36,817,123,476	55,832,162,670
Items measured at amortized cost		
Cash and cash equivalents	186,352,407,000	133,729,223,245
Short-term financial instruments	130,000,000,000	470,000,000,000
Trade receivables	106,530,673,376	119,432,884,399
Other receivables(*1)	43,013,107,432	29,064,853,694
Subtotal	465,896,187,808	752,226,961,338
Lease receivables	2,218,821,942	3,548,057,137
Total	504,932,133,226	811,607,181,145
Financial liabilities:		
Items measured at amortized cost		
Trade payables	196,211,140,403	213,463,276,070
Other payables(*2)	46,324,196,774	15,736,374,180
Subtotal	242,535,337,177	229,199,650,250
Lease liabilities	13,035,055,914	7,098,769,810
Total	255,570,393,091	236,298,420,060

(*1) Lease receivables are excluded.

(*2) Employee-related debts that are not included in financial liabilities are excluded.

(2) Financial incomes and costs by category

The details of financial incomes and financing costs recognized in the net income for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	Interest income (interest expense)		Other income(*)	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Financial assets at FVPL	-	-	-	(32,636,103)
Financial assets at FVOCI	-	-	4,310,559,951	13,311,927,152
Financial assets at amortized cost	11,831,568,035	4,007,999,042	(9,585,456,517)	(1,098,245,235)
Lease receivables	65,884,805	89,622,456	-	-
Financial liabilities at amortized cost	-	-	(15,537,727,956)	(5,173,959,094)
Lease liabilities	(378,267,334)	(168,295,320)	-	-
Total	11,519,185,506	3,929,326,178	(20,812,624,522)	7,007,086,720

(*) Other gains and losses consist of gains and losses on financial assets at FVPL, financial assets at FVOCI, financial assets at amortized cost and financial liabilities at amortized cost, and losses on disposal of trade receivables, foreign currency translation gains and losses and foreign exchange differences form gains or losses on foreign exchange.

(3) Transfer of financial assets

The Company transferred trade receivables according to the account receivable factoring contract with the Export-Import Bank, etc. In this transaction, if the relevant trade receivables are not recovered at maturity, the Company is not obligated to pay the unrecovered amount of trade receivables to banks.

There is no carrying amount of trade receivables accounted for as collateralized borrowing as the Company transferred all or part of the transferred financial assets through factoring of accounts receivable as of 31 December 2022.

6. Management of financial risk

(1) Credit risk

Credit risk refers to the risk that the Company will suffer financial loss as a result of a customer or counterparty not fulfilling its contractual obligations for a financial instrument. It mainly arises from trade receivables and investment assets to customers.

① Exposure to credit risk

The carrying amount of financial assets represents the maximum exposure to credit risk. The maximum exposure to credit risk of the Company for the years ended 31 December 2022 and 2021, is as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Cash and cash equivalents	186,352,407,000	133,729,223,245
Short-term financial instruments	130,000,000,000	470,000,000,000
Trade receivables (*1)	143,347,796,852	175,265,047,069
Other receivables(*2)	45,231,929,374	32,612,910,831
Total	504,932,133,226	811,607,181,145

(*1) Includes trade receivables classified as financial assets at FVOCI.

(*2) Includes lease receivables.

② Impairment loss

The Company has established an allowance for losses expected to occur on trade receivables. The allowance for a group of financial assets is determined based on historical data on the recovery of similar financial assets.

The trade receivables are net amount after loss allowance is deducted, and as indicated in the statement of financial position, details of trade receivables and related loss allowances based on the total amount before loss allowance for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Trade receivables	143,347,796,852	175,265,047,069
Loss allowance	-	-
Net carrying amount of trade receivables	143,347,796,852	175,265,047,069

As of 31 December 2022 and 2021, the age of trade receivables and the amount impaired by each year are as follows:

(Unit: KRW)						
Division	31 December 2022			31 December 2021		
	Total amount of receivables	Impaired amount	Carrying amount	Total amount of receivables	Impaired amount	Carrying amount
Within the due date	143,583,211,020	-	143,583,211,020	170,544,442,333	-	170,544,442,333
Due date ~ 3 months	(235,414,168)	-	(235,414,168)	4,735,821,767	-	4,735,821,767
3 ~ 6 months	-	-	-	(15,217,031)	-	(15,217,031)
Total	143,347,796,852	-	143,347,796,852	175,265,047,069	-	175,265,047,069

There is no change in allowance for bad debts for trade receivables for the years ended 31 December 2022 and 2021.

(2) Liquidity risk

Liquidity risk refers to the risk that the Company will have difficulty in meeting its obligations related to financial liabilities that are settled through the delivery of cash or other financial assets. The Company's liquidity management method is to generate abnormally excessive losses even in difficult financial situations, or to maintain sufficient liquidity to repay debts at maturity without risk of damaging the Company's reputation.

The Company manages liquidity risk by maintaining sufficient cash and cash equivalents and short-term financial instruments.

The contractual maturity of financial liabilities for the years ended 31 December 2022 and 2021, is as follows: The amount does not include the effect of trade agreements.

① 31 December 2022

(Unit: KRW)				
Division	Carrying amount	Contractual cash flow	Less than 1 year	1 ~ 5 years
Trade payables	196,211,140,403	196,211,140,403	196,211,140,403	-
Other payables(*)	46,324,196,774	46,324,196,774	44,323,036,774	2,001,160,000
Total	242,535,337,177	242,535,337,177	240,534,177,177	2,001,160,000

(*) Employee-related liabilities not included in financial liabilities are excluded, and the contractual maturity of lease liabilities is indicated in Note 15.

② 31 December 2021

(Unit: KRW)				
Division	Carrying amount	Contractual cash flow	Less than 1 year	1 ~ 5 years
Trade payables	213,463,276,070	213,463,276,070	213,463,276,070	-
Other payables(*)	15,736,374,180	15,736,374,180	15,716,374,180	20,000,000
Total	229,199,650,250	229,199,650,250	229,179,650,250	20,000,000

(*) Employee-related liabilities not included in financial liabilities are excluded, and the contractual maturity of lease liabilities is indicated in Note 15.

The contractual maturity is based on the earliest date on which the Company can be demanded for payment.

(3) Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices.

① Currency risk

The Company is exposed to the currency risk related to the sales profits and costs indicated in KRW, which is the functioning currency. The major currencies in these transactions are USD.

A. Exposure to foreign exchange risk

The carrying amounts of monetary assets and liabilities denominated in foreign currencies other than the functional currency as of for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)											
Division	31 December 2022						31 December 2021				
	USD	JPY	CNY	EUR	INR	TWD	USD	JPY	CNY	EUR	INR
Assets in foreign currency:											
Cash and cash equivalents	60,125,195,302	-	-	-	64,743,150	110,919,033	159,023,728	-	-	-	-
Advanced payments	-	-	-	-	-	-	-	-	-	-	57,180,894
Trade receivables	98,704,983,637	-	-	-	-	-	84,127,890,315	-	-	-	-
Receivables	458,338,309	-	-	-	-	-	559,325,456	-	-	-	-
Total	159,288,517,248	-	-	-	64,743,150	110,919,033	84,846,239,499	-	-	-	57,180,894
Liabilities in foreign currency:											
Trade payables	73,874,367,352	-	-	-	-	-	89,222,219,441	-	-	-	-
Payables	4,866,678,985	1,081,889,564	1,458,878,679	68,627,448	121,571,366	156,046,204	2,019,375,570	1,911,477,975	1,447,016,311	14,067,723	53,862,389
Total	78,741,046,337	1,081,889,564	1,458,878,679	68,627,448	121,571,366	156,046,204	91,241,595,011	1,911,477,975	1,447,016,311	14,067,723	53,862,389

The exchange rates applied to the conversion of monetary assets and liabilities denominated in foreign currencies are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
USD	1,267.30	1,185.50
JPY	9.53	10.30
CNY	181.44	186.26
EUR	1,351.20	1,342.34
INR	15.31	15.93
TWD	41.27	-

B. Sensitivity analysis

As of 31 December 2022 and 2021, if the exchange rate of the Korean won against major foreign currencies constituting financial assets and liabilities of the Company increased, the Company's equity and profit or loss would have increased or decreased. The analysis assumes a degree of variance that the Company considers to be reasonably possible at the end of the period. It has been also assumed that other variables such as interest rate do not fluctuate during the sensitivity analysis. The effect of the changes in foreign exchange rate for Korean won (before income tax) for the current and the last years on the losses and gains are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Increase by 5%	Decrease by 5%	Increase by 5%	Decrease by 5%
USD	4,027,373,546	(4,027,373,546)	(319,767,776)	319,767,776
JPY	(54,094,478)	54,094,478	(95,573,899)	95,573,899
CNY	(72,943,934)	72,943,934	(72,350,816)	72,350,816
EUR	(3,431,372)	3,431,372	(703,386)	703,386
INR	(2,841,411)	2,841,411	165,925	(165,925)
TWD	(2,256,359)	2,256,359	-	-

② Interest rate risk

The Company's interest-bearing assets are fixed at a fixed interest rate, and the Company does not treat fixed interest rate financial instruments as financial instruments measured at fair value. Therefore, the revenues and operating cash flows of the Company are actually independent of variations in the market interest rate.

(4) Fair value

The carrying amount and fair value of financial assets and liabilities include current fair value rank system for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)					
Division	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:					
Trade receivables (*1)	36,817,123,476	-	-	-	36,817,123,476
Financial assets not measured at fair value:					
Cash and cash equivalents	186,352,407,000	-	-	-	186,352,407,000
Short-term financial instruments	130,000,000,000	-	-	-	130,000,000,000
Trade receivables	106,530,673,376	-	-	-	106,530,673,376
Other receivables(*2)	43,013,107,432	-	-	-	43,013,107,432
Sub-total	465,896,187,808	-	-	-	465,896,187,808
Total	502,713,311,284	-	-	-	502,713,311,284
Financial liabilities not measured at fair value:					
Trade payables	196,211,140,403	-	-	-	196,211,140,403
Other payables(*2,*3)	46,324,196,774	-	-	-	46,324,196,774
Total	242,535,337,177	-	-	-	242,535,337,177

(*1) Since the carrying amount is a reasonable approximation of the fair value, the fair value hierarchy and measurement method are not included in the disclosure.

(*2) Lease receivables and lease liabilities are excluded.

(*3) Employee-related debts that are not included in financial liabilities are excluded.

② 31 December 2021

(Unit: KRW)					
Division	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:					
Trade receivables (*1)	55,832,162,670	-	-	-	55,832,162,670
Financial assets not measured at fair value:					
Cash and cash equivalents	133,729,223,245	-	-	-	133,729,223,245
Short-term financial instruments	470,000,000,000	-	-	-	470,000,000,000
Trade receivables	119,432,884,399	-	-	-	119,432,884,399
Other receivables(*2)	29,064,853,694	-	-	-	29,064,853,694
Sub-total	752,226,961,338	-	-	-	752,226,961,338
Total	808,059,124,008	-	-	-	808,059,124,008
Financial liabilities not measured at fair value:					
Trade payables	213,463,276,070	-	-	-	213,463,276,070
Other payables(*2.3)	15,736,374,180	-	-	-	15,736,374,180
Total	229,199,650,250	-	-	-	229,199,650,250

(*1) Since the carrying amount is a reasonable approximation of the fair value, the fair value hierarchy and measurement method are not included in the disclosure.

(*2) Lease receivables and lease liabilities are excluded.

(*3) Employee-related debts that are not included in financial liabilities are excluded.

(5) Capital management

The capital management of the Company is for maintaining the existence as a going concern, minimizing the capital cost for funding, maximizing the profits of the shareholders, and maintaining an appropriate equity structure. The Company manages the capital based on the ratio of liability, which is calculated by dividing the total liability in the statement of financial position with capital. The debt-to-equity ratio of the Company for the years ended 31 December 2022 and 2021, is as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Total liabilities	337,591,801,835	372,463,838,271
Total equities	944,810,239,127	797,070,185,737
Debt-to-equity ratio	35.73%	46.73%

7. Cash and cash equivalents

The details of cash and cash equivalents for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Demand deposits	77,052,407,000	28,429,223,245
Term deposit, etc.(*)	109,300,000,000	105,300,000,000
Total	186,352,407,000	133,729,223,245

(*) This is a financial instrument whose maturity is within 3 months from the acquisition date, has very high liquidity, is easy to convert to a fixed amount, and has a slight risk of value fluctuation.

8. Short-term financial instruments

The details of short-term financial instruments for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Term deposit	130,000,000,000	470,000,000,000

9. Trade and other receivables

(1) The trade and other receivables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Trade receivables	143,347,796,852	-	175,265,047,069	-
Receivables	24,698,056,644	-	15,701,924,837	-
Accrued income	2,370,913,828	-	1,741,505,891	-
Loan	1,790,574,626	6,091,320,171	1,683,384,338	7,650,673,846
Deposits	-	8,062,242,163	-	2,287,364,782
Lease receivables	1,359,317,660	859,504,282	1,329,235,195	2,218,821,942
Total	173,566,659,610	15,013,066,616	195,721,097,330	12,156,860,570

(2) The changes in lease receivables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
1 January	3,548,057,137	4,853,554,681
Interest income	65,884,805	89,622,456
Collection	(1,395,120,000)	(1,395,120,000)
31 December	2,218,821,942	3,548,057,137

(3) The maturity analysis of lease receivables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Less than 1 year	1,395,120,000	1,395,120,000
1-2 years	866,324,509	1,395,120,000
2-3 years	-	866,324,509
Total undiscounted lease	2,261,444,509	3,656,564,509
Unrealized financial income	(42,622,567)	(108,507,372)
Lease net investment	2,218,821,942	3,548,057,137

10. Other assets

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

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Advanced payments	8,234,130,310	9,367,236,340	1,794,361,385	186,959,330
Prepaid expenses	25,379,233,091	794,082,232	26,269,252,240	692,941,392
Total	33,613,363,401	10,161,318,572	28,063,613,625	879,900,722

11. Inventories

(1) The details of inventories for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Finished goods	184,831,476,664	68,414,211,584
Work in process	335,608,127,172	142,699,548,169
Inventory return assets	165,108,909	367,742,961
Provision for inventory valuation	(38,095,660,661)	(10,363,989,150)
Products	47,383,151	-
Total	482,556,435,235	201,117,513,564

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Cost of goods sold:		
(Reversal) establishment of allowance for return of inventories	202,634,052	(178,626,586)
Establishment (reversal) of provision for inventory valuation	27,731,671,511	(11,454,885,479)

12. Investments of associates and joint ventures

(1) The investments of associates and joint ventures for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)							
Company name	Location	Main sales activities	Month of account closing	31 December 2022		31 December 2021	
				Ratio(%)	Carrying amount	Ratio(%)	Carrying amount
LX Semicon U.S.A., Inc	USA	Semiconductor manufacturing and designing	December	100.00	137,322,045	100.00	137,322,045
LX Semicon China Co., Ltd.	China	Semiconductor manufacturing and designing	December	100.00	2,179,314,000	100.00	2,179,314,000
LX Semicon Japan Co., Ltd.	Japan	Semiconductor manufacturing and designing	December	100.00	1,215,486,000	100.00	317,112,000
Total					3,532,122,045		2,633,748,045

(2) The changes in the investments in associates and joint ventures as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)							
Company name	Location	Main sales activities	Month of account closing	31 December 2022		31 December 2021	
				Ratio(%)	Carrying amount	Ratio(%)	Carrying amount
Advance Power Device Technologies Co. Ltd.	Korea	R&D and design of semiconductor devices	March	49.00	4,410,000,000	49.00	4,410,000,000
FJ Composite Material Co.,LTD	Japan	Development, manufacturing and sales of composite materials	May	29.98	6,835,773,000	29.98	6,835,773,000
Telechips(*)	Korea	Manufacture of electronic integrated circuit	December	10.93	26,770,050,000	-	-
Total					38,015,823,000		11,245,773,000

(*) Newly acquired as of 31 December 2022, and although the share of the Company is less than 20%, it is exerting significant influence through the contractual right to appoint directors.

13. Tangible assets

(1) The details of tangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets(*)	Construction in-progress	Total
Acquisition cost	35,051,121,092	21,054,366,791	188,300,000	61,050,553,746	23,457,707,032	9,139,189,252	9,712,038,822	159,653,276,735
Accumulated amortization	-	(3,047,630,728)	(21,183,768)	(32,672,980,212)	(14,779,553,194)	(5,332,188,536)	-	(55,853,536,438)
Accumulated impairment loss	-	-	-	(239,798,395)	-	-	-	(239,798,395)
Government subsidies	-	-	-	(38,922)	(5,908,229)	(135,000,000)	-	(140,947,151)
Carrying amount	35,051,121,092	18,006,736,063	167,116,232	28,137,736,217	8,672,245,609	3,672,000,716	9,712,038,822	103,418,994,751

② 31 December 2021

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets (*)	Construction in-progress	Total
Acquisition cost	6,419,595,262	6,043,324,341	188,300,000	53,758,176,076	16,809,210,165	6,103,614,995	1,660,946,817	90,983,167,656
Accumulated amortization	-	(2,714,191,507)	(16,476,264)	(23,258,078,187)	(12,264,138,762)	(4,009,656,055)	-	(42,262,540,775)
Accumulated impairment loss	-	-	-	(239,798,395)	-	-	-	(239,798,395)
Government subsidies	-	-	-	(38,922)	(10,675,296)	(195,000,000)	-	(205,714,218)
Carrying amount	6,419,595,262	3,329,132,834	171,823,736	30,260,260,572	4,534,396,107	1,898,958,940	1,660,946,817	48,275,114,268

(*) Other tangible assets include facility equipment, and leasehold improvements.

(2) The changes in the carrying amount of tangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets(*)	Construction in-progress	Total
Carrying amount as of 1 January	6,419,595,262	3,329,132,834	171,823,736	30,260,260,572	4,534,396,107	1,898,958,940	1,660,946,817	48,275,114,268
Acquisition cost during the period	318,549,000	-	-	4,579,373,898	6,888,758,608	1,457,074,257	57,088,920,718	70,332,676,481
Disposal cost during the period	-	-	-	(6,001)	(266,944)	-	-	(272,945)
Substitution of assets under construction	28,312,976,830	15,011,042,450	-	4,135,309,433	-	1,578,500,000	(49,037,828,713)	-
Depreciation	-	(333,439,221)	(4,707,504)	(10,837,201,685)	(2,750,642,162)	(1,262,532,481)	-	(15,188,523,053)
Carrying amount as of 31 December	35,051,121,092	18,006,736,063	167,116,232	28,137,736,217	8,672,245,609	3,672,000,716	9,712,038,822	103,418,994,751

(*) Other tangible assets include facility equipment, and leasehold improvements.

② 31 December 2021

(Unit: KRW)								
Division	Land	Buildings	Structures	Machinery	Office equipment	Other tangible assets(*)	Construction in-progress	Total
Carrying amount as of 1 January	5,015,382,334	2,395,354,729	176,531,240	6,458,803,909	4,652,661,607	1,715,411,841	11,599,898,200	32,014,043,860
Acquisition cost during the period	1,404,212,928	1,196,075,160	-	4,574,333,248	2,093,544,933	913,394,949	19,734,259,163	29,915,820,381
Disposal cost during the period	-	-	-	(12,806)	(2,696,584)	-	(1,319,130,944)	(1,321,840,334)
Substitution of assets under construction	-	-	-	28,047,579,602	92,500,000	214,000,000	(28,354,079,602)	-
Depreciation	-	(262,297,055)	(4,707,504)	(8,820,443,381)	(2,301,613,849)	(943,847,850)	-	(12,332,909,639)
Carrying amount as of 31 December	6,419,595,262	3,329,132,834	171,823,736	30,260,260,572	4,534,396,107	1,898,958,940	1,660,946,817	48,275,114,268

* Other tangible assets include facility equipment, and leasehold improvements.

