



# BE THE BEST, MAKE A DIFFERENCE

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## Cover Story

The cover features squares filled with images of nature and raw materials, emphasizing the importance of environmental stewardship and positive social impact. The message “BE THE BEST, MAKE A DIFFERENCE” underscores Poongsan’s dedication to enriching the lives of its stakeholders.

## Executive Summary

Poongsan is pleased to present its inaugural Sustainability Report, which outlines our performance on sustainable growth and value creation across the economic, social, and environmental spheres, as well as our mid- to long-term vision. The report is structured around the key issues identified through a double materiality assessment process, providing stakeholders with the practical information they need, including relevant financial and non-financial performance data.

## Reporting Period

The report encompasses the period from January 1 through December 31, 2023, with select metrics extended through the first half of 2024 due to the significance of the information. The most recent three years (2021-2023) of quantitative data are included to facilitate year-over-year trend analysis, while in some cases, data from more than three years is included to support long-term assessment.

## Reporting Scope

This report primarily covers Poongsan’s domestic business sites in Korea (the scope of separate financial statements), which include the head office, the Ulsan Plant, the Angang Plant, and the Busan Plant, and in some cases also includes affiliated companies in Korea and abroad. Separate explanations are provided where the scope of reporting differs from the above. Greenhouse gas emissions data are based on the results of emissions verification.

## Reporting Cycle

Annually (We plan to publish the Sustainability Report on an annual basis starting with this report).

## Reporting Standards

This report is prepared in accordance with the Global Reporting Initiative (GRI) Standards 2021 and refers to the principles of the United Nations Global Compact. Financial data is stated on a consolidated basis in accordance with the Korean International Financial Reporting Standards (K-IFRS), with additional notes included where data is presented on a separate basis.

## Third-party Assurance

This report has been audited by the Korea Management Registrar, an independent third-party assurance organization, to ensure the objectivity, accuracy, and reliability of its contents and data. The results of the assurance can be found in the [Poongsan’s independent assurance report](#) on pages 72 and 73 of this report.

## For Inquiries

For inquiries on this report, please contact us below:

Planning Team 1 | [esg@poongsan.co.kr](mailto:esg@poongsan.co.kr)

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# Management Message

Dear Valued Stakeholders,

As we reflect on the past year, we recognize that 2023 presented a series of unprecedented challenges, both domestically and globally. The ongoing Russia-Ukraine crisis, the US-China trade dispute, rising commodity prices driven by geopolitical unrest, and prolonged high interest rates that dampened investor confidence have collectively contributed to increased uncertainty in our business landscape.

In the face of these challenges, Poongsan demonstrated resilience and pursued growth strategies that yielded remarkable results. The defense division achieved record sales, and the company's overall sales reached KRW 4.1 trillion. This success was made possible by our dedicated employees and the continued support of our valued stakeholders.

At Poongsan, our commitment to achieving healthy and sustainable growth is driven by the 'Poongsan Way', our company's overarching management philosophy. The Poongsan Way guides our mission to serve as a conduit for humanity's dreams, just as highly conductive copper, while also positioning us to become a leader in shaping a new world filled with abundance and peace.

In light of these considerations, in 2024 we published our inaugural Sustainability Report, in which we presented our sustainability management performance, our vision, and our plans for future growth to our stakeholders.

**Climate change response and environmental management**

In line with global initiatives addressing climate change, Poongsan has established a target of net-zero carbon emissions by 2050 and a medium-term objective of a 10% reduction in carbon emissions by 2030, accelerating practical efforts to realize carbon neutrality.

We are committed to pursuing carbon neutrality through the expansion of renewable energy use and the installation of solar power generation facilities. Furthermore, we are actively engaged with the Non-ferrous Metal Carbon Neutral Council to drive continuous, industry-wide initiatives. Looking ahead, our goal is to identify potential carbon reduction opportunities across the entire value chain and set and implement GHG reduction targets over the medium to long terms.

**Sustainable supply chain and win-win cooperation**

Poongsan pursues sustainable growth by 'going hand in hand' with its suppliers. We believe that while working alone may be faster, working together allows us to achieve more. To that end, we extend various financial and technical support to our suppliers, and we are actively working with them to establish a foundation for ESG management. This includes setting joint performance targets in the ESG domain and operating a performance-sharing system that rewards shared success.

**Sound corporate governance for sustainability**

We believe that robust corporate governance is the foundation upon which a company's sustainable growth and development are built. By implementing compliance management and ethical management, we are working to enhance transparency in our governance structure and integrate sustainability management with a comprehensive enterprise-wide risk management system.

Our professional, independent, and diverse Board of Directors oversees Poongsan's ESG management in a transparent manner, enabling us to proactively address shifts in the internal and external business environment and meet the expectations of our stakeholders.

Valued stakeholders,

At Poongsan, our mission is to continue reinventing ourselves as a global leader in advancing human development. We aim to create future value through our dedication to excellence in manufacturing copper and copper alloy materials and defense products.

We look forward to your continued interest and support in our journey forward.

Thank you.



Chief Operating Officer / Vice Chairman

**Woo Dong Park**

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## Company Overview

Poongsan is leveraging its extensive expertise in copper and copper alloy and defense industries to drive rapid growth, secure cutting-edge technologies and the highest standards of quality, and enter into the precision machining industry. We manufacture and sell a comprehensive portfolio of nonferrous metals, including copper and copper alloys, and defense products such as ammunition. Our global strategy is supported by four manufacturing facilities in Ulsan, Busan, and other cities, as well as 12 subsidiaries in various countries.

## Management Philosophy

At the core of our company is the Poongsan Way, a core value that shapes our future and guides the actions of all our employees. This principle means that, just as highly conductive copper, each member of Poongsan will become a conduit for humanity's dreams and a driving force behind a new world of prosperity and peace. By practicing the Poongsan Way, we endeavor to achieve our organizational vision, while contributing to the peace and well-being of humanity in a responsible manner as active members of society.

<b>Company Name</b>	Poongsan Corporation
<b>CEO/COO</b>	Jin Ryu/Woo Dong Park
<b>Date of Incorporation</b>	July 1, 2008 (Newly formed as a result of a spin-off)
<b>Headquarters</b>	Poongsan Bldg., 23, Chungjeong-ro, Seodaemun-gu, Seoul, Korea
<b>Company Website</b>	www.poongsan.co.kr
<b>Business Area</b>	Production and sales of copper and copper alloy and defense products

# POONGSAN WAY

**Mission**

Poongsan Corporation contributes to human progress through its superior products, employment opportunities, and uncompromising service.

**Vision**

Poongsan sets the industry's global standard for excellence.

**Core Values**

- Challenge** Poongsan overcomes obstacles to success.
- Create** Poongsan generates value in each of its operations.
- Change** Poongsan constantly seeks ways to improve itself, its industry, and the world.
- Confirm** Poongsan consistently checks to ensure superior quality in its process and products.
- Communicate** Poongsan communicates openly with its customers, employees, partners, and shareholders.

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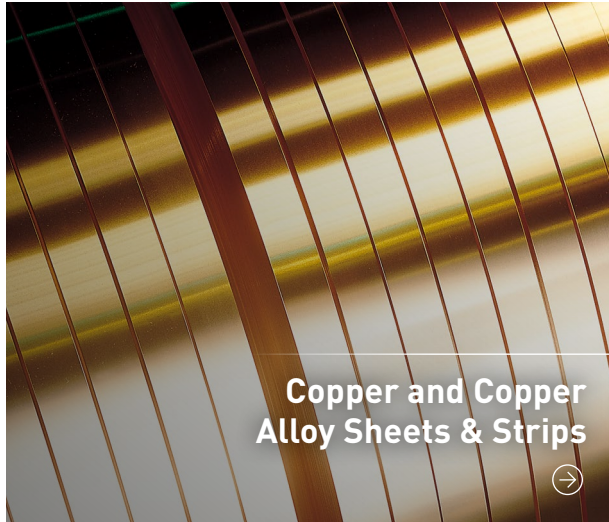
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# Copper & Copper Alloy Products



**Copper and Copper Alloy Sheets & Strips**

Poongsan produces a wide range of copper and copper alloy sheets and strips for use across many industries, from everyday copper products to high-tech industrial materials. Renowned for their premium quality both at home and abroad, our products are used in a wide range of industries and applications, including automobiles, electronics, semiconductors, telecommunications, construction, machinery, household goods and antibacterial materials. These rolled products are available in a variety of alloys, including copper, brass, phosphor bronze, nickel silver, cupro-nickel, and other specialized alloys (PMC26 and others), depending on the alloy composition and casting method. In response to market demands for new high-strength and high-conductivity copper alloys driven by technological advancements such as the Internet of Things and electric vehicles, we have developed new alloys (P1000HS and others) and incorporated them into high-tech products tailored to customer specifications.

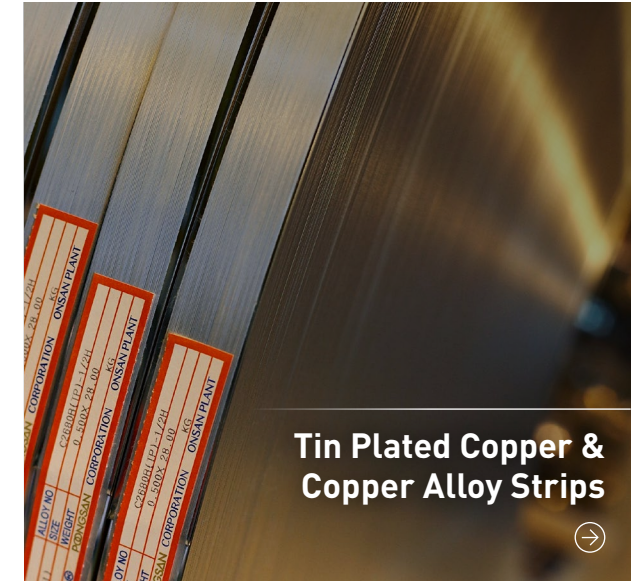
With years of production experience and accumulated technology in the non-ferrous industry, Poongsan has developed various copper alloys. This has enabled us to develop new high-tech materials for use in semiconductor leadframes and connectors, contributing significantly to the development of the semiconductor and electronic component industries.

PMC102 and PMC102M contain the ideal properties required in semiconductor leadframes - superior electrical and thermal conductivity as well as high strength and thermal resistance at high temperatures. Poongsan holds patents for these alloys in the US and Japan.

In addition to the proprietary PMC102 series, we also offer a diverse range of high quality materials, such as C194, which are well-suited for use in transistors, power transistors and heat sink components.



**Leadframe Alloys**



**Tin Plated Copper & Copper Alloy Strips**

Poongsan, through its subsidiary PNT, also manufactures and supplies tin-plated copper and copper alloy materials, which are widely used for electrical contacts and various contact terminals in automobiles, electrical and electronic appliances, and information and communication equipment.

The tin-plated materials are manufactured from copper and copper alloy base materials and subsequently undergo surface treatment via the reflow method of heating and melting, resulting in a uniform plating thickness and excellent surface brightness. Furthermore, the materials exhibit excellent welding and corrosion resistance properties, as well as a long-lasting plating layer that resists deterioration. This renders them ideal for use in various electrical and electronic components, including switches, connectors, terminals, and relays.

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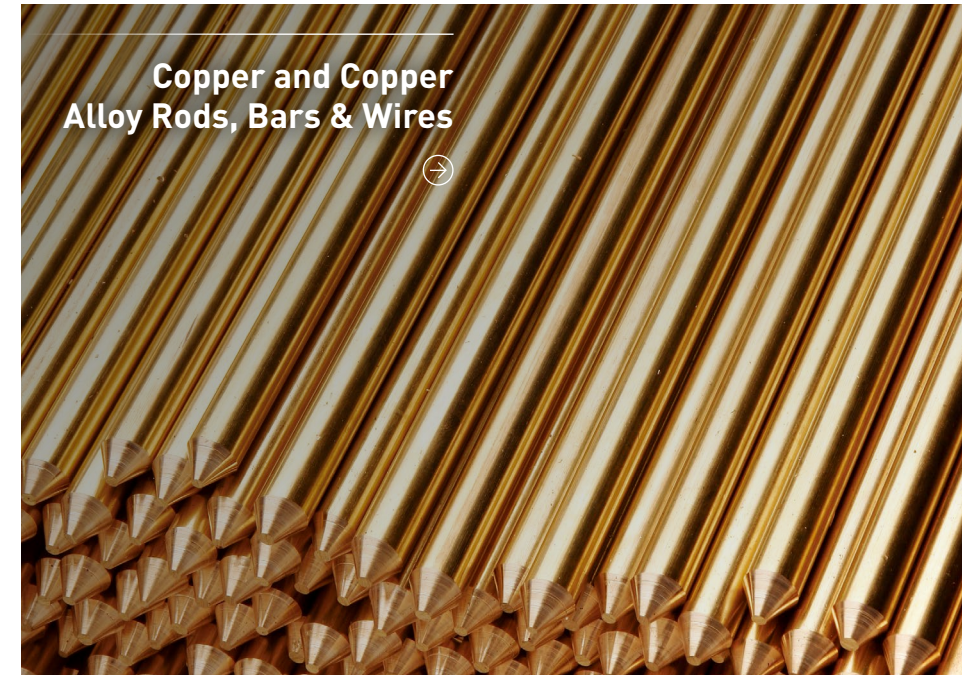
# Copper & Copper Alloy Products



**Coin Blanks**

Poongsan takes particular pride in its coin blanks, which refers to metal disks prepared for minting and devoid of any designs, denominations, or year of issue. We are responsible for the casting of over 50 distinct types of coin blanks, representing more than half of the global coin blank trade volume. Poongsan commenced the supply of coin blanks domestically in 1970 and has since grown to become the world's largest coin blank manufacturer, supplying over 70 countries worldwide. Additionally, we produce and export bi-metal and clad metal coin blanks and supply Euro coin blanks to EU countries as a recognized participant in the production of the Euro.

Poongsan's production process encompasses the full range of operations, from casting to shaving, enabling the company to manufacture copper and copper alloy rods, bars, and wires of various specifications, which are tailored to meet the specific demands of a diverse customer base. Our products are used extensively in a variety of applications, including bolts, nuts, valves, electrical and mechanical components, as well as accessory parts for automobiles and diverse industrial machinery. The free-cutting brass bars, which exhibit superior weldability and machinability, are frequently utilized for the production of high-precision components. Moreover, the special brass rods for EDM wires are in high demand for electrical discharge machining (EDM) of hard metals, such as cemented carbide, which are difficult to cut and machine. In recent times, Poongsan has concentrated its efforts on the development of new products, including environmentally friendly lead-free brass (bio-brass), faucet fittings and a range of other products for the craft industry.



**Copper and Copper Alloy Rods, Bars & Wires**

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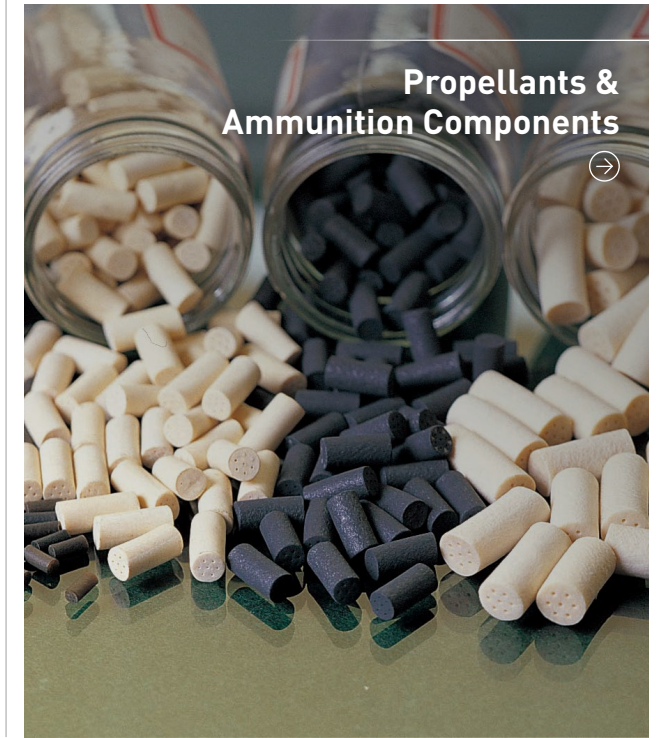
# Defense Products

Poongsan is a leading producer of ammunition for the military sector, offering a comprehensive range of products, including 5.56 mm cartridges, 155 mm projectiles for howitzers, and a growing portfolio of innovative solutions. Our product range includes anti-tank munitions with enhanced penetration capabilities, extended range munitions with increased range, goalkeeper munitions mounted on South Korean destroyers, and dual-purpose munitions. Moreover, Poongsan is involved in the joint development of the Multiple Launch Rocket System (MLRS) and is responsible for the production of warhead assemblies, including submunitions. As such, our ammunition technology has world class competitiveness and we will continue to enhance both the performance of existing ammunition and the development of high-precision ammunition and emerging fields such as drop-attack combat drones and multi-purpose combat drones in order to provide continued support to the country's defense system.



As a leading supplier of sporting ammunition, Poongsan's PMC (Precision Made Cartridges) brand has built a reputation for excellence based on rigorous inspections and quality testing. Our commitment to superior quality has positioned us as a competitive force in the North American and other global markets, where our products have consistently been favorably received by actual users for exceptional performance.

Poongsan leverages its extensive experience and cutting-edge technology in the production of copper and copper alloy materials and ammunition to develop a range of propellants and ammunition components. Our production facilities are equipped with dedicated production lines for each item, enabling us to efficiently produce and supply both domestic and international customers with semi-finished products and components used in the production of ammunition. Our product range includes cups, disks, rotating bands, shells, bullets, fuses, links, and tungsten penetrators.





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# Company History



**2008** JUL Establishment of Poongsan Holdings Corporation  
 SEP Poongsan exceeded USD 100 million in defense exports  
 DEC Poongsan received Korean Ministry of National Defense Award in recognition of its defense product exports

**2009** DEC Poongsan honored with Defense Quality Management Grand Prix Award

**2010** AUG Poongsan established a joint venture, LIG POONGSAN PROTECH  
 DEC Poongsan exceeded KRW 2 trillion in sales

**2011** MAR Poongsan received the Presidential Award for Meritorious Contribution to Unified Defense  
 NOV Poongsan awarded the USD 900 Million Export Tower Award on the Day of Trade

**2012** OCT Chairman Jin Ryu awarded the Moran Medal, the second highest Order of Civil Merit, on the 6th Day of Koreans  
 NOV Angang Plant awarded the Presidential Award for Quality Management Innovation

**2013** FEB Angang Plant obtained ISO27001 and AS9100  
 JUN Angang Plant honored with Total Productive Management Grand Prix Award

**2014** MAY Ulsan Plant acquired ISO/TS 16949 (Automotive Industry Quality Management System)

**2015** NOV Angang Plant honored with a Presidential Award at National Quality Management Convention

**2016** SEP Chairman Jin Ryu won the Korea-America Friendship Award from Korea-America Association  
**2018** OCT Poongsan celebrated its 50th anniversary  
**2021** DEC Angang Plant awarded the Silver Tower Order of Industrial Service Merit at the National Quality Management Convention

**2022** OCT Poongsan Group won the James A. Van Fleet Award  
 NOV Poongsan received the Gold Tower Order of Industrial Service Merit at the National Productivity Awards

**2023** FEB Poongsan held the 2023 Safety Awareness Campaign  
 APR Angang Plant received a plaque of appreciation as a model taxpayer for local taxes  
 APR Chairman Jin Ryu presented with a plaque of appreciation from Korea Electric Terminal in recognition of his contributions to stable material supply and development.  
 MAY Poongsan marked the 23rd anniversary of labor-management cooperation declaration  
 MAY Poongsan selected as an outstanding company for promoting price adjustment system  
 OCT Poongsan received 'Excellent' in the Shared Growth Index evaluation  
 OCT Defense R&D Institute acquired the highest rating of Level 5 of the international standard CMMI  
 OCT Poongsan celebrated its 55th anniversary  
 DEC Poongsan won the Presidential Award at the National Quality Management Convention

# Global Network

Poongsan, headquartered in Chungjeong-ro, Seoul, engages in the production and sale of copper and copper alloy products and ammunition products at four domestic business sites in Ulsan, Angang, and Busan. It has production and sales entities in the US, China, Japan, and other countries to secure a global network and enhance competitiveness.

Eleven affiliates are included in Poongsan's consolidated financial statements. These consist of one domestic company, Poongsan FNS, and ten overseas companies, including PMX Industries.

### Status of Consolidated Subsidiaries

● Shareholding 100% ● Shareholding 60% ● Shareholding 40%

Company Name	Address	Business Areas
① POONGSAN FNS CORPORATION	893, Deugandae-ro, Nonsan-si, Chungcheongnam-do (+82-41-740-5500)	Development and manufacturing of fuse products, Manufacturing of components for nuclear power plants
② PMX INDUSTRIES, INC.	5300 Willow Creek Drive S.W., Cedar Rapids, Iowa 52404, U.S.A (1-319-368-7700)	Manufacturing and sales of copper and copper alloy sheets/strips and strips for coin blanks
③ POONGSAN AMERICA CORPORATION	601 South Figueroa St. Suite No.4600, Los Angeles, CA90017, U.S.A (1-213-236-0300)	Trading of copper scraps, machinery and spare parts, and other sub-materials
④ PMC AMMUNITION, INC.	10777 Westheimer Road, Suite #1100, Houston, TX 77042 U.S.A (1-281-407-5655)	Sales of sporting ammunition
⑤ SIAM POONGSAN METAL CO.,LTD.	Laemchabang Industrial Estate, 38/14 Moo5, Tungsukhla, Sriracha, Chonburi 20230, Thailand (66-38-400-056)	Manufacturing and sales of copper and copper alloy sheets/strips and coin blanks
⑥ POONGSAN(H.K) LTD.	Unit 1907B 19/F Exchange Tower 33 Wang chiu Road Kowloon Bay Kowloon, Hong Kong (852-2-735-6330)	Manufacturing and sales of copper and copper alloy sheets/strips/rods and stainless steel bars
⑦ POONGSAN (SHENZHEN) CO.,LTD	8 Dahualu, Yanchuanshequ, Songgang, Baoan, Shenzhen, China (86-755-3323-8916)	Manufacturing and sales of copper and copper alloy sheets/strips/rods and stainless steel bars
⑧ POONGSAN (SHANGHAI) CO.,LTD	Room 803, Shanghai International Plaza, 1318 North Sichuan Road, Hongkou District, Shanghai, 200080, China (86-21-5868-0881)	Sales of copper and copper alloy sheets/strips/rods and stainless steel bars
⑨ POONGSAN (LIANYUNGANG) CO.,LTD.	20-3, Jinqiao Road, Dapu Industrial Park, Lianyungang City, Jiangsu, China (86-518-8108-9568)	Manufacturing and sales of copper and copper alloy sheets/strips/rods and stainless steel bars
⑩ POONGSAN JAPAN CORPORATION	Rune Yotsuya Bldg. 3F, Yotsuya 2-4-1, Shinjuku-Ku, Tokyo, 160-0004, Japan (81-3-5269-6570)	Manufacturing and sales of copper and copper alloy sheets/strips, leadframe alloys, rods, and stainless steel bars
⑪ POONGSAN(M) SDN BHD.	No.16, Jalan Anggerik Mokara 31/59, Kota Kemuning, Seksyen 31, 40460 Shah Alam, Selangor, Malaysia (60-3-5122-0001)	Manufacturing and sales of copper and copper alloy sheets/strips/rods and stainless steel bars

### Joint Ventures

Company Name	Address	Business Areas
⑫ PNT CORPORATION	94, Sanam-ro, Onsan-eup, Ulju-gun, Ulsan	Copper smelting, refining and alloy fabrication
⑬ LIG POONGSAN PROTECH CORPORATION	2606-10, Hoguk-ro, Angang-eup, Gyeongju-si, Gyeongsangbuk-do	Manufacturing of weapons and ammunition



\*Based on consolidated financial statements

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## INPUTS

### Financial Capital

Assets	KRW 3.3162 trillion
Liabilities	KRW 1.3502 trillion
Equity	KRW 1.9660 trillion

### Natural Capital

Energy consumption	4,603 TJ
Water consumption	6,554 thousand tons
Environmental investment cost	KRW 12.4 billion

### Human Capital

No. of employees	3,476 (domestic)
No. of new hires	386
Training hours per employee	49.5 hours
Training investment	KRW 1.7 billion