14. Intangible assets

(1) The details of intangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Construction in-progress	Total
Acquisition cost	27,913,122,677	6,080,962,005	23,441,477,534	4,354,074,600	35,114,460,000	1,689,695,760	108,593,792,576
Accumulated amortization	-	(2,148,048,751)	(9,477,719,140)	-	(33,075,765,007)	-	(44,701,532,898)
Accumulated impairment loss	-	-	-	(243,581,400)	-	-	(243,581,400)
Government subsidies	-	(19,481,639)	-	-	-	(7,941,731)	(27,423,370)
Carrying amount	27,913,122,677	3,913,431,615	13,963,758,394	4,110,493,200	2,038,694,993	11,681,754,029	63,621,254,908

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

② 31 December 2021

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Intangible assets under construction	Total
Acquisition cost	27,913,122,677	4,469,422,204	14,061,269,452	4,513,064,600	35,092,460,000	3,531,914,928	89,581,253,861
Accumulated amortization	-	(1,680,563,449)	(8,510,454,418)	-	(29,056,391,672)	-	(39,247,409,539)
Accumulated impairment loss	-	-	-	(243,581,400)	-	-	(243,581,400)
Government subsidies	-	(22,141,642)	-	-	-	(7,941,731)	(30,083,373)
Carrying amount	27,913,122,677	2,766,717,113	5,550,815,034	4,269,483,200	6,036,068,328	3,523,973,197	50,060,179,549

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

(2) The changes in the carrying amount of intangible assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Intangible assets under construction	Total
Carrying amount as of 1 January	27,913,122,677	2,766,717,113	5,550,815,034	4,269,483,200	6,036,068,328	3,523,973,197	50,060,179,549
Acquisition cost during the period	-	-	720,148,855	1,260,810,000	22,000,000	20,425,039,997	22,427,998,852
Disposal cost during the period	-	(18,475,464)	-	(1,419,800,000)	-	(123,754,087)	(1,562,029,551)
Substitution of assets under construction	-	1,677,516,678	10,465,988,400	-	-	(12,143,505,078)	-
Amortization of intangible assets	-	(512,326,712)	(2,773,193,895)	-	(4,019,373,335)	-	(7,304,893,942)
Carrying amount as of 31 December	27,913,122,677	3,913,431,615	13,963,758,394	4,110,493,200	2,038,694,993	11,681,754,029	63,621,254,908

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

② 31 December 2021

(Unit: KRW)							
Division	Goodwill	Industrial rights	Software	Rights of membership	Other intangible assets (*)	Intangible assets under construction	Total
Carrying amount as of 1 January	27,913,122,677	1,979,074,675	5,614,838,045	3,349,533,200	10,064,741,660	3,040,442,096	51,961,752,353
Acquisition cost during the period	-	48,669,002	448,643,277	919,950,000	-	3,290,518,618	4,707,780,897
Disposal cost during the period	-	(1,688,805)	-	-	-	(91,936,055)	(93,624,860)
Substitution of assets under construction	-	1,108,771,462	1,606,280,000	-	-	(2,715,051,462)	-
Amortization of intangible assets	-	(368,109,221)	(2,118,946,288)	-	(4,028,673,332)	-	(6,515,728,841)
Carrying amount as of 31 December	27,913,122,677	2,766,717,113	5,550,815,034	4,269,483,200	6,036,068,328	3,523,973,197	50,060,179,549

(*) Other intangible assets consist of customer-related intangible assets and technological capabilities generated through business acquisition.

(3) Intangible assets with indefinite useful life

The Company classifies goodwill and membership among intangible assets as intangible assets with indefinite useful lives and is not amortized, and reviews impairment annually along with intangible assets construction in-progress, which are intangible assets that have not yet been used. There is no impairment recognized for goodwill, intangible assets construction in-progress, and memberships as of 31 December 2022 and 2021.

15. Lease

(1) The Company leased buildings and vehicles, and the average lease period is about two years.

(2) The carrying amount of right-of-use assets for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)

Division	Buildings	Vehicles	Total
Acquisition amount	26,965,463,834	1,442,206,464	28,407,670,298
Accumulated depreciations	(13,548,663,885)	(654,312,484)	(14,202,976,369)
Carrying amount	13,416,799,949	787,893,980	14,204,693,929

② 31 December 2021

(Unit: KRW)

Division	Buildings	Vehicles	Total
Acquisition amount	14,024,960,245	1,233,173,521	15,258,133,766
Accumulated depreciations	(7,616,048,378)	(365,833,595)	(7,981,881,973)
Carrying amount	6,408,911,867	867,339,926	7,276,251,793

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

① 31 December 2022

(Unit: KRW)

Division	Buildings	Vehicles	Total
Amount as of 1 January	6,408,911,867	867,339,926	7,276,251,793
Acquisition amount	13,001,888,031	460,407,664	13,462,295,695
Decrease (contract termination)	(4,405,511)	(83,626,361)	(88,031,872)
Depreciation	(5,989,594,438)	(456,227,249)	(6,445,821,687)
Amount as of 31 December	13,416,799,949	787,893,980	14,204,693,929

② 31 December 2021

(Unit: KRW)

Division	Buildings	Vehicles	Total
Amount as of 1 January	8,195,876,238	266,238,006	8,462,114,244
Acquisition amount	1,203,419,925	1,122,807,248	2,326,227,173
Decrease (contract termination)	(30,552,418)	(167,116,582)	(197,669,000)
Depreciation	(2,959,831,878)	(354,588,746)	(3,314,420,624)
Amount as of 31 December	6,408,911,867	867,339,926	7,276,251,793

(4) The amounts recognized in profit or loss as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)

Division	31 December 2022	31 December 2021
Depreciation of right-of-use assets	6,445,821,687	3,314,420,624
Interest cost on lease liabilities	378,267,334	168,295,320
Expenses related to short-term leases and small assets lease	510,241,048	361,966,235

(5) The Company's total cash outflows due to leases as of 31 December 2022 and 2021 are KRW 6,854 million and KRW 3,581 million, respectively.

(6) The details of lease liabilities for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)

Division	31 December 2022		31 December 2021	
	Minimum lease	Present value of minimum lease	Minimum lease	Present value of minimum lease
Less than 1 year	7,369,438,947	7,057,098,646	3,425,005,384	3,294,661,488
1 to 5 years	6,025,921,444	5,867,172,744	3,769,516,194	3,691,886,230
5 to 10 years	120,236,710	110,784,524	121,745,160	112,222,092
Subtotal	13,515,597,101	13,035,055,914	7,316,266,738	7,098,769,810

(7) The current components of lease liabilities for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)

Division	31 December 2022	31 December 2021
Current liabilities	7,057,098,646	3,294,661,488
Non-current liabilities	5,977,957,268	3,804,108,322
Total	13,035,055,914	7,098,769,810

16. Trade and other receivables

The details of trade and other payables for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Trade payables	196,211,140,403	-	213,463,276,070	-
Payables	60,755,423,119	-	46,754,807,321	-
Accrued expenses	9,462,257,095	-	13,456,543,481	-
Rental deposits	-	-	-	20,000,000
Deposits received	-	2,001,160,000	-	-
Total	266,428,820,617	2,001,160,000	273,674,626,872	20,000,000

17. Other liabilities

(1) The details of other liabilities as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Current	Non-current	Current	Non-current
Advances	5,395,555,618	-	7,673,013,672	-
Withholdings	4,208,672,362	-	2,972,013,025	-
Provisions	1,138,031,947	2,502,515,452	2,136,783,855	1,031,415,452
Long-term employee salary liabilities	-	2,624,806,247	-	3,014,803,029
Total	10,742,259,927	5,127,321,699	12,781,810,552	4,046,218,481

(2) The changes in the provisions as of 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)					
Division	1 January	Setting	De-recognition	Paid	31 December 2022
Provision for sales warrant	1,578,936,322	1,125,699,703	(1,437,110,490)	(354,545,917)	912,979,618
Provision for return	557,847,533	225,052,329	(557,847,533)	-	225,052,329
Provision for restoration	1,031,415,452	1,471,100,000	-	-	2,502,515,452
Total	3,168,199,307	2,821,852,032	(1,994,958,023)	(354,545,917)	3,640,547,399

② 31 December 2021

(Unit: KRW)					
Division	1 January	Setting	De-recognition	Paid	31 December 2021
Provision for sales warrant	3,332,437,307	1,541,176,166	(647,873,599)	(2,646,803,552)	1,578,936,322
Provision for return	244,771,260	6,055,530,653	(5,742,454,380)	-	557,847,533
Provision for restoration	929,455,452	101,960,000	-	-	1,031,415,452
Total	4,506,664,019	7,698,666,819	(6,390,327,979)	(2,646,803,552)	3,168,199,307

The Company counted guarantee expenses to be borne for product sales guarantee as provision for sales guarantee and recognized its equivalent transfer as the selling and administrative expenses. On the other hand, the Company recognizes the amount corresponding to the portion of revenue to be canceled at the time of product return as allowance liability for return and deduction to sales in accordance with the IAS 1115.

18. Capital and capital surplus

(1) The details of capital as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Number of authorized shares	50,000,000	50,000,000
Par value	500	500
Number of shares issued	16,264,300	16,264,300
Capital	8,132,150,000	8,132,150,000

(2) There are no changes in the number of shares outstanding (16,264,300 shares) as of 31 December 2022 and 2021.

(3) The details of capital surplus as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	Division	Division
Paid-in capital in excess of par value	66,560,617,129	66,560,617,129
Other capital surplus	9,782,553,371	9,782,553,371
Total	76,343,170,500	76,343,170,500

19. Other capital items

The details of other capital items as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Gain (loss) on valuation of financial assets at FVOCI	(380,807,731)	(380,807,731)

20. Retained earnings

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Statutory reserves	4,066,075,000	4,066,075,000
Unappropriated retained earnings	856,649,651,358	708,909,597,968
Total	860,715,726,358	712,975,672,968

(2) The changes in the unappropriated retained earnings as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Amount as of 1 January	708,909,597,968	442,857,822,300
Dividends paid	(87,827,220,000)	(21,956,805,000)
Net income	230,607,638,966	294,897,620,146
Remeasurement for defined benefit plans	4,959,634,424	(6,889,039,478)
Amount as of 31 December	856,649,651,358	708,909,597,968

(3) The statements of appropriation of retained earnings for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)				
Division	31 December 2022		31 December 2021	
	Scheduled date of disposition: 23 March 2023		Confirmed date of disposition: 22 March 2022	
I. Unappropriated retained earnings		856,649,651,358		708,909,597,968
Unappropriated retained earnings carried over from the previous year	621,082,377,968		420,901,017,300	
Net income	230,607,638,966		294,897,620,146	
Remeasurement for defined benefit plans	4,959,634,424		(6,889,039,478)	
II. Appropriation of retained earnings		(73,189,350,000)		(87,827,220,000)
Dividends paid	(73,189,350,000)		(87,827,220,000)	
III. Unappropriated retained earnings carried forward (I - II)		783,460,301,358		621,082,377,968

21. Dividends

The details of dividends for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022(*)	31 December 2021
No. of shares to be distributed	16,264,300	16,264,300
Face value per share	500	500
Par dividend	900%	1,080%
Dividend per share	4,500	5,400
Dividends	73,189,350,000	87,827,220,000

(*) It is scheduled to be put on the agenda at the general meeting of shareholders scheduled on 22 March 2022.

22. Earnings per share

(1) Basic earnings per share

① The calculation of basic earnings per share for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW, shares)		
Division	31 December 2022	31 December 2021
Earnings per ordinary share	230,607,638,966	294,897,620,146
Weighted average No. of common shares outstanding	16,264,300	16,264,300
Basic earnings per share	14,179	18,132

② Calculation of weighted average No. of common shares outstanding as of 31 December 2022

Division	Number of shares issued (1)	Number of treasury shares (2)	No. of common shares outstanding (1-2)	Weighting	Weighted average number of common shares outstanding
1 January	16,264,300	-	16,264,300	365 days/365 days	16,264,300

③ Calculation of weighted average No. of common shares outstanding as of 31 December 2021

Division	Number of shares issued (1)	Number of treasury shares (2)	No. of common shares outstanding (1-2)	Weighting	Weighted average number of common shares outstanding
1 January	16,264,300	-	16,264,300	365 days/365 days	16,264,300

(2) Diluted EPS from continuing operations

The Company does not have any dilutive securities as of 31 December 2022 and 2021. Therefore, the diluted earnings per share is the same as the basic earnings per share.

23. Financial revenues and expenses

(1) The details of financial income for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Interest income	11,897,452,840	4,097,621,498

(2) The details of financial expenses for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Interest expenses	378,267,334	168,295,320
Loss on foreign exchange (financial)	1,620,801,785	178,059
Loss on disposal of trade receivables	10,818,201,531	2,780,371,251
Loss on disposal of financial assets at FVPL	-	32,636,103
Total	12,817,270,650	2,981,480,733

24. Other non-operating income and expenses

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Profit on foreign exchange (non-financial)	40,251,489,821	20,279,910,594
Profit on foreign currency conversion (non-financial)	3,309,084,399	406,329,768
Gain on disposal of tangible assets	938,249,894	83,374,772
Miscellaneous income	42,337,110	72,857,920
Total	44,541,161,224	20,842,473,054

(2) The details of other non-operating expenses for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Loss on foreign exchange (non-financial)	47,993,023,382	10,520,346,491
Loss on foreign currency conversion (non-financial)	3,959,780,511	345,621,738
Loss on disposal of tangible assets	11,442	16,934,602
Loss on disposal on intangible assets	162,029,551	93,624,860
Donation	85,856,381	9,957,583
Miscellaneous losses	12,132,506	721,541,272
Total	52,212,833,773	11,708,026,546

25. Sales

(1) The details of sales for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Key geographic markets:		
Domestic	381,815,520,403	465,127,993,967
China	1,044,391,022,127	825,043,499,064
Vietnam	276,016,749,709	415,855,606,590
Taiwan	222,353,097,356	163,128,718,052
Japan	36,796,221,867	26,187,933,597
Others	157,972,752,151	3,501,964,758
Total	2,119,345,363,613	1,898,845,716,028
Main service lines:		
Products	2,096,004,814,994	1,892,600,857,598
Services	20,832,938,355	3,808,946,060
Other sales	2,396,390,012	2,347,518,399
Merchandise	111,220,252	88,393,971
Total	2,119,345,363,613	1,898,845,716,028
When revenue is recognized:		
Implementation to one point	2,118,566,363,613	1,898,004,516,028
Implementation over time	779,000,000	841,200,000
Total	2,119,345,363,613	1,898,845,716,028

(2) Contract balance

The details of contract liabilities arising from contracts with customers for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Contract liabilities	5,369,555,618	6,173,093,982

As of 31 December 2022, there are no contract assets arising from contracts with customers, and contract liabilities of KRW 5,370 million are classified as advance payment accounts for other liabilities. The amount recognized as revenue is KRW 6,173 million of the outstanding contract liabilities of KRW 5,636 million as of 31 December 2021. In addition, the timing of conversion of contract liabilities into revenue as of 31 December 2022 is subject to uncertainty. However, the Company expects that most contract liabilities will be recognized as revenue within one year.

(3) Contract performance costs

The Company recognized costs incurred prior to the conclusion of a contract with a customer as a prepaid expense because it is directly related to the contract and the feasibility and recoverability of the contract are very high. The asset is recognized as cost of sales over the period in which the related sales are generated after the contract is entered into. The changes in the contract performance costs for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
1 January	7,175,451,587	1,250,350,646
Generation	9,449,522,329	8,099,295,953
Decrease	(14,298,210,822)	(2,174,195,012)
31 December	2,326,763,094	7,175,451,587

(4) There are two companies whose sales from a single external customer account for more than 10% of the Company's sales, and their sales for the years ended 31 December 2022 were KRW 1,202,606 million and KRW 451,992 million, and KRW 1,352,588 million and KRW 312,403 million in 2021, respectively.

26. Operating profit

The main items and amounts included in operating profit calculation for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Sales	2,119,345,363,613	1,898,845,716,028
Sales from sales of goods	2,096,004,814,994	1,892,600,857,598
Other sales	23,340,548,619	6,244,858,430
COGS	1,443,672,300,059	1,240,353,258,754
Cost of finished goods sold	1,428,973,942,830	1,237,931,936,455
Other COGS	14,698,357,229	2,421,322,299
Selling and general administrative expenses	366,627,487,034	289,862,890,738
Salary and bonuses	59,402,444,248	52,581,116,981
Severance payments	4,354,156,832	3,022,256,095
Employee benefits	13,957,101,447	10,211,375,316
Travel expenses	1,569,517,853	1,340,683,675
Rent	1,545,734,595	1,152,363,156
Service fees	51,680,599,854	33,051,278,609
Depreciation	10,212,630,478	5,963,989,690
Amortization of intangible assets	2,642,866,529	2,139,003,918
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Ordinary R&D expenses	209,823,950,943	171,347,514,557
Others	11,749,895,042	8,160,006,174
Operating profit	309,045,576,520	368,629,566,536

27. Selling and general administrative expenses

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Salaries	33,672,158,403	24,017,603,602
Bonus	25,730,285,845	28,563,513,379
Severance payments	4,354,156,832	3,022,256,095
Employee benefits	13,957,101,447	10,211,375,316
Travel expenses	1,569,517,853	1,340,683,675
Communication	731,486,452	542,170,409
Consumables	3,012,353,410	1,925,761,010
Taxes and dues	1,147,136,306	725,777,654
Rent	1,545,734,595	1,152,363,156
Service fees	51,680,599,854	33,051,278,609
Depreciation	10,212,630,478	5,963,989,690
Repairs	195,471,591	153,655,700
Insurance	1,002,559,141	946,577,433
Entertainment	1,365,051,207	785,102,151
Advertisement	142,000,000	79,455,425
Meeting	1,682,168	3,284,562
Printing	21,563,506	14,863,016
Transportation	1,135,190,207	1,035,762,117
Samples	1,102,964,662	774,434,084
Training	1,354,350,098	855,384,221
Vehicle maintenance	280,503,596	137,770,706
Gas, water, oil	257,582,698	180,007,686
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Ordinary R&D expenses	209,823,950,943	171,347,514,557
Amortization of intangible assets	2,642,866,529	2,139,003,918
Total	366,627,487,034	289,862,890,738

28. Disclosure by nature of expenses

The details of disclosure by nature of expenses for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Changes in inventories	(281,438,921,671)	(65,852,605,218)
Employee cost	179,404,933,408	159,772,652,318
Depreciation and amortization of intangible assets	28,939,238,682	22,163,059,104
Outsourcing process	1,691,270,770,332	1,298,894,263,313
Process cost	16,211,634,279	(3,070,630,947)
R&D	107,011,982,270	68,735,378,790
Rent	1,545,734,595	1,152,363,156
Service fees	58,388,647,938	37,634,864,071
Transportation	7,107,613,550	6,839,465,247
Travel expenses	3,164,030,477	3,365,900,906
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Samples	1,102,964,662	774,434,084
Others	(2,097,430,642)	(1,086,297,899)
Total	1,810,299,787,093	1,530,216,149,492

(*) It is the sum of the cost of sales and sales and administrative expenses in the income statement.

29. Employee benefits

The Company pays retirement benefits to employees in a lump sum, which are determined according to the wage level and number of years of service upon retirement, and this is classified as a defined benefit plan. Such retirement benefit can be withdrawn before the resignation of the employee as interim settlement when the legal requirements apply, and the number of years of service for calculating severance pay after the interim settlement is newly calculated from the time of settlement.

(1) The details of defined benefit obligations as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Present value of defined benefit liability	68,723,266,014	66,233,664,676
Fair value of plan assets	(87,024,709,511)	(65,613,017,567)
Defined benefit obligations (assets)	(18,301,443,497)	620,647,109

(2) The major estimates used for the actuarial evaluation as of 31 December 2022 and 2021, are as follows.

Division	31 December 2022	31 December 2021
Future wage increase rate	4.95%	4.60%
Discount rate	5.28%	2.83%

The discount rate is calculated based on the Company's credit rating and corporate bond yield similar to the expected payment period of the defined benefit obligation as of 31 December 2022, the future wage increase rate is calculated in consideration of the Company's empirical promotion index and wage increase rate reflecting inflation and wage agreements.