### Manufactured Capital

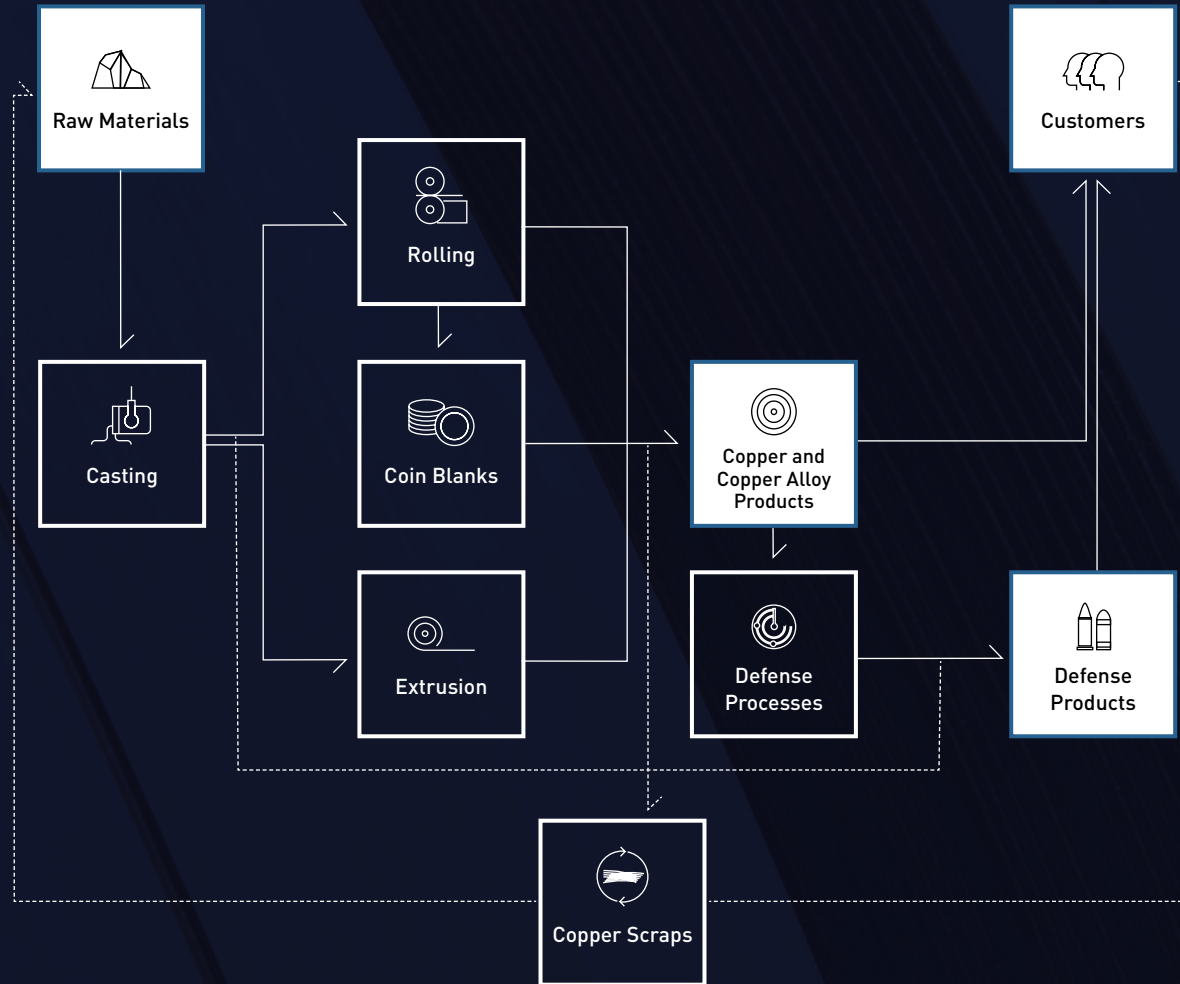
No. of business sites	4
Annual production capacity	222,100 M/T
Tangible assets	KRW 1.0074 trillion

### Purchase of Major Raw Materials

Purchases	KRW 1.7076 trillion
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### R&D Capital

R&D investment	KRW 26.6 billion
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## OUTPUTS

### Financial Capital

Sales	KRW 3.1006 trillion
Operating profit	KRW 190.3 billion
Net profit	KRW 156.3 billion

### Environment

GHG emissions	223,416 tCO <sub>2</sub> eq
Waste generation	37,034 tons
Wastewater generation	5,255,554 tons
Water reuse	109,518 tons

### Employment

No. of female employees (ratio)	194 (5.6%)
Average continuous years of service	16.2 years

### Manufactured

Production	177,696 M/T
Capacity utilization	90%

### Relationship

Social contribution investment	KRW 4.6 billion
Sponsorship of the marginalized	155 times
Employee compensation	KRW 280.4 billion
Distribution to shareholders	KRW 32.8 billion

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# PSC's Mid- to Long-Term Roadmap for ESG Management

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Poongsan has identified key ESG tasks and developed a mid- to long-term roadmap for ESG management, with 2023 as the starting point.

## KEY ESG TASKS & MID- TO LONG-TERM STRATEGIC ROADMAP



### Establish ESG Decision-making/ Management Roles

Establish a system and define roles for ESG decision-making and management



### Identify Mid- to Long-term ESG Management Goals and Roadmap

Clarify Poongsan's ESG management direction by aligning with global sustainability goals



### Determine the Appropriate Course of Action for Disclosing ESG Information to Stakeholders

Enhance ESG management by analyzing key stakeholder ESG needs and engaging in regular communication with them



### Refine Strategies for GHG Emissions Reduction and Energy Transition

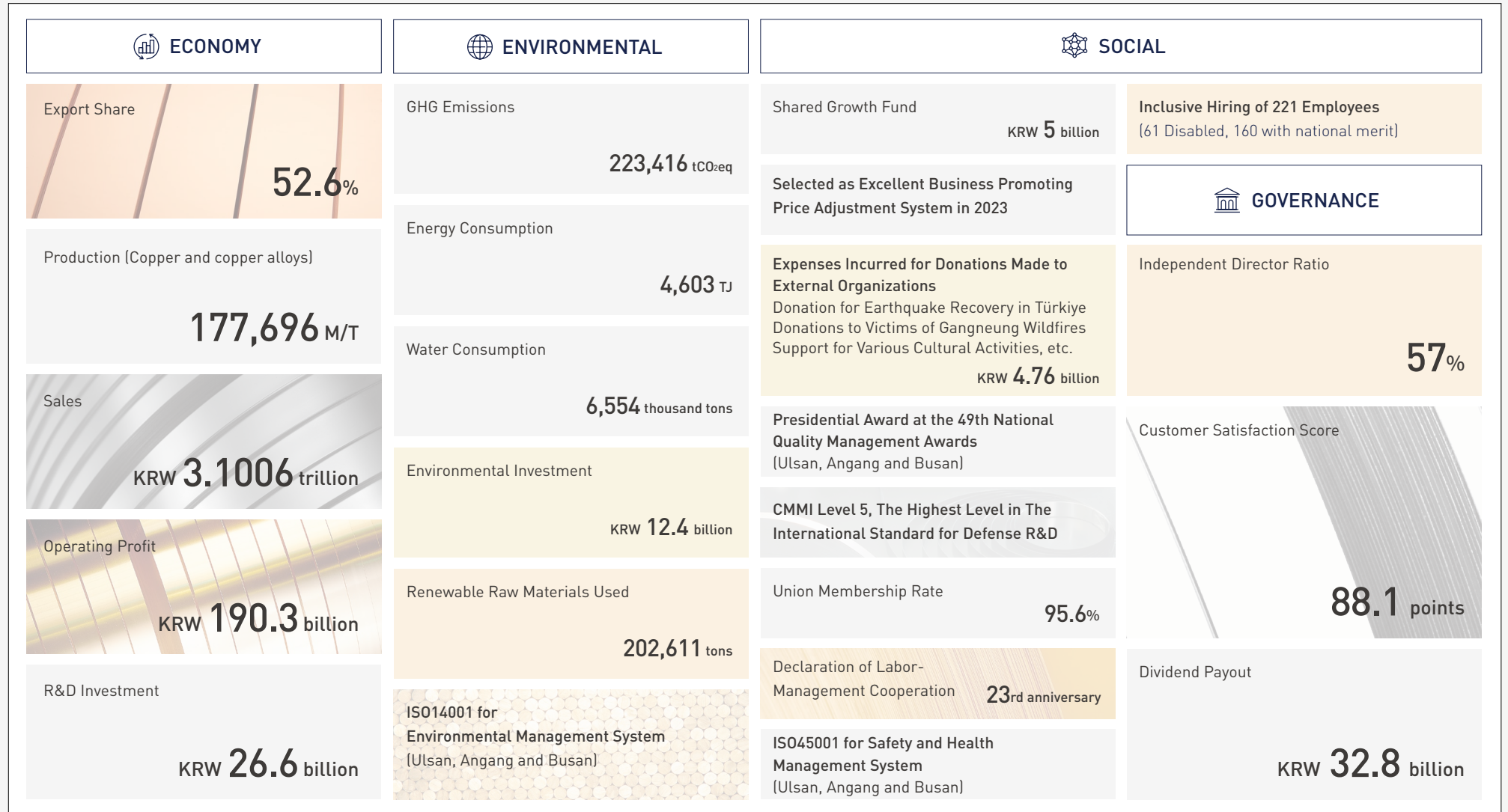
Develop GHG reduction and energy transition goals and strategies for the medium to long term



### Implement an ESG Assessment System to Evaluate Suppliers' Environmental and Social Impact

Expand supply chain assessment and support for sustainable growth of suppliers

# 2023 ESG At a Glance

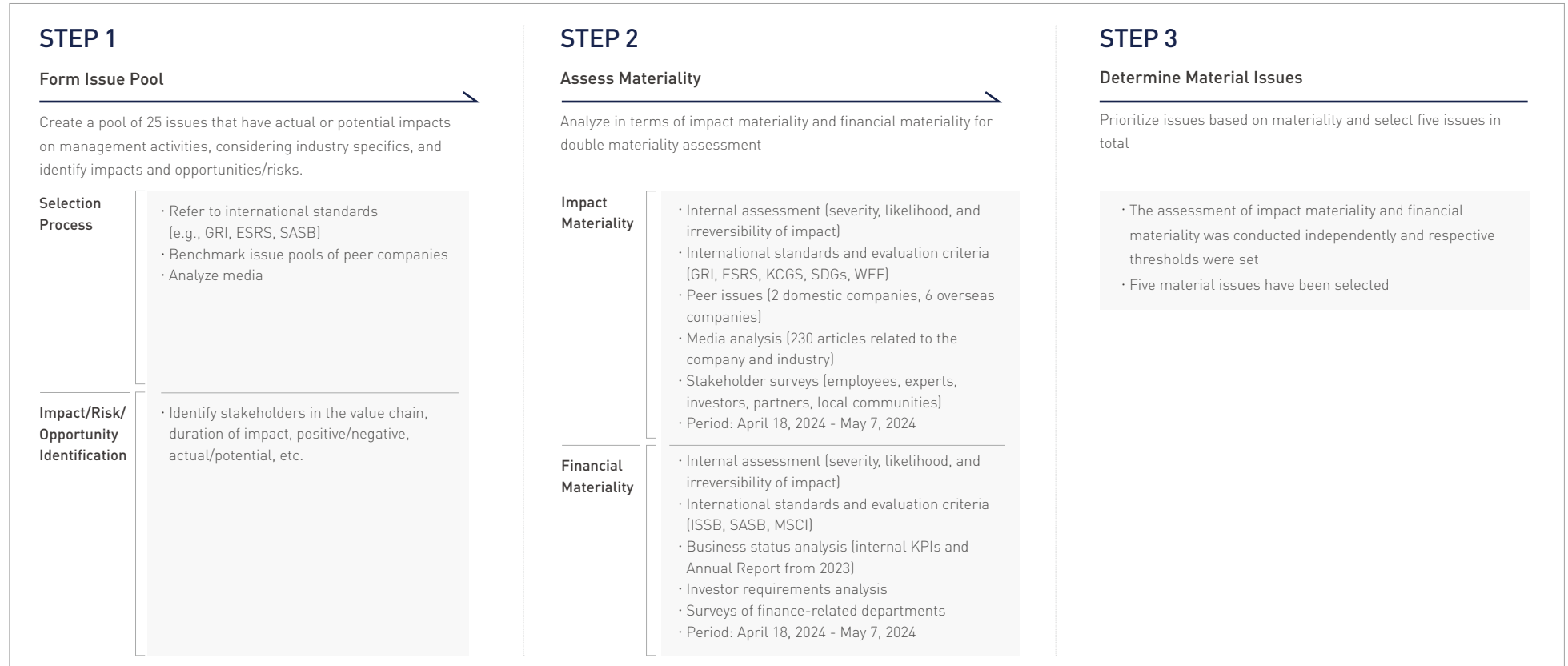


# Double Materiality Assessment

Poongsan is committed to transparent communication with stakeholders regarding our ESG efforts and plans in relation to our business activities. In line with this objective, we have adopted the concept of 'double materiality', as proposed by the European Sustainability Reporting Guidelines (CSRD), and applied it to the materiality assessment process in accordance with the GRI Standards 2021, with a view to analyzing both the impact of our business activities on the environment and society (impact materiality), and the impact on our financial position (financial materiality).

Following the materiality assessment, five ESG issues deemed pertinent to our business operations were identified and subsequently reviewed and endorsed by management and the Board of Directors. We will proactively manage and monitor the risks and opportunities associated with these material ESG issues.

## Double Materiality Assessment Process



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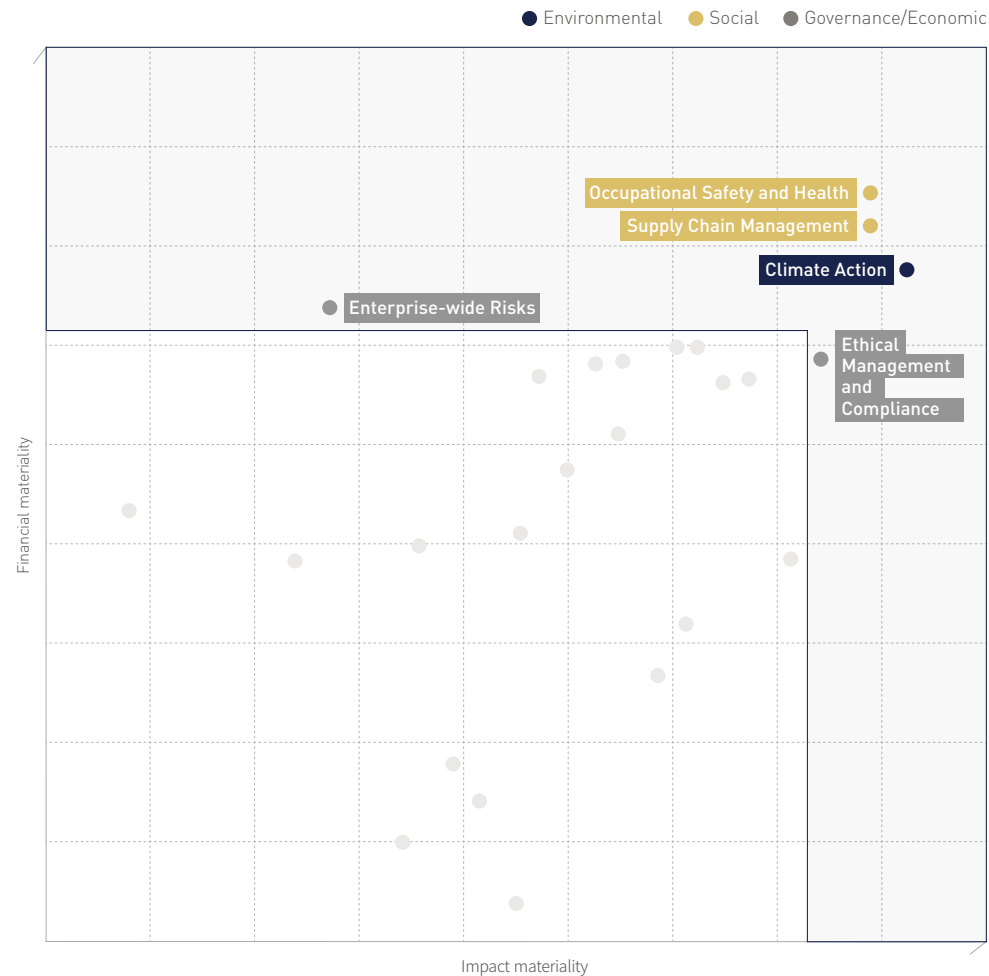
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## Double Materiality Assessment Results

Following a comprehensive review of the double materiality assessment—which considers both impact materiality and financial materiality—we have identified and prioritized key issues based on their materiality. The five material issues selected for further attention are as follows:



<b>1</b>	<b>Area</b>	Environmental	<b>Key Stakeholders</b>	All stakeholders
	<b>Impact Materiality</b>	Very High	<b>GRI</b>	302, 305
<b>Climate Action</b>	<b>Financial Materiality</b>	High	<b>Reporting Page</b>	22~24
	<b>KPI</b>	Reduce carbon emissions and energy costs, and respond to air pollutant emission trading scheme		
<b>2</b>	<b>Area</b>	Social	<b>Key Stakeholders</b>	Suppliers
	<b>Impact Materiality</b>	Very High	<b>GRI</b>	308, 414
<b>Supply Chain Management</b>	<b>Financial Materiality</b>	Very High	<b>Reporting Page</b>	31, 32
	<b>KPI</b>	Lay the foundation for ESG purchasing, engage in shared growth activities		
<b>3</b>	<b>Area</b>	Social	<b>Key Stakeholders</b>	Employees
	<b>Impact Materiality</b>	High	<b>GRI</b>	403
<b>Occupational Safety and Health</b>	<b>Financial Materiality</b>	Very High	<b>Reporting Page</b>	27~30
	<b>KPI</b>	Zero safety accidents, safety and health audits, and company-wide environmental management		
<b>4</b>	<b>Area</b>	Governance/Economic	<b>Key Stakeholders</b>	Investors
	<b>Impact Materiality</b>	Mid	<b>GRI</b>	205
<b>Ethical Management and Compliance</b>	<b>Financial Materiality</b>	Mid	<b>Reporting Page</b>	45~47
	<b>KPI</b>	Ethical management initiatives		
<b>5</b>	<b>Area</b>	Governance/Economic	<b>Key Stakeholders</b>	Investors, Customers
	<b>Impact Materiality</b>	Mid	<b>GRI</b>	205
<b>Enterprise-wide Risks</b>	<b>Financial Materiality</b>	Mid	<b>Reporting Page</b>	48, 49
	<b>KPI</b>	Internal control, change management, process innovation		



# Stakeholder Communication

Poongsan engages with a diverse range of stakeholders, including employees, suppliers, shareholders/investors, and local communities, through a variety of channels. This commitment to stakeholder engagement guides our approach to management activities.

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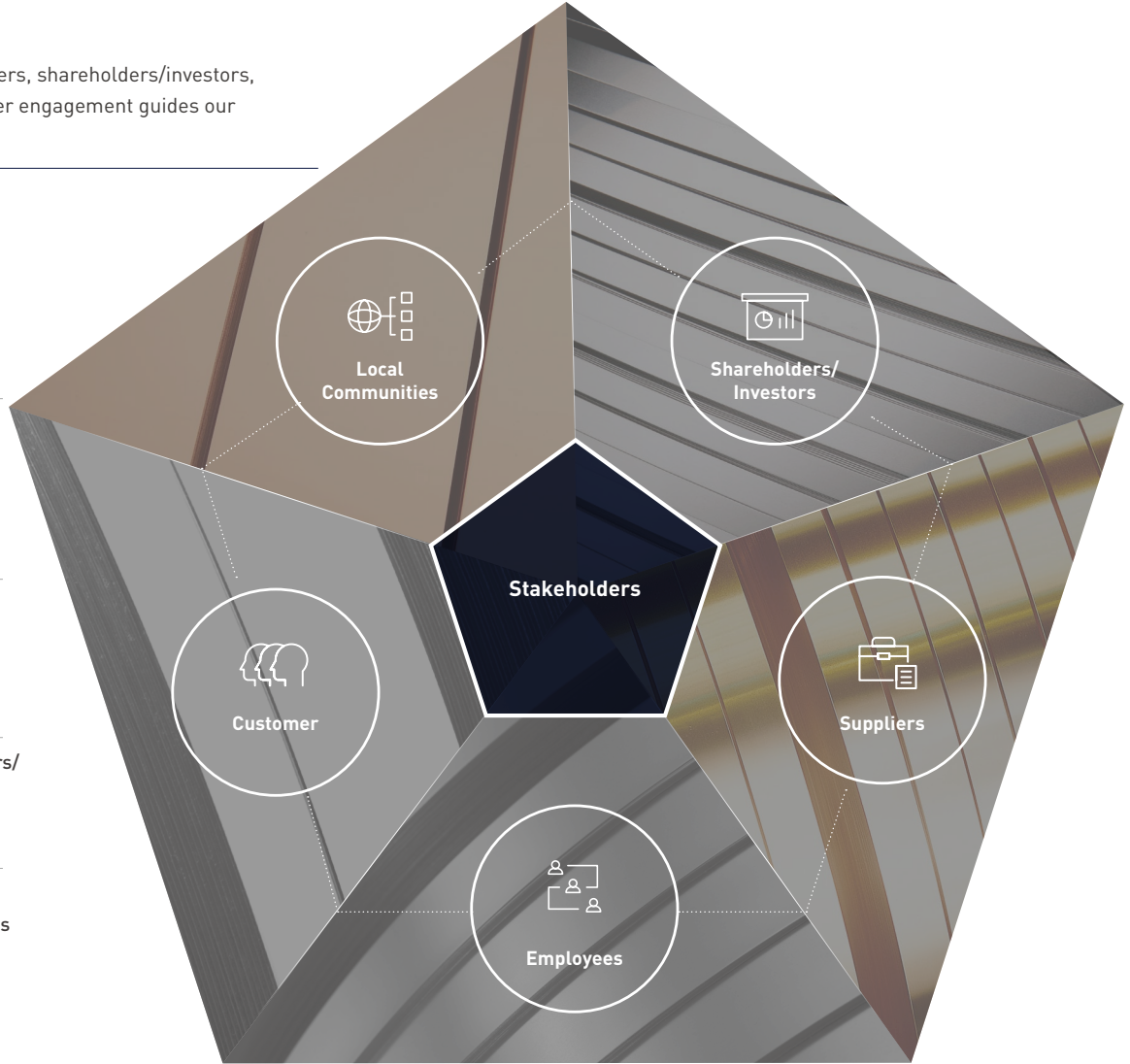
- PSC's Mid- to Long-Term Roadmap for ESG Management
- 2023 ESG At a Glance
- Double Materiality Assessment

Stakeholder Communication

PSC Sustainability Performance

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Communication Channels	Key Activities	
<ul style="list-style-type: none"> <li>Customer Satisfaction Survey</li> <li>Company website</li> <li>Site tour program</li> </ul>	<ul style="list-style-type: none"> <li>Conduct an annual customer satisfaction survey</li> <li>Operate Customer Center to receive sales inquiries regarding products, materials and facilities, management, and raw materials</li> <li>Conduct site visits and production line tours for customers</li> </ul>	Customers
<ul style="list-style-type: none"> <li>Labor-Management Council</li> <li>Business update booklet</li> <li>Organizational culture improvement activities and programs</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly labor-management council meetings</li> <li>Distribute business update booklet explained in cartoons every year</li> <li>Offer various programs such as SoPoong+, P-VENT, Cross Lunch and Cultural Walks</li> </ul>	Employees
<ul style="list-style-type: none"> <li>Supplier satisfaction survey</li> <li>Supplier roundtable</li> <li>Ethics Hotline</li> </ul>	<ul style="list-style-type: none"> <li>Conduct an annual survey on overall satisfaction and improvement areas</li> <li>Support new suppliers and receive supplier suggestions and complaints</li> <li>Handling grievances through Ethics Hotline</li> </ul>	Suppliers
<ul style="list-style-type: none"> <li>Corporate disclosure</li> <li>General Shareholders' Meeting</li> <li>IR</li> </ul>	<ul style="list-style-type: none"> <li>Regular disclosure</li> <li>E-voting and electronic proxy system introduced in 2023</li> <li>Hold quarterly IR</li> </ul>	Shareholders/Investors
<ul style="list-style-type: none"> <li>Social Contribution Activities</li> </ul>	<ul style="list-style-type: none"> <li>Participate in the One Company, One River Cleanup campaign</li> <li>Educational scholarship programs (Byeongsan Educational Foundation, Hakrok Scholarships)</li> <li>Site-specific volunteer and donation activities</li> <li>Cultural activities to support multicultural families</li> </ul>	Local Communities



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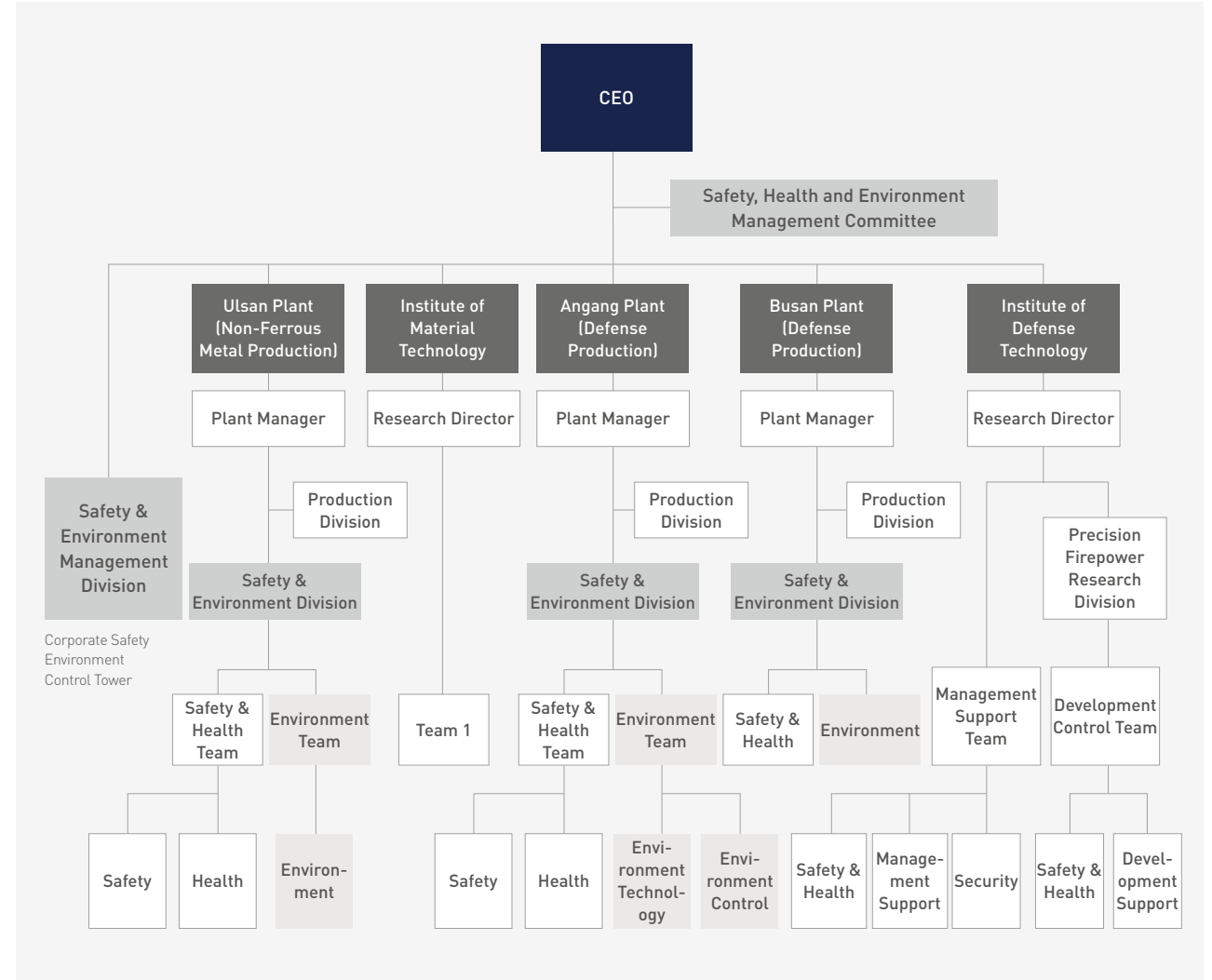
# Environmental Management

## Environmental Management Framework

### Environmental Management Framework

Poongsan has established and operates an environmental management system to ensure systematic environmental management and contribute to the satisfaction of our stakeholders.

Poongsan's environmental management is centralized in the Safety & Environment Management Division and supported by a Safety & Environment Division at each plant. The Safety & Environment Management Division is responsible for overseeing the company's green management strategy and works closely with individual plants to ensure that safety and environmental objectives are achieved. The Safety & Environment Division of each plant is tasked with internal and external environmental analyses pertaining to the plant environment. This includes TMS monitoring of air and water pollutant emissions and the measurement and analysis of environmental pollutants. The office also conducts on-site inspections and implements control measures to prevent and mitigate risks. This involves identifying and evaluating potential risks, establishing preventive measures against pollution, and taking corrective actions when necessary. Additionally, the Safety, Health and Environment Management Committee, established under the CEO, formulates environmental policies and goals for the entire company, and analyzes and responds to environment-related risks.



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**Environmental Management Policy**

In order to mitigate adverse environmental consequences of its operations and maximize positive impacts, Poongsan has established an environmental management policy. This policy guides the company's environmental management activities and fosters environmental stewardship across the company. Employees are dedicated to actively implementing this policy.

Our environmental management policy recognizes the intrinsic link between the environment and our business operations and emphasizes the need for ongoing enhancements. It also delineates Poongsan's dedication to active involvement in environmental conservation endeavors through engagement with local communities and stakeholders.



**Poongsan's Safety, Health and Environment Management Policies**

- 1 In all of the company's management activities, Safety, Health and the Environment are our top priorities.
- 2 We identify and remove any potential Safety, Health or Environmental hazards in advance to help prevent accidents, while we continue working to improve the environment.
- 3 Poongsan provides comprehensive training for all employees that not only comply with relevant regulations, but also meet rigorous, internal standards.
- 4 Within Poongsan's Safety, Health and Environment management system, we set, implement and constantly evaluate specific goals and initiatives for continuous improvement.
- 5 We continually work to communicate, and optimize relationships, with all stakeholders – including customers, contractors, and local communities.

**External Certifications**

Poongsan has obtained ISO 14001, an internationally recognized standard for environmental management systems, across all our business locations. This certification allows us to demonstrate our commitment to establishing and operating environmental management systems in a systematic manner. Through regular audits and reviews, we ensure that our environmental management is consistently validated and improved. As part of our environmental management system, each of our plants conducts regular environmental risk assessments, evaluating both internal environmental risks and external stakeholder requirements, with the aim of identifying and mitigating environmental risks on an ongoing basis.

In 2006, the Ulsan Plant became the first in the non-ferrous metals industry to be designated as a green company. This was in recognition of its commitment to reducing pollutants through the introduction of an environmental management system and investments in pollution reduction facilities, as well as its dedication to the preservation of the local environment. The plant has since retained this designation by the Ministry of Environment following a re-designation review, which recognized its environmental improvement activities aligned with the goal of sustainable development. We will strive to obtain the green business certification not only for the Ulsan Plant but also for all of our facilities.



ISO 14001 Certificate and Green Business Designation



**Raising Environmental Management Awareness**

At Poongsan, environmental training is conducted on a regular basis with the objective of enhancing the environmental awareness of both employees and business partners. To enhance the knowledge of employees engaged in environmental and energy-related activities, external experts are invited to present on topics such as climate change, carbon neutrality, and corporate responses to environmental issues in the ESG era. At the Ulsan Plant, training is provided to raise awareness of the importance of environmental responsibility by sharing domestic and international ESG management issues to enhance employees' environmental consciousness. Furthermore, we conduct environmental training at each plant to instill a sense of environmental awareness among our workforce. We will continue to offer a range of environmental training programs to promote environmental awareness among our employees.

Certifications	Applicable Sites
Green Business	Ulsan Plant
ISO 14001	Ulsan Plant
	Angang Plant
	Busan Plant

In pursuit of our goal of playing an active role in environmental stewardship in local communities, we engage in the One Company, One River Cleanup campaign at each plant. In March 2023, employees at the Angang Plant undertook environmental clean-up activities along Chilpyeongcheon Stream in Angang. Meanwhile, at the Ulsan Plant, ecological restoration work was completed on Namchangcheon Stream in Onyang, with periodic environmental clean-up activities conducted five times. Poongsan will maintain its involvement in river revitalization initiatives at each facility, with the objective of enhancing the environmental quality of neighboring communities and ensuring the sustainability of the aquatic ecosystem.

**Compliance with Environmental Laws and Regulations**

At Poongsan, we are dedicated to ensuring compliance with environmental regulations by clearly identifying relevant legislation, such as the Chemical Substances Control Act, Water Environment Conservation Act, and Clean Air Conservation Act, and incorporating them into our Environmental Management System. We also conduct regular reviews of newly introduced or revised laws and regulations to ensure compliance and prevent violations. In 2022, there was one instance of non-compliance with the Water Environment Conservation Act at the Busan Plant due to exceeding the permissible standard for discharging water pollutants. We promptly implemented corrective measures by improving wastewater discharge facilities and prevention facilities, and there were no other instances of non-compliance with environmental laws and regulations.

Goldfish Introduced into Angang Plant's Wastewater Treatment Plant



**Green Purchasing**

In line with our commitment to sustainable development, we have introduced green purchasing guidelines at our Ulsan Plant. These guidelines aim to proactively replace raw materials and components used in construction/electrical equipment or manufacturing activities with environmentally friendly products.

The term 'eco-friendly' is used to describe products that are certified by environmental marks, in accordance with the law; high-grade recycled products; products with energy efficiency ratings of 1 and 2; products displaying energy-saving marks; high-efficiency energy equipment; products that reduce harmful substances; products that reduce waste; products with overseas environmental marks; and any other products deemed environmentally friendly by the relevant department heads.

We prioritize the purchase of eco-friendly products over quality and price in order to incentivize suppliers to align themselves with our green purchasing policy. We also equip suppliers with guidance on our green purchasing policy and award additional points to eco-friendly products during supplier evaluations, as well as offering training and advice on green purchasing and environmental management practices.

**Investment Review Committee**

The Investment Review Committee is responsible for evaluating the viability of major facility investments. The committee, which is chaired by the CEO, determines the feasibility of investment projects through a review process. Once a project has been approved, the respective functions implement the approved facility investments and monitor the results.

In line with our ESG management framework, we categorize prospective investment projects into safety, environment, energy, and other areas. This approach ensures that non-financial impacts from an ESG perspective inform the investment review and decision-making processes. In 2023, we invested approximately KRW 3.7 billion in facilities with the aim of improving the environment.

Ulsan Plant's Cleanup Activities at Namchangcheon Stream



# Climate Action

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## 2050 Carbon Neutrality Declaration

The international community has acknowledged the urgency of the climate crisis and is taking action to address greenhouse gas emissions, with ongoing discussions on limiting the increase in global average temperature through the adoption of the Climate Change Convention, Kyoto Protocol, and Paris Agreement. In a special report released in 2018, the Intergovernmental Panel on Climate Change (IPCC) outlined a strategy for containing the increase in global average temperature to 1.5°C. This strategy entails a reduction of greenhouse gas emissions by at least 45% from 2010 levels by 2030, with carbon neutrality achieved by 2050. Korea is aligned with the global community in its goal to achieve carbon neutrality by 2050, as set forth in the 2050 Carbon Neutrality Declaration and Vision.

The non-ferrous metals industry has joined the international community in setting an ambitious target of carbon neutrality by 2050, with the establishment of a dedicated consultative body comprising industry, academic and government representatives. This body, the Nonferrous Metals Carbon Neutrality Committee, released a carbon neutrality joint declaration in March 2021, in which Poongsan also committed to playing its part in this endeavor.

Poongsan is currently in the early stages of preparing for the 2050 Carbon Neutrality drive and has set a medium-term goal of reducing carbon emissions by 10% by 2030. It is essential to establish a company-wide strategy that is based on a shared commitment to carbon neutrality. We are therefore in the process of preparing a mid- to long-term strategic framework that is both efficient and effective. This will enable us to identify and respond to relevant risks at a company-wide level.



### Non-ferrous metals industries' commitment to carbon neutrality by 2050

The non-ferrous metals industry recognizes that the reduction of greenhouse gases in response to climate change is an urgent task for human coexistence and prosperity and declares the following to join the 2050 carbon neutrality.

- 1 The industry is working towards achieving carbon neutrality by 2050 through innovative technology development and production structure transformation.
  - In the near term, greenhouse gas emissions will be reduced by building a circular economy and optimizing processes through improved energy efficiency, the use of low-carbon raw materials, and increased metal scrap recycling.
  - In the mid- to long-term, the industry will develop and secure innovative technologies such as low-carbon non-ferrous metal production technology and carbon capture and conversion technology, with the goal of achieving carbon-neutral and eco-friendly smart smelters.
- 2 A "Nonferrous Metals Carbon Neutrality Committee" will be formed with representatives from industry, academia, and research to facilitate ongoing dialogue on shared issues related to the transition to an eco-friendly and future-oriented industrial structure and to strengthen mutual cooperation.
- 3 The industry is committed to enhancing its competitiveness in the future by leveraging the government's support for R&D, establishing a platform for expanded use of recyclable resources, and restructuring production processes. To this end, the industry will engage proactively with the government to explore and implement innovative policy projects, and communicate actively to establish a carbon-neutral, innovative new industrial model to reinforce global competitiveness and generate new opportunities.
- 4 The industry will continue to enhance global collaboration with organizations such as the International Copper Association (ICA), International Zinc Association (IZA) and other non-ferrous metals industries worldwide, in order to facilitate the transition to a low-carbon society.

March 10, 2021

### Climate Change Risks and Opportunities

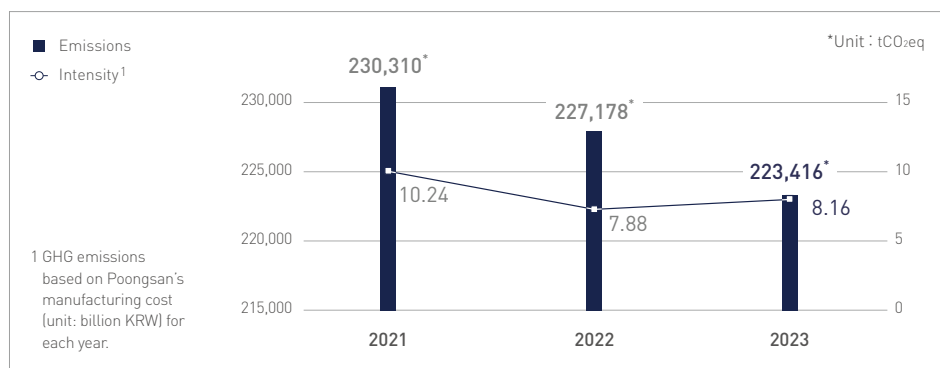
Since the Paris Agreement in 2015, there has been an increased demand from various stakeholders in the financial market for climate-related information to inform decision-making, as well as a growing interest in the financial impact of climate change. In light of these developments, we have conducted a thorough analysis of our current risks and financial impacts of climate change. Over the medium to long term, we will implement concrete strategies to effectively manage the changes and financial impacts of climate change risks on the company, while also enhancing our system for managing these changes.

Climate Change Risks					
Type	Risk	Risk Factor	Potential Financial Impact	Period	Countermeasures
Physical	Acute	Natural disasters, such as floods, typhoons, etc.	Damage to facilities caused by natural disasters, resulting in recovery costs and a decrease in sales during the period of recovery	○○ Medium/long term	<ul style="list-style-type: none"> <li>The Safety and Environment Office at each plant conducts preliminary inspections and takes necessary measures to prevent facility damage due to natural disasters.</li> <li>We have taken out insurance policies to cover our business assets against potential risks.</li> </ul>
	Chronic	Environmental changes such as temperature changes, drought, and sea level rise	<ul style="list-style-type: none"> <li>Increased energy costs such as electricity costs due to increased average temperatures</li> <li>Reduced productivity and lower operating income due to water shortages</li> <li>Disruptions in operations due to inundation of business sites due to sea level rise</li> </ul>	○○○ Short/medium/long term	<ul style="list-style-type: none"> <li>We are continuously striving to identify and implement effective countermeasures in a variety of ways, including facility investments and operational improvements to enhance energy efficiency. Additionally, we are working to reduce water usage by optimizing processes and expanding recycling technologies.</li> <li>In the medium to long term, we intend to evaluate the potential impact of sea level rise on our business sites through scenario analysis and implement appropriate measures in line with the identified risks.</li> </ul>
Transition	Policy and legal	Stricter GHG emission regulations	<ul style="list-style-type: none"> <li>Potential increase in operating costs resulting from the reduction of domestic emissions quotas and the increase in carbon credit prices</li> <li>Potential increased cost of complying with global GHG regulations such as CBAM in the short, medium and long term</li> </ul>	○○○ Short/medium/long term	<ul style="list-style-type: none"> <li>We are evaluating investments in facilities and the introduction of renewable energy and PPAs as a means to reduce GHG emissions and improve energy efficiency in the medium and long term.</li> <li>We are taking action to reduce greenhouse gases and energy use by participating in the carbon neutral facility support program and the greenhouse gas/energy reduction facility support program.</li> </ul>
	Technology	Transition to low-carbon technology	Increased capital expenditure for GHG reduction facilities and energy efficient facilities	○○○ Short/medium/long term	
	Market	Increased demand for carbon reduction from customers	Reduced revenue due to inability to meet customer requirements to verify and reduce carbon emissions for Scope 3 reduction	○○ Medium/long term	<ul style="list-style-type: none"> <li>In the medium to long term, we are considering the introduction of carbon footprint certification for key products.</li> </ul>
Climate Change Opportunities					
Opportunity	Opportunity Factor	Potential Financial Impact		Period	Countermeasures
Resource efficiency	Increased revenue by driving demand for eco-friendly products thanks to higher recycling rates of copper	Increased sales driven by growing demand for products that use recycled materials		○○ Medium/long term	We plan to expand the proportion of recycled raw materials in our products by increasing the copper scrap content in each product.
Product	Increased product demand due to expanded green investments	Increased sales due to growing demand for components used in energy storage, wind/solar power generation, and electric vehicles as a result of increased investment in green infrastructure		○○○ Short/medium/long term	While we will respond flexibly in the short term through strategic alliances, in the medium to long term we plan to stabilize product supply and expand market share by increasing capital investment.

## Greenhouse Gas Emission Management

### Greenhouse Gas Emission Status

At Poongsan, we recognize the critical importance of reducing GHG emissions for attaining carbon neutrality in the medium to long term. To this end, we are committed to reducing GHG emissions through improvements in facilities and operational practices, as well as monitoring for abnormal emissions or leaks, with the goal of achieving carbon neutrality by 2050.



### GHG Reduction Efforts

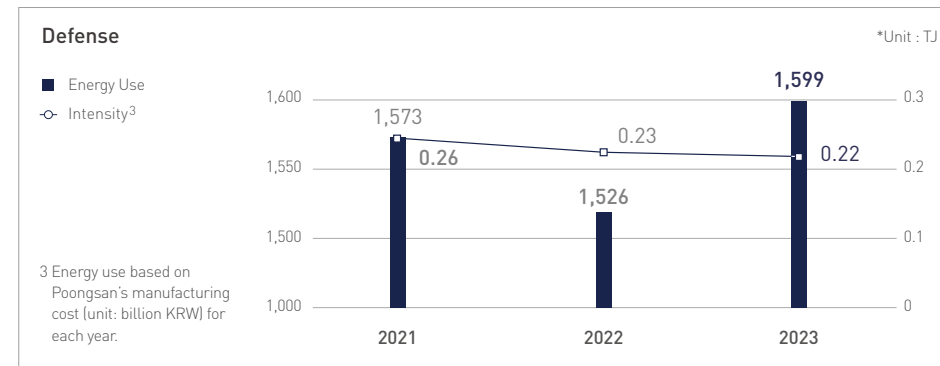
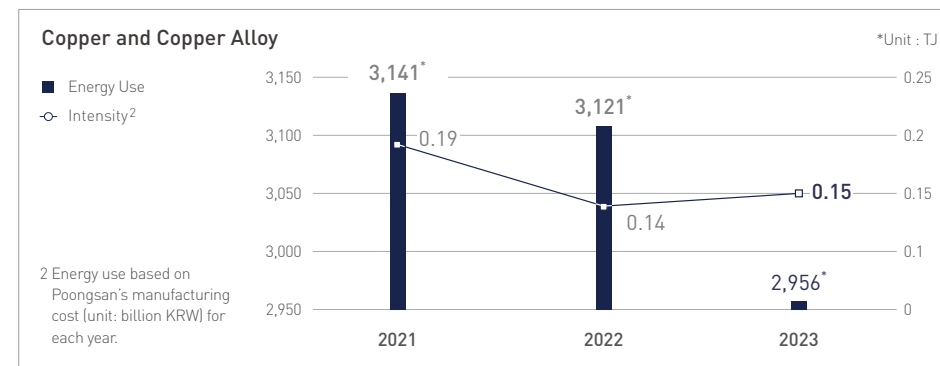
We are concentrating our efforts on reducing greenhouse gas emissions through investments and improvements to our aging emission facilities. In 2023, the Angang Plant successfully replaced one old 20-ton water-tube type boiler with five 3-ton once-through boilers with improved efficiency. The replacement is expected to optimize boiler operations based on process load, reducing GHG emissions and improving overall efficiency.

In light of the necessity to reduce greenhouse gas emissions and the long-term goal of integrating renewable energy into our strategy, we are currently investing in solar power generation facilities at the Ulsan Plant on a pilot basis. Despite the relatively modest capacity of the 48kW facility, we remain committed to pursuing the integration of renewable sources to mitigate the impact of climate change. Furthermore, we will endeavor to minimize greenhouse gas emissions by replacing outdated infrastructure and participating in carbon neutrality support programs.

## Energy Use Management

### Energy Use Status

Poongsan is dedicated to improving energy efficiency and reducing wasteful energy usage through a comprehensive, company-wide approach that involves active management at all levels.



### Energy Saving Efforts

In order to improve energy efficiency, Poongsan made an investment to replace the lighting in the Angang Plant with LEDs in 2023 and is currently implementing further replacements in 2024. Furthermore, we are replacing facilities that have become less energy efficient over time with more efficient alternatives on an annual basis. Furthermore, we are investing in facilities to enhance energy efficiency throughout the process, including the construction of a smart factory at our Ulsan Plant. Going forward, we intend to invest in continuous improvements to energy efficiency and the reduction of inefficient energy use.



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## Reducing Environmental Pollutants

### Air Pollutant Control

In line with the strengthening of regulations such as the Clean Air Conservation Act, Poongsan is intensifying its efforts to minimize air pollutant emissions through the optimization of air pollutant management facilities and the monitoring of pollutant emissions. We have installed a range of air pollutant abatement facilities, including inertial force dust collectors, wet scrubbers, bag filters, activated carbon adsorption towers, and combustion control facilities. These facilities are designed to minimize air pollutant emissions, including NO<sub>x</sub>, SO<sub>x</sub>, and particulate matter. Additionally, a Tele-Monitoring System (TMS) has been installed at key locations to track air pollutant concentrations in real time, allowing for the swift identification of any irregularities in emissions. We monitor air pollutants through self-measurement in line with annual, quarterly, and monthly cycles.

The Angang Plant is planning to install additional wet scrubbers in 2024 to reduce pollutant emissions from its processes. The new installation will capture and discharge exhaust fumes, dust, and other air pollutants that were released from the existing dry process, thereby reducing emissions and improving air quality in the surrounding area. We will continue to work to reduce air pollutants in line with our air pollutant management targets.

### Chemicals Control

Poongsan is classified as a hazardous chemical handling facility under the Dangerous Substances Control Act. We prioritize proactive prevention activities to maintain a safe workplace. The chemicals that comprise our main products are managed in accordance with the requirements set forth in Material Safety Data Sheets (MSDS). When introducing new chemicals, we conduct a comprehensive evaluation based on the information provided in the MSDS and perform environmental reviews, including assessments of environmental impact and wastewater treatment feasibility. We maintain a detailed control register of incoming and outgoing quantities to effectively manage our chemical inventory.

We utilize the Chemical Hazard Risk Management (CHARM) system for chemicals to analyze and assess their risks, and then establish and implement measures to minimize or eliminate risks based on the evaluation results. Furthermore, we conduct weekly self-inspections of facilities where hazardous chemicals are used, stored, or warehoused, and conduct annual inspections to ensure the safety of chemical storage and handling facilities. To ensure the safety of our facilities handling hazardous chemicals, we have installed gas detectors, CCTV, and leak detection sensors to monitor for leakage in real time. Furthermore, we conduct regular drills on chemical accident scenarios to prevent and respond to such incidents. In addition, we have an emergency response system in place to limit damage in the event of an accident.

### Soil Pollutant Control

Poongsan monitors the impact of oil and other substances on soil to minimize soil pollutants, and inspects soil pollution levels at each business site every two years.

### Water Resources Management

At Poongsan, we are aware of the importance of water as a shared resource and are therefore committed to efficient water use and the minimization of polluted water discharge. To achieve this, we have implemented a systematic approach that encompasses water withdrawal, use, and discharge. Water is mainly used for cooling in the process of producing rolled materials.

To manage water resources, wastewater generated at our plants is collected through each plant's own wastewater treatment facility and is finally discharged after physicochemical and biological treatment if the discharge meets the standards. The Angang and Busan Plants discharge into rivers, while the Ulsan Plant discharges to a final sewage treatment plant. Since the Angang and Busan Plants discharge directly into rivers, we have installed a water quality TMS to measure and monitor water pollutant concentrations in real time for strict management of water pollutants. In addition, all plants periodically monitor specific water pollutants through self-measurements to strictly manage the quality of discharged water. All of our plants strictly comply with the permissible discharge standards under the Clean Water Environment Conservation Act, and some plants are striving to minimize the impact on water pollution by managing internal management standards below the legal permissible thresholds.

At the Ulsan Plant, cooling water is mainly used in the rolling and extrusion processes of copper and copper alloy products. The plant is striving to save water resources by collecting the cooling water used in the rolling and extrusion process at the central cooling tower, filtering and cooling it down through the industrial water reuse facility, and recycling it as cooling water.

# Circular Economy

## Waste Management

At Poongsan, we understand that non-compliance with laws and regulations or improper disposal of waste can result in legal sanctions and environmental contamination. That's why we have a robust waste management system in place at all our business sites. This system, which is in line with the Waste Management Guidelines, covers the entire lifecycle of waste, from generation to final disposal. It also ensures that we keep detailed records of each type of waste through the Proper Waste Management System (Allbaro). We consider recycling as a priority for all waste generated at our workplaces, and when selecting suppliers for waste disposal, we give priority to companies that can recycle waste in order to reduce the amount of waste generated.

We categorize waste by type and specify disposal methods, discharge instructions, and designated locations to prevent waste from being mixed and discharged. Furthermore, when new waste is generated and it is necessary to confirm whether it contains hazardous substances, we require that the waste be analyzed through sampling and managed and disposed of in accordance with applicable regulations.

Copper Scrap for Recycling



## Resource Recycling

Our Copper and Copper Alloy Division is a non-ferrous metal processing business that uses electrolytic copper as the primary raw material, and we endeavor to effectively manage our resources.

First and foremost, our goal is to increase scrap utilization in the casting process. We leverage the selective recycling profile of copper and copper alloy products to achieve this goal. All copper scrap generated during the rolling and extrusion process is collected and stored, and copper scrap is recycled in the casting process, in conjunction with electric copper, with the aim of reducing the quantity of electric copper raw materials employed.