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Defined benefit obligation as of 1 January	66,233,664,676	43,512,383,794
Current service cost	10,609,433,582	7,482,452,487
Interest cost	1,811,298,547	965,490,307
Remeasurement (before tax):		
Demographic assumptions	16,910,107	296,977,113
Financial assumption	(12,591,176,183)	(1,083,296,821)
Experience adjustment, etc.	5,545,037,255	9,706,940,378
Transfer between affiliates	958,453,780	8,195,050,138
Payment of severance payment	(3,860,355,750)	(2,842,332,720)
Defined benefit obligation at the end	68,723,266,014	66,233,664,676

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Plan assets as of 1 January	65,613,017,567	42,749,338,496
Payments of plan assets	24,000,000,000	25,000,000,000
Interest income	1,793,584,253	947,808,505
Plan assets remeasurement (before tax)	(486,175,492)	(167,821,913)
Payment of severance payment form plan assets	(3,859,975,120)	(2,842,054,910)
Others	(35,741,697)	(74,252,611)
Plan assets at the end	87,024,709,511	65,613,017,567

For the defined benefit plan, a reasonable estimate of the employer's contribution expected to be paid in 2023 is KRW 11,675,383,000.

(5) Expenses recognized in the current profit or loss regarding the defined benefit plans as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Current service cost	10,609,433,582	7,482,452,487
Net interest cost	17,714,294	17,681,802
Others	35,741,697	74,252,611
Total	10,662,889,573	7,574,386,900

(6) The details of plan assets as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Short-term financial product, etc.	87,024,709,511	65,613,017,567

(7) Sensitivity analysis

With all other assumptions remaining for the year ended 31 December 2022, if meaningful actuarial assumptions change in reasonable and possible range, the effects to definite benefit liabilities are as follows:

(Unit: KRW)		
Division	Increase	Decrease
Discount rate (1% change)	(4,928,121,971)	5,641,505,447
Expected wage growth rate (1% change)	5,609,220,312	(4,992,536,774)

The sensitivity analysis does not take into account the variance of all cash flows expected to arise from the plan, but provides an approximation of the sensitivity to the assumptions used.

As of 31 December 2022 and 2021, the weighted average durations of defined benefit obligations were 8.2 years and 9.6 years, respectively.

(8) The remeasurement factors for defined benefit plan recognized in other comprehensive income for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Cumulative remeasurement factor as of the beginning of year	11,782,486,406	4,893,446,928
Current change amount	(6,543,053,329)	9,088,442,583
Income tax effect on changes	1,583,418,905	(2,199,403,105)
Cumulative remeasurement factor as of the ending of year	6,822,851,982	11,782,486,406

30. Income tax expenses

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

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Current tax	74,237,581,838	82,493,201,627
Adjustments recognized in 2022 in relation to the tax expense of the previous periods	(1,138,005,637)	(1,297,315,391)
Changes in deferred tax expense (income) relating to the temporary differences	(1,669,710,101)	587,244,322
Tax expense (income) related to items not recognized in profit or loss	(1,583,418,905)	2,199,403,105
Income tax expenses	69,846,447,195	83,982,533,663

(2) The deferred taxes related to items not recognized in profit or loss for the years ended 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Deferred tax:		
Actuarial gains and losses	(1,583,418,905)	2,199,403,105
Income tax expense (income) reflected directly in equity	(1,583,418,905)	2,199,403,105

(3) The relationship between income tax expense and accounting profit during the years ended 31 December 2020 and 2019, is as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Net income before tax	300,454,086,161	378,880,153,809
Applicable tax rate	24.05%	24.77%
Tax burden according to the applicable tax rate	72,262,873,694	93,830,042,297
Adjustments		
Non-taxable income	(19,861,695)	(5,456,559)
Non-deductible expenses	371,719,830	2,121,291,120
Tax credits	(6,336,885,483)	(8,718,470,558)
Adjustments recognized in 2022 in relation to the tax expense of previous periods	(1,138,005,637)	(1,297,315,391)
Changes in unrecognized deferred tax	125,836,642	(1,570,313,500)
Others (effect of change in tax rate, etc.)	4,580,769,844	(377,243,746)
Income tax expenses	69,846,447,195	83,982,533,663
Average effective tax rates	23.25%	22.17%

(4) The changes in deferred tax assets and liabilities for the years ended 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)				
Division	Amount as of 1 January	Reflecting net income	Reflecting other comprehensive income	Amount as of 31 December
Accrued income	(421,444,426)	(126,236,668)	-	(547,681,094)
Net defined benefit obligations	-	(2,286,572,604)	(1,583,418,905)	(3,869,991,509)
Impairment loss on intangible assets	58,946,699	(2,679,396)	-	56,267,303
Loss valuation of inventories	2,419,091,577	6,342,865,878	-	8,761,957,455
Exceeded amortization limit	1,326,680,617	539,573,066	-	1,866,253,683
Impairment loss on tangible assets	58,031,212	(2,637,783)	-	55,393,429
Accrued expenses	3,256,483,522	(998,399,133)	-	2,258,084,389
Prepaid expenses	35,047,840	(16,300,092)	-	18,747,748
Provisions	766,704,232	74,262,217	-	840,966,449
Financial assets at FVOCI	121,000,000	(5,500,000)	-	115,500,000
Long-term employee salary liabilities	729,582,333	(123,252,090)	-	606,330,243
Others	24,624,691	(141,994,389)	-	(117,369,698)
Total	8,374,748,297	3,253,129,006	(1,583,418,905)	10,044,458,398

② 31 December 2021

(Unit: KRW)				
Division	Amount as of 1 January	Reflecting net income	Reflecting other comprehensive income	Amount as of 31 December
Accrued income	(173,275,315)	(248,169,111)	-	(421,444,426)
Net defined benefit obligations	-	(2,199,403,105)	2,199,403,105	-
Impairment loss on intangible assets	58,946,699	-	-	58,946,699
Loss valuation of inventories	5,234,401,497	(2,815,309,920)	-	2,419,091,577
Exceeded amortization limit	542,099,996	784,580,621	-	1,326,680,617
Impairment loss on tangible assets	136,501,555	(78,470,343)	-	58,031,212
Accrued expenses	1,423,519,394	1,832,964,128	-	3,256,483,522
Prepaid expenses	51,712,636	(16,664,796)	-	35,047,840
Provisions	1,090,612,693	(323,908,461)	-	766,704,232
Financial assets at FVPL	(22,515,503)	22,515,503	-	-
Financial assets at FVOCI	121,000,000	-	-	121,000,000
Long-term employee salary liabilities	516,926,924	212,655,409	-	729,582,333
Others	(17,937,957)	42,562,648	-	24,624,691
Total	8,961,992,619	(2,786,647,427)	2,199,403,105	8,374,748,297

(5) The temporary differences between items not recognized as deferred tax assets for the years ended 31 December 2022 and 2021, is as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Investments in subsidiaries	418,177,955	418,177,955
Transfer price (subsidiaries)	807,301,385	807,301,385
Investments in associates	457,587,790	-
	(5,710,230,908)	(5,710,230,908)

As of 31 December 2022, the Company judges that it is unlikely that temporary differences related to investment assets and transfer prices (subsidiaries) will disappear in the foreseeable future.

31. Statement of cash flow

(1) The details of reconciliation of income and expenses during business activities as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Income tax expenses	69,846,447,195	83,982,533,663
Depreciation	21,634,344,740	15,647,330,263
Establishment (reversal) of provision for inventory valuation	27,731,671,511	(11,454,885,479)
(Reversal) establishment of allowance for return of inventories	202,634,052	(178,626,586)
Loss on disposal of inventories	16,041,776,701	21,945,232,603
Establishment (reversal) of provisions for returns	(332,795,204)	313,076,273
Gain on disposal of tangible assets	(938,249,894)	(83,374,772)
Loss on disposal of tangible assets	11,442	16,934,602
Loss on disposal on intangible assets	162,029,551	93,624,860
Amortization of intangible assets	7,304,893,942	6,515,728,841
Severance payments	10,662,889,573	7,574,386,900
Gain on foreign currency translation	(3,309,084,399)	(406,329,768)
Loss on foreign currency translation	5,580,582,296	345,799,797
Interest income	(11,897,450,710)	(4,097,621,498)
Interest expenses	378,267,334	168,295,320
Establishment of provision for sales guarantee (reversal)	(311,410,787)	893,302,567
Loss on disposal of financial assets at FVPL	-	32,636,103
Long-term employee benefits	(309,296,782)	946,441,358
Loss on disposal of trade receivables	10,818,201,531	2,780,371,251
Transfer of provision for restoration	-	60,650,000
Others	250,501	-
Miscellaneous losses	-	19,988,382
Total	153,265,712,593	125,115,494,680

(2) The changes in assets and liabilities during sales as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Trade receivables	17,172,190,608	32,544,111,919
Other receivables	(9,020,666,143)	(4,634,169,544)
Other current assets	(14,833,358,772)	(10,533,369,188)
Inventories	(325,415,003,935)	(76,164,325,756)
Trade payables	(14,186,356,161)	69,299,182,802
Other current liabilities	(1,395,344,634)	1,735,497,721
Other payables	(3,818,544,195)	23,494,209,323
Non-current other payables	2,001,160,000	-
Long-term employee salary liabilities	(80,700,000)	(67,700,000)
Net defined benefit obligations	(23,041,926,850)	(16,805,227,672)
Lease receivables	1,329,235,195	1,305,497,544
Total	(371,289,314,887)	20,173,707,149

(3) The Company has prepared the cash flows based on operating activities on the cash flow statement using the indirect method. The significant transactions that do not involve cash inflows and outflows as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Substitution of tangible assets under construction	49,037,828,713	28,354,079,602
Substitution of intangible assets under construction	12,143,505,078	2,715,051,462
Increase in right-of-use assets due to restoration obligations	1,471,100,000	41,310,000
Increase in payables related to acquisition of tangible assets	11,030,293,113	61,976,432
Increase (decrease) in payables related to acquisition of intangible assets	3,031,688,436	(291,707,838)
Recognition of lease liabilities and licensed assets under the lease agreement	11,991,195,695	2,284,917,173
Liquidity substitution of lease liabilities	3,762,437,158	3,826,939,355
Liquidity substitution of lease receivables	1,359,317,660	1,335,042,797
Liquidity substitution of loans	1,608,015,296	1,677,991,974

(4) Financial activity cash flow

The changes in liabilities arising from financial activities as of 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)				
Division	1 January	Financial activity cash flow	Non-cash transaction	31 December 2022
Dividends payable	-	(87,827,220,000)	87,827,220,000	-
Lease liabilities(current)	3,294,661,488	(5,965,836,823)	9,728,273,981	7,057,098,646
Lease liabilities (non-current)	3,804,108,322	-	2,173,848,946	5,977,957,268

② 31 December 2021

(Unit: KRW)				
Division	1 January	Financial activity cash flow	Non-cash transaction	31 December 2021
Dividends payable	-	(21,956,805,000)	21,956,805,000	-
Lease liabilities(current)	2,718,391,566	(3,051,223,943)	3,627,493,865	3,294,661,488
Lease liabilities (non-current)	5,346,130,504	-	(1,542,022,182)	3,804,108,322

32. Financial instruments with the restricted use

The financial instruments restricted for use as of 31 December 2022, are as follows:

(Unit: KRW)			
Items	Category	31 December 2022	31 December 2021
Long-term other receivables	Checking deposit	2,000,000	2,000,000

33. Insured assets

The details of insured assets of the Company as of 31 December 2022, are as follows:

(Unit: KRW)				
Insurance type	Assets	Carrying amount	Insured amount	Insurance company
Gas accident liability insurance	Buildings and structures	18,173,852,295	1,180,000,000	KB Insurance Co., Ltd.
			6,000,000,000	
Fire insurance	Machinery	28,137,736,217	2,659,000,000	
	Office equipment	8,672,245,609	2,659,000,000	
	Other tangible assets	3,672,000,716	500,000,000	
Total		58,655,834,837	12,998,000,000	

In addition to the above insurance, the Company is also subscribed to workers' compensation insurance and fire liability insurance.

34. Related parties

(1) The details of related parties as of 31 December 2022 and 2021, are as follows:

Type of related parties	31 December 2022	31 December 2021
Subsidiaries	LX Semicon U.S.A., Inc	LX Semicon U.S.A., Inc
	LX Semicon China Co., Ltd.	LX Semicon China Co., Ltd.
	LX Semicon Japan Co., Ltd.	LX Semicon Japan Co., Ltd.
Associates and joint ventures	Advance Power Device Technologies Co. Ltd.	Advance Power Device Technologies Co. Ltd.
	FJ Composite Material Co., Ltd.	FJ Composite Material Co., Ltd.
	Telechips Inc.(*1)	-
Companies exercising significant influence on the Company(*2)	LX Holdings Co., Ltd.	LX Holdings Co., Ltd.
Others	Joint ventures of LX Holdings Co., Ltd.	Joint ventures of LX Holdings Co., Ltd.
	Large corporate group affiliates(*2)	Large corporate group affiliates(*2)

(*1) Acquired a 10.93% ratio in Telechips Inc. as of 31 December 2022.

(*2) As LX Holdings Co., Ltd. is separated from LG Corporate Group based on the Monopoly Regulation and Fair Trade Act on 21 June 2022, the Company is excluded from LG affiliates, which are large corporate groups, and affiliates of LX Holdings Co., Ltd. are equivalent to affiliates of large corporate groups.

(2) The details of specially related parties with the Group for the years ended 31 December 2022 and 2021, are as follows:

① Transactions with related parties after separation of affiliates

(Unit: KRW)			
Division	Name	Details	31 December 2022
Subsidiaries	LX Semicon U.S.A., Inc	Sales expenses	1,921,708,691
	LX Semicon China Co., Ltd.	Sales expenses	7,613,960,200
	LX Semicon Japan Co., Ltd.	Sales expenses	1,829,148,267
Associates and joint ventures	FJ Composite Material Co., Ltd.	Sales expenses	1,520,908,675
Companies exercising significant influence on the Company	LX Holdings Co., Ltd.	Sales expenses	212,401,000
Other large corporate group affiliates	LX Pantos Co., Ltd.	Sales expenses	2,787,090,240

② Transactions with related parties before separation of affiliates

(Unit: KRW)				
Division	Name	Details	31 December 2022 (*1)	31 December 2021
Subsidiaries	LX Semicon U.S.A., Inc	Sales expenses	1,411,768,466	2,104,015,930
	LX Semicon China Co., Ltd.	Sales expenses	6,432,829,642	9,910,563,475
	LX Semicon Japan Co., Ltd.	Sales expenses	442,091,963	-
Associates and joint ventures	FJ Composite Material Co., Ltd.	Sales expenses	64,447,770	2,064,280,000
Others(*1)	LX Hausys Co., Ltd.	Sales expenses	1,379,533,243	42,955,051
		Acquisition of tangible and intangible assets	1,170,054,257	210,644,949
	LX INTERNATIONAL JAPAN LTD.	Sales expenses	4,647,333	-
	LX Pantos Co., Ltd.	Other incomes	-	1,456,540
		Sales expenses	2,648,362,055	5,568,158,144
	LG CNS Co., Ltd.	Sales expenses	2,982,071,802	4,553,117,056
		Acquisition of tangible and intangible assets	1,328,911,400	1,278,460,700
	D&O Co., Ltd.(*2)	Sales expenses	1,530,391,236	792,670,132
		Acquisition of tangible and intangible assets	413,700,000	-
	S&I Corp.(*3)	Sales expenses	721,786,300	148,941,200
		Acquisition of tangible and intangible assets	-	18,924,000
	LG Management Development Institute	Sales expenses	468,762,000	1,345,575,000
	LG Display (China) Co., Ltd.	Sales	11,845,896,102	16,415,502,521
LG Display (Guangzhou) Co., Ltd.	Sales	277,535,172,867	452,334,379,878	

LG Display Vietnam Haiphong Co., Ltd.	Sales	129,005,911,232	355,226,978,520
LG Display Yantai	Sales	21,360,454,279	60,628,628,070
LG Display High-Tech (China)Co., Ltd.	Sales	18,556,438	29,149,667
LG Display (Nanjing) Co., Ltd.	Sales	41,702,811,192	29,575,793,575
LG Display Co., Ltd.	Sales	241,683,107,009	442,477,851,076
	Other incomes	-	175,747,619
	Sales expenses	-	2,550,934,059
LG Electronics USA Inc.	Sales	1,063,817,806	1,774,875,632
LG Electronics Indonesia	Sales	2,110,470,138	-
LG Electronics Co., Ltd.	Sales	6,509,289,131	15,645,978,167
	Other incomes	-	411,450,851
	Sales expenses	3,324,593,936	5,921,428,184
	Acquisition of tangible and intangible assets	95,350,000	43,742,000
LG Innotek Co., Ltd.	Sales	700,000,000	-
	Other incomes	-	829,931
	Sales expenses	24,494,558,720	78,578,605,083
	Acquisition of tangible and intangible assets	-	1,500,000,000
LG U Plus Co., Ltd.	Sales	-	3,800,000
	Sales expenses	108,397,044	144,862,208
Biztech Partners Co., Ltd.	Sales expenses	164,996,000	250,000,000
Hi-Teleservice Co., Ltd.	Sales expenses	302,273	1,614,547
LG Chemicals Co., Ltd.	Acquisition of tangible and intangible assets	(746,875)	164,227,000
HS Ad Co., Ltd.	Sales expenses	-	510,918,000

(*1) Applicable to transactions prior to the Company's exclusion from LG affiliates, a large corporate group.

(*2) S&I Corp. changed its names to D&O Co., Ltd. dated on 23 March 2022. The existing S&I Corp. brand is succeeded and used by S&I atxpert.

(*3) S&I atxpert Co., Ltd. is a newly established corporation through a physical division from S&I Corp. as of 31 December 2021. It changed its names to S&I Corp. dated on 23 March 2022.

(3) The receivables and payables of related parties as of 31 December 2022 and 2021, are as follows:

① 31 December 2022

(Unit: KRW)			
Division	Name	31 December 2022	
		Receivables, etc.	Payables, etc.
Subsidiaries	LX Semicon U.S.A., Inc	-	358,048,951
	LX Semicon China Co., Ltd.	-	1,458,676,311
	LX Semicon Japan Co., Ltd.	-	264,003,933
Associates and joint ventures	FJ Composite Co., Ltd.	-	26,178,448
Other large corporate group affiliates	LX Pantos Co., Ltd.	-	942,232,840

② 31 December 2021

(Unit: KRW)			
Division	Name	31 December 2021	
		Receivables, etc.	Payables, etc.
Subsidiaries	LX Semicon U.S.A., Inc	-	199,436,689
	LX Semicon China Co., Ltd.	-	1,446,839,364
Associates and joint ventures	FJ Composite Co., Ltd.	-	1,854,432,000
Other large corporate group affiliates(*)	LX Pantos Co., Ltd.	-	928,500,869
	LG Display (China) Co., Ltd.	5,604,645,589	-
	LG Display (Guangzhou) Co., Ltd.	5,796,094,580	-
	LG Display (Nanjing) Co., Ltd.	1,518,674,461	-
	LG Display High-Tech(China)Co., Ltd.	11,587,456	-
	LG Display Vietnam	5,069,403,435	-
	LG Display Yantai	8,225,912,949	-
	LG Electronics USA Inc.	439,327,332	-
	LG Display Co., Ltd.	84,582,694,139	116,758,229
	LG Electronics Co., Ltd.	6,046,280,481	224,000
	HS Ad Co., Ltd.	-	4,026,000
	LG Innotek Co., Ltd.	-	9,109,574,607
	LG CNS Co., Ltd.	-	431,090,795
	LG Management Development Institute	-	11,487,300
	Biztech Partners Co., Ltd.	-	22,920,700
	S&I Corp.	-	71,706,580
D&O Co., Ltd.	900,000,000	13,558,585	

(*1) It is the details of receivables and liabilities with LG affiliates, a large corporate group as of 31 December 2021.