Copper scrap represents a more energy- and carbon-efficient alternative to electrolytic copper manufactured by smelting copper ore. As such, it can play a role in promoting the circular economy. To this end, we will seek to increase the recycling of copper scraps by contracting with customers to collect copper scraps and expanding our stable suppliers of copper scraps.

Furthermore, the casting process inevitably generates dross, a byproduct containing impurities that cannot be directly recycled back into the process. As a result, dross is typically regarded as a waste product.

To transform dross by-products into valuable resources, Poongsan collaborates with a partner company to extract the copper component and recycle it into the casting process. Alternatively, the copper is sold to an external party who repurposes it into resources. These initiatives reduce waste generation and optimize resource utilization.

Going forward, Poongsan will continue to identify areas for improvement and establish strategies to respond to them in order to contribute to the resource circular economy.

# Safety & Health

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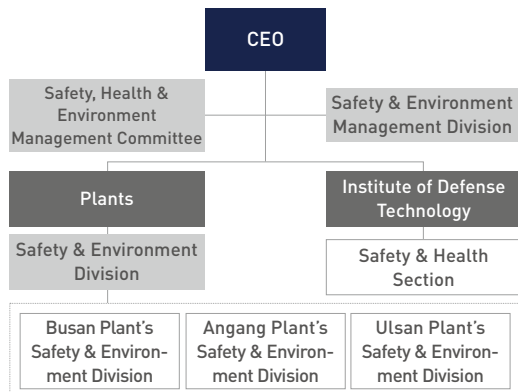
## Safety and Health Management Framework

### Organization

Poongsan has placed the Safety & Environment Management Division — the control tower for safety and health matters — under the CEO to streamline the company’s safety management system across all plants. Additionally, to bolster autonomy of safety operations, the safety and environment teams at each plant have been elevated to ‘divisions’ and repositioned with through enhanced organization and staffing.

Since 2022, we have operated the Safety, Health, and Environment Management Committee with the objective of ensuring efficient, company-wide consultation and decision-making in matters related to safety, health, and the environment. The committee convenes quarterly to review performance and major issues in these areas, and makes decisions on policies, goals, and safety and health plans as needed.

### Organizations in Charge of Safety and Health



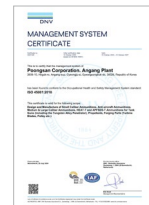
## Safety and Health Mission/Policy

At Poongsan, we recognize that the safety and health of our people and the preservation of the environment are fundamental to our sustainability agenda. In alignment with our vision and commitment to safety excellence, we have established and implemented a comprehensive Safety, Health, and Environment Management Policy to guide our efforts.

Poongsan’s Safety, Health and Environment Management Policies →

## Safety and Health Management System

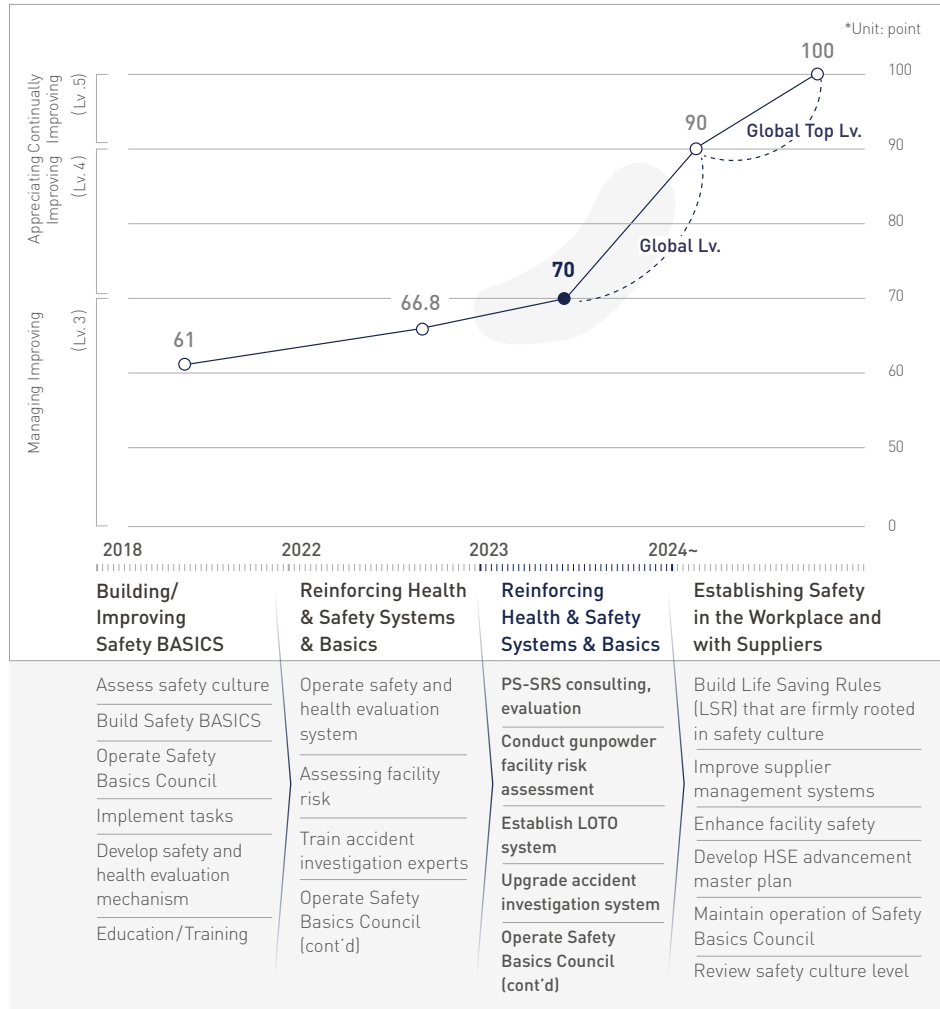
Poongsan is committed to fostering a safe and healthy workplace for all employees and partners. We proactively identify and mitigate potential health and safety risks through a systematic approach. As part of our commitment to health and safety, we have obtained ISO 45001 certification for all our plants in Busan, Ulsan, and Angang since 2020. The ISO 45001 standard, established by the International Organization for Standardization (ISO) and the International Labor Organization (ILO), sets international benchmarks for health and safety management systems. We adopt a proactive stance in the prevention of occupational accidents and the promotion of employee health, engaging with management, employees, and stakeholders in a collaborative manner.



**Improving Safety Culture**

Poongsan is dedicated to establishing a robust safety operations system to optimize supplier management and drive continuous improvement in facility safety. This will enable us to attain a 'continually improving' safety culture by 2025, progressing from our current 'managing' approach to one that encompasses a more holistic and mature approach to safety.

**Improving Safety Culture**



**Health and Safety Management Activities**

**Promoting Employee Health**

**Building a Healthy Workplace** At Poongsan, we prioritize the well-being of our employees. We measure and evaluate employee exposure to potential hazards at each workplace and implement improvements to facilities and equipment to prevent occupational diseases and create a positive work environment. Additionally, we offer a range of health facilities and programs to promote continuous health and well-being among employees.

**Health Promotion Programs** The company offers a variety of programs designed to promote employee well-being. These include a walk-on challenge, a smoking cessation program, in-home workout training, an In-Body competition, a mindfulness program, a sobriety campaign, health counseling for people with symptoms, a health care center, and various other programs.

**Occupational Disease Prevention Efforts** Our company is committed to the prevention of occupational diseases. We investigate and eliminate harmful factors affecting employees. We take a multi-faceted approach that includes the removal, replacement, and engineering/technical solutions. Additionally, we conduct periodic checkups to monitor and manage employees, along with regular monitoring and management through periodic checkups.

<b>Respiratory Protection Program</b>	Establishing a comprehensive plan to prevent and manage health hazards such as respiratory diseases caused by dust generated in the workplace where employees work.
<b>Work in Confined Spaces Program</b>	Developing a plan to prevent accidents such as asphyxiation when working in confined spaces.
<b>Hearing Conservation Program</b>	Developing a comprehensive plan to prevent and manage noise-induced hearing loss in the workplace.
<b>Musculoskeletal Disease Prevention and Management Program</b>	Providing preventive measures to prevent musculoskeletal diseases and eliminate and improve harmful risk factors to establish fundamental preventive measures in the workplace
<b>Job Stress Management Program</b>	Identifying and managing work-related stressors in advance, identifying health conditions early, and providing prompt follow-up and rehabilitation as needed
<b>Employee Assistance Program (EAP)</b>	Expert counselling and coaching on various difficulties or concerns that may arise in daily life *Maximum of 5 times per year/person
<b>Heat Illness Prevention</b>	Setting and implementing standards to prevent heat-related illnesses, including heat stroke  Providing drinking water, salts, shade, adjusting break times during heat waves, etc.

## Safety Training

### Employee Safety Training

We conduct safety training for all employees who enter our sites to improve their safety awareness and compliance with our safety rules.

To systematically improve the company's safety and health capabilities, we establish annual safety and health training plans for each workplace and integrate them into a company-wide training plan.

To internalize safety and health training in the organization, we supplement the training infrastructure and diversify the training methods to encourage participation, and provide special lectures on safety management by top management to communicate the commitment to safety management and develop safety leadership.

We also regularly collect feedback from employees on safety training and, where necessary, adjust the safety training plan to ensure it is relevant to practice.

### Emergency Response Drills

We have emergency response scenarios and manuals in place to quickly disseminate information and minimize damage in the event of a major disaster or imminent risk of disaster, and we conduct emergency response exercises for all departments at least once a year.

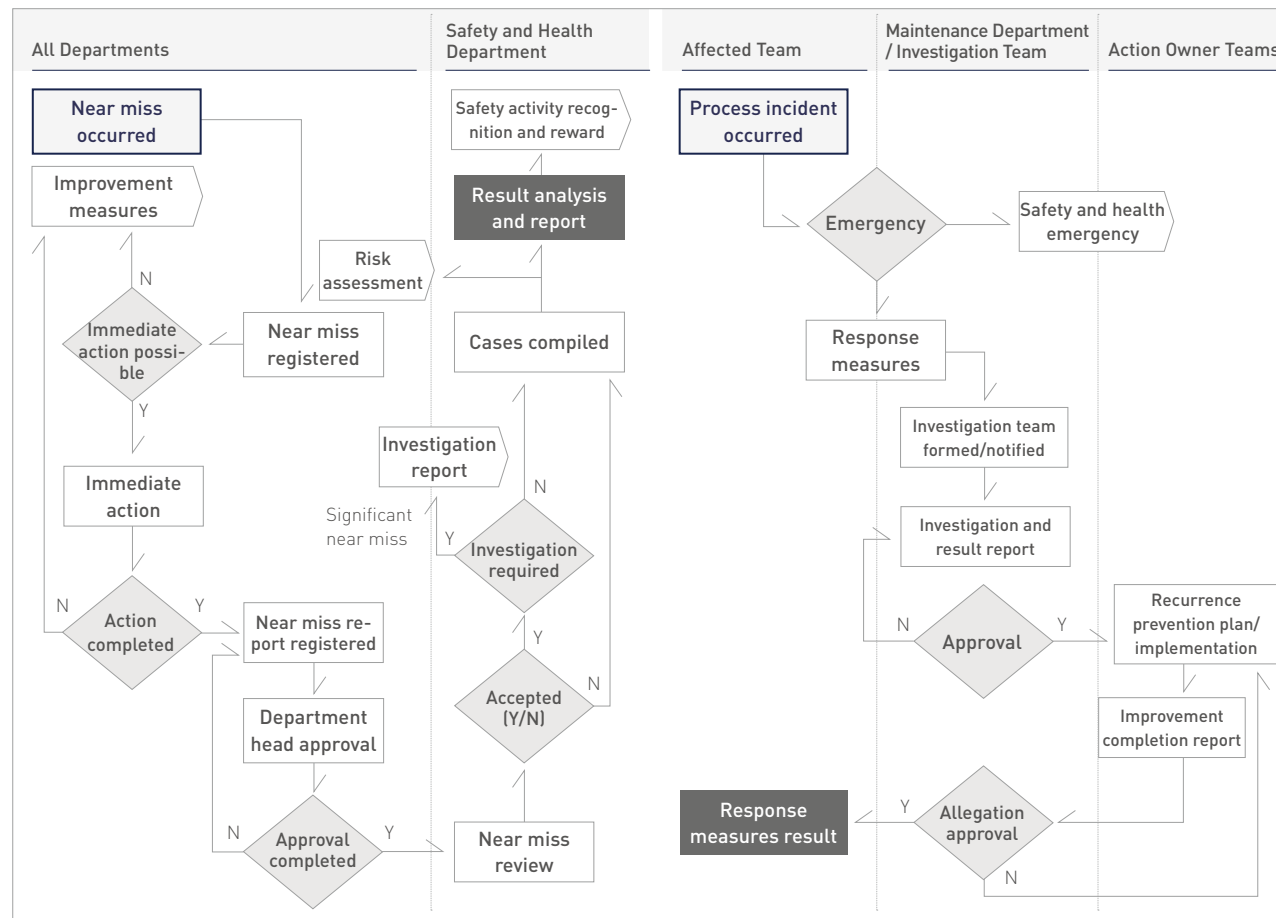
We have established and maintain an emergency contact system and periodically review our emergency response plan. In addition, regular training and exercises are conducted to enhance the operational skills of our first responders. Emergency response equipment, such as life-saving equipment, disaster prevention equipment, evacuation protection equipment and first aid kits, is also made available for rapid response.

## Risk Management

### Safety Incident Management

In the event of a safety incident, the initial report will be made to the Safety Organization at headquarters immediately or within 24 hours of the incident, depending on its severity classification, and the investigation will be conducted within 72 hours as a matter of principle in order to limit damage through prompt reporting and activation of the response system. In the event of an incident, we make every effort to prevent its recurrence or similar incidents in the future by identifying the cause of the incident and following the reporting policy, which refers to the Occupational Injury Statistics Practice Manual. We also track the treatment status and recovery time for injured employees to return to work.

#### Incident Management Process at Ulsan Plant



**Workplace Health and Safety Inspection**

Poongsan regularly conducts joint safety and health inspections and walk-through inspections in the presence of the head of the safety and health department and the management of the suppliers to identify potential risks in the workplaces, including those of the suppliers. In addition, cross-checks are conducted between workplaces to increase the effectiveness of inspections by encouraging cooperation and creating synergies between different sites.

For newly introduced production and operational lines and facilities, we ensure that they are designed with safety in mind at the design stage, taking into account requirements based on international standards. We also develop plant safety specification sheets for major production facilities.

The Ulsan and Angang Plants are subject to Process Safety Management (PSM), which involves an annual audit of the level of implementation of PSM by an audit committee composed of PSM experts and relevant functional managers. The committee also develops remediation plans for identified risks and tracks remediation progress.

**Supplier Health and Safety Management**

In an effort to reinforce our commitment to safety, we are taking steps to enhance the safety management of our suppliers by applying our standards consistently throughout the entire process, from supplier selection to evaluation. In selecting suppliers, the Qualified Contractor Evaluation System is used to assess their ability to prevent and address occupational accidents. Furthermore, monthly safety and health council meetings are held with our suppliers. These meetings facilitate the discussion of various safety and health issues, as well as the promotion of safety management activities with the objective of fostering the development of an autonomous safety management system. Furthermore, our company is committed to enhancing the safety and health of our suppliers through a variety of initiatives. We offer financial assistance for safety and health-related activities, as well as work environment improvements. Our safety and health information and basic safety training for off-site suppliers' workers are part of our online access control process. We are dedicated to fostering a safe workplace for all our employees.

**Enhancing Safety Management and Competency in All Areas, From Supplier Selection and Contract to the Actual Work Performed and Performance Evaluation**

1 <b>Supplier Selection Stage</b>	<p><b>Identify contractors</b></p> <ul style="list-style-type: none"> <li>Clarify the scope of the contractor's obligations</li> </ul>	<p><b>Set evaluation criteria for qualified contractors</b></p> <ul style="list-style-type: none"> <li>Two evaluation categories (more than 50 employees and less than 50 employees)</li> <li>Computerized operation (P-SRM)</li> <li>Standardized evaluation form</li> </ul>	
2 <b>Contract Stage</b>	<p><b>Standardized contract forms</b></p> <ul style="list-style-type: none"> <li>Production process (on-site contractor)</li> <li>Outsourced construction</li> <li>Outsourced machining</li> <li>Equipment and supplies</li> </ul>	<p><b>Apply policy on payment of contractor health and safety costs</b></p> <ul style="list-style-type: none"> <li>On-site contractors: 0.5% or more of the contract amount</li> <li>Outsourced machining contractors: 1% or more of the contract amount</li> </ul>	<p><b>Apply safety management standards for equipment (facilities) and other lease contracts</b></p> <ul style="list-style-type: none"> <li>Enforce the lessor's health and safety obligations</li> </ul>
3 <b>Pre-job Stage</b>	<p><b>Review and approve safety management plan</b></p> <ul style="list-style-type: none"> <li>Outsourced contractors: Apply a standardized plan to all contractors</li> <li>On-site contractors: Expand to all contractors</li> </ul>	<p><b>Operate safe work permit standards</b></p> <ul style="list-style-type: none"> <li>Unified standards by plant</li> </ul>	
4 <b>Operational Stage</b>	<p><b>Operate contractor safety management standards</b></p> <ul style="list-style-type: none"> <li>Unified standards by plant</li> </ul>	<p><b>Fulfill the obligation to account for occupational safety and health management costs in construction projects</b></p> <ul style="list-style-type: none"> <li>Applicable accounting standards by construction type and size</li> <li>3.09% for KRW 10 million to less than KRW 500 million</li> <li>Lump sum payment for amounts less than KRW 40 million</li> <li>Supporting evidence &amp; accounting required for amounts over KRW 40 million</li> </ul>	<p><b>Guidance for the prevention of occupational accidents in construction</b></p> <ul style="list-style-type: none"> <li>Applicable to projects with over KRW 100 million to less than KRW 12 billion (1 month or more)</li> <li>Content: Providing safety guidance for targeted construction projects</li> </ul>
5 <b>Evaluation Stage</b>	<p><b>Review contract and progress for evaluation</b></p> <ul style="list-style-type: none"> <li>Standardized evaluation criteria</li> <li>Reflect evaluation clause when signing contract</li> </ul>		

# Supply Chain Management

## Supply Chain Management Framework

In order to foster a sustainable supply chain and promote mutual growth with suppliers, Poongsan has established the Shared Growth Committee, chaired by the CEO. The Shared Growth Team, which was recently established within the Integrated Procurement Office in 2023, is tasked with assessing suppliers and providing guidance and training on safety and environmental matters in close collaboration with relevant departments. The Shared Growth Team operates a variety of shared growth programs and manages the Shared Growth Fund, supporting sustainable growth with suppliers.

We classify the 200 primary suppliers surveyed for the Shared Growth Committee as core suppliers, along with the 70 suppliers with whom we have signed Fair Trade agreements. We promote risk management and various shared growth policies with these suppliers.

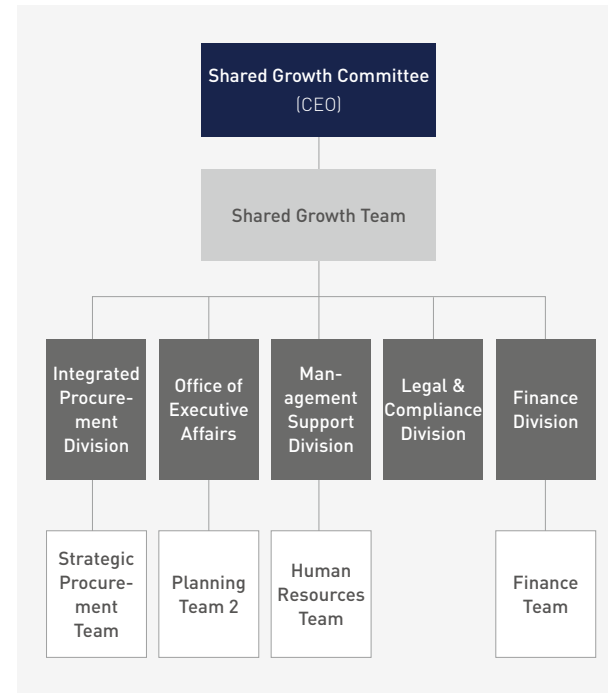
## Supply Chain Policies

### Purchasing Policy

Poongsan is committed to fostering shared growth with its suppliers through the establishment of mutually beneficial partnerships based on a culture of fair trade. To achieve this goal, we have established 'togetherness' as our core value and have implemented the four guidelines set by the Korea Fair Trade Commission, namely: guidelines for contract signing, guidelines for supplier selection and operation, guidelines for establishing and operating an internal review committee, and guidelines for issuing and preserving documents.

Furthermore, in alignment with our commitment to address social issues such as human rights violations, child labor, exploitation, and sexual assault, we have implemented a policy prohibiting the use of four minerals (tin, tungsten, tantalum, and gold) mined in 10 con-


flict-affected countries in Africa, including Congo. We are committed to ensuring that the minerals we use are sourced responsibly and have transitioned to purchasing these minerals through Conflict Free Smelters (CFS), certified by the Responsible Business Alliance (RBA). In light of the recent geopolitical instability, intensifying climate change impacts, and the spread of protectionism, which have cast doubt on the stability of global supply chains, we are taking proactive measures to mitigate the risk of supply shortages. We are securing volumes under multi-year contracts and diversifying suppliers for key items to ensure a stable and reliable supply.



Core Value

## Togetherness | 同行

“ Alone, we go fast; together, we go further.”



Hand in Hand Process

Establishing a win-win partnership by cultivating a fair trade culture

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Enhancing mutual competitiveness

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Enhancing national competitiveness

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Win-win cooperation

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Compliance with fair trade laws

### Shared Growth Policy

At Poongsan, we engage in a variety of shared growth activities with our suppliers, including financial and technical support, training, and other employee benefits, to foster sustainable shared growth. In recognition of this commitment, Poongsan achieved an Outstanding rating in the Shared Growth Index released by the Shared Growth Committee in 2023.

#### Financial support

**Performance Sharing System** : We remunerate our suppliers for their contribution to our collective success in improving key ESG indicators, such as carbon emission, energy reduction, waste and air pollutant management, eco-friendly products, and safety standards. We also recognize their input in technical areas, such as facility improvement. In 2022, we allocated 50% of the savings generated by suppliers' projects, amounting to KRW 25 million, through an adjustment in the contract price.

**Shared Growth Fund** : Poongsan provides financial support to its partners by enabling them to take out loans of up to KRW 1 billion at below-market interest rates to finance their business needs. As of 2023, the fund has reached a total of KRW 5 billion and is on track to reach KRW 10 billion by 2024.

**Price Adjustment Program** : Voluntarily participating in the price adjustment program driven by the Ministry of SMEs and Startups, we adjust the delivery

price of hydrogen gas, tin, copper cables, and other raw materials delivered by our suppliers according to fluctuating market prices in order to alleviate the burden of global inflation and support small and medium-sized enterprises in navigating operational challenges. In 2023, we increased subcontracting payments by KRW 1 billion for a total of 16 suppliers under this program.

**Rent Waiver** : We waive the monthly rent for on-site contract manufacturers when the number of operating days falls below 30% of the total number of business days. In 2023, three companies were granted exemption from the monthly rent for the period of non-operation of their workshops.

**Early Payment Ahead of Holiday Seasons** : To ease the financial burden on our suppliers, we settle payments earlier than usual in the run-up to the Lunar New Year and Chuseok holidays.

#### Technical Support

**Supplier Support Group** : A team of experts drawn from various departments, including management/cost, quality/technology, safety/environment, and security, visit suppliers to assess their capabilities in each field, identify areas for improvement, and provide assistance in order to enhance supply chain competitiveness.

**Supplier Quality Management Process Support** : Poongsan offers targeted assistance to suppliers that produced nonconforming products in the previous year and new outsourcing partners with the aim of driving quality improvement through quality management process support in nonconformity management, process management, facility management, standard procedures management, and worker management, with a view to preventing faulty products from being delivered and ensuring final quality is consistently reliable.

#### Supplier Training and Other Benefits

Reimburse suppliers' employees for training costs to attend online courses on Hunet

Invite external experts to provide training on fair outsourcing/contracting practices and ESG

Provide safety and health mentoring and first aid training to local SMEs

Provide holiday presents, congratulatory support, and quarantine supplies to suppliers and improve rest facilities

### Supplier Communication

Poongsan has established a variety of communication channels to facilitate effective communication with suppliers. Our goal is to address their concerns and suggestions promptly and effectively.

**Supplier Satisfaction Survey**: Annually, we conduct an anonymous transaction satisfaction survey online in 10 sections, including purchasing process, employee attitude, company evaluation, and shared growth activities. In 2023, a total of 169 suppliers were surveyed, and the overall satisfaction average 4.49 points, indicating a favorable level of satisfaction. We share the results of the satisfaction survey at the supplier meeting for each plant and use them to develop improvement measures.

**Supplier Meetings**: We conduct regular meetings at each plant to provide an overview of Poongsan's support system for new suppliers and to address any challenges or suggestions they may have. These meetings also serve as a platform for us to communicate the actual implementation of improvement measures in response to their suggestions.

**Ethics Hotline**: Ethics Hotline page on the company website is accessible to all employees, including suppliers, to report anonymously on fair trade violations and ethical violations within the company.

### Supplier Risk Management

Poongsan employs a fair and impartial process for the selection and registration of suppliers, in accordance with the standard contract and the four guidelines set forth by the Korea Fair Trade Commission. Our supplier selection criteria include consideration of credit information, facility capabilities, raw material supply methods, and quality management systems.

A comprehensive evaluation of suppliers is conducted on an annual basis for each sourcing group of defense manufacturing, raw materials, and equipment construction in the following categories: management/cost, quality/technology, safety/environment, and security. As part of our ongoing commitment to sustainable supply chain management, we have incorporated ESG factors—such as environmental management, supply chain, employees, and ethical management—into the evaluation process in 2023. Following the evaluation, we recognize our most outstanding suppliers with a range of benefits, including rewards, exemption from contract performance bonds, exemption from credit rating fees, and priority in awarding orders. Suppliers whose performance is below the required standards will be given the opportunity to improve their performance independently by submitting improvement plans.



# Human Resources

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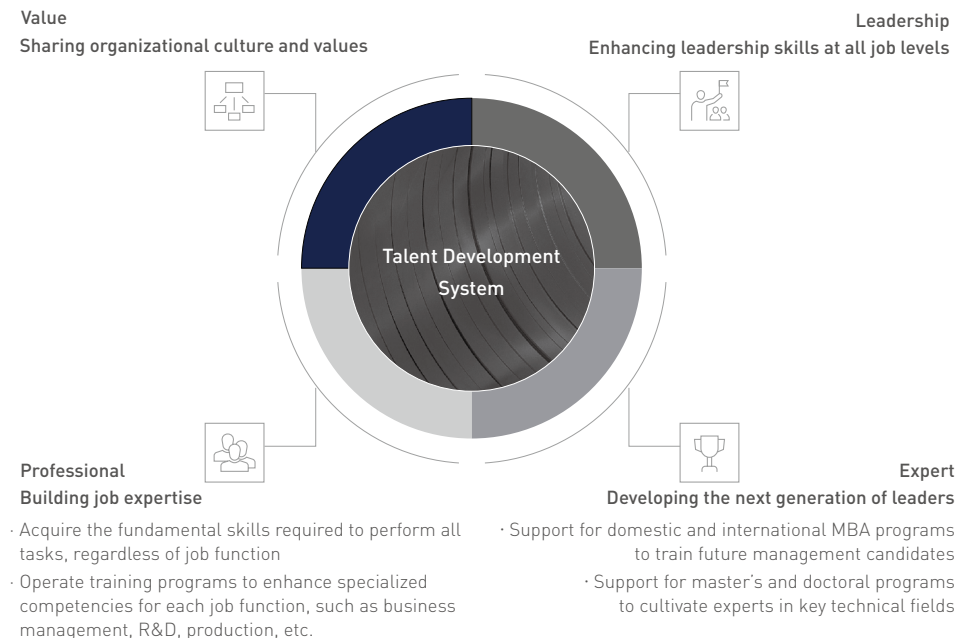
Appendix

## Talent Development

### Talent Image

At Poongsan, we seek to cultivate a dynamic and adaptable talent image. We believe in challenging the status quo, exercising creativity in all our endeavors, embracing change, and confirming results by emphasizing ethical and fundamental principles, and communicating with an open mind. To cultivate a talent pipeline aligned with our values, we have set four talent development directions: value, leadership, professional, and expert. We are building a talent development system anchored by these directions.

- Implement training for all employees to embed core values and share organizational values
- Operate programs to respond to changing environments and create a healthy organizational culture
- Implement systematic talent development programs to facilitate employee growth into next-level leaders
- Provide a range of training and coaching programs to support leadership roles

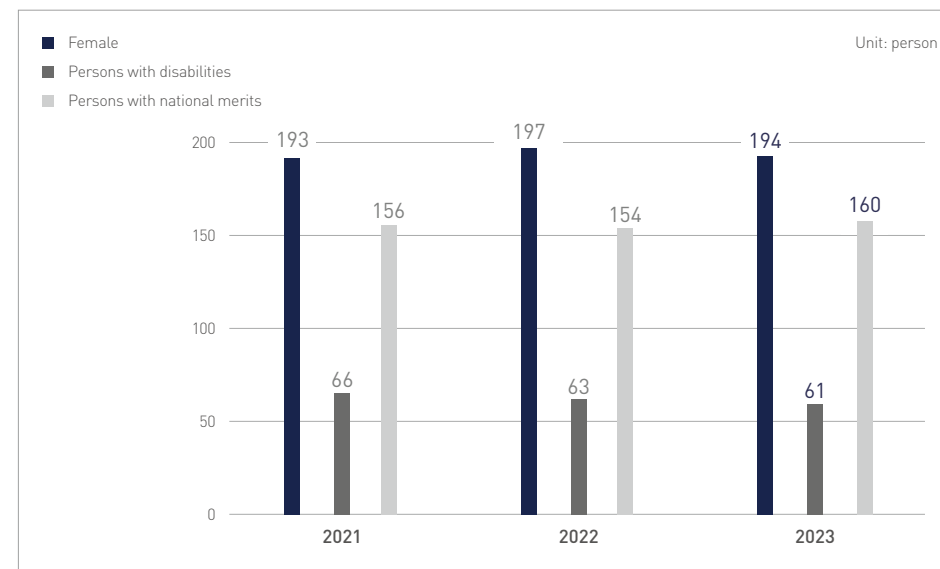


## Talent Recruitment

At Poongsan, we hold open recruitment for new and experienced talent to lead innovation and growth. Our systematic and specialized screening procedures and standards ensure that we objectively evaluate the competencies and qualities of applicants. Furthermore, to guarantee the transparency and fairness of our selection process, we implement a professional interviewer certification system.

### Diversity and Inclusion

We are committed to fostering a diverse and inclusive workforce based on fairness and non-discrimination in talent recruitment. We maintain rigorous oversight to guarantee impartiality and equal opportunity in hiring and compensation, regardless of age, gender, or disability status. In recognition of the unique challenges faced by individuals with disabilities and those with national merits, we implement a recruitment policy that awards additional points to create a level playing field for individuals with disabilities and national merits.



**Employee Training and Career Development**

At Poongsan, we conduct systematic training for employee capacity building, which is categorized into general training, job-level training, job training, and specialized training. New and experienced hires receive three weeks of intensive training to facilitate their transition to their new roles. Additionally, we offer internal and external language training to support employee development.

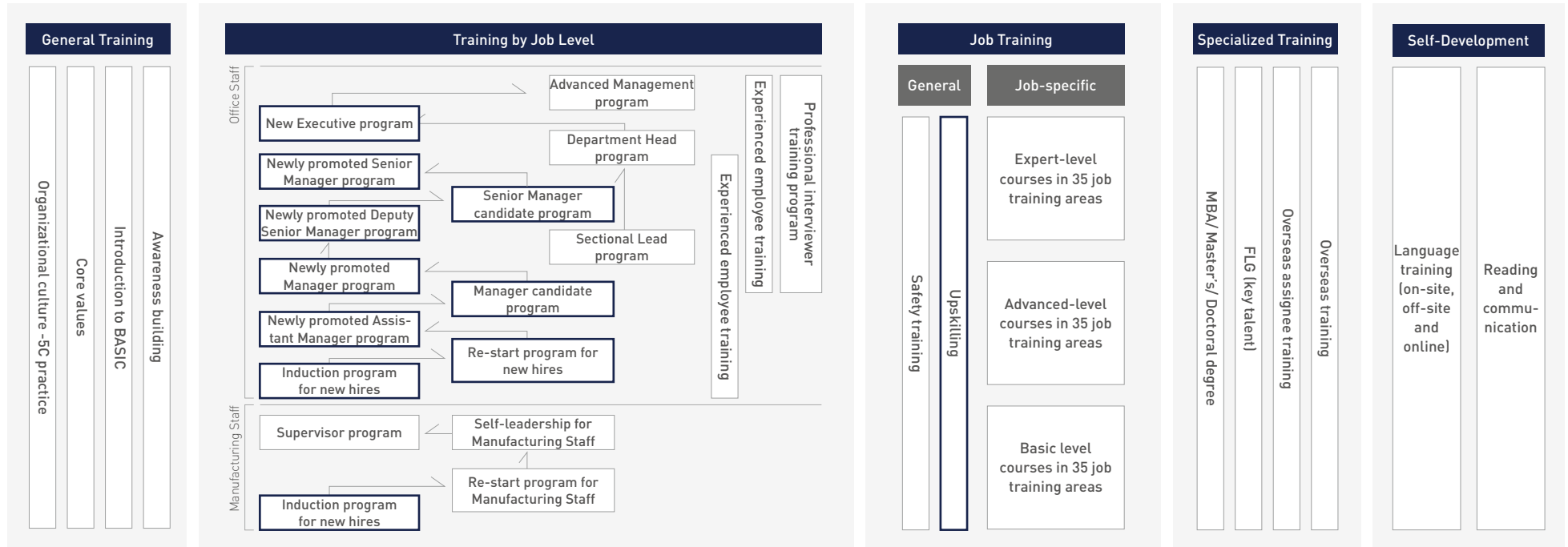
The FLG (future leader growth) training program is our primary talent development initiative, designed to cultivate potential future executives and managers who can spearhead innovation and change. Additionally, we support MBA and doctoral programs to develop highly skilled professionals.

<b>General Training</b>	Instill core values and share organizational values
<b>Job level training</b>	Prepare employees for the next level of leadership as they progress through their careers
<b>Job training</b>	Level-specific training for 35 job areas to develop job expertise
<b>Specialized training</b>	· FLG program · Support for MBA/ Master's/ Doctoral degree

**Evaluation and Compensation**

Poongsan aims to foster a culture of continuous improvement by conducting impartial assessments of employee performance and competencies. Performance objectives and competency targets are established annually using the management by objectives (MBO) approach. Subsequently, employees engage in a self-evaluation, which is then reviewed by the organization and their department heads. Once adjustments have been made, the final evaluation rating is confirmed. Finally, employees receive feedback on their performance. Furthermore, multi-faceted evaluations are conducted by department members, including department heads, and leadership evaluations are conducted for department heads as well. These evaluations serve as a supplement to top-down evaluations and provide a reference for the entire HR process, including promotion, compensation, transfer, and training.

We offer an annual salary increase to provide employees with financial stability. In addition to the fixed salary, the company distributes its collective management performance through a variable profit-sharing system, and recognizes individual performance through performance and competency evaluations conducted once a year. The performance allocation table, which is the basis for distributing performance-based compensation, is transparently disclosed to all employees to ensure fair compensation.



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## Organizational Culture

### Employee Engagement / Work-Life Balance

Various systems and programs are in place at Poongsan to foster a work environment that supports a healthy balance between professional and personal lives. We implement a staggered commuting system and flexible working hours to facilitate the easy adjustment of commuting time for childcare. Additionally, we provide an in-house daycare center and nursing facilities at each workplace, and endeavor to cultivate a family-friendly culture through the implementation of a pregnancy registration system, a welcome program for returning employees after parental leave, and a maternity mentoring program. We have recently introduced a childbirth incentive program, offering a congratulatory payment for each birth to provide support for new parents in welcoming their children.

Poongsan has implemented a series of activities and programs designed to foster a positive organizational culture grounded in proactive communication that facilitates the company's growth and that of its employees, while also enhancing overall employee satisfaction. New recruits are assigned a mentor for a six-month period, with the objective of facilitating a smooth integration into our organization. Furthermore, we facilitate over 50 in-house networking groups, which provide our employees with opportunities to engage in personal development outside of their professional responsibilities.

**Support for Children's Education :**

100% coverage of middle and high school education expenses, 100% coverage of university tuition (130% limit for national universities), and congratulatory payments for elementary, middle, and high school entrance.

**Group Accident Insurance Plan :**

Insurance for all employees for accidental disability, wrongful death, industrial accident death, occupational accident, and disease death

**Telecommunication Expense Support**

**Benefits Points**

**Personal Development Leaves**

**Sabbatical Leave for Those Nearing Retirement Age**

**1,100+ Private Homes Available for Employee Use**

### Organizational Culture Programs

Program	Description	Frequency
<b>SoPoong+</b>	Functional heads provide employees with an overview of the company's business performance and key issues in an informal setting. Events are also organized to ensure employees have a comprehensive understanding of our vision and management structure, as well as fostering open communication.	<b>Quarterly</b>
<b>Poongsan Monthly</b>	Publishing a culture letter around core values to all employees	<b>Monthly</b>
<b>P-VENT</b>	Organize online and offline interactive events to facilitate communication, foster a positive organizational atmosphere, and enhance employees' sense of belonging.	<b>As needed (6 times a year)</b>
<b>Culture Day</b>	Designate culture days twice a year to support various cultural activities (e.g., shooting, theater, jazz bar visits, perfume making, and wine classes) to build a sense of connection and belonging within the organization	<b>Semi-annual</b>
<b>Cross Lunch</b>	Departments engage in cross-functional dialogue on a bi-annual basis, establishing collaboration ground rules and building trust through one-on-one partnerships for a meal.	<b>Semi-annual</b>
<b>Cultural Walks</b>	After-work cultural lectures on a variety of topics, including crafts, wine, music, and photography, are held at the company for employees from different levels, functions, and generations to interact with each other	<b>As needed (6 times a year)</b>

## Labor-Management Relations

### Win-Win Labor-Management Relations

Poongsan commemorated the 23rd anniversary of its Declaration of Labor-Management Cooperation in 2023 on the foundation of resilient labor-management relations. Our objective is to foster a culture of mutual trust and harmony and to create a win-win partnership between labor and management. In compliance with the Trade Union and Labor Relations Adjustment Act, we respect the right to engage in legitimate trade union activities and collaborate with unions to maintain and improve employee treatment and working conditions through annual wage negotiations and biennial collective bargaining on benefits. Additionally, we conduct joint labor-management health and safety campaigns to reinforce our shared commitment to achieving zero accidents and creating a safe workplace.

Pursuant to the Act concerning the Promotion of Worker Participation and Cooperation, quarterly labor-management councils are conducted at each workplace to report on the status of management and personnel affairs, as well as to freely share opinions on employee benefits. Items proposed by either party are then considered by the councils and, where appropriate, implemented following consultation. Reports are also made on the progress of implemented items to strengthen trust between labor and management. Additionally, we conduct HR workshops on a quarterly basis to provide training on labor laws, including the Labor Standards Act.

### Union Membership Rate



### Major Agenda of Labor-Management Council

- Expanding culture program implementation
- Expanding flexible work arrangements and suggestions for group leaves
- Operation Status of the fund to help the less fortunate
- Improving work clothes and office environment
- Other benefits programs

## Human Rights Management

### Human Rights Grievance Handling Process

Poongsan has established Ethics Hotline on its website, which allows employees to submit anonymous reports regarding workplace bullying, sexual harassment, and other pertinent issues.

We offer a range of human rights training programs for all employees, with the aim of enhancing their awareness of human rights.

[Ethics Hotline](#) →

Training Program	No. of participants
Disability Awareness Training	3,522
Sexual Harassment Prevention	3,522
Workplace Harassment Prevention	3,522

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At Poongsan, we are committed to making a positive impact on the development of our country and society through business. We actively engage in social contribution activities within the communities where our operations are located, as part of our commitment to corporate social responsibility.

## Educational Scholarships

We have a history of sponsoring educational activities with the goal of fostering outstanding talent as a key driver of the advancement of our society. Our initiatives are anchored in the Poongsan and Hahoe regions of Andong, Gyeongsangbuk-do. Additionally, we collaborate with local communities near our business sites, but we also conduct various scholarship activities in connection with local communities where our business sites are located, including Ulsan University and Handong University.

**Byeongsan Educational Foundation** : Established in 1947, it is the educational foundation of Poongsan High School in Poongsan-eup, Andong-gun. It offers a well-designed curriculum that includes overseas training programs to fulfill its mission of fostering global talents. This is based on the foundation's educational philosophy of cultivating talented individuals with a patriotic spirit, moral spirit, and character.

**Hakrok Scholarship** : Established by Poongsan to provide financial assistance to high-achieving students from disadvantaged backgrounds and to support those who have made notable contributions to the advancement of educational research.



## Volunteer Activities and Donations

Poongsan is committed to making a positive impact in the communities where it operates with various volunteer activities and donations.

## Cultural Activities

Poongsan regularly supports multicultural families through its sponsorship of the Pearl S. Buck Foundation Korea, a social welfare organization. In addition, we have provided support for a range of cultural initiatives, including organizing a benefit concert in 2023 to assist victims of the Gangneung wildfire and sponsoring the debut performances of promising young Korean artists at Carnegie Hall in New York, which introduced them to an international audience.

<b>Angang Plant</b>	<ul style="list-style-type: none"> <li>· Donate money raised through matching grant fundraising initiative</li> <li>· Conduct a campaign to provide financial support to underprivileged students in Angang until their graduation</li> <li>· Deliver scholarships for local talent development</li> </ul>
<b>Ulsan Plant</b>	<ul style="list-style-type: none"> <li>· Wage tail-cut donation: employees contribute spare change of less than KRW1,000 from their paychecks each month to support fellow employees in need</li> <li>· Conduct rural labor activities in partnership with our sister village, Sanghoe Village</li> <li>· Participate in the One Company, One River Cleanup campaign organized by Ulju-gun, Ulsan</li> </ul>
<b>Busan Plant</b>	<ul style="list-style-type: none"> <li>· Donate money raised through a matching grant fundraising initiative</li> <li>· Sponsor scholarships for underprivileged youth</li> <li>· Provide support to the marginalized through the Sharing Love campaign</li> </ul>

# Information Security

## Information Security Framework

At Poongsan, the Chief Security Officer (CSO) oversees company-wide security affairs, while the Chief Information Security Officer (CISO) establishes and supervises security policies in the information and communication field. The CSO chairs the pertinent standing committees on information security—the Security Review Committee and the Technology Protection Review Committee—which are tasked with making decisions and revising security policies when necessary.

Security operations are categorized into the following areas: document security, personnel security, facility security, information and communication security (including privacy protection), and other security. Each area is managed by a dedicated security manager to allow for effective response to threats.

In addition, when it is necessary to investigate serious security incidents or personnel who have committed security violations, the Security Review Committee is held to deliberate and make decisions.

### Cybersecurity Program

<b>Integrated Security Management</b>	Log collection and real-time monitoring of each security solution
<b>DRM</b>	<ul style="list-style-type: none"> <li>Prevent internal data leaks</li> <li>Encrypt documents</li> </ul>
<b>IPS</b>	<ul style="list-style-type: none"> <li>Detect and block internal and external intrusions</li> <li>Detect and block harmful traffic</li> <li>Detect and block webmail (based on hacking types and patterns)</li> </ul>
<b>DLP</b>	<ul style="list-style-type: none"> <li>Detect data leakage</li> <li>Control storage media (USB, CD/DVD, etc.), H/W and S/W</li> </ul>
<b>Web Firewall</b>	Detect and block web application server vulnerability attacks
<b>Antivirus/Patch Management</b>	PC security enhancement (antivirus and Windows patching)
<b>SSL Decryption</b>	Support for stable decryption function for SSL traffic environment

## Information Security Policy

We adhere strictly to the information security standards set out in the Unfair Competition Prevention Act, the Information and Communication Network Act, the Information Protection Industry Act, the Personal Information Protection Act, as well as the Military Secrets Protection Act, which reflects the unique nature of our defense industry. To this end, we have put in place and are enforcing a robust security framework, aligned with these legislative requirements.

In the defense sector, our company participates in the annual technology protection survey conducted by the Defense Acquisition Program Administration and the security inspection carried out by the Ministry of Defense. These evaluations assess the protection of security-rated facilities and technologies for the defense industry. Additionally, we physically separate the general network from the defense network to safeguard critical assets. We also conduct comprehensive background checks on employees before and after joining the company.

Poongsan has implemented a range of cybersecurity measures to ensure an effective response to potential cyber threats.

<b>DB Encryption</b>	<ul style="list-style-type: none"> <li>Privacy protection and DB encryption</li> <li>DB access and control history management</li> </ul>
<b>DB Access Control</b>	<ul style="list-style-type: none"> <li>Key DB access control and monitoring</li> <li>DB access authorization and control</li> </ul>
<b>UTM</b>	<ul style="list-style-type: none"> <li>Detect and block internal/external intrusion</li> <li>Allow and block IP &amp; port-based access</li> <li>Authorized IP mapping/internal user access control</li> </ul>
<b>APT</b>	<ul style="list-style-type: none"> <li>Detect and block email/network/file APT attacks</li> <li>Detect and block the latest unknown hacking attacks</li> </ul>
<b>NAC</b>	Internal network access control/ IP management control
<b>Spam Blocking</b>	<ul style="list-style-type: none"> <li>Block spam and virus mails</li> <li>Webmail monitoring</li> </ul>

## Information Security Risk Management

To anticipate and mitigate potential risks associated with information security breaches, we develop and report disaster recovery measures annually. Additionally, we operate a breach response process based on our cybersecurity breach response manual and maintain a 24/7 monitoring system.

Furthermore, we develop an information and communication security activity plan on an annual basis to address information security threats through cyber intrusions. Additionally, we conduct periodic reviews of the logs for each security solution with the objective of identifying and blocking potential infringement paths.

In order to ensure the continued availability of our systems in the event of disasters, breaches, or other incidents, we conduct backup recovery drills on a bi-annual basis. These drills are essential for developing our ability to effectively respond to significant information system failures. In addition to these drills, we conduct thorough company-wide security vulnerability assessments and implement corrective actions within one month for findings. Additionally, we evaluate the impact of publicly announced critical vulnerabilities affecting our assets, and implement the necessary updates as needed.

## Security Awareness Initiatives

In light of the recent increase in cybersecurity breaches targeting unspecified or key personnel, Poongsan has been implementing comprehensive employee training and exercises to enhance information security awareness.

The twice-yearly cyber breach drills train employees on advanced knowledge on common breach scenarios, equipping them to proactively respond in case of an actual incident. Additionally, repeated security vulnerability offenders are subjected to recurrent training sessions and issued with written warnings, thereby raising their awareness.

In order to maintain optimal cybersecurity, we conduct a monthly inspection, "Clean Computer Day," which entails deleting unnecessary work files and documents, changing the primary and secondary passwords of personal PCs, deleting unauthorized and illegal software, and updating server security. Furthermore, we share cybersecurity and technology protection guidance on our work portal to enhance awareness and promote security management.

It is company policy that all employees in the defense division, regardless of worksite, must attend Defense Industry Technology Protection training at least once a year. In addition, we conduct internal training semi-annually and provide frequent training opportunities, including a special security program at the end of the year, with the goal of raising security awareness.