(4) The details on major fund transactions with the related parties as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)						
Division	Name	31 December 2022		31 December 2021		
		Dividends paid	Cash contribution, etc.	Dividends paid	Cash contribution	Purchase of investments
Companies exercising significant influence on the Company	LX Holdings Co., Ltd.	29,054,829,600	-	-	-	-
Subsidiaries	LX Semicon Japan Co., Ltd.	-	898,374,000	-	317,112,000	-
Associates	Telechips Inc.	-	19,260,300,000	-	-	-
Others(*)	LG Corp.	-	-	7,263,707,400	-	-
	LG Chemicals Co., Ltd.	-	-	-	-	6,835,773,000
Total		29,054,829,600	20,158,674,000	7,263,707,400	317,112,000	6,835,773,000

(*) The largest shareholder of the Company was changed from LG Co., Ltd. to LX Holdings Co., Ltd., and the LX affiliates have been separated from LG's corporate group as of 31 December 2022 and classified as others.

(5) The details of the compensation for major management as of 31 December 2022 and 2021, are as follows:

(Unit: KRW)		
Division	31 December 2022	31 December 2021
Short-term salaries	8,133,620,830	10,197,880,206
Severance payments	1,508,694,740	735,154,445
Total	9,642,315,570	10,933,034,651

The major management of the Company includes directors (including external directors) who are registered executives and members of the audit committee.

(6) The Company has no security and guarantee detail providing to or provided by special interest parties as of 31 December 2022 and 2021.

35. Commitments and contingencies

(1) The Company is receiving payment and payment guarantee of KRW 557 million from Seoul Guarantee Insurance as of 31 December 2022.

(2) The Company has a credit limit contract with some financial institutions such as Shinhan Bank, and the Company's credit limit details as of 31 December 2022, are as follows:

(Unit: USD)		
Division	Financial institutions	Foreign currency
Bills bought	Shinhan Bank	16,000,000
Bills bought	NH Bank	15,000,000
Bills bought	Mizuho Bank	60,000,000

(3) The Company has an export receivable transfer transaction agreement with the Export-Import Bank and two banks in relation to the collection of trade receivables as below. The limit details of the Company as of 31 December 2022 are as follows:

(Unit: USD)		
Division	Financial institutions	Foreign currency
Factoring	Export-Import Bank	300,000,000
Factoring	BNP Paribas	80,000,000
Factoring	MUFG	220,000,000

(4) The Company has no details of providing collateral for financial assets as of 31 December 2022.

(5) The Company has no ongoing litigation or disputes as of 31 December 2022.

6. Dividends

A. Dividends

The Company, pursuant to its Articles of Incorporation, is distributing dividends by the decisions of the board of directors and resolutions of general meeting of shareholders. In order to enhance shareholder value and expand shareholder return, the Company plans to maintain an appropriate level of dividend policy in the future by using the free cash flow that comprehensively considers investment, cash flow, financial structure, and dividend stability. Moreover, Article 55 and 57 of the Company's Articles of Incorporation provides profit dividend and the prescription of extinction for rights of dividend payment claim.

Article 55 of the Articles of Incorporation [Profit Distribution]

- ① The dividends may be carried out with money or other properties than money.
- ② If the dividend of profit is carried out with shares, the Company may use other types of stocks upon a resolution of the general meeting of shareholders when it issues a number of shares.
- ③ Dividends under paragraph 1 shall be paid to shareholders listed in the shareholder register or registered pledgees as of the end of each settlement period.

Article 57 [Extinctive Prescription of Claims for the Payment of Dividend]

- ① The extinctive prescription of the right to request the payment of dividends shall be completed if it is not exercised for five years.
- ② The dividends resulting from the completion of the extinctive prescription under paragraph 1 shall belong to the Company.

B. Dividends over the recent three business years

(1) Major dividends indexes

Division	Type of share	31 December 2022	31 December 2021	Pre-previous period
Face value per share (KRW)		500	500	500
(Consolidated) net income (KRW million)		233,693	296,424	72,529
(Individual) net income (KRW million)		230,608	294,898	72,291
(Consolidated) earnings per share (KRW)		14,368	18,225	4,459
Total dividends in cash (KRW million)		73,189	87,827	21,957
Total of dividends (KRW million)		-	-	-
(Consolidated) Cash dividend payout ratio (%)		31.3	29.6	30.3
Cash dividend rate (%)	Common shares	5.7	3.4	2.5
	Preferred shares	-	-	-
Share dividend rate (%)	Common shares	-	-	-
	Preferred shares	-	-	-
Dividend in cash per share (KRW)	Common shares	4,500	5,400	1,350
	Preferred shares	-	-	-
Share allocation per share (shares)	Common shares	-	-	-
	Preferred shares	-	-	-

*1) (Consolidated) net profit is the share of consolidated net profit attributable to the owners of the parent, and (consolidated) earnings per share is the basic earnings per common share of the parent's share of consolidated net profit.

*2) (Consolidated) cash dividend payout ratio is the percentage of the total cash dividend amount to the parent interest in consolidated net income.

(2) Past dividend history

(Unit: times, %)

No. of consecutive dividends		Average dividend yield	
Quarterly (intermediate) dividends	Settlement dividend	Last 3 years	Last 5 years
-	12	2.7	2.4

*) The number of consecutive dividends from the 12th to the 23rd period years is a total of 12 times.

7. Financing by Issuance of Securities

7-1. Performance of financing by issuance of securities

[Matters related to issuance of equity securities, etc.]

As of the reporting date, there is no relevant information.

Capital increase (decrease) status

(As of 31 December 2022)

(Unit: KRW, shares)

Date of stock issue (decrease)	Issue (decrease) type	Details of issued (decreased) shares				
		Types	Quantity	Par value per share	Issued (decreased) price per share	Remarks
-	-	-	-	-	-	-
-	-	-	-	-	-	-

[Matters related to issuance of debt securities, etc.]

As of the reporting date, there is no relevant information.

Record on issue of liability securities

(As of 31 December 2022)

(Unit: KRW, %)

Issuer	Type of securities	Method of issue	Date of issue	Total (electronic registration)	Interest rate	Rating (rating institution)	Maturity	Redemption	Undertaking company
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-

Outstanding balance of corporate paper

(As of 31 December 2022)

(Unit: KRW)

Remaining to maturity		Less than 10 days	30-90 days	30-90 days	90-180 days	180 days-1 year	1-2 years	2-3 years	Over 3 years	Total
Outstanding balance	Public offering	-	-	-	-	-	-	-	-	-
	Private offering	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-	-

Outstanding balance of short-term bonds

(As of 31 December 2022)

(Unit: KRW)

Remaining to maturity		Less than 10 days	30-90 days	30-90 days	90-180 days	180 days-1 year	Total	Limit of issue	Remaining limit
Outstanding balance	Public offering	-	-	-	-	-	-	-	-
	Private offering	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-

Outstanding balance of corporate bonds

(As of 31 December 2022)

(Unit: KRW)

Remaining to maturity		Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	Over 10 years	Total
Outstanding balance	Public offering	-	-	-	-	-	-	-	-
	Private offering	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-

Outstanding balance of hybrid securities

(As of 31 December 2022)

(Unit: KRW)

Remaining to maturity		Less than 1 year	1-5 years	5-10 years	10-15 years	15-20 years	20-30 years	Over 30 years	Total
Outstanding balance	Public offering	-	-	-	-	-	-	-	-
	Private offering	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-

Outstanding balance of conditional capital securities

(As of 31 December 2022)

(Unit: KRW)

Remaining to maturity		Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-20 years	20-30 years	Over 30 years	Total
Outstanding balance	Public offering	-	-	-	-	-	-	-	-	-	-
	Private offering	-	-	-	-	-	-	-	-	-	-
	Total	-	-	-	-	-	-	-	-	-	-

7-2. Usage of financing by issuance of securities

As of the reporting date, there is no relevant information.

8. Other Finances

A. Cautions such as reparation of financial statements

(1) If the (consolidated) financial statements are reprepared, the reasons for the reparation, the contents and the impact on the (consolidated) financial statements

As of the reporting date, there is no relevant information.

(2) Merger, division, asset transfer, business transfer

As of the reporting date, there is no relevant information.

B. Establishment of allowance for bad debts

(1) Allowance for bad debts by account item

[As of 31 December 2022]

(Unit: KRW million, %)

Division	Items	Receivables	Allowance for bad debts	Ratio of allowance establishment
31 December 2022	Trade receivables	143,348	-	0.0
	Other receivables	30,339	-	0.0
	Non-current other receivables	15,730	-	0.0
	Total	189,417	-	0.0
31 December 2021	Trade receivables	175,265	-	0.0
	Other receivables	20,460	-	0.0
	Non-current other receivables	12,361	-	0.0
	Total	208,086	-	0.0
31 December 2020	Trade receivables	210,368	-	0.0
	Other receivables	14,493	-	0.0
	Non-current other receivables	13,157	-	0.0
	Total	238,018	-	0.0

*) The consolidated subsidiaries of the Company have no record of establishing allowance for bad debts.

(2) Changes in allowance for bad debts

The changes in the allowance for bad debts from trade receivables in the year are as follows:

[As of 31 December 2022]

(Unit: KRW million)

Division	31 December 2022	31 December 2021	31 December 2020
1. Total allowance for bad debts as of 1 January	-	-	-
2. Net recognition as bad debts(①+②±③)	-	-	-
① Amount processed as bad debts (receivables written off)	-	-	-
② Recollected receivables	-	-	-
③ Other increases/decreases	-	-	-
3. Amount in reflection of allowance for bad debts	-	-	-
4. Total allowance for bad debts as of 31 December	-	-	-

*) The consolidated subsidiaries of the Company have no change of establishing allowance for bad debts.

(3) Policy on establishing the allowance for bad debts over the trade receivables

The assumed bad debt amounts are set to allowances for bad debts in parallel use of the individual analysis method and age analysis for the balances of trade receivables.

- 100% bad debt was established for bonds with more than one year according to the bond age analysis.
- The experience ratio of bad debts is calculated and established on the basis of the accrued bad debts in reality on the average balance of receivables in the past three years.

(4) Outstanding amount of trade receivables by their elapsed duration as of 31 December 2022

[As of 31 December 2022]

(Unit: KRW million)

Division	Elapsed period		Total
	Within 6 months	Over 6 months	
Trade receivables	143,348	-	143,348
Total	143,348	-	143,348
Ratio (%)	100.00	-	100.00

C. Inventories, etc.

(1) Inventories by business division

[As of 31 December 2022]

(Unit: KRW million)

Business sector	Items	31 December 2022	31 December 2021	31 December 2020	Remarks
Semi-conductor	Inventories	482,556	201,118	135,265	-
Total		482,556	201,118	135,265	-
Portion of inventory over gross assets (%) [Total inventories ÷ total assets as of 31 December × 100]		37.4	17.2	18.0	-
Inventory turnover ratio (recollection) [Converted annual sales cost ÷ {(Inventory at the beginning + Inventory as of 31 December) ÷ 2}]		4.2	7.4	6.8	-

(2) Due diligence results on inventories

① Date of due diligence

Due diligence on inventories is carried out twice a year on the basis at the end of June and December.

② Method of due diligence

Examination with samples is carried out for some items with less importance although total quantity shall be examined in principle.

The external auditor shall be present in the due diligence of inventory, take samples and check out the existence of inventories.

③ Status of long-term overstock, etc.

Loss due to obsolescence evaluation of inventories is determined, and the evaluation details of inventories as of 31 December 2022 are as follows:

[As of 31 December 2022]

(Unit: KRW million)

Items	Acquisition cost	Holding amount	Valuation allowance	Balance as of 31 December
Inventories	520,652	520,652	(38,096)	482,556

D. Status on contracts

As of the reporting date, there is no relevant information.

E. Evaluation details of fair value

The carrying amount and fair values of financial assets and financial liabilities including the hierarchy system of fair values are as follow.

(Unit: KRW million)					
Division	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value:					
Trade receivables (*1)	36,817	-	-	-	36,817
Subtotal	36,817	-	-	-	36,817
Financial assets not measured at fair value:					
Cash and cash equivalents	188,365	-	-	-	188,365
Short-term financial	130,501	-	-	-	130,501
Trade receivables	106,531	-	-	-	106,531
Other receivables(*2)	43,850	-	-	-	43,850
Subtotal	469,247	-	-	-	469,247
Total	506,064	-	-	-	506,064
Financial liabilities not measured at fair value:					
Trade payables	196,211	-	-	-	196,211
Other payables(*2,*3)	44,672	-	-	-	44,672
Total	240,883	-	-	-	240,883

(*1) Since the carrying amount is a reasonable approximation of fair value, the fair value hierarchy and measurement method are not included in the disclosure.

(*2) Lease receivables and lease liabilities are excluded.

(*3) Employee-related debts that are not included in financial liabilities are excluded.

IV. Directors' Management Diagnoses and Analytic Opinions

1. Cautions on forecasts

This material contains forecasts about the future.

Any activities, events or phenomena that the Company anticipates and predicts in the future in this business report reflect the Company's views on the events and financial performance at the time of preparing the year's official document. The forecasts are based on a variety of assumptions related to the future business environment, and these assumptions may eventually prove to be inaccurate. These assumptions also include risks, uncertainties, and other factors that can cause significant differences between the estimates and actual results described in the forecasts. Among the factors that can cause this significant difference, factors related to the Company's internal management and external environment and other related factors are included.

The Company are not obligated to disclose corrective reports that amend the information provided to reflect the risks or uncertainties that occur after the time of writing the forecasts. As a result, the Company cannot provide assurance that the Company's expected results or findings in the business report will be realized or that the expected impact the Company anticipates will happen. Please note that the forecasts contained in this report are based on the time of writing this report and that the Company does not intend to revise these risk factors or forecasts.

2. Overview

The board of directors of LX Semicon Co., Ltd. reports opinions on the management diagnosis of directors regarding accounting and business for the 24th business year from 1 January 2019 to 31 December 2019. In order to understand the overall management of the Company, the books and related documents were read, and the financial statements and accompanying statements were carefully reviewed. We have received enough reports on documents that are deemed necessary for management diagnosis, and have reviewed the details of the Company's management by using appropriate methods such as reading documents related to important tasks and closely reviewing the contents.

Despite the fierce market competition environment in 2022, the Company achieved sales of KRW 2,119.3 billion, an increase of approximately 11.6% compared to 2021. This year, we will focus on R&D, our main business, to launch competitive products, and expand our overseas market share through active sales activities to grow into a global company beyond the domestic market.

3. Financial status and operating results

A. Financial status - Summary of statement of financial position (consolidated)

(Unit: KRW million, %)

Category	31 December 2022	31 December 2021	Change	Rate of change(%)
Assets	1,289,619	1,172,531	117,088	10.0
[Current assets]	1,009,649	1,031,063	(21,414)	(2.1)
[Non-current assets]	279,969	141,468	138,501	97.9
Liabilities	339,258	372,199	(32,941)	(8.9)
[Current liabilities]	324,402	363,583	(39,181)	(10.8)
[Non-current liabilities]	14,856	8,616	6,240	72.4
Equity	950,361	800,332	150,029	18.7
[Capital]	8,132	8,132	-	-
[Capital surplus]	76,343	76,343	-	-
[Other capital items]	(782)	15	(797)	(5,313.3)
[Retained earnings]	866,667	715,842	150,825	21.1
Debt-to-equity ratio	35.7	46.5	(10.8%p)	-

(1) Assets

As of 31 December 2022, the total assets increased by KRW 117.1 billion from the previous year to KRW 1,289.6 billion, thanks to increased investments in equity and tangible assets. Among them, current assets account for 78.3% of total assets and non-current assets account for 21.7% of total assets.

(2) Liabilities

As of 31 December 2022, the total liabilities are KRW 339.3 billion, down KRW 32.9 billion from the previous year. Current liabilities amount to KRW 324.4 billion, accounting for 95.6% of total liabilities, mostly composed of trade payables and accounts payable. Non-current liabilities amounted to KRW 14.8 billion, accounting for 4.4% of total liabilities.

(3) Equity

As of 31 December 2022, the total capital is KRW 950.4 billion, an increase of KRW 150 billion from the previous year. This is mainly due to an increase in retained earnings from net income of KRW 233.7 billion and a decrease in retained earnings due to dividend payments of KRW 87.8 billion.

B. Operating performance - Summary income statement (consolidated)

(Unit: KRW million, %)

Category	31 December 2022	31 December 2021	Change	Rate of change(%)
Sales	2,119,345	1,898,846	220,499	11.6
COGS	1,443,672	1,240,353	203,319	16.4
Gross profit	675,673	658,493	17,180	2.6
- SG&A expenses	365,049	288,871	76,178	26.4
Operating profit	310,624	369,622	(58,998)	(16.0)
Net profit excluding income tax expense	303,971	380,676	(76,705)	(20.1)
Income tax expenses	70,278	84,252	(13,974)	(16.6)
Net income	233,693	296,424	(62,731)	(21.2)
Gross margin	31.9	34.7	(2.8%p)	-
Operating margin	14.7	19.5	(4.8%p)	-
Ordinary development expenses to sales	10.0	9.0	1.0%p	-
Valid tax rates	23.1	22.1	1.0%p	-

Sales in 2022 reached KRW 2,119.3 billion, an increase of KRW 220.5 billion compared to the previous year, and the main factor was the increase in mobile DDI sales due to the increase in mobile volume.

Gross profit reached KRW 675.7 billion, an increase of KRW 17.2 billion from the previous year, and SG&A expenses increased by KRW 76.2 billion from the previous year due to an increase in personnel and R&D expenses for business expansion, resulting in operating profit of KRW 310.6 billion, a decrease of KRW 59 billion from the previous year.

C. Business performance by business sector

(Unit: KRW million, %)

Division	Business sector	31 December 2022	31 December 2021	Change	Rate of change(%)
Sales	System IC	2,119,345	1,898,846	220,499	11.6
Operating profit	System IC	310,624	369,622	(58,998)	(16.0)

[System IC Division]

Sales in the System IC division in 2022 were KRW 2,119.3 billion, up 11.6% from the previous year, and operating profit was KRW 310.6 billion, down 16.0% from the previous year.

In the first half of 2022, sales increased significantly due to an increase in DDI unit price due to a prolonged semiconductor supply shortage that has continued since 2021 and an increase in demand for premium products such as high-end LCD and OLED, but in the second half, sales turned to a downward trend due to a drop in production from display panel makers following a decrease in demand from downstream industries.

The Company is striving to expand our market share by strengthening our product lineup, expanding our products in the Chinese market, and conducting preemptive R&D. As a result, SG&A expenses such as labor and R&D expenses increased by approximately 26.4% compared to the previous year, and operating profit decreased by approximately 16.0% compared to the previous year.

D. Key consideration

The Company's sales and purchases are based on USD-based unit price calculation and settlement, so fluctuations in the won-dollar exchange rate are a major factor affecting our business performance.

As wafer price varies greatly depending on the market supply and demand environment, it is necessary to carefully monitor the price fluctuations of wafers.

E. New business

The Company purchased a factory site in Siheung at the end of January 2022 for the heat radiation substrate business and completed the production plant in December. As of the filing date of the disclosure documents, the Company is preparing for plant operation and product production.

For the details of the new business, Please refer to II. Business Activities - 7. Other references - C. Contents and prospects of new business.

4. Liquidity and resource provision and expenditures, etc.

A. Liquidity index

(Unit: KRW million, %)

Category	31 December 2022	31 December 2021	Change	Rate of change(%)
I. Current assets	1,009,649	1,031,063	(21,414)	(2.1)
Cash and cash equivalents	188,365	135,614	52,751	38.9
Deposit to financial institution	130,501	470,000	(339,499)	(72.2)
Trade receivables	143,348	175,265	(31,917)	(18.2)
Inventories	482,556	201,118	281,438	139.9
II. Current liabilities	324,402	363,583	(39,181)	(10.8)
Trade payables	196,211	213,463	(17,252)	(8.1)
Current ratio	311.2	283.6	27.6%p	-

Liquidity risk due to rapid economic fluctuations is not expected to be significant as the Company maintains a stable financial position through non-debt management and adequate liquidity reserve.

As of 31 December 2022, it holds cash and cash equivalents, deposits at financial institutions of KRW 318.9 billion, and trade receivables of KRW 143.3 billion, and it is believed to have adequate liquidity in preparation for the company's capital needs. The Company is preparing for uncertainties such as changes in the financial environment that may affect liquidity in the future. Looking at the liquidity ratio, it remains at a high level of 311.2%, and the Company maintains a stable liquidity ratio while maintaining no-borrowing management.