## Cyberattack Response Procedures

Category	Description	Countermeasures
Alert	<b>Severe (RED)</b> <ul style="list-style-type: none"> <li>Network and information systems are rendered unavailable on a national scale</li> <li>Incident has occurred on a nationwide scale or the damage is extensive</li> <li>It requires coordinated response at the national level</li> </ul>	<ul style="list-style-type: none"> <li>Continue to implement 'Vigilant' alert measures</li> <li>Block targeted service ports when alerted</li> <li>Recommend minimizing the use of computers in the organization</li> <li>Disconnect networks with high potential for damage</li> </ul>
	<b>Severe (ORANGE)</b> <ul style="list-style-type: none"> <li>Failure or paralysis of multiple ISP networks / backbone networks</li> <li>Increased likelihood that the breach is multi-organizational or has the potential to become a large-scale event</li> <li>Requires coordinated response from multiple organizations</li> </ul>	<ul style="list-style-type: none"> <li>Continue to implement 'Caution' alert measures</li> <li>Reset blocking rules in the event of a DDoS attack</li> <li>Back up important data</li> <li>Strengthen monitoring of the affected IP-port and system vulnerability checks</li> <li>Consider disconnecting networks with high potential for damage</li> </ul>
	<b>Caution (YELLOW)</b> <ul style="list-style-type: none"> <li>Partial network and information system failure</li> <li>Increased likelihood that the breach has occurred in some organizations or may spread to multiple organizations</li> <li>Need to strengthen security preparedness across national information systems</li> </ul>	<ul style="list-style-type: none"> <li>Continue to implement 'Attention' alert measures</li> <li>Increased surveillance of targeted systems, service ports, and scanning activities</li> <li>Blocking the expected path of malware such as worms, viruses, and hacking attacks</li> </ul>
	<b>Attention (BLUE)</b> <ul style="list-style-type: none"> <li>Increased likelihood of damage caused by worms, viruses, hacking tactics, etc.</li> <li>Concerns about the spread of overseas cyberattacks into Korea</li> <li>Need to strengthen cybersecurity threat detection activities</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen monitoring when the latest worms, hacking techniques, and security vulnerabilities are announced</li> <li>Block unnecessary services</li> <li>Review blocking rules for routers, switches, and intrusion detection systems</li> <li>Check the emergency contacts with maintenance companies in case of an accident</li> </ul>
	<b>Normal</b>	<ul style="list-style-type: none"> <li>Continuously check the latest information on the National Cyber Security Center website (<a href="http://service1.nis.go.kr">http://service1.nis.go.kr</a>) and information sharing system</li> <li>Conduct regular checks on key information systems</li> <li>Check servers, networks, security equipment, and security policies</li> </ul>

# Quality Management

Company Overview

PSC ESG Highlight

**PSC Sustainability Performance**

Environmental

**Social**

Safety & Health

Supply Chain Management

Human Resources

Community Engagement

Information Security

**Quality Management**

Governance

Appendix

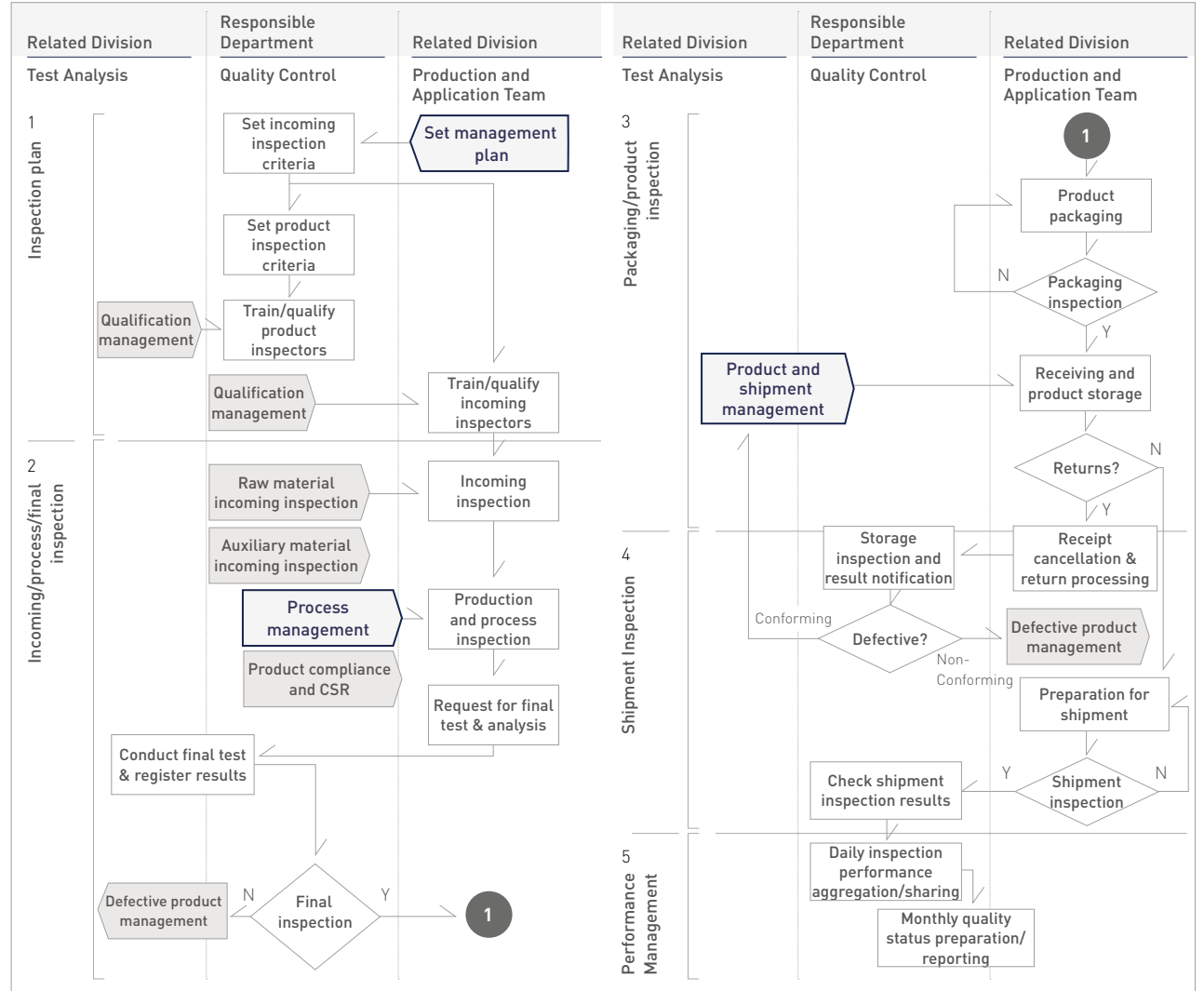
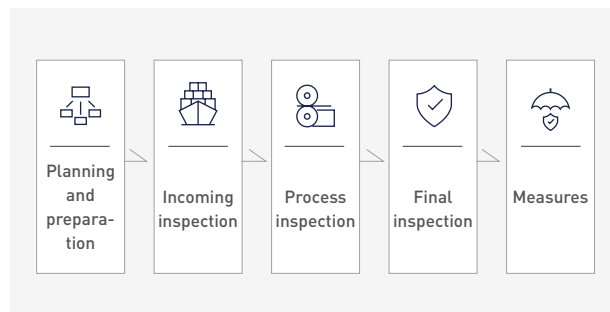
## Quality Management Framework

The Quality Assurance Team at each plant is responsible for conducting internal and external quality assurance activities, inspecting products and processes, and auditing for non-compliance with procedures. Furthermore, we endeavor to guarantee effective quality control through monthly quality innovation meetings, during which we review the present status of our product quality standards, discuss the results of cross-checks, and address other quality-related matters.

We have implemented an ISO 9001-certified quality management system at our Ulsan, Busan, and Angang facilities, with a commitment to continual quality improvement across its product and service offerings.

## Quality Management Process

We have established a quality inspection and management system for our processes and products so as to provide our customers with the best quality products.





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Appendix

**Quality Innovation**

At Poongsan, we are committed to driving quality innovation to provide customers with superior quality and eco-friendly products.

In the Copper and Copper Alloy Division, we have been developing BioMediCopper products for daily use and applications in the environment and public sector. These products take advantage of the antibacterial and antiviral properties of copper alloys, offering innovative solutions for enhanced safety and hygiene.

We have also developed lead-free brass with excellent machinability, making it an excellent choice for use in small electrical and electronic products, valves, water meters, and automotive parts, and registered patents in Korea, China, Japan, and Taiwan.

The Defense Division has developed a strategy for the production of environmentally-friendly, small-caliber ammunition that does not contain the potentially harmful heavy metals found in many conventional products. The Division is continuously working to improve this process, using copper as a primary material to create a similar level of performance.

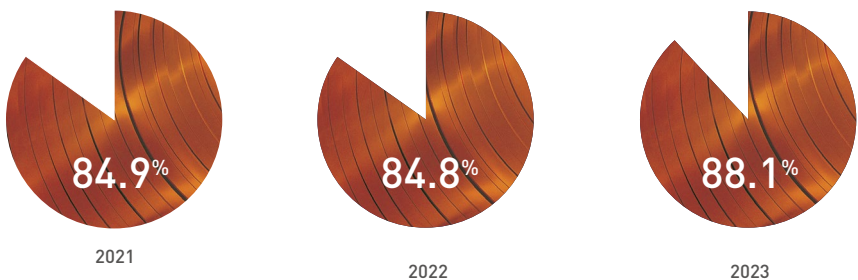
The Angang Plant has identified and prioritized seven core tasks within the Facility Block activities with the goal of becoming a leading producer of high-quality ammunition. The focus is on achieving zero breakdowns, zero defects, zero waste, and zero accidents, while also enhancing the capabilities of our people, facilities, and systems.

<b>Facility Maintenance Manual</b>	A manual created to assist users in understanding the facility
<b>Safety/Quality Spark Points</b>	Activities to prevent safety and quality accidents by creating and training Spark points based on near misses, human errors, and quality incidents
<b>Facility Function Check &amp; Recovery</b>	Activities to optimize facility operations and train competent operators
<b>Facility Checklist</b>	Checklists to identify inspection items/criteria/frequency, and check numerical values tailored to facility characteristics
<b>Creating Zero Waste Plant</b>	Activities to eliminate waste generated at the site and realize zero waste
<b>OPL Video</b>	Activities to accumulate and transfer technology and know-how
<b>6S1E-VM Activities</b>	Maintaining on-site 5S activities by developing techniques that fit site characteristics

**Customer Satisfaction Survey**

Annually, we conduct a customer satisfaction survey to ascertain customer opinions and improvement requirements related to quality. The customer satisfaction survey is conducted by assessing three key areas: on-time delivery rate, number of production line stoppages, and claims. These are then classified into quality and service satisfaction. The evaluation indicators are calculated by averaging these categories. In the event that an item is rated low in the customer satisfaction survey, we establish a detailed improvement plan in consultation with the relevant departments.

**Customer satisfaction survey score**










# Sound Corporate Governance

Poongsan is committed to developing a corporate governance structure that aligns with the company's growth trajectory and organizational culture. Our goal is to ensure transparency, soundness, and stability, thereby enhancing shareholder value and protecting the rights and interests of stakeholders. Furthermore, the company delegates the Board of Directors (BOD) and the management team with decision-making and execution authority, respectively. The BOD monitors management's progress through regular reports, thereby establishing mutual checks and balances between the BOD, management, and outside directors, with the objective of attaining stable corporate governance and accountability.

## Composition of Board of Directors

The BOD is composed of a total of seven directors (three inside and four outside), with over 57% being outside directors to maintain independence from management. In addition, the CEO serves as the chairman of the BOD to ensure its efficient functioning. The BOD has three specialized committees: Management Committee, Audit Committee, and Outside Director Candidate Recommendation Committee. These committees are tasked with ensuring the company's decision-making process is efficient and informed by expertise. The Audit Committee is composed entirely of independent directors, including the chairman, and the Outside Director Candidate Recommendation Committee consists of a majority of independent directors, including the chairman, thereby guaranteeing that the operations of outside directors are carried out with the highest degree of autonomy. The BOD is the highest decision-making body for company management, with a primary focus on pursuing sustainable growth by enhancing corporate value. Additionally, to ensure that outside directors fulfill their duties effectively, they are prohibited from simultaneously serving as directors, executives, or auditors for more than two companies, including Poongsan.

## Board of Directors Composition and Experience

Inside Directors			
	<b>Jin Ryu</b>   Male Chairman, Federation of Korean Industries	<b>Woo Dong Park</b>   Male Chairman, Korea Nonferrous Metal Association	<b>Se Yung Hwang</b>   Male Director, Poongsan Holdings Corporation
	■ ■	■ ■ ■	■ ■
Outside Directors			
	<b>Duk Joong Kim</b>   Male 20th Commissioner, National Tax Service	<b>Hee Chul Hwang</b>   Male 53rd Vice Minister, Ministry of Justice	
	■ ■	■ ■ ■	
			
	<b>Hyun Ok Jung</b>   Female Former Vice Minister, Ministry of Employment and Labor	<b>Ihl Soo Yang</b>   Male Certified Public Accountant, E-JUNG Accounting Corporation	
	■ ■	■ ■	

- Board of Directors
- Management Committee
- Outside Director Candidate Recommendation Committee
- Audit Committee
- Chairman

## BOD Committees

**Management Committee** : The Management Committee is a sub-committee of the BOD that reviews and resolves matters delegated to it by the Board in accordance with the Articles of Incorporation, Board Regulations and resolutions, with the aim of enhancing the professionalism and efficiency of Board operations. In 2023, the Management Committee held a total of 26 meetings and deliberated on issues such as payment guarantees for subsidiaries and borrowing agreements.

**Outside Director Candidate Recommendation Committee** : The Outside Director Candidate Recommendation Committee recommends candidates who align with company and shareholder interests. The committee conducts a fair and transparent process to ensure that outside director candidates are selected through a transparent and sound nomination process. This also includes verifying that the selected candidates meet the qualifications required by laws and regulations concerning their independence and expertise. The committee is composed of two outside directors and one inside director, with a majority of outside directors in accordance with applicable laws and regulations, the Articles of Incorporation, and the BOD Regulations. The committee's transparency and independence are enhanced by the appointment of outside director Hee Chul Hwang as chairman. In 2023, the committee did not hold a nominating committee, as there were no outside directors whose term expired in 2023.

**Audit Committee** : The Audit Committee consists of three independent directors, all non-executive, and is responsible for overseeing the work of the directors and management and reviewing accounting matters to make appropriate judgments. It is also responsible for convening extraordinary general meetings, making statements on the general meeting agenda and submitting audit reports. In addition, the Committee appoints external auditors, approves the establishment and revision of internal accounting management regulations, and evaluates the operation of the internal accounting management system. In 2023, the Audit Committee held a total of four meetings and reviewed issues such as the evaluation of the operation of the internal accounting management system and the independence of the external auditor in non-audit functions. The Audit Committee meets with the external auditor on a quarterly basis, without the presence of management.

## Board Operation

Poongsan has established ground rules for convening meetings, holding regular board meetings and holding extraordinary board meetings as required at any time in accordance with Article 32 of the Articles of Incorporation and Article 6 of the Board Regulations. A meeting of the Board of Directors shall be convened by setting a date for the meeting and providing at least one day's advance written or verbal notice to each director. However, a meeting may be held at any time without prior notice if all the directors agree to it. A majority of the directors present and a majority of the votes cast by the directors present shall constitute a quorum for the transaction of business, and the Board may permit all or some of the directors to participate in a resolution by means of a telecommunications system that allows all directors to send and receive voice communications simultaneously without being physically present at the meeting. In addition, the Regulations of the Board of Directors prohibit possible conflicts of interest by limiting the exercise of the right to vote by members of the Board who have a vested interest in the agenda items. All members of the Board actively participate in Board and committee meetings and fulfill their responsibilities in a diligent manner. In 2023, the Board of Directors convened seven times to address a range of matters, including the approval of the financial statements, the nomination of director candidates and the convening of the Annual General Meeting of Shareholders. The Board of Directors meets with 100% attendance from both inside and outside directors. The Business Report discloses the status of activities, including the attendance of individual directors and their votes for and against agenda items. The BOD also oversees the company's non-financial management activities, approving safety and health plans, and reviewing reports on key operations, including the internal accounting management system, operation of Compliance Program, and the activities of compliance officers.

## Board Evaluation and Compensation

The term of office for outside directors is set at the conclusion of the general meeting of shareholders for the final fiscal year that falls within two years after their appointment. The reappointment of outside directors is contingent upon an in-depth evaluation of their attendance at meetings, their capacity to provide suitable counsel, and their contributions to the Board of Directors' discussions.

The remuneration of the directors is subject to approval by the general meeting of shareholders and is within the overall remuneration limit for the board. Remuneration for inside directors is calculated according to the value of their duties, while that for outside directors is in line with the company's executive remuneration policy. All outside directors receive the same compensation, which excludes additional allowances or meeting fees. However, to acknowledge the responsibilities and risks associated with their roles, we supplement the basic compensation for audit committee members by 10% and for committee chairs by 20%. Individual director remuneration of over KRW 500 million is disclosed in our business report, in accordance with relevant laws and regulations.

## Board Diversity and Expertise

Poongsan does not impose any restrictions on nationality, gender, religion, race, etc. when appointing outside directors. The Board of Directors is comprised of experts with experience and backgrounds in business, law, accounting, and labor. This enables the Board to represent the interests of shareholders and other stakeholders, engage in management activities, and make important decisions in consideration of social values. Furthermore, we endeavor to foster gender diversity by incorporating the appointment of female outside directors into the Articles of Incorporation.

### Background of BOD Appointments

Category	Name	Evaluation of expertise and diversity	Year of first appointment
Inside Directors	Jin Ryu	Serving as CEO of Poongsan Group for many years, he played a leading role in developing effective positioning strategies in relevant industries.	2008
	Woo Dong Park	In his role as COO, he oversees all aspects of management and develops suitable business strategies.	2009
	Se Yung Hwang	His extensive experience in professional financial management provides a valuable insight that benefits the company.	2021
Outside Directors	Duk Joong Kim	He offers professional guidance to management based on his extensive experience and knowledge in the field of taxation.	2018
	Hee Chul Hwang	He serves as a professional advisor on legal matters drawing on his long public service and legal experience	2020
	Hyun Ok Jung	She uses her specialized labor knowledge and experience to improve working conditions and prevent occupational accidents.	2022
	Ihl Soo Yang	As a certified public accountant, he has expertise in all aspects of accounting and finance	2022

### Board Training

To ensure the seamless fulfillment of their duties, outside directors are furnished with pertinent information and undergo training on pivotal matters pertaining to the company's management, including industry trends and investment plans.

### Training Provided to Outside Directors

Date	Training Organization	Outside Directors Attending	Training Content
Feb 8, 2023	Planning Team 1	Duk Joong Kim,	Significant matters pertaining to the company's management
Apr 24, 2023		Hee Chul Hwang,	
Jul 25, 2023		Hyun Ok Jung,	
Nov 10, 2023		Ihl Soo Yang	

### Board Independence

Poongsan has taken measures to ensure the independence of the Board of Directors (BOD). Four of the seven members of the BOD are outside directors, representing 57% of the total. Additionally, the majority of two BOD committees (Audit Committee and Outside Director Candidate Recommendation Committee) are composed of outside directors. The chairperson of both committees is also an outside director, ensuring independence from management.

Moreover, to bolster the independence and transparency of BOD appointments, the Outside Director Candidate Recommendation Committee weighs diversity factors such as nationality, gender, religion, and race when selecting outside director candidates. It then recommends to the BOD a candidate who aligns with relevant laws and regulations and the Articles of Incorporation, and appoints him or her through a resolution of the general meeting of shareholders.

### Independent Operation of Audit Committee

The Audit Committee is composed entirely of outside directors, ensuring its independence from management and corporate governance. To guarantee the efficient and seamless fulfilment of the Audit Committee's responsibilities, the Audit Department of Poongsan Holdings is entrusted with the duty of providing support to the Audit Committee, including assisting with financial statements, internal accounting control systems, and other relevant matters. Furthermore, in accordance with Article 6 of the Audit Committee Regulations, the committee is authorized to seek external expert assistance at the company's expense when required to perform its duties.

### Shareholder Rights Protection

#### General Shareholders' Meetings

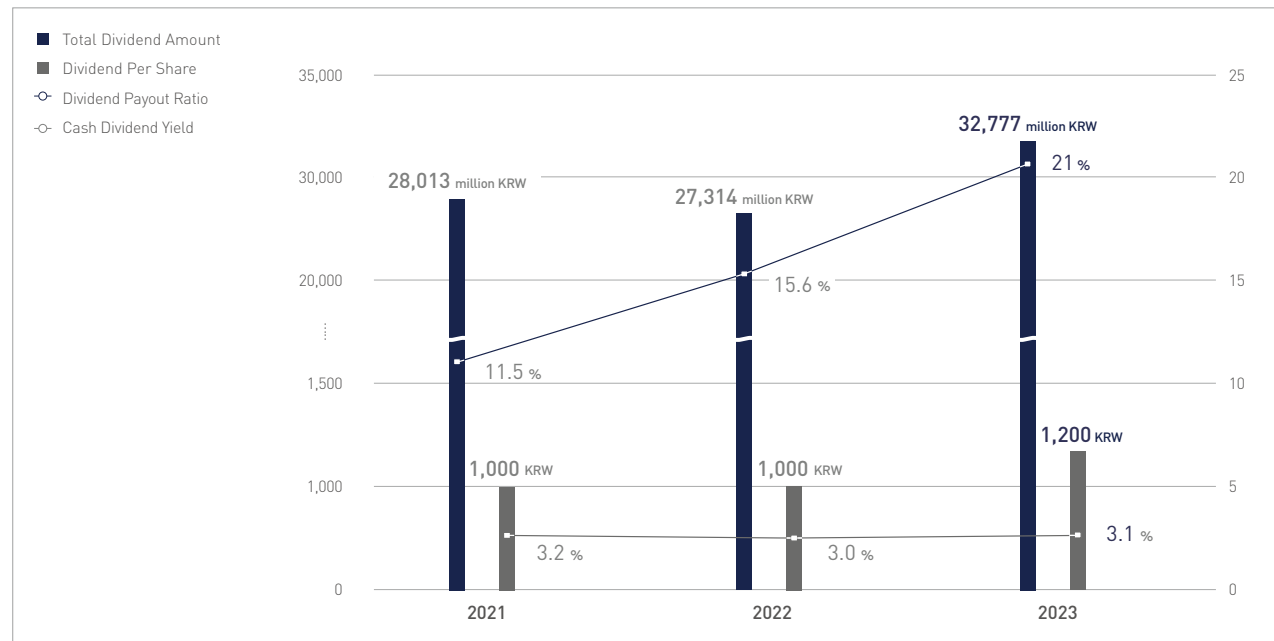
We encourage shareholders to participate in the annual general meeting of shareholders by sending the convening notice, which includes all relevant information, in writing four weeks prior to the meeting as prescribed by the Commercial Act and the company's Articles of Incorporation. The notice will also be posted on DART, KIND, and the company's website. Furthermore, we have streamlined the voting process by implementing an e-voting and electronic proxy system in 2023 and encouraging shareholders to utilize the DART electronic disclosure system to exercise their votes.

#### Cash Dividends

Over the past three years, Poongsan has demonstrated a consistent track record of paying dividends. Such dividend payment is disclosed publicly through a cash and in-kind dividend decision announcement on KIND, DART, and the company's website, typically six weeks prior to the general shareholders' meeting, following endorsement by the BOD. Furthermore, at the 2022 general shareholders' meeting, we introduced quarterly dividends and established the basis for these in the Articles of Incorporation.

Going forward, we intend to maintain a certain level of dividend payout, in accordance with our dividend policy, to guarantee predictability for our shareholders while aligning their interests with our goal of enhancing corporate value.

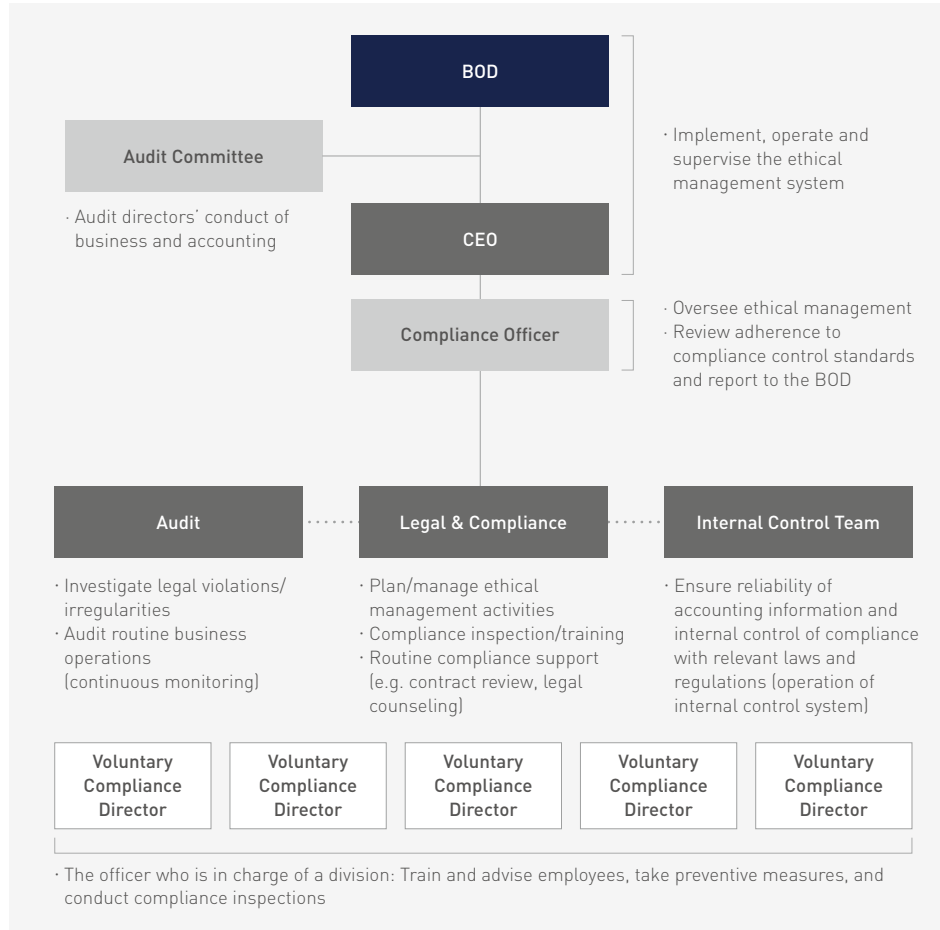
#### Dividend and Dividend Rate



# Ethical Management

## Ethical Management Framework

### Governance Structure for Ethics



In 2007, Poongsan declared its commitment to ethical management. In line with this declaration, we have since established a Code of Ethics and a Practical Guideline for the Code of Ethics. These two documents provide a framework for ethical management, and they serve to reinforce the company's commitment to implementing this framework.

The following tenets set forth in our Declaration of Ethics serve as the foundation for the actions of our entire workforce:

- We shall conduct all Company affairs in a fair and honest manner, and shall strive to foster a thoroughly ethical culture as a proud member of the Poongsan team.
- We shall respect each of our colleagues and contribute to a work environment where ability and achievement are assessed fairly.
- We shall comply with relevant laws and regulations, respect ethical commercial practices, and seek mutual development through fair and transparent transactions.
- We shall consider and protect our customers' interests in all Company decisions, actions and goal-setting.
- We shall pursue the benefits to share-holders by achieving steady profits through efficient management.
- We shall recognize, respect and redeem the wide range of social responsibilities we bear to the communities where we operate, and where our customers live.

### Framework for Ethical Management

<b>Declaration of Ethics</b>	· Implicitly expresses the underlying philosophy and spirit of ethical management
<b>Code of Ethics</b>	<ul style="list-style-type: none"> <li>· Offers a more specific expression of the declaration of ethics</li> <li>· Provides guidance for employees in evaluating the value of decisions and actions toward stakeholders               <ul style="list-style-type: none"> <li>· Responsibilities and Obligations of Officers and Employees</li> <li>· Fair Transactions and Competitions</li> <li>· Ethical Conducts of the Company toward Officers and Employees</li> <li>· Ethical Conducts toward Customers</li> <li>· Responsibilities and Obligations toward Shareholders</li> <li>· Responsibilities toward Country and Society</li> </ul> </li> </ul>
<b>Practical Guideline for Code of Ethics</b>	<ul style="list-style-type: none"> <li>· Sets forth specific standards for practicing ethical management               <ul style="list-style-type: none"> <li>· General</li> <li>· Ethical Conducts</li> <li>· Protection of Assets and Confidentiality</li> <li>· Workplace Ethics</li> <li>· Sanctions and Protection of Whistleblower</li> </ul> </li> </ul>

## Practicing Ethical Management

### Integrity Pledge

Each year, Poongsan executives and employees are required to submit an Integrity Pledge, in which they agree to adhere to the highest ethical standards in the performance of their duties and to understand and comply with all applicable laws and ethical standards. In particular, the pledge includes compliance with anti-bribery laws in Korea and the application of a zero-tolerance policy for violations.

### Report and Whistleblower Protection

Poongsan maintains a variety of reporting channels, including an Ethics Hotline, through which any individual may report violations of applicable laws and regulations or the company's Code of Ethics, either anonymously or in their own name. We adhere to a strict policy for whistleblower protection, including confidentiality and protection from retaliation.



#### Protection Policy of the Whistleblower

- 1 The identity of the whistleblower shall be kept strictly confidential and the whistleblower shall not be subject to any disadvantages due to reporting, testifying or providing information.
- 2 The Company shall strictly prohibit any unfair or disadvantageous treatment of the whistleblower, officers or employees who conducted ethics related questioning and employees who participated in internal investigation.
- 3 In case where the whistleblower requests protective measures or change in position in order to avoid disadvantages due to reporting, the Company shall take all reasonable measures deemed necessary.
- 4 If the whistleblower reports violations or unfair practices related to him or her, such report can be considered as mitigating factor. All whistleblowers shall not be subject to any disadvantages in personnel management due to the whistleblowing.

### Report of the Receipt of Valuables, Entertainment or Convenience

It is company policy that all members of Poongsan refrain from accepting monetary gifts or gratuities from stakeholders in accordance with our Code of Ethics. In order to reinforce this policy, we conduct the "Don't Give or Receive Gifts" campaign on Lunar New Year and Chuseok holidays every year, reminding employees of fair trade behavior. Should any employee be offered money or gifts, they are expected to politely decline and return them, and only report them to the Audit Department if returning them is impossible.

### Ethics Training for Employees

Our organization offers comprehensive training programs for employees, aimed at promoting ethical conduct and compliance. All personnel, including new hires, receive regular and special training online and in-person on the company's fundamental policies regarding ethical management, the Code of Ethics framework, and the standards of conduct required of employees. Furthermore, all

employees are required to complete an annual training program on topics including sexual harassment prevention, workplace harassment prevention, and disability awareness in the workplace.

## Compliance

Pursuant to the Commercial Act, Poongsan appoints a Compliance Officer and establishes and implements compliance control guidelines and procedures that all employees are required to follow in the performance of their duties to ensure proper management of the company. Poongsan has also introduced the Compliance Program (CP) since 2008 to comply with fair trade laws and regulations and proactively respond to related risks. We also operate an internal accounting control system in order to enhance internal and external credibility and reliability of accounting information (including information on transactions that form the basis of accounting information) prepared by the company in accordance with the Article 2-2 of the Act on External Audit of Stock Companies.

### Compliance Framework Overview

Compliance Structure	Compliance Activities	Efficacy Testing
<ul style="list-style-type: none"> <li>• <b>Enactment of Compliance Guidelines</b> <ul style="list-style-type: none"> <li>· Applied to all of the business activities and all activities of the directors, officers and employees</li> </ul> </li> <li>• <b>Structuring of Compliance System</b> <ul style="list-style-type: none"> <li>· Structuring of departments and assignment of roles and responsibilities for the Compliance</li> </ul> </li> <li>• <b>Appointment of Compliance Officer</b> <ul style="list-style-type: none"> <li>· Appointment by BOD</li> <li>· Qualifications, Term and Status</li> <li>· Authorities and Duties</li> </ul> </li> <li>• <b>Independence of Compliance Officer</b> <ul style="list-style-type: none"> <li>· Reporting directly to the BOD</li> <li>· Restriction on outside concurrent employment</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• <b>Assessment and Management of Legal Risk</b> <ul style="list-style-type: none"> <li>· Categorization of major activities related to the Legal Risk</li> </ul> </li> <li>• <b>Compliance Monitoring by Compliance Officer</b> <ul style="list-style-type: none"> <li>· Monitoring</li> <li>· Report to BOD</li> </ul> </li> <li>• <b>Compliance Monitoring by Voluntary Compliance Director</b> <ul style="list-style-type: none"> <li>· Report to Compliance Officer</li> </ul> </li> <li>• <b>Outgoing Compliance Assistance</b> <ul style="list-style-type: none"> <li>· Contract Review</li> <li>· Legal Counseling</li> </ul> </li> <li>• <b>Whistleblowing</b></li> <li>• <b>Handling of Compliance Violations</b></li> <li>• <b>Training and Education for Compliance</b></li> <li>• <b>Comprehensive Information Management System</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>Efficacy Testing of Compliance System</b> <ul style="list-style-type: none"> <li>· Appropriateness and efficacy of the contents of the Guidelines</li> <li>· Assessment and Management System of Legal Risk</li> <li>· Monitoring and Reporting System</li> <li>· Systematic independence of the Compliance Officer</li> <li>· Sanction system</li> </ul> </li> <li>• <b>Report to BOD the Result of Such Testing</b></li> <li>• <b>Preparation of Improvement Plans by BOD</b></li> <li>• <b>Employee Rewards</b></li> </ul>

**Operation of Compliance Program**

As illustrated by our CEO's declaration of commitment to compliance, Poongsan is implementing a comprehensive compliance program (CP) to ensure voluntary compliance with fair trade laws and regulations. The CP encompasses the appointment of a voluntary compliance manager, the development and dissemination of compliance manuals, compliance training, and regular monitoring activities. The objective of these activities is to establish a trusting relationship with customers and business partners through fair competition and transactions that comply with the requirements of the Fair Trade Act. Furthermore, we endeavor to cultivate a fair trade culture in order to mitigate potential risks, both financial and non-financial, such as reputational damage and adverse impact on corporate credit.

**Internal Accounting Control**

Poongsan has established and operated an internal accounting control system in order to enhance internal and external credibility and reliability of accounting information (including information on transactions that form the basis of accounting information) prepared by the company in accordance with the Act on External Audit of Stock Companies. Our company's internal accounting controls are operated at the audit level with the aim of identifying and managing risks facing the company. It is the responsibility of the CEO to provide an annual report to the BOD, the Audit Committee, and the general meeting of shareholders on the operational status of the internal accounting control system. The Audit Committee also assesses the internal accounting control system and reports its findings to the BOD. Additionally, an internal control team is in place to operate the system and implement changes as needed in response to the evolving management environment and business processes

on an ongoing basis. The team also addresses deficiencies identified during the design and operation evaluation, in consultation with relevant business departments.

**Continuous Monitoring System**

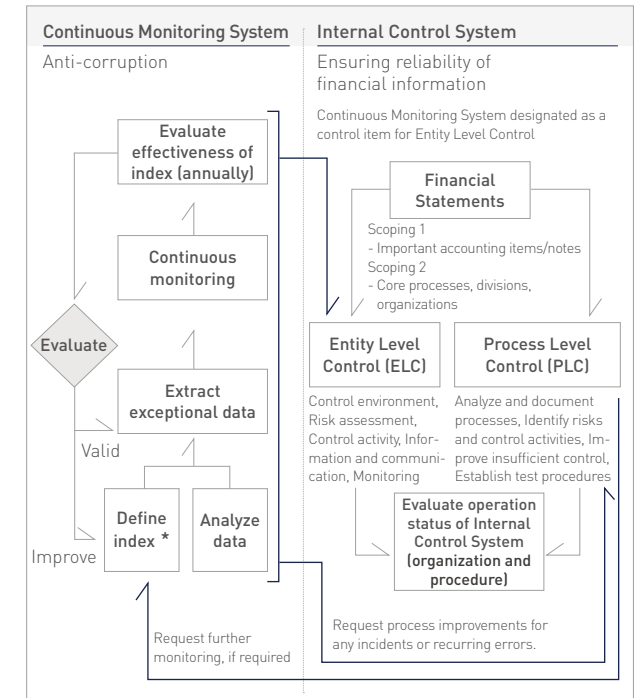
Poongsan employs a Constant Monitoring System, given that all company operations, including sales, purchases, and financial activities, are conducted via computerized processes. The system automatically alerts the Audit Department to any instances of non-compliance with pre-registered business processes. The system allows the Audit Department to identify irregularities promptly and assists in maintaining the effectiveness of control measures before and after an audit. To avoid impeding business operations through excessive monitoring, business units are provided the chance to provide clarifications regarding any observed abnormalities. The Continuous Monitoring System is also operated in conjunction with the Internal Control System, as it is designated as a control item for Entity Level Control (ELC). The scenarios on which the exception extraction is based also include the Process Level Control (PLC) Control Manual (RCM), Internal Control System audit findings, and social issues. We intend to develop scenarios on an ongoing basis in line with changes in the business environment. Furthermore, we plan to enhance the Continuous Monitoring System by adjusting scenario thresholds and monitoring cycles to improve efficiency, deleting and improving low-risk scenarios, and transferring recurring/repetitive items to PLCs. In the medium to long term, we are exploring the potential expansion of our Continuous Monitoring System to include our domestic affiliates.

<b>Implementing change management</b>	· Check and reflect changes in management environment and business processes · Improve control activities and change management identified as deficiencies in the previous year · Tracking and tracing (WTT)
<b>Design test</b>	· Design evaluation by external auditor · Report design test results and make improvements
<b>Operation test</b>	· Evaluate operation status · Form operational TF and train control activity departments · Operation test by external auditor · Identify and improve operational defects
<b>Internal Control System audit and reporting</b>	· Audit on design test and operation test by external auditor [EY Hanyoung] · Internal control system evaluation reported to BOD by Audit Committee · Evaluation on operation status reported to AGM, BOD and Audit Committee by CEO

**Continuous Monitoring System Operation Result in 2023**

Business area	Major items	No. of scenarios			
		2023*	2022*	2021*	
Sales	Return unit cost monitoring, commission appropriateness, Sales price modifications, etc.	27	3	1	16
Purchasing	Purchase price checks, outstanding compensation of loss, Irregularities in quote proposals, etc.	26	40	34	67
Inventory and Costs	Inventory increase checks, etc.	4	1	-	1
Administration	Accounting statement approval checks, CMS permissions, etc.	12	1	2	2
Fixed Assets	Bidding process reviews, etc.	6	1	3	2
General Expenses	Corporate card use check (holiday use), etc.	10	9	10	14
<b>Total</b>		<b>85</b>	<b>55</b>	<b>50</b>	<b>102</b>

\* No. of requests



# Enterprise-wide Risk Management

Company Overview

PSC ESG Highlight

**PSC Sustainability Performance**

Environmental

Social

**Governance**

Sound Corporate Governance

Ethical Management

**Enterprise-wide Risk Management**

Sustainable Innovation and Technology

Appendix

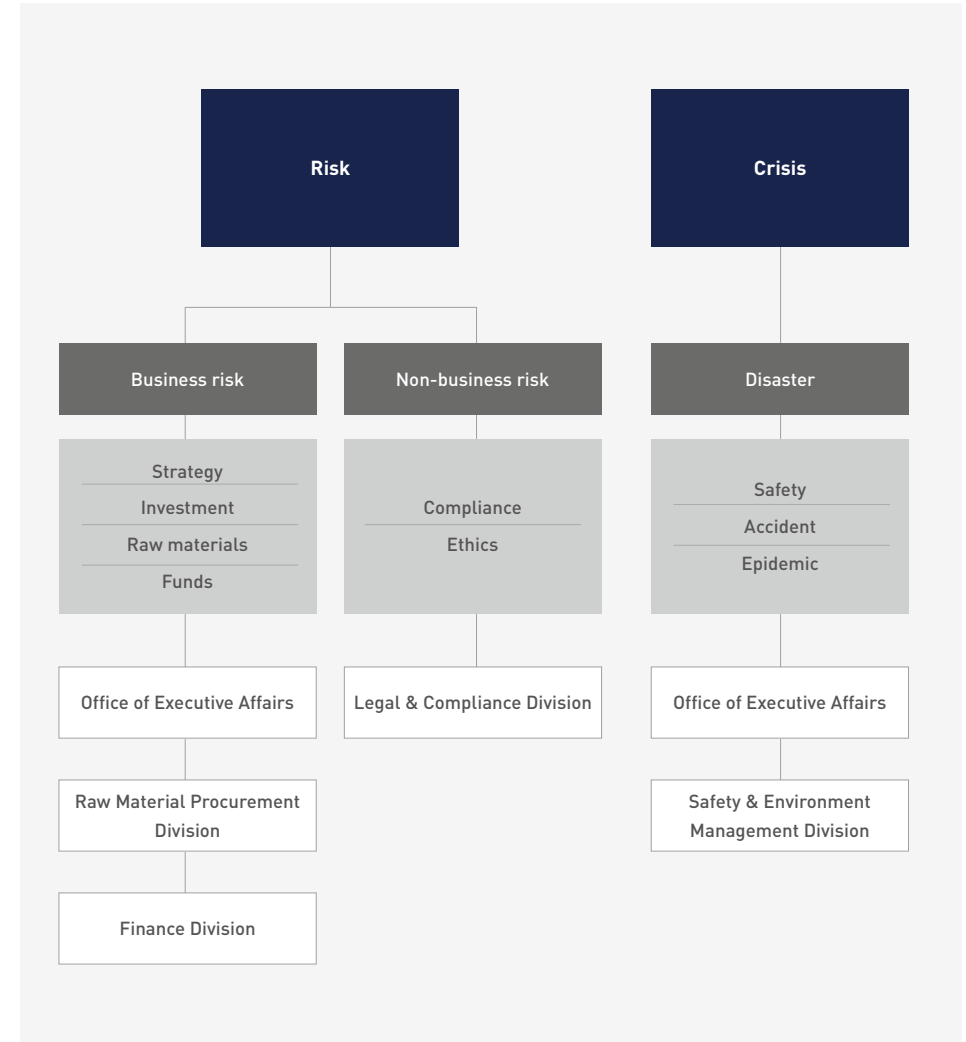
## Risk Reporting and Management Framework

Poongsan’s risk management framework is structured to address risks on a case-by-case basis, with each respective department responsible for managing the associated risks. Risks are categorized into three main groups: business risks, non-business risks, and disasters and crises. The Office of Executive Affairs addresses strategy and competitor-related risks, along with risks associated with investment and overseas business operations. The Raw Material Procurement Division is responsible for risks pertaining to raw materials and exchange rates. The Finance Division is tasked with managing financial risks related to funding. The Internal Control Team oversees the design and operation of the Internal Control System, which provides reasonable assurance that the company’s financial statements are prepared in accordance with accounting standards. The Legal & Compliance Division is responsible for managing non-business risks, including ethics, compliance, and reputation, through a voluntary risk prevention system. In the event of disasters or crises, the Safety & Environment Management Division, established in 2021, ensures the maintenance of healthy and accident-free workplaces.

## Monitoring External Economic Risks

Given the nature of our non-ferrous industry, which is sensitive to fluctuations in the economy, metals, and commodity markets, our Risk Management Team operates a system to analyze and forecast these variables on a regular basis. The Risk Management Team monitors LME prices and exchange rates on a daily basis and provides forecasts and analysis based on these observations.

At the monthly risk management meeting, which is attended by team leaders, business risks are analyzed and shared with business departments, including those in the export business. In addition, the outcomes of risk responses are communicated at a quarterly meeting with the COO, and plans for addressing future risks are developed and approved. The company has recently established a monthly Futures Committee comprising executives from the C-suite and external experts. This committee oversees monitoring of business risks, including economic conditions domestically and internationally, and the outlook for LME prices and exchange rates. Through these processes, we effectively manage and respond to business risks.





### Risk Management Strategy

The following is a summary of Poongsan’s enterprise-level risks and associated countermeasures.

Risk Type	Description	Risk Owner	Countermeasures
Financial Risks	Strategy, Investment	Management risks due to changes in internal/ external environment and investment	Office of Executive Affairs (Planning Team 1 & 2) Report on performance against plan and external impact analysis Report and discuss issues through monthly/weekly management meetings
	Raw materials, FX rates	Risks arising from fluctuations in financial markets, such as foreign exchange rates, and commodity prices, such as the LME.	Raw Material Procurement Division (Risk Management Team) Monitor financial markets and trade foreign exchange derivatives such as currency forwards to hedge exchange rate risk Regular monitoring, forecasting and reporting of raw material trends including LME prices
	Credit	Credit risks associated with collecting accounts receivable and more	Sales Support Team Periodic evaluation of customer creditworthiness to adjust credit limits and collateral levels for customers
	Liquidity	Risk of difficulty in meeting obligations related to financial liabilities	Finance Division (Finance Team) Enter into agreements with major financial institutions for overdrafts, import transaction limits, etc. Lengthen financing structure, strengthen credit rating
	Tax	Tax-related risks that may arise in all business activities	Finance Division (Cost Analysis & Tax Team) Fulfill tax obligations such as diligent reporting and payment in accordance with laws and regulations in Korea and each country where we conduct business activities
Non-financial Risks	Ethics & Compliance	Reputational and legal risks from unethical/illegal behavior	Legal & Compliance Division/ Internal Control Team Operate Compliance Program Raise ethical awareness of employees through compliance with the Code of Ethics and related training
	Safety	Safety risks that may occur in the workplace	Safety and Environment Management Division Monitor workplace safety and health and operate safety incident management processes
	Environment	Risk of sanctions and damage to corporate image due to increasing social interest in eco-friendly environment and stricter laws and regulations.	Safety and Environment Management Division Comply with environmental laws and regulations and implement relevant training
		Risks related to climate change	Establish an environmental management system
		Regulatory risks related to environmental pollution	
Information Security	Risk of information and technology leakage	Security Team / SI Team Conduct various drills to prevent cyber attacks	
Human Rights	Risks arising from damage to corporate image and legal issues in the event of gender issues such as gender discrimination and labor issues such as workplace harassment	Legal & Compliance Division Operate Ethics Hotline	

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Sound Corporate Governance

Ethical Management

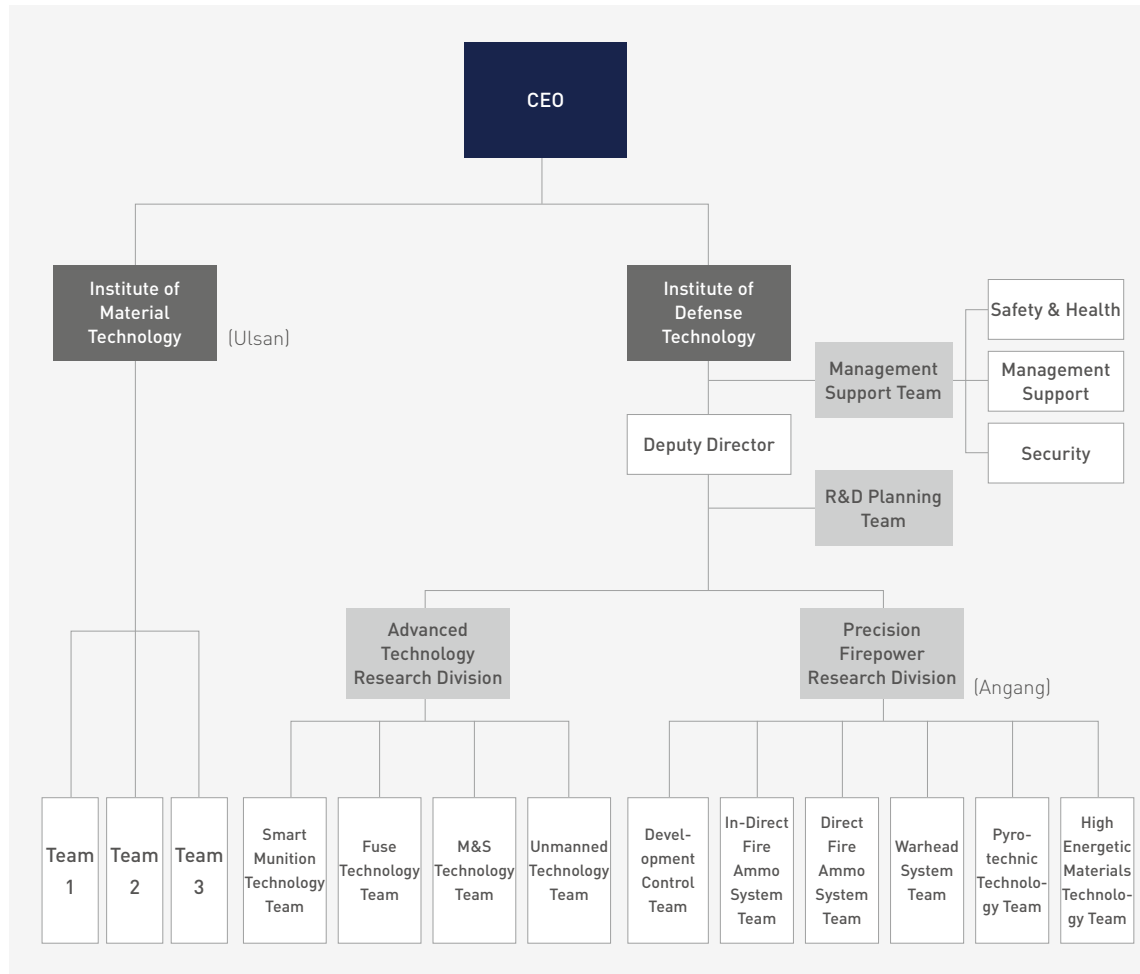
Enterprise-wide Risk Management

Sustainable Innovation and Technology

Appendix

# Sustainable Innovation and Technology

## R&D Governance



## R&D Strategy

In June 2011, Poongsan established the Poongsan Technology Research Institute, a large-scale defense and non-ferrous metals research center in Daejeon Techno Valley, as a base for developing new growth engines for the future. Since 2014, the Copper and Copper Alloy Materials division has been relocated to Ulsan with the objective of concentrating its development capabilities. Concurrently, the Civil and Defense Research Institute has been focusing its research and development capabilities with the goal of creating new growth engines. The Institute of Material Technology is at the forefront of research and development of high-performance and high-strength copper alloys that meet the needs of electronic component companies. Our work also encompasses the creation of specialized components for nuclear power, energy, and next-generation lighting, along with the development of sustainable materials for recycling and environmentally-conscious components. Poongsan has been a key driver in the development of Korea's copper and copper alloy industry, contributing to national competitiveness through the successful development and supply of industrial functional core materials. These include advanced copper alloys for electric, electronic, and semiconductor components, such as PDP, LCD, and LED; automotive parts materials; coin blanks; ultra-precision molds; and eco-friendly materials harmless to the human body. The company is also a leading supplier of component materials for nuclear power generation. In the defense industry, we have a proven track record of developing and supplying high-performance, precision-guided, multi-purpose, and sustainable ammunition to the Korean military. We have recently completed the development of ammunition for advanced weapons and are currently moving forward with mass production. Poongsan's future plans are to expand into a global enterprise with unparalleled technological competitiveness. We will achieve this by comprehensively and systematically developing and manufacturing the most advanced materials and defense technologies and dramatically strengthening our research and development capabilities through the Institute of Defense Technology, which will spearhead our efforts to develop new growth engines.

## R&D Achievements

### Development of Bio MediCopper Products

Since 2015, Poongsan has developed Bio MediCopper products that can be applied to the construction, living, and medical sectors by capitalizing on the antibacterial and antiviral properties of copper alloys. At present, Bio MediCopper is being utilized in the production of door knobs and copper alloy tapes. Our immediate objective is to commercialize it as a material for hygiene, daily use, and interior and exterior applications. In the medium-term, we intend to extend the application of Bio MediCopper products to include the medical and public sectors.

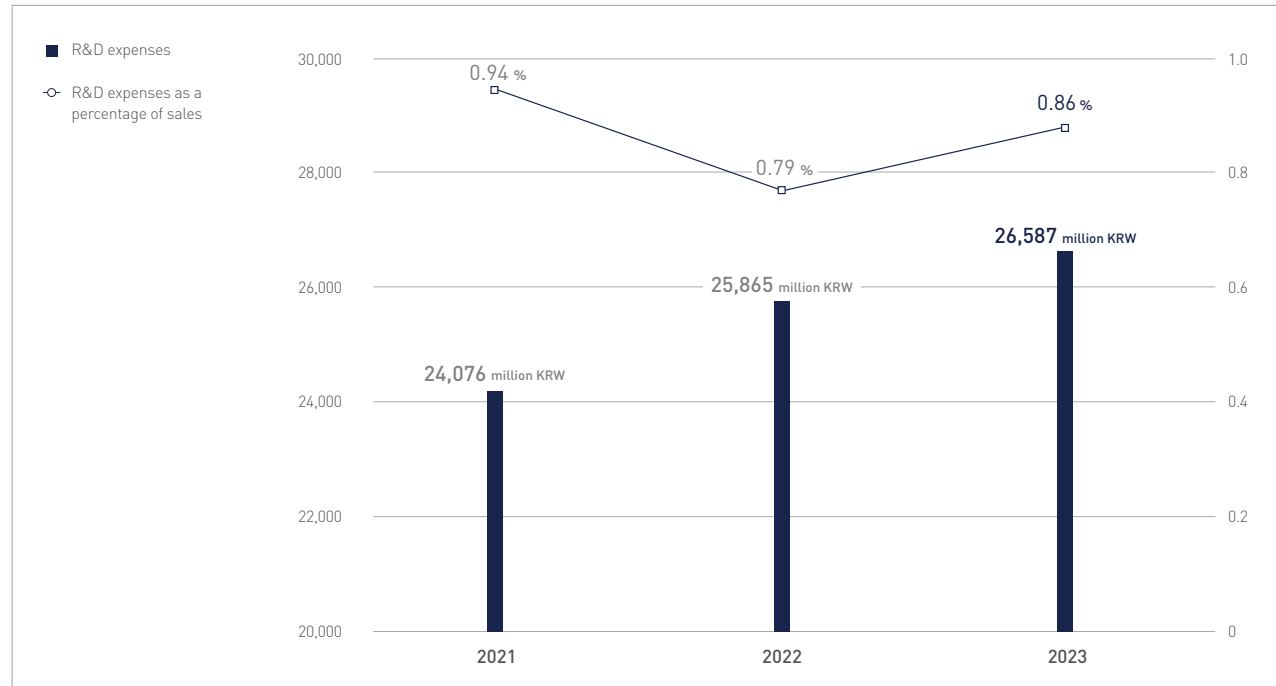
### Development of lead-free brass

In response to the growing demand for eco-friendly materials due to the increasing regulation of lead (Pb), a hazardous substance to human health, Poongsan has developed lead-free brass with excellent machinability. This innovative material is now being applied to a range of products, including small electrical and electronic items, valves, water meters, and automotive parts.