Since the current ratio is maintained at a high level of 311.2%, it is judged that it can flexibly respond to uncertain financial environments such as rapid changes in the financial environment that may affect liquidity in the future.

B. Fund raising, etc.

As of the submission date of the report, the Company has no borrowing management, not borrowing from financial institutions based on good cash flow. Therefore, it is expected that exposure will be low to the risk of fluctuations, such as interest rates, that may arise from external asset provisions.

C. Funds expenditure

In 2022, about KRW 50 billion was spent on purchasing land and constructing a new factory building for the heat dissipation substrate business, and KRW 26.7 billion was spent on acquiring shares in Telechips.

5. Other matters necessary for investment decision making

A. Material accounting policies and estimates

The Company's financial statements are prepared by applying K-IRFS. For the details of the important accounting policies and estimates, refer to 'III. Financial Matters.

B. Environment and employees, etc.

For environmental sanctions or administrative measures, please refer to XI. Other matters necessary for investor protection - 3. Regulations, etc.

There are no significant employee-related changes, such as major key personnel movements.

C. Regulation of the statutes

For main regulations related to the Company's business, please refer to XI. Other matters necessary for investor protection - 3. Regulations, etc.

D. Derivatives and risk management policies

For derivatives and risk management policies of the Company, refer to II. Business Activities - 5. Risk Management and Derivatives and III. Finances - 3. Notes on Consolidated Financial Statements and 5. Notes on Financial Statements.

V. Audit Opinion, etc.

1. External Audit

A. Name and audit opinion

Business year	Auditor	Audit opinion	Special remarks	Key audit matters
31 December 2022	Anjin Accounting Corp.	Appropriate	Not applicable	Evaluation of inventories
31 December 2021	Anjin Accounting Corp.	Appropriate	Not applicable	Evaluation of inventories
31 December 2020	Anjin Accounting Corp.	Appropriate	Not applicable	Evaluation of inventories

B. Audit service contract (Unit: KRW million, hour(s))

Business year	Auditor	Contents	Audit contracts		Actual performances	
			Remuneration	Hours	Remuneration	Hours
31 December 2022	Anjin Accounting Corp.	Audit for review of quarterly and semi-annual report and separate and consolidated financial statements Audit for the internal accounting control system	460	3,948	460	3,497
31 December 2021	Anjin Accounting Corp.	Audit for review of quarterly and semi-annual report and separate and consolidated financial statements Audit for the internal accounting control system	420	3,818	420	3,575
31 December 2020	Anjin Accounting Corp.	Audit for review of quarterly and semi-annual report and separate and consolidated financial statements Audit for the internal accounting control system	379	3,443	379	3,644

C. Non-audit service contracts with auditor (Unit: KRW million)

Business year	Contract date	Services	Period	Remuneration	Remarks
31 December 2022	17 March 2022	Implementation of agreed procedures for verification of financial information written in the application for independent management accreditation	One week from the date of contract	0	- Financial information target period: 2021 - Service fee is included in the contract price for 2020
31 December 2021	28 December 2021	Implementation of agreed procedures for verification of financial information written in the application for independent management accreditation	One week from the date of contract	3	- Financial information period: 2019~2020
31 December 2020	-	-	-	-	-

D. Result of the internal audit organization's discussion with the accounting auditor on matters that may have a significant influence on the judgment of stakeholders in the financial statements

Division	Date	Attendees	Method	Details of major discussion
1	27 January 2022	Company: 3 members of the audit committee Auditor: Executive director	Face to face	Report of the end-of-year audit results, and operation evaluation results internal accounting management system
2	31 May 2022	Company: 3 members of the audit committee Auditor: Executive director	In writing	Annual audit plan report, key audit items
3	31 December 2022	Company: 3 members of the audit committee Auditor: Executive director	In writing	Report on year-end audit plan, report on key audit matters
4	26 January 2023	Company: 3 members of the audit committee Auditor: Executive director	Face to face	Report of the end-of-year audit results, and operation evaluation results internal accounting management system

E. Auditor's opinion on subsidiaries

There is no subsidiary which has received any audit opinion other than appropriate from auditor as of 31 December 2022.

F. Change of auditors

The Company has been selected as a corporation subject to periodic designation from the 2020 business year, and has been subject to Article 11-1 and 11-2 of the Act on External Audit of Stock Companies, Article 17 of the Enforcement Decree of the Act on External Audit of Stock Companies, and in accordance with Articles 10 and 15-1 of its enforcement. The Company was notified by the Financial Supervisory Service that an external auditor was designated as Anjin Accounting Firm and reported the above to the audit committee and the 21st general meeting of shareholders.

For reference, the designated audit period is from 2020 to the 2022 business year.

As the designated audit period expired in 2022, the Audit Committee appointed Samil Accountings as the 25th auditor.

2. Internal Accounting Management System

A. Operation of internal accounting management system

(1) Report by the internal accounting manager

Business year	Reporting date	Details	Remarks
31 Dec. 2022	26 Jan. 2022	The Company's internal accounting control system as of 31 December 2022 is thought to be effectively designed and operated in terms of importance, considering the standard regulations on the internal accounting control system.	-
31 Dec. 2021	27 Jan. 2022	The Company's internal accounting control system as of 31 December 2021 is thought to be effectively designed and operated in terms of importance, considering the standard regulations on the internal accounting control system.	-
31 Dec. 2020	27 Jan. 2021	The Company's internal accounting control system as of 31 December 2020 is thought to be effectively designed and operated in terms of importance, considering the standard regulations on the internal accounting control system.	-

(2) Overall opinions represented in the audit report by auditor

Business year	Auditor	Details	Points to note
31 Dec. 2022	Anjin Accounting Corp.	The Company's internal accounting control system as of 31 December 2022 is thought to be effectively designed and operated in terms of importance, considering the standard regulations on the internal accounting control system.	Not applicable
31 Dec. 2021	Anjin Accounting Corp.	The Company's internal accounting control system as of 31 December 2021 is thought to be effectively designed and operated in terms of importance, considering the standard regulations on the internal accounting control system.	Not applicable
31 Dec. 2020	Anjin Accounting Corp.	The Company's internal accounting control system as of 31 December 2020 is thought to be effectively designed and operated in terms of importance, considering the standard regulations on the internal accounting control system.	Not applicable

VI. Company's Organizations such as the Board of Directors

1. Board of Directors

A. Overview of the structure of board of directors

As of the day this report is prepared, the board of directors comprises of 2 full time directors, 1 uncategorized non-executive director and 3 external directors. executive director and 3 external directors. Our representative director Son Bo-Ik also takes charge of the chairman of the board of directors and he was elected as chairman in accordance with Article 5 of the Board of Directors Regulations. With regard to the history and roles of each director, please refer to VIII. Executives and Employees - 1. Executives and Employees.

The Audit Committee, Finance Committee, and ESG Committee have been established and are in operation in the board of directors.

The ESG Committee has been newly established on 21 July 2022 to strengthen ESG management for the environment, society, and governance, and to realize sustainable management through improvement of internal transaction transparency and adequacy.

Name of committee	Configuration	Name of director	Purpose and authority
Audit committee	3 external directors	Wi Kyung-Woo (chairperson), Yoon Il-Goo, Shin Yeong-Soo	- Purpose To perform the internal monitoring function for the management and to enhance the transparency of accounting information - Authority Supervision authority, including investigation of the company's business and property status, and request for business reports to the management
Finance Committee	2 internal directors	Son Bo-Ik (chairperson), Choi Sung-Kwan	- Purpose To Improve management efficiency through prompt decision-making on matters entrusted by the board of directors, matters requiring prior review for discussion by the board of directors, and other daily financial matters - Authority Deliberation and resolution of matters entrusted to the Finance Committee by the Board of Directors and other daily management matters
ESG Committee	1 internal directors 3 external directors	Son Bo-Ik, Wi Kyung-Woo (chairperson), Yoon Il-Goo, Shin Yeong-Soo	- Purpose To realize sustainable growth by realizing ESG management for the environment, society, and governance and strengthening the company's internal control on internal transactions - Authority Deliberation, resolution and supervision of overall internal transactions, including ESG management and transactions between affiliates

External directors and their changes

(Unit: person(s))

No. of directors	No. of external directors	Changes in external directors		
		Appointment	Dismissal	Early retirement
6	3	-	-	-

*) Wi Kyung-Woo, an external director and a member of the audit committee, was re-appointed at the general meeting of shareholders in 2022 and has a term of three years.

B. Major resolutions

No.	Date held	Agenda	(Not) Approved	Name of directors						
				Son Bo-Ik (Attendance rate: 100%)	Choi Sung-Kwan (Attendance rate: 100%)	Yoon Il-Go (Attendance rate: 100%)	Shin Yeong-Soo (Attendance rate: 100%)	Wi Kyung-Woo (Attendance rate: 90%)	Roh Jin-Seo (Attendance rate: 100%)	
				Agreed or not						
1	27 Jan. 2022	Report	1. Report in the business performance and annual performance for the 4Q, 2021 2. Report on the operation status of the internal accounting management system 3. Report on the operational status of the compliance control system	Report	-	-	-	-	-	-
		Approved	1. Approval of the 23rd financial statements and business report 2. Approval of appointment of compliance officers 3. Approval of occupational safety and health plans 4. Approval of the purchase of factory site in accordance with the promotion of the heat dissipation substrate business	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
2	18 Feb. 2022	Report	1. Report on the evaluation result of the operation status of the internal accounting management system	Report	-	-	-	-	-	-
		Approved	1. Approval of convocation and purpose of the 23rd regular general meeting of shareholders 2. Approval of revision of internal accounting management regulations	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
3	22 Mar. 2022	Approved	1. Approval of executive officer personnel 2. Approval of amendments to executive officer personnel management regulations 3. Approval of adjustment of the financial limit for the role of executive officers 4. Approval of payment of performance incentives for executive officers 5. Approval of executive remuneration execution	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
4	22 Apr. 2022	Report	1. Report on business performance in the 1Q, 2022	Report	-	-	-	-	-	-
5	17 May 2022	Approved	1. Approval of investment by other corporations	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
6	21 Jul. 2022	Report	1. Relocation of Japanese branch office 2. Report on business performance in the 2Q, 2022	Report	-	-	-	-	-	-
		Approved	1. Approval of self-transaction with affiliates, etc. (*) 2. Approval of the establishment of the ESG Committee	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
7	17 Aug. 2022	Approved	1. Convocation of an extraordinary general meeting of shareholders and Approval of the purpose of the meeting 2. Approval of the base date and the period for closing the shareholder register	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
8	27 Oct. 2022	Report	1. Report on business performance in the 3Q, 2022	Report	-	-	-	-	-	-
		Approved	1. Approval of KOSDAQ delisting and KOSPI transfer	Approved	Agreed	Agreed	Agreed	Agreed	Non-attendance	Agreed
9	07 Nov. 2022	Report	1. Report on results of the 1st ESG Committee 2. Report on the current status of recruitment of special service executives in 2022	Report	-	-	-	-	-	-
		Approved	1. Approval of the 2023 business plan	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed
			2. Approval of self-transaction with affiliates, etc. (**)	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	-
			3. Approval of the conclusion of the LX trademark usage contract (**)	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	-
		4. Approval of executive officer personnel	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	Agreed	
10	06 Dec. 2022	Report	1. Report on results of the 2nd ESG Committee	Report	-	-	-	-	-	-
		Approved	1. Approval of self-transaction with affiliates, etc. (***)	Approved	Agreed	Agreed	Agreed	Agreed	Agreed	-

*1) Wi Kyung-Woo, an external director and a member of the audit committee, was re-appointed at the 23rd general meeting of shareholders and has a term of three years.

*2) An external director, Wi Kyung-Woo was absent from the board meeting held on 27 October 2022 due to personal circumstances (family consideration).

(*) Approval No. 1: Restriction on voting rights of director Roh Jin-Seo

***) Approval No. 2, 3: Restriction on voting rights of director Roh Jin-Seo

****) Approval No. 1: Restriction on voting rights of director Roh Jin-Seo

C. Committee within the BOD

(1) Composition of committee within the BOD

Name of committee	Configuration	Name of director	Purpose and authority
Finance Committee	2 internal directors	Son Bo-Ik (chairperson), Choi Sung-Kwan	- Purpose To Improve management efficiency through prompt decision-making on matters entrusted by the board of directors, matters requiring prior review for discussion by the board of directors, and other daily financial matters - Authority Deliberation and resolution of matters entrusted to the Finance Committee by the Board of Directors and other daily management matters
ESG Committee	1 internal directors 3 external directors	Son Bo-Ik, Wi Kyung-Woo (chairperson), Yoon Il-Goo, Shin Yeong-Soo	- Purpose To realize sustainable growth by realizing ESG management for the environment, society, and governance and strengthening the company's internal control on internal transactions - Authority Deliberation, resolution and supervision of overall internal transactions, including ESG management and transactions between affiliates

*1) The audit committee was excluded according to the standards for preparing the corporate disclosure form.

(2) Activities of the Committee within the BOD

- Finance Committee

No.	Date held	Agenda	(Not) Approved	Name of directors	
				Son Bo-Ik (Attendance rate: 100%)	Choi Sung-Kwan (Attendance rate: 100%)
				Agreed or not	
1	11 Feb. 2022	1. Approval of name change of branch in India	Approved	Agreed	Agreed
2	11 May 2022	1. Relocation of Japanese branch office	Approved	Agreed	Agreed

- ESG Committee

No.	Date held	Agenda	(Not) Approved	Name of directors				
				Son Bo-Ik (Attendance rate: 100%)	Choi Sung-Kwan (Attendance rate: 100%)	Yoon Il-Go (Attendance rate: 100%)	Shin Yeong-Soo (Attendance rate: 100%)	
				Agreed or not				
1	07 Nov. 2022	Report	1. Report on ESG management progress and plan	-	-	-	-	
		Approved	Approval of the appointment of the chairperson of the ESG Committee Approval of limit on total amount of transactions with related parties Approval of self-transaction with affiliates, etc. Approval of the conclusion of the LX trademark usage contract	Approved	Agreed	Agreed	Agreed	Agreed
2	06 Dec. 2022	Approved	1. Approval of self-transaction with affiliates, etc.	Approved	Agreed	Agreed	Agreed	Agreed

D. Independence of directors

The directors are elected at the general meeting of shareholders, and the candidates for the directors to be elected at the general meeting of shareholders are appointed by the board of directors meeting and submitted to the general meeting shareholders as an agenda. If there is a shareholder's proposal in accordance with the relevant laws regarding the appointment of directors, the board of directors submits it as an agenda to the general meeting of shareholders within the legal scope.

As the total assets as of 31 December 2022 are less than KRW 2 trillion, the Company has no obligation to establish a recommendation committee for external directors. In order to secure fairness and obligation to establish a recommendation committee for external directors.

The six directors elected in accordance with these procedures as of 31 December 2022 are as follows:

Job title	Name	Background of appointment	Recomm ended by	Field of activity (business in charge)	Deal with the Company	Relationship with the largest or major shareholders	Term of office	Consecutive term (No. of consecutive terms)
Internal director	Son Bok-ik	He served as the head of the SIC Center at LG Electronics, as the leading authority in the field of system semiconductors. Based on his abundant experience and competence, he was appointed as the CEO of LX Semicon from 2017 and has excellent capabilities in the overall operation of the Company, such as continuing the Company's growth. Therefore, he was appointed as the internal director.	Board of directors	CEO, board chairman	N/A	Registered executive of a subsidiary (LX Semicon)	3 yrs.	Reappointed (1)
Internal director	Choi Sung-Kwan	Since he was appointed CFO in 2018, he has demonstrated excellent capabilities in the overall operation of the Company. He has also made a lot of contributions to the profit creation of the Company and shareholders even in the rapidly changing internal and external economic conditions, therefore, he was appointed as the executive director.	Board of directors	Business for overall management		Registered executive of a subsidiary (LX Semicon)	3 yrs.	Reappointed (1)
Other non-executive director	Roh Jin-Seo	He was appointed as other non-executive director since he has long-standing management and planning experience at LG and LG Electronics, and based on sufficient experience and knowledge in related fields and experience in justice management, he is expected to contribute to development of the Company through his stable performance of his work..	Board of directors	Business for overall management		Registered executive of the largest shareholder (LX Holdings)	3 yrs.	-
External director	Wi Kyung-Woo	He is currently a professor at the department of business administration at Sookmyung Women's Uni., and is expected to contribute to the Company's development by providing advice on overall management and a lot of experience from the perspective of a financial expert.	Board of directors	Business for overall management, Chairman of the audit committee		Not applicable	3 yrs.	Reappointed (1)
External director	Yoon Il-Go	He is currently working in the department of electronic engineering at Yonsei university, and because of his expertise in the IT industry, he is expected to be able to appropriately serve as an outside director, such as reinforcing decision-making expertise and preparing for the future of LX Semicon.	Board of directors	Business for overall management, audit committee member		Not applicable	3 yrs.	Reappointed (1)
External director	Shin Yeong-Soo	He is a PhD in electronic engineering at Seoul National Uni., and is currently serving as a professor in the department of electronic engineering at KAIST. He was appointed as an outside director because he was judged to be able to contribute to the Company's business development based on his knowledge and experience in the semiconductor business field.	Board of directors	Business for overall management, audit committee member		Not applicable	3 yrs.	Reappointed (1)

*) Wi Kyung-Woo, an external director and a member of the audit committee, was re-appointed at the 23rd general meeting of shareholders and has a term of three years.

■ Authorities of the board of directors

- 1) The board of directors decides important corporate issues pursuant to Chapter 5 of the articles of incorporation.
- 2) The board of directors shall review and decide the following issues pursuant to Article 393-2 of the Commercial Act:
 - Proposal of issues requiring the approval of the general meeting of shareholders
 - Appointment and dismissal of the CEO
 - Establishment of the committee and the appointment and dismissal of its members
 - Matters determined by the articles of association

E. Professionalism of external directors

(1) Job performance support organizations for external directors

- CFO finance/IR team
- Main tasks: Support for the operation of the board of directors and the performance of duties of external directors
- Team staff: 3 people

Department	No. of staff	Job title (Service years)	Work period	Major activities
Financial/IR team	3	Senior manager (1 year) Staff (4 years) Staff (2 years)	Average 2 years	Pre-explanation of the board agenda for external directors Perform tasks such as support for requests necessary for the performance of external director duties Establishment of external director workshops and seminar training schedules

*) The number of years of service is calculated based on the number of years of service at the Company.

(2) Training for external directors

- Training implementation for external directors

Date	Organizer	Attendees	Reason for absence	Details
17.04.2019	LG Management Development Institute Co., Ltd.	Wi Kyung-Woo	Education for new external directors	Activities of the board of directors and major items related to company management
10.05.2019	Financial, IR and business management team	Wi Kyung-Woo	Education for new external directors	Major items related to company management
22.08.2019	Financial, IR and lead product planning team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Company's main product presentation

- Workshop implementation of external directors

Date	Organizer	Attendees	Reason for absence	Details
11.02.2020	Finance, Accounting management and Integrity management team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Internal audit work plan Matters concerning the independence of external auditors
06.03.2020	Finance, Accounting management and Integrity management team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Evaluation results of the operation status of the internal accounting management system Evaluation result of the internal accounting management system
03.06.2020	Finance, Accounting management and Integrity management team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Operation schedule of the internal accounting management system, evaluation plan of the internal accounting management system, and support of the audit committee in 2020
26.11.2020	Samil Accountings (external training)	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	The role and responsibility of the audit committee due to the contents of changes and responses to the advancement of the internal accounting management system and the expansion of the internal accounting management system.
27.01.2021	Finance, Accounting management and Integrity management team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Report on internal audit department business performance and plan; External audit progress and key audit items
26.02.2021	Finance, Accounting management and Integrity management team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Evaluation result of the internal accounting management system Evaluation of internal monitoring system operation status Audit report of audit committee
11.05.2021	Finance, Accounting management and Management improvement team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Operation schedule of the internal accounting management system, evaluation plan of the internal accounting management system, and support of the audit committee in 2021
22.10.2021	Finance, Accounting management and Management improvement team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Report on internal accounting management system design evaluation results and internal audit department performance
22.10.2021	Samil Accountings (external training)	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Review of major issues on internal accounting management system operation status and internal accounting management system certification trend
27.01.2022	Finance/IR, Accounting management and Management improvement team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Report on internal audit department business performance and plan; External audit progress and key audit items
18.02.2022	Finance/IR, Accounting management and Management improvement team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Evaluation result of the internal accounting management system Evaluation of internal monitoring system operation status Audit report of audit committee
17.08.2022	Finance/IR, Accounting management and Management improvement team	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Inspection plan of the internal accounting control system operation status, operation plan of 2022 internal accounting management system, performance report of internal audit department, and result report of evaluation on internal accounting management system design
06.12.2022	Samil Accountings (external training)	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Roles of the Audit Committee for fraud prevention, compliance control, and the responsibilities of external directors

2. Audit System

A. Audit committee

(1) Composition of the audit committee and inclusion of external directors

Name	External director or not	Career Information	Accounting and financial experts		
			Yes or no	Type of expert	Related careers
Wi Kyung-Woo	Yes	BA in Economics, SNU MA in Business Administration and PhD Business Administration, UCLA Prof. of Business Administration, Sookmyung Women's Uni. (1997~present) President of the Korean Financial Association (2021~present) External director of Mirae Asset Life Insurance (2020~present)	Yes	Accounting and finance degree holders	BA in Economics, SNU MA in Business Administration and PhD Business Administration, UCLA (Current) Prof. of Business Administration, Sookmyung Women's Uni. (1997~present) President of the Korean Financial Association (2021~present) External director of Mirae Asset Life Insurance (2020~present)
Yoon Il-Go	Yes	BA in Electrical and Electronic Engineering, Yonsei Uni. MA and PhD in Electrical and Computer Engineering, Georgia Tech, USA Georgia Tech Microelectronics Research Center Research Fellow, USA(1997~1999) Senior Researcher, Source Technology Research Division, Electronics and Telecommunications Research Institute (1999~2000) Songdo Campus Coordination Team Leader (2009~2010), Prof. of Electrical and Electronic Engineering, Yonsei Uni. College of Engineering (2010~present) Dean of International Engineering College, Yonsei Uni.(2010~2012), Member of the Internationalization Advisory Committee directly under the President of Yonsei Uni. (2012~2014), Vice-chairman of Industry-Academic Center, Yonsei Uni. (2012~present), Vice president of Yonsei Uni. Planning Office (2016~present) Dean, Dept. of Electrical and Electronic Engineering, Yonsei Uni. (2022~present) Director, BIO-IT Microfabrication Center, Yonsei Uni. (2022~present)	-	-	-
Shin Yeong-Soo	Yes	BA, MA, and PhD in Electronic Engineering, SNU Research Staff Member, IBM T. J. Watson Research Center, Yorktown Heights, NY, USA (2001~2004), Advisory Prof. of LG Electronics Future Technology Forum (2011~2014), Prof. of KAIST Electrical and Electronic Engineering (2004~present) KAIST ICT chair Professor (2021~present) IEEE Fellow (2017~present)	-	-	-

*) Wi Kyung-Woo, an external director and a member of the audit committee, was re-appointed at the 23rd general meeting of shareholders and has a term of three years.

(2) Independence of the members of the audit committee

The three members of the audit committee (three persons) are all external directors who do not have any reasons for disqualification in accordance with the Commercial Act. They are maintaining their independence and the appointment of the members has been made after a thoroughly review by the board of directors and the final approval by the general meeting of shareholders.

The Company is complying with the procedures set forth in the Commercial Act and other relevant laws. Also, the organization, authority, and the scope of works are clearly stated in the relevant rules in order to carry out the auditory works.

Main contents of election criteria	Satisfied the selection criteria	Related laws
Consisting of three directors	Satisfied (3 people)	Article 415-2 (2) of the Commercial Act
Two thirds or more of external directors as members	Satisfied (all are external directors)	
One or more members as an accounting or financial expert	Satisfied (Wi Kyung-Woo 1 person)	Article 542-11 (2) of the Commercial Act
Independent director as the representative of the audit committee	Satisfied	
Other disqualification requirements (related parties with the largest shareholder)	Satisfied (not applicable)	Article 542-11 (3) of the Commercial Act

Audit committee	Background of appointment	Recommended by	Deal with the Company	Relationship with the largest or major shareholders
Wi Kyung-Woo	Appointed as a qualified financial and accounting expert	Board of directors	Not applicable	Not applicable
Yoon Il-Go	Appointed as a semiconductor expert, judged as the right person	Board of directors	Not applicable	Not applicable
Shin Yeong-Soo	Appointed as a semiconductor expert, judged as the right person	Board of directors	Not applicable	Not applicable

(3) Activities of the audit committee

No.	Date held	Agenda	Approved or not	External director			Remarks
				Wi Kyung-Woo (Attendance rate: 80%)	Yoon Il-Go (Attendance rate: 100%)	Shin Yeong-Soo (Attendance rate: 100%)	
1	27.01.2022	Report	Report	-	-	-	-
		Approved	Approved	Agreed	Agreed	Agreed	-
2	18.02.2022	Approved	Approved	Agreed	Agreed	Agreed	-
3	22.04.2022	Report	Report	-	-	-	-
4	21.07.2022	Report	Report	-	-	-	-
5	2022.10.27	Report	Report	Non-attendance	-	-	-

(4) Training implementation for the Audit Committee

Date	Organizer	Attendees	Reason for absence	Details
26.11.2020	Samil PwC	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	The role and responsibility of the audit committee due to the contents of changes and responses to the advancement of the internal accounting management system and the expansion of the internal accounting management system.
22.10.2021	Samil PwC	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Review of major issues on internal accounting management system operation status and internal accounting management system certification trend
06.12.2022	Samil PwC	Wi Kyung-Woo, Yoon Il-Goo, Shin Yeong-Soo	-	Roles of the Audit Committee for fraud prevention, compliance control, and the responsibilities of external directors

(5) Status of support organizations for the Audit Committee

Dept. (team) name	No. of employees (persons)	Job title (Service years)	Major activities
Financial/IR team	3	2 senior managers, 2 staff (Average 2 years)	Support for the operation and job performance of the audit committee and Establishment of the audit committee workshops and seminar training schedules
Management improvement team	2	2 senior managers (average 3.3 years)	Support for evaluation of internal accounting management system, support for exercise of audit authority

*) The number of years of service is calculated based on the number of years of service at the Company.

B. Compliance officer

(1) Personal information of compliance officers, etc. (including major experience)

Name	Date of Birth	Major career	Date of appointment
Shin Dong-Hyup	October 1990	<ul style="list-style-type: none"> - (BS) Electrical and Electronic Engineering, Yonsei Uni. - (MA) Laws, Graduate School of Law, Hankuk University of Foreign Studies - Lawyer (Korea) - Attorney at Jungburo Law Firm (Limited) - Legal affair team in LX Semicon Co., Ltd. 	27 January 2022

*) The compliance officer Shin Dong-Hyup, is a lawyer, and has met the compliance control standards and requirements of a Compliance Officer pursuant to Clause 5 of Article 542-13 of the Commercial Act.

(2) Major activities and results of the compliance officer

As a result of evaluating the effectiveness of our compliance control standards and checking compliance with them, our compliance control standards have been created and adhered to in accordance with all laws and regulations and control standards for compliance.

Checking on	Details	Results
Always	Ensure that matters specified by the Commercial Act are stipulated in the compliance control standards	Details compliance control standards - Appropriately established in accordance with the requirements of the Commercial Act and standard compliance control criteria.
	Ensure that compliance control systems, procedures, instruments, training and compliance support matters are effectively established	Evaluation and management system of legal risks - Formalizing legal risks and preparing detailed check items by type in progress
		Independent business performance system of compliance support officer - Compliance officers are appointed by the board of directors, and their tenure is guaranteed.
		Sanctions system for violations - Relevant contents are appropriately reflected in the employment rules and disciplinary regulations.
Ensure that the categorization of risky actions, compliance check, matters relating to the compliance officer are effectively implemented	Compliance check and reporting system - Relevant contents are appropriately reflected in the employment rules and disciplinary regulations.	
		Compliance check and reporting system - Preparing to carry out the regular annual compliance check and prepare and operate a process to report to the board of directors.

(3) Status of support organizations for the compliance officer

Dept. (team)	No. of	Job title	Major activities
Legal affairs	5	1 senior manager, 4 junior	Important matters related to the

3. General Meeting of Shareholders, etc.

A. Voting system

(1) Status of voting system

(As of 31 December 2022)

Type of voting system	Concentrated voting system	Written voting system	Electronic voting system
Introduction	Excluded	Not introduced	Introduced
Implementation	-	-	31 December 2020 regular general meeting of shareholders The first extraordinary general meeting of shareholders in 2021 31 December 2021 regular general meeting of shareholders 2022 extraordinary general meeting of shareholders

*1) The Company implements a voting system by proxy, and the methods of delegation include direct issuance of a written power of attorney, post or fax, posting on the Internet website, etc., and sending it by e-mail.

*2) In accordance with Article 382-2 of the Commercial Act, shareholders who own 3% of the total number of issued stocks may request that the directors be appointed by the intensive voting method. The Company does not stipulate matters concerning the written voting system in the articles of incorporation, and the electronic voting system can be implemented by the resolution of the board of directors. It was approved for the implementation of the electronic voting system by the resolution of the first board of directors, which was held on 27 January 2021.

(2) Exercise of the right of the minority shareholders

During the disclosure period, there is no exercise of minority shareholder rights.

(3) Competition over management right

During the disclosure period, competition for management rights is not applicable.

B. Voting rights

(1) Status of voting rights

(As of 31 December 2022)

(Unit: shares)

Division	Type of share	No. of shares	Remarks
Total number of shares issued (A)	Common shares	16,264,300	-
	Preferred shares	-	-
Number of shares without voting rights (B)	Common shares	-	-
	Preferred shares	-	-
Number of shares with restricted voting rights based on the Articles of Association laws (C) Common shares		-	-
	Preferred shares	-	-
Number of shares with restricted voting rights based on other laws (D)	Common shares	-	-
	Preferred shares	-	-
Number of shares with resurrected voting rights (E)	Common shares	-	-
	Preferred shares	-	-
Number of shares with voting rights (F = A - B - C - D + E)	Common shares	16,264,300	-
	Preferred shares	-	-

(2) Operations for shares

Division	Details
Preemptive rights based on the Articles of Association	<p>① Each shareholder shall be entitled to the allotment of new shares in proportion to the number of shares which he/she holds.</p> <p>② Despite clause 1, the Company may distribute new shares in the event of the following.</p> <ol style="list-style-type: none"> 1. When the Company issues new shares via the general capital increase by public offering based on their solution of the board of directors according to Article 165 6 of the 「Act on Capital Market and Financial Investment」 2. When the Company issues new shares via stock option according to Article 542-3 of the 「Commercial Act」 3. Primary distribution to the members of the Employee Stock Ownership Association within 20% of the total number of shares issued 4. When necessary to achieve the management goals such as the introduction of new technology and improvement of the financial structure according to Article 418-2 of the Commercial Act 5. In the case of collecting new shares or having the acquirers take over the shares to be listed in the security market or KOSDAQ 6. When the Company issues new shares for foreigners' investment based on the reasons of management according to the Foreigners Investment Promotion Act 7. When issuing new shares according to the issuance of depository receipts (DR) within 50% of the total number of shares issued <p>③ The handling of odd lots generated from the allocation of shares and new shares based on the abandonment or loss of preemptive rights shall be Decided based on the resolution of the board of directors.</p> <p>④ Pursuant to Claus 2, in the event one other than a shareholder assigns a new stock, he/she shall notify the shareholder at least two weeks prior to the date of payment the provisions prescribed in Sections 1,2 and 2(2), 3 and 4 of Article 416 of the Commercial Act.</p>
Settlement date	31 December
Regular general meeting of shareholders	Within three months after the closing of each business year
Period closing the shareholders' list	1 January ~ 7 January, every year (the closing date of the shareholders' list: 31 December, every year)
Type of share certificates	1 share, 5 share, 10 share, 50 share, 100 share, 500 share, 1000 share, and 10,000 share certificates (8 types)
Transfer agent	The Korea Securities Depository / Busan International Finance Center (BIFC), 40, Munhyeon Geumyung Road, Nam gu, Busan, Korea / (Tel) +82 51 519 1500
Public notices	The Company's public announcement is posted at its website (www.lxsemicon.com). When network glitches or other unavoidable factors prevent the posting at its Website, the Company makes notices at the Maeil Economic Daily published in Seoul.

(3) Summary of minutes of general meeting of shareholders

Date	Agenda	Resolution
2022 extraordinary general meeting of shareholders (23 September 2022)	1. Approval of KOSDAQ conditional delisting and KOSPI transfer	Approved
2021 ordinary general meeting of shareholders (22 March 2022)	<ol style="list-style-type: none"> 1. Approval of the 2021 consolidated financial statements and financial statements 2. Appointment of a director - External director Wi Kyung-Woo 3. Appointment of an audit committee member - External director Wi Kyung-Woo 4. Approval of limit of remuneration for directors 5. Approval of the regulation for the payment of executive retirement pay 	<p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p>
The first extraordinary general meeting of shareholders in 2021 (25 June 2021)	1. Approval of amendment to the articles of incorporation	Approved
2021 ordinary general meeting of shareholders (18 March 2021)	<ol style="list-style-type: none"> 1. Approval of the 2020 consolidated financial statements and financial statements 2. Approval of amendment to the articles of incorporation 3. Appointment of directors <ol style="list-style-type: none"> 3-1: Appointment of internal director Choi Sung-Kwan 3-2: Appointment of non-executive director Roh Jin-Seo 4. Appointment of a member of the audit committee (external director Shin Young-Soo) 5. Approval of limit of remuneration for directors 	<p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p>
2019 ordinary general meeting of shareholders (26 March 2020)	<ol style="list-style-type: none"> 1. Approval of the 2019 consolidated financial statements and financial statements 2. Appointment of directors <ol style="list-style-type: none"> 2-1: Appointment of internal director Son Bo-Ik 2-2: Appointment of internal director Yoon Il-Goo 3. Appointment of a member of the audit committee (external director Yoon Il-Goo) 4. Approval of limit of remuneration for directors 	<p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p>

VII. Shareholders

1. Shareholding of the largest shareholder and its related parties

A. Shareholding of the largest shareholder and its related parties

(As of 31 December 2022)

(Unit: shares, %)

Name	Relation	Type of share	Number of shares owned and the ratio				Remarks
			1 January		31 December		
			Number of shares	Ratio	Number of shares	Ratio	
LX Holdings Co., Ltd.	Largest shareholder	Common shares	5,380,524	33.08	5,380,524	33.08	-
Son Bo-Ik	Executive	Common shares	2,600	0.02	2,600	0.02	-
Choi Sung-Kwan	Executive	Common shares	1,600	0.01	1,600	0.01	-
Total		Common shares	5,384,724	33.11	5,384,724	33.11	-
		-	-	-	-	-	-

*1) Please refer to VIII. Executives and Employees for more details on change in management.

*2) LX Holdings Co., Ltd., the largest shareholder of the Company, was established through a spin-off from LG Corp. with the date of the spin-off on 1 May 2021.

B. Important issues related to the largest shareholder

(1) Basic information of the largest shareholder

Name	No. of investors (persons)	CEO (Representative member)		Business executive (Business executive member)		Largest shareholder (The largest investor)	
		Name	Ratio(%)	Name	Ratio(%)	Name	Ratio(%)
LX Holdings Co., Ltd.	66,135	Koo Bon-Joon	20.37	-	-	Koo Bon-Joon	20.37
		Roh Jin-Seo	-	-	-	-	-

*1) The number of investors is as of 31 December 2022, the date of the recent closing of the shareholder register.

*2) The ratio is based on common stock as of 31 December 31 2022.

[Changes of representative directors, business executives, and largest shareholder of corporations or organizations]

Date of change	CEO (Representative member)		Business executive (Business executive member)		Largest shareholder (The largest investor)	
	Name	Ratio(%)	Name	Ratio(%)	Name	Ratio(%)
03 May 2021	Koo Bon-Joon	7.72	-	-	Koo Kwang-Mo	15.95
03 May 2021	Song Chi-Ho	-	-	-	-	-
14 December 2021	Koo Bon-Joon	40.04	-	-	Koo Bon-Joon	40.04
27 December 2021	Koo Bon-Joon	20.37	-	-	Koo Bon-Joon	20.37
29 Mar. 2022	Roh Jin-Seo	-	-	-	-	-

*1) New CEOs Koo Bon-Joon and Song Chi-Ho have been appointed by the board of directors on 3 May 2021.

*2) The largest shareholder has been changed from CEO Koo Kwang-Mo of LG Corp. to CEO Koo Bon-Joon of LX Holdings Co., Ltd. due to over-the-counter trading on 14 December 2021.

*3) CEO Koo Bon-Joon, CEO of LX Holdings Co., Ltd., gave a stock donation, resulting in a decrease in the ratio on 27 December 2021.

*4) CEO Song Chi-Ho has resigned, and new CEO Roh Jin-Seo has been appointed on 29 March 2022.

*5) The ratio is based on common shares.

(2) Financial status of the largest shareholder

(Unit: KRW million)

Division	
Name of corporation or organization	LX Holdings Co., Ltd.
Total assets	1,635,041
Total liabilities	23,948
Total equities	1,611,093
Sales	236,918
Operating profit	158,908
Net income	170,140

*1) Based on the financial statements as of 31 December 2022.

*2) For the financial status as of 31 December 2022, please refer to the business report of LX Holdings Co., Ltd. to be disclosed within March 2023

(3) Major contents that may affect the stability of the Company's business including business status

LX Holdings Co., Ltd., the largest shareholder of the Company, was established through a spin-off from LG Corp. with the date of the spin-off on 1 May 2021. LX Holdings Co., Ltd. is a holding company that controls all business contents through stock ownership of LX International Co., Ltd., LX Hausys Co., Ltd., LX Semicon Co., Ltd., LX MMA Co., Ltd. and LX MDI Co., Ltd. as of 31 December 2022. The main source of income for LX Holdings Co., Ltd. consists of dividend income.

2. Changes to the largest shareholder

The details for changes to the largest shareholder

(As of 31 December 2022)

(Unit: shares, %)

Date of change	Name of the largest shareholder	Number of shares owned	Ratio	Reason for change	Remarks
03 May 2021	LX Holdings Co., Ltd.	5,384,724	33.11	Stock succession due to spin-off of LG Corp.	-

*1) The largest shareholder changed from LG Corp. to LX Holdings Co., Ltd. according to the spin-off of LG Corp., which was the previous largest shareholder. (Date of division registration 2 May 2021)

*2) The number of shares and ownership ratio above are the sum of the shares owned by the largest shareholder and specially related persons at the time of the change of the largest shareholder.

Status of shares held

(As of 31 December 2022)

(Unit: shares)

Division	Name of shareholders	No. of shares owned	Ratio(%)	Remarks
Shareholders with 5% or more	LX Holdings Co., Ltd.	5,380,524	33.08	-
	-	-	-	-
Employee stock ownership association		5,025	0.03	-

*) The number of shares owned and the share ratio are as of 31 December 2022, the date of the recent closing of the shareholders' list.

Minority shareholders

(As of 31 December 2022) (Unit: shares)

Division	Shareholders			Shares hold			Remarks
	Minority shareholders	Total shareholders	Ratio(%)	Minority shares	Total number of shares issued	Ratio(%)	
Minority shareholders	59,928	59,936	99.99	9,911,366	16,264,300	60.94	-

*1) Shareholders having shares under 1/100 of the total shares issued.

*2) Date of the recent closing of the shareholders' list as of 31 December 2022.

3. Share Price and Share Trading

A. Domestic share market

(Unit: KRW, shares)

Types			2022					
			December	November	October	September	August	July
LX Semicon (A108320) Common shares	Share price	Max.	89,000	95,400	85,100	94,100	105,000	99,500
		Min.	71,700	80,800	79,600	75,300	89,700	87,800
		Average	81,538	88,973	82,563	87,640	96,909	92,914
	Volume of transaction	Max. (days)	219,627	556,533	262,460	388,725	1,001,799	367,754
		Min. (days)	47,892	43,342	91,738	70,372	118,258	78,627
		Monthly	2,132,495	3,569,992	2,964,788	3,551,185	6,019,397	3,519,962

※ The highest and lowest share prices and trading volume are based on the closing price and daily trading volume of the day.

B. Overseas share market

As of the reporting date, there is no relevant information.

VIII. Executives and Employees

1. Status of Executives and Employees

A. Executives

(As of 31 December 2022)

(Unit: shares)

Name	Gender	DOB	Position	Registered or not	(Non-)regular	Responsibilities	Major career	Number of shares owned		Relationship with the largest shareholder	Service period	Expiration date
								Shares with voting rights	Shares without voting rights			
Son Bo-ik	M	09.1961	President	Internal director	Regular	Board chairman, representative director	(MA) MIT CTO SIC Center Director, LG Electronics Co., Ltd.	2,600	-	Registered executive of a subsidiary (LX Semicon)	01.12.2016 ~present	25.03.2032
Choi Sung-Kwan	M	02.1973	Managing director	Internal director	Non-regular	Business for overall management	Dept. of Business Administration, Yonsei Uni. General manager of Finance Team, LG Corp.	1,600	-	Registered executive of a subsidiary (LX Semicon)	01.01.2018 ~present	17.03.2024
Roh Jin-Seo	M	09.1968	Director	Other non-executive director	Non-regular	Business for overall management	MIT (MA) Strategy division of LG Electronics Co., Ltd.	-	-	Registered executive of the largest shareholder (LX Holdings)	18.03.2021 ~present	17.03.2024
Wi Kyung-Woo	M	07.1962	Director	External director	Non-regular	Business for overall management, Chairman of the audit committee	PhD Business Administration, UCLA Prof. of Business Administration, Sookmyung Women's Uni.	-	-	Not applicable	15.03.2019 ~present	22.03.2025
Yoon Il-Go	M	06.1967	Director	External director	Non-regular	Business for overall management, audit committee member	PhD in Georgia Tech Prof. of Electrical and Electronic Engineering, Yonsei Uni.	-	-	Not applicable	17.03.2017 ~present	25.03.2023
Shin Yeong-Soo	M	08.1967	Director	External director	Non-regular	Business for overall management, audit committee member	PhD in Electronic Engineering, SNU Prof. of KAIST Electrical and Electronic Engineering	-	-	Not applicable	16.03.2018 ~present	17.03.2024
Koo Bon-Joon	M	12.1951	CEO	Unregistered director	Regular	Business for overall management	(MA) Business Administrative, Uni. of Chicago Vice chairman of LG Corp.	-	-	Registered executive of the largest shareholder (LX Holdings)	11.05.2021 ~present	-
NA Joon-Ho	M	09.1968	Executive director	Unregistered director	Regular	Overall product planning, R&D, etc.	(MA) Dept. of Electronic Engineering, Inha Uni. Memory Research Center, LG Semiconductor	20,636	-	Non-registered executive of a subsidiary (LX Semicon)	19.01.2001 ~present	-
Choi Young-cheol	M	07.1970	Executive director	Unregistered director	Regular	Overall product planning, R&D, etc.	Cornell Univ. (PhD) Electrical and Computer Engineering Panjit Americas CTO	-	-	Non-registered executive of a subsidiary (LX Semicon)	01.01.2023 ~present	-
Lee Jae-Deok	M	06.1962	Executive director	Unregistered director	Regular	R&D	(PhD) Dept. of Physics, Yonsei Uni. Director of Sensor Research Center, LG Electronics Co., Ltd.	500	-	Non-registered executive of a subsidiary (LX Semicon)	03.01.2021 ~present	-
Go Dae-Hyeop	M	09.1965	Executive director	Unregistered director	Regular	R&D	(MA) Electronic Engineering, SNU Director of DTV SoC development, SIC Center, LG Electronics Co., Ltd. actual	-	-	Non-registered executive of a subsidiary (LX Semicon)	31.07.2017 ~present	-
Kim Hun	M	05.1969	Managing director	Unregistered director	Regular	CFO, internal accounting manager	(BA) Business Administration, Korea Uni. Indonesia business management in LX International Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	15.11.2022 ~present	-
Hong Min-Seok	M	07.1969	Managing director	Unregistered director	Regular	HR	Cornell Univ. MILR(MA) HR manager of MC business division, LG Electronics Co., Ltd.	1,800	-	Non-registered executive of a subsidiary (LX Semicon)	01.12.2018 ~present	31.03.2023
Na Young-Sun	M	05.1971	Managing director	Unregistered director	Regular	Overall product planning, R&D, etc.	(PhD) Electrical and Computer Engineering, Hanyang Uni. Business team in SIC Center, LG Electronics Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	01.07.2015 ~present	-
Woo Young-Jin	M	02.1977	Managing director	Unregistered director	Regular	R&D	(PhD) Electrical and Electronics Engineering, KAIST Research assistant prof., KAIST	-	-	Non-registered executive of a subsidiary (LX Semicon)	10.02.2011 ~present	-
Park Byoung-Hoo	M	05.1965	Managing director	Unregistered director	Regular	Overall product planning, R&D, etc.	(BS) Department of Materials Science and Engineering, Korea Uni. Vice president of production technology at LG Display Co., Ltd.	550	-	Non-registered executive of a subsidiary (LX Semicon)	01.04.2021 ~present	-
Jeon Hyeon-Gyu	M	02.1971	Director	Unregistered director	Regular	(PhD) Electrical and Electronics Engineering, KAIST	Electronics and Telecommunications Research Institute	20,691	-	Non-registered executive of a subsidiary (LX Semicon)	01.09.2003 ~present	-

Jang Jae-Ryang	M	01.1964	Director	Unregistered director	Regular	Quality Management	(MA) KAIST, Techno management major SIC Center, LG Electronics Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	15.02.2016 ~present	-
Kim Eon-Young	M	05.1968	Director	Unregistered director	Regular	Head of Manufacturing Control Group	(BS) Electronic Engineering, Kumoh National Institute Technology Display team, LG Semiconductor	-	-	Non-registered executive of a subsidiary (LX Semicon)	15.11.1999 ~present	-
Hwang Gyung-Ha	M	1971.06	Director	Unregistered director	Regular	Head of strategy group	(BA) Business Administration, Sogang Uni. Transfer pricing team, LG Electronics Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	02.03.2017 ~present	-
Jeong Yong-Ik	M	02.1975	Director	Unregistered director	Regular	R&D	(MA) Dept. Electronic Engineering, Korea Uni. Magna Chip Semiconductor Display Solution Division	-	-	Non-registered executive of a subsidiary (LX Semicon)	01.06.2006 ~present	-
Lee Ji-Wo	F	11.1976	Director	Unregistered director	Regular	R&D	(PhD) Dept. of Electronic Engineering, Sogang Uni. SoC development division, in SIC Center, LG Electronics Co., Ltd.	200	-	Non-registered executive of a subsidiary (LX Semicon)	12.08.2019 ~present	-
Lee Min-Ho	M	02.1973	Director	Unregistered director	Regular	Overall product planning, R&D, etc.	(MA) Dept. of Electronic Engineering, Hanyang Uni. LSI team in SIC Center, LG Electronics Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	17.04.2017 ~present	-
Kim Gi-Sang	M	08.1968	Director	Unregistered director	Regular	Sales	(MA) Executive MBA, KAIST Mobile team, LG Display Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	01.12.2019 ~present	31.03.2023
Sagong Young-Jae	M	01.1969	Director	Unregistered director	Regular	SCM manager	Aalto Univ. (MA) MVA SOC production and operation team, SIC center, LG Electronics Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	20.02.2018 ~present	-
Han Young-Soo	M	09.1971	Director	Unregistered director	Regular	New business strategy	(PhD) Materials Science and Technology, KAIST Managing director of Planning team, LG Corp.	-	-	Non-registered executive of a subsidiary (LX Semicon)	01.01.2021 ~present	-
Kim Hyun-ho	M	09.1976	Director	Unregistered director	Regular	R&D	(MA) electrical and electronic engineering, SNU SIC Center, LG Electronics Co., Ltd.	-	-	Non-registered executive of a subsidiary (LX Semicon)	01.07.2015 ~present	-

*1) The number of shares owned includes allocations of shares under the employee stock ownership plan to unregistered executives (NA Joon-Ho, Jeon Hyeon-Gyu).

*2) Jeon Hyeon-Gyu, an internal director, concurrently serves as a director of Advanced Power Device Technology Co., Ltd.

*3) The concurrent status of non-executive director Roh Jin-seo is as follows.

Concurrent company name	Concurrent job title	(Non)-regular
LX Holdings Co., Ltd.	Representative director	Regular
LX Hausys Co., Ltd.	Other non-executive director	Non-regular
LX MMA Co., Ltd.	Other non-executive director	Non-regular
LX MDI Co., Ltd.(*)	Other non-executive director	Non-regular
Korea Glass Industry Co., Ltd. (**)	Other non-executive director	Non-regular

(*) He is registered as a non-executive director of LXMDAI Co., Ltd. in December 2022.

(**) He is registered as a non-executive director of Korea Glass Industry Co., Ltd. in January 2023.

*4) Wi Kyung-Woo, an outside director, concurrently serves as an outside director of Mirae Asset Life Insurance Co., Ltd.

*5) Managing director Choi Sung-Kwan has been transferred to LX Holdings on 14 November 2022.

*6) Managing director Kim Hun has been transferred from LX International Co., Ltd. on 15 November 2022, and newly appointed as other non-executive director of Advanced Power Device Technology Co., Ltd. on 16 December 2022.

*7) Executive director Choi Young-cheol has been newly appointed on 1 April 2023.

*8) Director Kim Hyun-ho will be newly appointed on 1 January 2023.

Status of candidates for appointment and dismissal of registered executives

(As of 31 December 2022)

Division	Name	Gender	DOB	Applicable to external director candidates	Major career	Expected date of appointment/dismissal	Relationship with the largest shareholder
Appointment	Kim Hun	M	May 1969	Internal director	General manager of Finance Team, LG Corp. Indonesia business management in LX International Co., Ltd.	23 March 2023	Non-registered executive of a subsidiary (LX Semicon)
Appointment	Jung Seong-ook	M	June 1965	External director	Senior researcher at Samsung Electronics Qualcomm Principal Engineer Prof. of Dept. Electrical and Electronic Engineering, Yonsei University	23 March 2023	-

B. Status of employees, etc.

(As of 31 December 2022)

(Unit: KRW million)

Employee										Non-affiliated workers			Remarks
Business sector	Gender	No. of employees					Average tenure	Total annual salary	Average salary per person	M	F	Total	
		Workers with an indefinite period		Temporary worker		Total							
		Whole	(Part-time workers)	Whole	(Part-time workers)								
Whole	M	1,250	0	27	15	1,277	4.48	119,742	94				-
Whole	F	287	0	17	10	304	3.17	19,400	64	6	42	48	-
Total		1,537	0	44	25	1,581	4.28	139,141	88				-

Remuneration of unregistered executives

(As of 31 December 2022)

(Unit: KRW million)

Division	No. of executives	Total annual salary	Average salary per person	Remarks
Unregistered executives	19	8,627	454	-

2. Remuneration to Executives

<Remuneration for all directors and auditors>

A. Amount approved by general meeting of shareholders

(Unit: KRW million)

Division	No. of executives	Amount approved by general meeting of shareholders	Remarks
Registered directors	3	-	The amount approved by the general meeting of shareholders is based on the sum of the registered executives.
External director	-	-	The amount approved by the general meeting of shareholders is based on the sum of the registered executives.
Member of the audit committee or auditor	3	-	The amount approved by the general meeting of shareholders is based on the sum of the registered executives.
Total	6	5,000	-

*) In accordance with Article 38 of the Articles of Incorporation, the Company pays remuneration for directors in accordance with the 「Executives Retirement Allowance Payment Regulations」 passed a resolution at the general meeting of shareholders. Therefore, severance pay is not included in the remuneration limit approved by the general meeting of shareholders.

B. Remuneration amount

(1) All directors and auditors

(Unit: KRW million)

No. of executives	Total remuneration	Average remuneration per person	Remarks
5	2,425	485	-

*) Other non-executive directors (Roh Jin-Seo) has been excluded from the number of executives.

(2) Type

(Unit: KRW million)

Division	No. of executives	Total remuneration	Average remuneration per person	Remarks
Registered directors (excluding external director and members of the audit committee)	2	2,209	1,105	-
External director (excluding members of the audit committee)	-	-	-	-
Members of the audit committee	3	216	72	-
Auditor	-	-	-	-

*1) The number of executives is as of the reporting date.

*2) The total amount of remuneration is the amount of income under the Income Tax Act paid to registered directors, external directors, and audit committee members who have served or retired in the current business year as registered executives in accordance with Article 159 of the Capital Markets and Financial Investment Business Act and Article 168 of the Enforcement Decree of the same Act.

*3) The average amount paid per audit committee member was calculated by dividing the total amount of remuneration by the number of people (3 persons).

*4) Other non-executive directors (Roh Jin-Seo) has been excluded from the number of executives.

<Individual remuneration for directors and auditors with a remuneration amount of more than KRW 500 million>

A. Individual remuneration

(Unit: KRW million)

Name	Position	Total remuneration	Remuneration not included in the total remuneration
Son Bo-Ik	Representative director	1,733	-

B. Calculation criteria and method

(Unit: KRW million)

Name	Type of remuneration	Total	Calculation criteria and method
Son Bo-Ik	Earned income	Salaries	1,049 1. Basic pay - Based on the executive remuneration regulations determined by the board of directors in consideration of the position, and paid about KRW 62.4 million from January to March and about KRW 63.9 million from April to December. 2. Role pay - Based on the importance of duties and roles, about 18.7 million won from January to March and about 25.6 million won from April to December are paid monthly.
		Bonus	682 It is determined by the board of directors based on performance evaluation in accordance with the special bonus provisions among executive remuneration regulations. It is paid within 0% to 150% of annual salary by evaluating non-metric indicators such as quantitative indicators consisting of the Company's sales and operating profit of the previous year, evaluation of core tasks, and mid-to-long-term priority tasks for future preparation. In relation to the metrics, considering that the sales increased by 63% from KRW 1161.9 billion in 2020 to KRW 1898.8 billion in 2021 compared to the previous year and considering the fact that operating profit increased by 292% from KRW 94.2 billion in 2020 to KRW 369.6 billion in 2021 compared to the previous year, and net profit increased by 309% from KRW 72.5 billion in 2020 to KRW 296.4 billion in 2021, and in relation to non-metric indicators, considering that internal control works smoothly, such as no accidents related to internal control at all, law-abiding management and ethical management culture can be spread, KRW 681.6 million has been calculated and paid as a bonus.
	Profit from exercise of stock option	-	-
	Other earned income	2	Paid as welfare benefits, etc. by internal regulations
	Retirement income	-	-
	Other income	-	-

<Remuneration of the top 5 individuals out of more than KRW 500 million paid in remuneration>

A. Individual remuneration

(Unit: KRW million)

Name	Position	Total remuneration	Remuneration not included in the total remuneration
Son Bo-Ik	Representative director	1,733	-
Koo Bon-Joon	CEO	1,722	-
NA Joon-Ho	Executive director	722	-
Go Dae-Hyeop	Executive director	632	-
Na Young-Sun	Managing director	523	-

B. Calculation criteria and method

(Unit: KRW million)

Name	Type of remuneration	Total	Calculation criteria and method
Son Bo-Ik	Earned income	Salaries	1,049 1. Basic pay - Based on the executive remuneration regulations determined by the board of directors, the basic salary is determined in consideration of the position, etc., and about KRW 62.4 million from January to March and KRW 63.9 million from April to December are paid monthly. 2. Role pay - Based on the importance of duties and roles, about 18.7 million won from January to March and about 25.6 million won from April to December are paid monthly.
		Bonus	682 It is determined by the board of directors based on performance evaluation in accordance with the special bonus provisions among executive remuneration regulations. It is paid within 0% to 150% of annual salary by evaluating non-metric indicators such as quantitative indicators consisting of the Company's sales and operating profit of the previous year, evaluation of core tasks, and mid-to-long-term priority tasks for future preparation. In relation to the metrics, considering that the sales increased by 63% from KRW 1161.9 billion in 2020 to KRW 1898.8 billion in 2021 compared to the previous year and considering the fact that operating profit increased by 292% from KRW 94.2 billion in 2020 to KRW 369.6 billion in 2021 compared to the previous year, and net profit increased by 309% from KRW 72.5 billion in 2020 to KRW 296.4 billion in 2021, and in relation to non-metric indicators, considering that internal control works smoothly, such as no accidents related to internal control at all, law-abiding management and ethical management culture can be spread, KRW 681.6 million has been calculated and paid as a bonus.
		Profit from exercise of stock option	-
		Other earned income	2 Paid as welfare benefits, etc. by internal regulations
	Retirement income	-	
	Other income	-	
Koo Bon-Joon	Earned income	Salaries	1,095 1. Basic pay - Based on the executive remuneration regulations determined by the board of directors in consideration of the position, and paid about KRW 89.6 million from January to March and about KRW 91.8 million from April to December.
		Bonus	627 It is determined by the board of directors based on performance evaluation in accordance with the special bonus provisions among executive remuneration regulations.

				<p>It is paid within 0% to 150% of annual salary by evaluating non-metric indicators such as quantitative indicators consisting of the Company's sales and operating profit of the previous year, evaluation of core tasks, and mid-to-long-term priority tasks for future preparation.</p> <p>In relation to the metrics, considering that the sales increased by 63% from KRW 1161.9 billion in 2020 to KRW 1898.8 billion in 2021 compared to the previous year and considering the fact that operating profit increased by 292% from KRW 94.2 billion in 2020 to KRW 369.6 billion in 2021 compared to the previous year, and net profit increased by 309% from KRW 72.5 billion in 2020 to KRW 296.4 billion in 2021, and in relation to non-metric indicators, considering that internal control works smoothly, such as no accidents related to internal control at all, law-abiding management and ethical management culture can be spread, KRW 627.1 million has been calculated and paid as a bonus.</p>
		Profit from exercise of stock option	-	-
		Other earned income	-	-
		Retirement income	-	-
		Other income	-	-
NA Joon-Ho	Earned income	Salaries	441	<p>1. Basic pay</p> <p>- Based on the executive remuneration regulations determined by the board of directors, the basic salary is determined in consideration of the position, etc., and about KRW 30.3 million from January to March and KRW 31.1 million from April to December are paid monthly.</p> <p>2. Role pay</p> <p>- Based on the importance of duties and roles, about KRW 5.8 million from January to December are paid monthly.</p>
		Bonus	266	<p>It is determined by the board of directors based on performance evaluation in accordance with the special bonus provisions among executive remuneration regulations.</p> <p>It is paid within 0% to 150% of annual salary by evaluating non-metric indicators such as quantitative indicators consisting of the Company's sales and operating profit of the previous year, evaluation of core tasks, and mid-to-long-term priority tasks for future preparation.</p> <p>In relation to the metrics, considering that the sales increased by 63% from KRW 1161.9 billion in 2020 to KRW 1898.8 billion in 2021 compared to the previous year and considering the fact that operating profit increased by 292% from KRW 94.2 billion in 2020 to KRW 369.6 billion in 2021 compared to the previous year, and net profit increased by 309% from KRW 72.5 billion in 2020 to KRW 296.4 billion in 2021, and in relation to non-metric indicators, considering that internal control works smoothly, such as no accidents related to internal control at all, law-abiding management and ethical management culture can be spread, KRW 266.0 million has been calculated and paid as a bonus.</p>
		Profit from exercise of stock option	-	-
		Other earned income	15	Paid as welfare benefits, etc. by internal regulations
		Retirement income	-	-
		Other income	-	-
Go Dae-Hyeop	Earned income	Salaries	421	<p>1. Basic pay</p> <p>- Based on the executive remuneration regulations determined by the board of directors, the basic salary is determined in consideration of the position, etc., and about KRW 30.3 million from January to March and KRW 31.1 million from April to December are paid monthly.</p> <p>2. Role pay</p> <p>Based on the importance of duties and roles, about KRW 4.2 million from January to December are paid monthly.</p>

		Bonus	208	<p>It is determined by the board of directors based on performance evaluation in accordance with the special bonus provisions among executive remuneration regulations.</p> <p>It is paid within 0% to 150% of annual salary by evaluating non-metric indicators such as quantitative indicators consisting of the Company's sales and operating profit of the previous year, evaluation of core tasks, and mid-to-long-term priority tasks for future preparation.</p> <p>In relation to the metrics, considering that the sales increased by 63% from KRW 1161.9 billion in 2020 to KRW 1898.8 billion in 2021 compared to the previous year and considering the fact that operating profit increased by 292% from KRW 94.2 billion in 2020 to KRW 369.6 billion in 2021 compared to the previous year, and net profit increased by 309% from KRW 72.5 billion in 2020 to KRW 296.4 billion in 2021, and in relation to non-metric indicators, considering that internal control works smoothly, such as no accidents related to internal control at all, law-abiding management and ethical management culture can be spread, KRW 208.0 million has been calculated and paid as a bonus.</p>
		Profit from exercise of stock option	-	-
		Other earned income	3	Paid as welfare benefits, etc. by internal regulations
		Retirement income	-	-
		Other income	-	-
Na Young- Sun	Earned income	Salaries	332	<p>1. Basic pay - Based on the executive remuneration regulations determined by the board of directors, the basic salary is determined in consideration of the position, etc., and about KRW 23.1 million from January to March and KRW 23.7 million from April to December are paid monthly.</p> <p>2. Role pay Based on the importance of duties and roles, about KRW 4.2 million from January to December are paid monthly.</p>
		Bonus	176	<p>It is determined by the board of directors based on performance evaluation in accordance with the special bonus provisions among executive remuneration regulations.</p> <p>It is paid within 0% to 150% of annual salary by evaluating non-metric indicators such as quantitative indicators consisting of the Company's sales and operating profit of the previous year, evaluation of core tasks, and mid-to-long-term priority tasks for future preparation.</p> <p>In relation to the metrics, considering that the sales increased by 63% from KRW 1161.9 billion in 2020 to KRW 1898.8 billion in 2021 compared to the previous year and considering the fact that operating profit increased by 292% from KRW 94.2 billion in 2020 to KRW 369.6 billion in 2021 compared to the previous year, and net profit increased by 309% from KRW 72.5 billion in 2020 to KRW 296.4 billion in 2021, and in relation to non-metric indicators, considering that internal control works smoothly, such as no accidents related to internal control at all, law-abiding management and ethical management culture can be spread, KRW 176.2 million has been calculated and paid as a bonus.</p>
		Profit from exercise of stock option	-	-
		Other earned income	15	Paid as welfare benefits, etc. by internal regulations
		Retirement income	-	-
		Other income	-	-

< Grant and exercise stock options >

As of the reporting date, there are no unexercised stock options for executives and employees.

<Table 1>

(Unit: KRW million)

Division	No. of people granted	Total fair value of stock options	Remarks
Registered directors (excluding external director and members of the audit committee)	-	-	-
External director (excluding members of the audit committee)	-	-	-
Member of the audit committee or auditor	-	-	-
Business execution director, etc.	-	-	-
Total	-	-	-

<Table 2>

(As of 31 December 2022)

(Unit: KRW million, shares)

Grantee	Relation	Date	Method	Type of share	Initial grant qty.	Variable quantity in 2022		Total variable quantity		Unexecuted qty. as of 31 Dec. 2022	Exercise period	Exercise price	Retention of duty	Period
						Exercised	Canceled	Exercised	Canceled					
-	-	-	-	-	-	-	-	-	-	-	-	-	X	-

※ Closing price as of 31 December 2022, the date of preparation of the disclosure documents: KRW 71,700

IX. Affiliates

1. Name of the relevant corporate group and names of affiliates

A. Affiliates (Summary)

Twelve companies including LX Holdings Co., Ltd., LX International Co., Ltd., LX Semicon Co., Ltd., and LX Hausys Co., Ltd. have been separated from the corporate group LG on 21 June 2022 with the approval of the Fair Trade Commission, and as of the date of filing of the disclosure document, the companies were not designated as a corporate group restricted by mutual investment under the Act on Monopoly Regulation and Fair Trade.

For the 2 companies including XL Holdings as of the date of preparation of the disclosure document, please refer to XII. Detailed Table — 2. Affiliates (Detailed).

Affiliates (Summary)

(As of 31 December 2022)

(Unit: Companies)

Name of corporate group	Number of affiliates		
	Listed	Unlisted	Total
-	-	-	-

※ Refer to Table 2. Status of affiliates (Detailed).

2. Name of companies and details among the affiliates, which directly or indirectly affects the management of the Company

Company name	Details
LX Holdings Co., Ltd.	Holding company

3. Additional positions between the Company and the affiliates

[As of 31 December 2022]

Name	Position	Status of additional positions		
		Concurrent company name	Concurrent job title	(Non)-regular
Roh Jin-Seo	Other non-executive director	LX Holdings Co., Ltd.	Representative director	Regular
		LX Hausys Co., Ltd.	Other non-executive director	Non-regular
		LX MMA Co., Ltd.	Other non-executive director	Non-regular
		LX MDI Co., Ltd.(*)	Other non-executive director	Non-regular
		Korea Glass Industry Co., Ltd. (**)	Other non-executive director	Non-regular

(*) He is registered as a non-executive director of LX MDI Co., Ltd. in December 2022.

(**) He is registered as a non-executive director of Korea Glass Industry Co., Ltd. in January 2023.

4. Investment in other companies (Summary)

(As of 31 December 2022)

(Unit: KRW million)

Purpose of investment	Number of investment company			Total investment amount			
	Listed	Unlisted	Total	Carrying amount as of 1 January	Increase(decrease)		Carrying amount as of 31 December
					Acquisition (disposition)	Assessed profit or loss	
Management participation	1	5	6	13,879	27,668	-	41,547
General investment	-	-	-	-	-	-	-
Simple investment	-	1	1	-	-	-	-
Total	1	6	7	13,879	27,668	-	41,547

※ Refer to Table-3. Investment in other companies (Detailed)

*) For details of investments in other corporations, refer to XII. Detailed Table - 3. Status of investments in other corporations (details).

X. Transactions with Large Shareholders

1. Credit granting to large shareholders

As of the reporting date, there is no relevant information.

2. Transfer or succession of assets to or from large shareholders

As of the reporting date, there is no relevant information.

3. Operational transactions with large shareholders

[As of 31 December 2022]

(Unit: KRW million)

Company name	Relationship	Transaction type	Period	Details	Amount
LG Display (Guangzhou) Co., Ltd.	Affiliate	Sales and purchases	01.01.2022~30.06.2022	Products and others	277,535
LG Display Vietnam Haiphong Co. Ltd.	Affiliate	Sales and purchases	01.01.2022~30.06.2022	Products and others	129,006
LG Display Co., Ltd.	Affiliate	Sales and purchases	01.01.2022~30.06.2022	Products and others	241,683

*1) The Company has been separated from the corporate group LG on 21 June 2022 with the approval of the Fair Trade Commission, and the transaction amount during the period corresponding to the Company's specially related person before being excluded from LG affiliates is described.

*2) For details, refer to III. Finances - 5. Notes on Financial Statements - 34. Related parties.

4. Transactions with stakeholders other than major shareholders

For details, refer to III. Finances - 5. Notes on Financial Statements - 34. Related parties.

XI. Other Matters for the Protection of Investors

1. Progress and Changes of Disclosure

<Progress and changes of disclosure>

As of the reporting date, there is no relevant information.

2. Contingent Liabilities

<Important Litigations>

As of 31 December 2022, it is judged that there are no significant litigation cases that are likely to materially affect the business of the Company as lawsuits against the Company's property.

<Promissory note, notes and checks as collateral>

(As of 31 December 2022)

(Unit: sheets, KRW million)

Submitted to	Sheets	Amount	Remarks
Bank	-	-	-
Financial institution (Except for banks)	-	-	-
Corporate	-	-	-
Others (individual)	-	-	-

<Debt guarantees and debt acceptance agreements, other contingent liabilities, etc.>

As of the reporting date, there is no relevant information.

3. Sanctions, etc.

<Status of sanctions>

There is no case of any violation against domestic and/or international financial and tax obligations from laws and regulations such as the Commercial Act, Capital Market Act, External Audit Act, Fair Trade Act.

<Sanctions from the Korea Exchange, etc.>

As of the reporting date, there is no relevant information.

<Occurrence and return of profits from short-term trading>

As of the reporting date, there is no relevant information.

4. Other Matters Such as Significant Incidents after the Basic Date for Preparation

<Significant incidents after the basic date for preparation>

As of the reporting date, there is no relevant information.

<Use of direct financed funds>

As of the reporting date, there is no relevant information.

<Information after merger>

As of the reporting date, there is no relevant information.

XII. Detailed Table

1. Consolidated Subsidiaries (Detailed)

(Unit: KRW million)

Business name	Established on	Address	Main businesses	Total asset at the end of the recent year	Basis of controlling relationship	Whether it is major subsidiary
LX Semicon U.S.A., Inc	15 Oct. 2012	2952 BUNKER HILL LN #101 SANTA CLARA, CA 95054	Sales support, etc.	1,088	Control over the investee (paragraph 5 to 18 of K IFRS 1110 consolidated financial statements)	Not applicable
LX Semicon China Co., Ltd.	03 Mar. 2017	Room 609 Zhongchen Building No.1 Lizezhong 2Road, Wangjing Chaoyangqu, Beijing, 100102, China	Sales support, etc.	7,181	Control over the investee (paragraph 5 to 18 of K IFRS 1110 consolidated financial statements)	Not applicable
LX Semicon Japan Co., Ltd.	03 Sep. 2021	Otemachi First Square East Tower 11F, 1-5-1 Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan	Sales support, etc.	2,847	Control over the investee (paragraph 5 to 18 of K IFRS 1110 consolidated financial statements)	Not applicable

2. Affiliates (Detailed)

Fourteen companies including LX Holdings Co., Ltd., LX International Co., Ltd., LX Semicon Co., Ltd., and LX Hausys Co., Ltd. have been separated from the corporate group LG on 21 June 2022 with the approval of the Fair Trade Commission, and as of the date of filing of the disclosure document, the companies were not designated as a corporate group restricted by mutual investment under the Act on Monopoly Regulation and Fair Trade.

The table below shows the current status of domestic/overseas corporations of 14 companies including LX Holdings as of the date of preparation.

① Domestic corporations

(As of 31 December 2022) (Unit: Companies)

Listed or not	No. of Companies	Company name	Business Reg. No.
Listed	4	LX Holdings Co., Ltd.	110111-7875359
		LX International Co., Ltd.	110111-0004632
		LX Hausys Co., Ltd.	110111-4071207
		LX Semicon Co., Ltd.	160111-0089395
Unlisted	10	LX MMA Co., Ltd.	206211-0001805
		LX Pantos Co., Ltd.	110111-0208127
		LX Pantos Busan Newport Logistics Center Co., Ltd.	180111-0641133
		Helistar Air Co., Ltd.	120111-0528086
		Dangjin Tank Terminal Co., Ltd.	165011-0011709
		Eco&Logis Busan Corp.	180111-1424877
		Poseung Green Power Co., Ltd.	131311-0143077
		Green Nuri Co., Ltd.	230111-0286144
		Hanultari Co., Ltd.	110111-6628337
LX MDI Co., Ltd.	110111-8490932		

② Overseas corporations

No.	Name of affiliate	Location
1	LX Hausys Americajnc.	USA
2	LX Hausys Europe GmbH	Germany
3	LX Hausys India Private Limited	India
4	LX Hausys RUS,LLC.	Russia
5	LX Hausys Trading Co., Ltd.	China
6	LX Hausys Tianjin Co., Ltd.	China
7	LX Hausys (Wuxi) Co., Ltd.	China
8	LX Hausys(Tianjin) Engineering Co., Ltd.	China
9	LX Hausys Canada, Inc.	Canada
10	LX PANTOS LOGISTICS (BEIJING) CO., LTD.	China
11	LX PANTOS SOLUTIONS INDIA PVT. LTD.	India
12	Hi Logistics Egypt S.A.E	Egypt
13	LX PANTOS LOGISTICS (QINGDAO) CO., LTD.	China
14	LX PANTOS LOGISTICS (SHANGHAI) CO., LTD.	China
15	LX PANTOS LOGISTICS (HONGKONG) CO., LTD.	China
16	LX PANTOS LOGISTICS TAIWAN CO., LTD.	Taiwan
17	PT. LX PANTOS INDONESIA	Indonesia
18	PT. LX PANTOS JAKARTA	Indonesia
19	LX PANTOS MALAYSIA SDN. BHD.	Malaysia

20	LX PANTOS (INDIA) PVT. LTD.	India
21	LX PANTOS (CAMBODIA) CO., LTD.	Cambodia
22	LX PANTOS AUSTRALIA PTY LTD.	Australia
23	LX PANTOS HOLDINGS (THAILAND) CO., LTD.	Thailand
24	LX PANTOS U.K. LTD.	UK
25	LX PANTOS NETHERLANDS B.V	Netherlands
26	LX PANTOS FRANCE S.A.R.L.	France
27	LX PANTOS POLAND SP.Z.O.O.	Poland
28	LX PANTOS GERMANY GMBH	Germany
29	LX PANTOS SPAIN, SLU	Spain
30	LX PANTOS TURKEY LOJISTIK VE TICARET LTD. STI.	Turkey
31	LX PANTOS MEXICO, S.A. DE C.V.	Mexico
32	LX PANTOS LOGISTICA DO BRASIL LTDA	Brazil
33	LX PANTOS COLOMBIA S.A.S	Columbia
34	LX PANTOS CHILE SPA	Chile
35	LX PANTOS PANAMA, S.A	Panama
36	FNS CIS LLC	Russia
37	Pantos Logistics Kazakhstan	Kazakhstan
38	Pantos Logistics UKRAINE LTD.	Ukraine
39	Pantos Logistics L.L.C (DUBAI)	UAE
40	LX PANTOS ARABIA CO., LTD.	Saudi Arabia
41	LX PANTOS JAPAN INC.	Japan
42	LX PANTOS AMERICA, INC.	USA
43	LX PANTOS SOLUCOES LOGISTICAS DO BRASIL LTDA.	Brazil
44	LX PANTOS SWEDEN AB.	Sweden
45	LX PANTOS HUNGARY KFT.	Hungary
46	PT. Global Investment Institusi	Indonesia
47	Korea Carbon International Co., Ltd.	China
48	LX International Yakutsk	Russia
49	LX International(America) Inc.	USA
50	Bowen Investment(Australia) Pty Ltd	Australia
51	LX International (Shanghai) Corp.	China
52	LX International(Deutschland) GmbH.	Germany
53	LX International (HK) Ltd.	China
54	LX International Japan Ltd.	Japan
55	LX_International(Singapore) Pte. Ltd.	Singapore
56	Philco Resources Ltd.	Malaysia
57	PT. Batubara Global Energy	Indonesia
58	PT. Green Global Lestari	Indonesia
59	PT.LX International Indonesia	Indonesia
60	Resources Investment (H.K) Limited	China

61	Steel Flower Electric Machinery (Tianjin) Co., Ltd.	China
62	Yantai LX international VMI Co., LTD	China
63	Colmineral S.A. de C.V	Mexico
64	PT. Ganda Alam Makmur	Indonesia
65	LX International India Private Limited	India
66	Fertilizer Resources Investment Limited	China
67	PT. Binsar Natorang Energi	Indonesia
68	Haiphong Steel Flower Electrical & Machinery Company Limited	Vietnam
69	LX Semicon U.S.A., Inc	USA
70	LX Semicon China Co., Ltd.	China
71	LX Semicon Japan Co., Ltd.	Japan
72	PT. Tintin Boyok Sawit Makmur Dua	Indonesia
73	PT. Pantos Express Indonesia	Indonesia
74	LX PANTOS SINGAPORE PTE. LTD.	Singapore
75	LX PANTOS VIETNAM CO., LTD.	Vietnam
76	LX PANTOS PHILIPPINES, INC.	Philippines
77	PT. Parna Agromas	Indonesia
78	PT. Grand Utama Mandiri	Indonesia
79	PT. Tintin Boyok Sawit Makmur	Indonesia
80	PT. Green Global Utama	Indonesia
81	PT. Satu Gen Indonesia	Indonesia
82	PT. Energy Metal Indonesia	Indonesia
83	PT. Mega Global Energy	Indonesia
84	PT. Mega Prima Persada	Indonesia
85	KM Resources Inc.	Malaysia
86	LX PANTOS LOGISTICS (NINGBO) CO., LTD.	China
87	LX PANTOS LOGISTICS (SHENZHEN) CO., LTD.	China
88	PANTOS LOGISTICS AR S.A.	Argentina
89	LX PANTOS (THAILAND) CO., LTD.	Thailand
90	LHC Solar. LLC	USA
91	LX PANTOS USA, INC.	USA
92	LPIC TN LLC	USA
93	PT. SLX Global Healthcare	Indonesia
94	Ordos Lezheng Trading Limited	China

3. Investment in Other Companies (Detailed)

(As of 31 December 2022)

(Unit: KRW million, thousand shares, %)

Company name	Listed or not	First acquisition date	Purpose of investment	Amount of the 1st acquisition	Balance as of 1 January			Increase(decrease)			Balance as of 31 December			Financial status for the most recent business year	
					Qty.	Ratio	Carrying amount	Acquisition (disposition)		Valuation profit or loss	Qty.	Ratio	Carrying amount	Total assets	Net income
								Qty.	Amount						
LX Semicon U.S.A., Inc	Unlisted	15 Oct. 2012	Management participation	555	2,000	100	137	-	-	-	2,000	100	137	1,088	192
LX Semicon China Co., Ltd.	Unlisted	03 Mar. 2017	Management participation	674	-	100	2,179	-	-	-	-	100	2,179	7,181	1,033
Advanced Power Device Technology Co., Ltd.	Unlisted	12 Mar. 2018	Management participation	4,410	176	49	4,410	-	-	-	176	49	4,410	9,103	269
LX Semicon Japan Co., Ltd.	Unlisted	03 Sep. 2021	Management participation	317	15	100	317	45	898	-	60	100	1,215	2,847	-44
FJ Composite Materials Co.,LTD	Unlisted	25 Nov. 2021	Management participation	6,836	70	29.98	6,836	-	-	-	70	29.98	6,836	12,811	2,622
Telechips Inc.	Listed	06 Jun. 2022	Management participation	26,770	-	-	-	1,515	26,770	-	1,515	10.93	26,770	106,277	7,031
Daedeok Investment Co., Ltd.	Unlisted	20 May 2011	Simple investment	500	100	6.8	0	-	-	-	100	6.8	0	3,792	-6
Total					2,361	-	13,879	1,560	27,668	-	3,921	-	41,547	143,099	8,475

*1) LX Semicon U.S.A., Inc, LX Semicon China Co., Ltd. and LX Semicon Japan Co., Ltd. are December-settled corporations, and total assets and net income for the most recent business year are as of 31 December 2022.

*2) Advanced Power Device Technology Co., Ltd. is a March-settlement corporation, and total assets and net profit or loss for the most recent business year are as of 31 March 2022.

*3) FJ Composite Materials Co.,LTD is a May-settlement corporation, and total assets and net profit or loss are as of 31 May 2022.

*4) Telechips Inc. is a December-settlement corporation, and total assets and net profit or loss for the most recent business year are as of 31 December 2021.

*5) Daedeok Investment Co., Ltd. is a December-settlement corporation, and total assets and net profit or loss for the most recent business year are as of 31 December 2022.

【Confirmation by Expert】

1. 【Confirmation by Expert】

As of the reporting date, there is no relevant information.

2. Interests with Expert

As of the reporting date, there is no relevant information.