### Development of sustainable small caliber ammunition

Poongsan is developing and expanding the commercialization of small-caliber ammunition that removes harmful heavy metal components such as lead and barium from existing conventional small-caliber ammunition. Through technology development, we have created small-caliber rounds that are free of these harmful metals while maintaining the performance of conventional ammunition and minimizing environmental pollution during military exercises.

## R&D Expenses



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# Economic Performance

## Non-consolidated Financial Performance

### Summary of Non-consolidated Financial Statements

#### Assets

Category	Unit	2023	2022	2021
Current assets	million KRW	1,701,254	1,497,727	1,338,446
Non-current assets	million KRW	1,614,948	1,562,951	1,470,986
<b>Total assets</b>	<b>million KRW</b>	<b>3,316,202</b>	<b>3,060,678</b>	<b>2,809,432</b>

#### Liabilities

Category	Unit	2023	2022	2021
Current liabilities	million KRW	1,115,083	886,851	847,161
Non-current liabilities	million KRW	235,164	333,828	278,771
<b>Total liabilities</b>	<b>million KRW</b>	<b>1,350,247</b>	<b>1,220,679</b>	<b>1,125,932</b>

#### Equity

Category	Unit	2023	2022	2021
Issued capital	million KRW	140,121	140,121	140,121
Capital surplus	million KRW	494,520	494,520	494,520
Capital adjustments	million KRW	(22,634)	(22,634)	(152)
Other comprehensive income/ loss accumulated amount	million KRW	38,964	32,946	15,425
Retained earnings	million KRW	1,314,984	1,195,046	1,033,586
<b>Total equity</b>	<b>million KRW</b>	<b>1,965,955</b>	<b>1,839,999</b>	<b>1,683,500</b>
Equity to asset ratio	%	59	60	60
Debt to equity ratio	%	69	66	67

### Summary of Non-consolidated Income Statements

#### Business Performance

Category	Unit	2023	2022	2021
<b>Revenue</b>	<b>million KRW</b>	<b>3,100,555</b>	<b>3,257,164</b>	<b>2,556,005</b>
Cost of goods sold	million KRW	2,769,616	2,901,428	2,202,634
Gross profit	million KRW	330,939	355,736	353,371
Selling, general and administrative expenses	million KRW	140,629	152,568	119,544
Operating income	million KRW	190,310	203,168	233,827
Other income	million KRW	86,436	125,321	62,778
Other expenses	million KRW	81,743	111,214	59,261
Financial income	million KRW	10,300	12,921	5,424
Financial costs	million KRW	33,408	36,083	16,840
Equity method profit & loss	million KRW	19,377	26,306	80,411
Profit (Loss) before tax expense	million KRW	191,272	220,419	306,339
Tax expense	million KRW	34,967	45,033	63,002
Net profit	million KRW	156,305	175,386	243,337

## Consolidated Financial Performance

### Summary of Consolidated Financial Statements

#### Assets

Category	Unit	2023	2022	2021
Current assets	million KRW	2,239,438	2,013,246	1,859,455
Non-current assets	million KRW	1,421,191	1,382,051	1,288,805
<b>Total assets</b>	<b>million KRW</b>	<b>3,660,629</b>	<b>3,395,297</b>	<b>3,148,260</b>

#### Liabilities

Category	Unit	2023	2022	2021
Current liabilities	million KRW	1,352,196	1,117,974	1,108,833
Non-current liabilities	million KRW	342,478	435,083	353,792
<b>Total liabilities</b>	<b>million KRW</b>	<b>1,694,674</b>	<b>1,553,057</b>	<b>1,462,625</b>

#### Equity

Category	Unit	2023	2022	2021
<b>Equity attributable to owners of parent</b>	<b>million KRW</b>	<b>1,965,955</b>	<b>1,840,036</b>	<b>1,683,533</b>
Issued capital	million KRW	140,121	140,121	140,121
Capital surplus	million KRW	494,520	494,520	494,520
Capital Adjustments	million KRW	[22,634]	[22,634]	[152]
Other comprehensive income/ loss accumulated amount	million KRW	38,963	32,944	15,423
Retained earnings	million KRW	1,314,985	1,195,085	1,033,621
<b>Non-controlling interest</b>	<b>million KRW</b>	<b>-</b>	<b>2,204</b>	<b>2,102</b>
<b>Total equity</b>	<b>million KRW</b>	<b>1,965,955</b>	<b>1,842,240</b>	<b>1,685,635</b>
Equity to asset ratio	%	54	54	54
Debt to equity ratio	%	86	84	87

### Summary of Consolidated Income Statements

#### Business Performance

Category	Unit	2023	2022	2021
<b>Revenue</b>	<b>million KRW</b>	<b>4,125,264</b>	<b>4,372,983</b>	<b>3,509,498</b>
Cost of goods sold	million KRW	3,684,408	3,911,020	3,009,895
Gross profit	million KRW	440,856	461,963	499,603
Selling, general and administrative expenses	million KRW	212,220	230,343	185,478
Operating income	million KRW	228,636	231,620	314,125
Other income	million KRW	116,354	167,745	94,110
Other expenses	million KRW	108,567	147,765	84,452
Financial income	million KRW	14,903	15,066	5,959
Financial costs	million KRW	50,271	46,908	22,898
Gain on valuation and disposal of investments in joint ventures	million KRW	32	-	-
Profit (Loss) before Tax Expense	million KRW	201,087	219,758	306,844
Tax Expense	million KRW	44,647	44,496	63,457
Net Profit	million KRW	156,440	175,262	243,387

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## GHG Emissions<sup>1)</sup>

Category	Unit	2023	2022	2021
<b>GHG Emissions</b>	<b>tCO<sub>2</sub>eq</b>	<b>223,416</b>	<b>227,178</b>	<b>230,310</b>
Direct GHG Emissions (Scope 1)	tCO <sub>2</sub> eq	60,254	61,664	62,251
Copper and Copper Alloy Division	tCO <sub>2</sub> eq	31,575	33,071	33,165
Defense Division	tCO <sub>2</sub> eq	28,262	28,249	28,720
Other	tCO <sub>2</sub> eq	417	343	366
Indirect GHG emissions (Scope 2)	tCO <sub>2</sub> eq	163,165	165,516	168,062
Copper and Copper Alloy Division	tCO <sub>2</sub> eq	111,010	117,105	117,873
Defense Division	tCO <sub>2</sub> eq	50,265	46,698	48,393
Other	tCO <sub>2</sub> eq	1,890	1,713	1,796
GHG Intensity <sup>2)</sup>				
Copper and Copper Alloy	tCO <sub>2</sub> eq/ billion KRW	7.06	6.80	9.16
Defense	tCO <sub>2</sub> eq/ billion KRW	10.93	11.10	12.84

1) Emissions by specific GHGs and total emissions differ from the sum of emissions by division (which are rounded off by plant level before aggregation).

2) Intensity calculated against manufacturing costs in Copper & Copper Alloy Division and Defense Division.

## Air Pollutant Emissions

Category	Unit	2023	2022	2021
<b>Air Pollutant Emissions</b>	<b>ton</b>	<b>32.261</b>	<b>35.655</b>	<b>22.535</b>
Dust				
Copper and Copper Alloy	ton	7.062	7.773	9.237
Defense	ton	0.909	0.431	0.468
SOx				
Copper and Copper Alloy	ton	1.436	2.360	0.823
Defense	ton	0.013	0.008	0.014
NOx				
Copper and Copper Alloy	ton	11.059	14.349	1.574
Defense	ton	11.782	10.734	10.419
Air Pollutant Intensity <sup>1)</sup>				
Copper and Copper Alloy	ton/ billion KRW	0.0010	0.0011	0.0007
Defense	ton/ billion KRW	0.0018	0.0017	0.0018

1) Intensity calculated against manufacturing costs in Copper & Copper Alloy Division and Defense Division.



**Energy Use**

Category		Unit	2023	2022	2021
<b>Direct energy use</b>		<b>TJ</b>	<b>1,171</b>	<b>1,200</b>	<b>1,215</b>
Fuel	Copper and Copper Alloy	TJ	615	644	646
	Defense	TJ	548	550	562
	Other	TJ	8	6	7
Intensity of direct energy use <sup>1)</sup>	Copper and Copper Alloy	TJ/billion KRW	0.030	0.029	0.039
	Defense	TJ/billion KRW	0.076	0.081	0.094
<b>Indirect energy use</b>		<b>TJ</b>	<b>3,432</b>	<b>3,490</b>	<b>3,544</b>
Electricity	Copper and Copper Alloy	TJ	2,261	2,396	2,409
	Defense	TJ	1,050	976	1,011
	Other	TJ	38	35	37
Steam	Copper and Copper Alloy	TJ	80	81	87
	Other	TJ	2	2	2
Intensity of indirect energy use <sup>1)</sup>	Copper and Copper Alloy	TJ/billion KRW	0.1159	0.1122	0.1513
	Defense	TJ/billion KRW	0.1465	0.1448	0.1686

1) Intensity calculated against manufacturing costs in Copper & Copper Alloy Division and Defense Division.

**Water use**

Category		Unit	2023	2022	2021
<b>Water consumption<sup>1)2)</sup></b>		<b>thousand tons</b>	<b>6,554</b>	<b>6,705</b>	<b>6,602</b>
Ulsan Plant		thousand tons	2,081	2,217	2,188
Angang Plant		thousand tons	4,070	3,883	3,911
Busan Plant		thousand tons	381	587	485
Other		thousand tons	22	18	18
Water use intensity <sup>3)</sup>		thousand tons/ billion KRW	2.39	2.33	2.93

1) Ulsan Plant utilizes industrial water sources, while Angang/Busan Plant employs a combination of municipal water, river water, and groundwater.

2) Water consumption is calculated based on metered water withdrawal.

3) Intensity calculated against manufacturing costs in Copper & Copper Alloy Division and Defense Division.

**Wastewater Treatment**

Category		Unit	2023	2022	2021
Reuse volume		ton	109,518	138,598	119,699
Water discharged		ton	5,255,554	4,913,138	4,989,672

**Water Pollutant Discharge**

Category		Unit	2023	2022	2021
Suspended Solids (SS)	Copper and Copper Alloy	ton	12.238	10.359	7.740
	Defense	ton	12.440	9.978	8.718
	Total	ton	24.678	20.337	16.458
Chemical Oxygen Demand (COD) <sup>1)</sup>	Copper and Copper Alloy	ton	-	55.723	59.347
	Defense	ton	-	24.923	19.746
	Total	ton	-	90.646	79.093
Total Organic Carbon (TOC) <sup>1)</sup>	Copper and Copper Alloy	ton	47.067	63.657	-
	Defense	ton	27.240	20.629	-
	Total	ton	74.307	84.286	-
Biological Oxygen Demand (BOD)	Copper and Copper Alloy	ton	42.660	24.119	31.157
	Defense	ton	6.164	4.079	-
	Total	ton	48.824	28.198	31.157
Total Nitrogen (T-N)	Copper and Copper Alloy	ton	3.354	3.657	1.586
	Defense	ton	16.75	16.142	11.018
	Total	ton	20.104	19.799	12.604
Total Phosphorus (T-P)	Copper and Copper Alloy	ton	0.036	0.076	0.039
	Defense	ton	3.02	3.059	3.734
	Total	ton	3.056	3.135	3.773

1) The TOC is measured from 2022 onward, reflecting the transition from COD to TOC as the organic matter management indicator under the Water Environment Conservation Act.



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Category	Unit	2023	2022	2021
<b>Byproduct generation</b>	<b>ton</b>	<b>9,783</b>	<b>9,645</b>	<b>9,287</b>
Slag	ton	1,402	1,480	1,571
Fine particles	ton	325	352	373
Spent refractory waste	ton	1,159	799	896
Sludge	ton	6,897	7,014	6,447

**Waste and Recycling**

Category	Unit	2023	2022	2021
<b>Waste discharged</b>	<b>ton</b>	<b>37,034</b>	<b>34,341</b>	<b>34,286</b>
Waste intensity <sup>1)</sup>	ton/billion KRW	1.35	1.19	1.52
General waste	ton	29,982	27,994	29,695
Designated waste	ton	6,189	5,282	3,358
Construction waste	ton	863	1,066	1,232
Recycled waste	ton	28,648	27,074	29,207

1) Intensity calculated against manufacturing costs in Copper & Copper Alloy Division and Defense Division.

**Chemical Use**

Category		Unit	2023	2022	2021
Chemicals used	Copper and Copper Alloy	ton	2,866	2,695	3,034
	Defense	ton	3,151	3,049	2,510
	Total	ton	6,017	5,744	5,544
Chemical Intensity <sup>1)</sup>	Copper and Copper Alloy	ton/billion KRW	0.14	0.12	0.18
	Defense	ton/billion KRW	0.44	0.45	0.42
Major chemicals used	H <sub>2</sub> SO <sub>4</sub>	ton	2,636	2,473	2,773
	HNO <sub>3</sub>	ton	1,228	1,173	983
	Oleum	ton	981	908	714
	H <sub>2</sub> O <sub>2</sub>	ton	41	45	49
	NaOH	ton	184	221	137
	Pb	ton	406	413	455
	H <sub>3</sub> BO <sub>3</sub>	ton	5	5	4
	CH <sub>3</sub> OH	ton	282	270	223
Chemical Emissions	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	ton	61	38	51
	C <sub>16</sub> H <sub>22</sub> O <sub>4</sub>	ton	38	36	36
	C <sub>2</sub> Cl <sub>4</sub>	ton	56	53	23
	Copper and Copper Alloy	ton	0.034	0.502	0.390
	Defense	ton	30.202	29.472	17.112
	Total	ton	30.236	29.974	17.502

1) Intensity calculated against manufacturing costs in Copper & Copper Alloy Division and Defense Division.

**Total Environmental Investment Costs**

Category	Unit	2023	2022	2021
<b>Total environmental investment</b>	<b>Hundred million KRW</b>	<b>124</b>	<b>118</b>	<b>75</b>
Environmental operating expenses <sup>1)</sup>	Hundred million KRW	87	83	75
Environmental investment expenses <sup>2)</sup>	Hundred million KRW	37	35	-

1) All expenses are included, such as those related to preventive facility power supply, chemicals, consumables, sewage treatment costs, and self-measurement/management services.  
 2) Capital expenditures are aggregated from 2022 onward for environmental investments.

**Environmental Violations**

Category	Unit	2023	2022	2021
Number of legal violations	Case	-	1	-
Overlapping with the above item. This should be an amount	Million KRW	-	-	-

**Green Purchasing**

Category	Unit	2023	2022	2021
Purchases of environmentally certified products	Million KRW	18.89	12.45	11.40

**Sales of Sustainable Products**

Category	Unit	2023	2022	2021
Sales of sustainable products <sup>1)</sup>	Million KRW	1,047	1,431	1,142

1) Sustainable products include antibacterial copper and Pb-free brass, etc.

**Use of Recycled Raw Materials**

Category	Unit	2023	2022	2021
Major raw materials used	ton	318,290	352,424	376,117
Renewable raw materials used	ton	202,611	213,762	221,360

**Environmental Management System (ISO 140001) Certification**

Category	Unit	2023	2022	2021
No. of sites covered	site	3	3	3
<b>No. of sites acquired</b>	<b>site</b>	<b>3</b>	<b>3</b>	<b>3</b>

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## Status of Employees

Category	Unit	2023	2022	2021
<b>Total number of employees</b>	person	<b>3,476</b>	<b>3,412</b>	<b>3,377</b>
By employment type	Regular	2,738	2,774	2,855
	Non-regular	738	638	522
By gender	Male	3,282	3,215	3,184
	Female	194	197	193
Fostering Female Talent	Percentage of female employees <sup>1)</sup>	1.48	1.52	0.77
By age	Ages under 30	468	466	483
	Ages 30 to 39	962	915	839
	Ages 40 to 49	544	528	535
	Ages 50 or above	1,502	1,503	1,520
By job category	Administrative & Research	802	787	764
	Technical	2,664	2,607	2,599
	Other	10	18	14
By job level	Senior management <sup>1)</sup>	41	40	40
	Middle management <sup>1)</sup>	94	92	90
	Those in non-management roles <sup>1)</sup>	3,341	3,280	3,247
Persons with disabilities	person	61	63	66
Persons with national merits	person	160	154	156
Non-affiliated workers <sup>2)</sup>	person	570	573	588

1) Senior management: Executives and directors and above / Middle management: team leaders and department heads

2) Outsourced labor in the workplace

## Hiring/Turnover and Termination/Retirement

Category	Unit	2023	2022	2021
<b>Total number of new hires</b>	person	<b>386</b>	<b>352</b>	<b>386</b>
By gender	Male	378	342	382
	Female	8	10	4
By age	Ages under 30	182	204	189
	Ages 30 - 49	41	57	43
	Ages 50 or above	163	91	154

## Turnover

Category	Unit	2023	2022	2021
Voluntary turnover	person	63	86	74
Total turnover	person	326	381	359
Average turnover rate	%	19.3	22.6	20.6
<b>Average years of continuous service</b>	<b>year</b>	<b>16.2</b>	<b>17.5</b>	<b>18.3</b>

**Maternity and Parental Leave**

Category	Unit	2023	2022	2021
Number of parental leave users	person	37	31	22
By gender	Male	3	7	9
	Female	34	24	13
Number of people returning	person	38	33	22
Employees on reduced hours	person	1	2	1

**Social Contribution Performance**

Category	Unit	2023	2022	2021
Social contribution investment	million KRW	4,603	3,842	3,645
Expenses incurred in relation to volunteering activities <sup>1)</sup>	million KRW	4.3	3.6	1.1
Employee volunteer contribution amount <sup>2)</sup>	million KRW	9.6	9.7	10.3
Volunteer participation rate	%	28	29	32
Volunteer hours	hour	158.0	132.0	40.0

1) The figure is calculated using the average hourly wage of an office-based employee at the headquarters and the number of hours volunteered.

2) Matching grant contributions from HQ employees

**Employee Training**

Category	Unit	2023	2022	2021	
Total training investment	million KRW	1,687	1,261	817	
Total training hours	hour	171,936	176,840	134,971	
<b>By gender</b>					
Male	Total training hours	hour	163,110	167,239	127,479
	Average training hours	hour	49.7	52.0	40.0
Female	Total training hours	hour	8,826	9,601	7,492
	Average training hours	hour	45.5	48.7	38.8
<b>By Age</b>					
Ages 30 and under	Total training hours	hour	24,800	25,900	20,600
	Average training hours	hour	53.0	55.6	42.7
Ages 30 to 39	Total training hours	hour	52,442	52,167	36,886
	Average training hours	hour	54.5	57.0	44.0
Ages 40 to 49	Total training hours	hour	26,270	26,828	20,855
	Average training hours	hour	48.3	50.8	39.0
Ages 50 and above	Total training hours	hour	68,424	71,945	56,630
	Average training hours	hour	45.56	47.87	37.26

**Average Compensation of Employees**

Category	Unit	2023	2022	2021	
Average Compensation of Employees	million KRW	90	83	82	
By gender	Male	million KRW	91	84	83
	Female	million KRW	86	74	73

**Employee Retirement Pension Plan**

Category	Unit	2023	2022	2021
Amount in defined contribution plan	million KRW	73,005	84,660	91,403
Amount in defined contribution plan	person	667	778	880
Amount in defined benefit plan	million KRW	227,175	208,230	201,768
Employees on defined benefit plan	person	1,958	1,938	1,933

**Amount in defined contribution plan**

Category	Unit	2023	2022	2021
<b>Total number of suppliers</b>	<b>Company</b>	<b>1,431</b>	<b>1,299</b>	<b>1,440</b>
Number of key suppliers <sup>1)</sup>	Company	200	200	200
<b>Purchases from all suppliers</b>	<b>hundred million KRW</b>	<b>5,903</b>	<b>5,212</b>	<b>4,891</b>
Purchase amount from key suppliers <sup>1)</sup>	hundred million KRW	2,472	2,049	1,912
Purchase amount of major raw materials	hundred million KRW	17,076	20,283	15,436
<b>Shared Growth Support</b>				
Support from Shared Growth Fund	hundred million KRW	50	100	50

1) Based on the results of a survey conducted by the Shared Growth Committee

**Labor Union Membership**

Category	Unit	2023	2022	2021
Union membership rates	%	95.6	96.1	95.1

**Industrial Accidents**

Category	Unit	2023	2022	2021
Occupational accident rate <sup>1)</sup>	Prime contractors	0.12	0.23	0.15
	Subcontractors	-	0.35	-
Lost Time Injury Frequency Rate (LTIFR)	Prime contractors Incident/1 million hours	0.51	1.05	0.66
	Subcontractors Incident/1 million hours	-	1.78	-

1) Occupational injury rate: the number of injuries per 100 full-time equivalent employees

**Social Contribution Expenses**

Category	Unit	2023	2022	2021
Donations	million KRW	4,760	3,847	3,936

# Governance Performance

## Operation of the Board of Directors (BOD)

Category	Unit	2023	2022	2021
Number of BOD meetings held	session	5	5	5
Number of extraordinary board meetings held	session	2	3	2
Total number of meetings held	session	7	8	7
Agenda items discussed	item	22	28	27

## BOD Remuneration

Category	Unit	2023	2022	2021
Inside Directors	Number of persons	3	3	4
	Total compensation paid	million KRW	6,748	6,073
Outside Directors	Number of persons	4	6	4
	Total compensation paid	million KRW	341.5	320.9
Average compensation of employees & executives	million KRW	90.5	83.1	82.1
CEO Compensation	million KRW	6,325	5,696	5,505

## Economic Value Distribution

Category	Unit	2023	2022	2021
Shareholder dividends	hundred million KRW	328	273	280
Employee wage, etc.	hundred million KRW	2,804	2,730	2,657
Investor interest expense	hundred million KRW	227	223	130
Purchases from suppliers	hundred million KRW	5,903	5,212	4,891
Government income taxes	hundred million KRW	350	450	630

## Customer Satisfaction

Category	Unit	2023	2022	2021
Customer satisfaction score	point	88.1	84.8	84.9

## Payment of Major Association Membership Fees

Category	Unit	2023	2022	2021
Federation of Korean Industries	hundred million KRW	3.1	2.5	2.5
Korea Enterprises Federation	hundred million KRW	0.5	0.5	0.5
Korea Chamber of Commerce and Industry	hundred million KRW	2.3	2.2	1.6

## R&D Investment

Category	Unit	2023	2022	2021
Investment Costs	million KRW	26,587	25,865	24,076
Investment as a percentage of revenue	%	Below 1%	Below 1%	Below 1%

## Company Policy Violations and Actions

Category	Unit	2023	2022	2021
Anti-Corruption/Bribery	case	3	7	9
Anti-Discrimination/Harassment	case	3	1	-
Customer Information Data	case	1	1	3
Conflicts of Interest	case	2	-	-
Money Laundering/Insider Trading	case	2	2	-
Information Security	case	2	1	1
Code of Conduct	case	1	-	1

## Anti-Corruption & Competitive Practices



Category	Unit	2023	2022	2021
Fines for anticompetitive practices	million KRW	-	-	-
Corruption and bribery cases	case	-	-	-

# Organizational Memberships



Federation of Korean Industries	Korea-U.S. Economic Council	Korea-Japan Economic Association	Korea America Friendship Society
Korea China Friendship Association	Korea-America Association	Institute for Global Economics	Seoul Forum for International Affairs
Korea Forum Progress	Korea Mecenat Association	AMCHAM Korea	International Management Institute
Korea Copper Industry Cooperative	Korea Nonferrous Metal Association	THE KOREA SOCIETY	Korea Listed Companies Association
Korea Personnel Improvement Association	Korea Enterprises Federation	Korea Association for Chief Financial Officers	Korea Industrial Technology Association
Korea International Trade Association	Pyeongtaek Chamber of Commerce and Industry	Daegu Chamber of Commerce and Industry	Busan Chamber of Commerce and Industry
Korea Defense Industry Association	Korea Defense Industry Association	Korea Association of Military Studies	Korea Testing Laboratory
Emergency Planning Council of MOTIE	Seoul Branch of Defense Security Council	Guns & Explosives Safety Technology Association	Korea Institute of Military Science and Technology
Korea Automobile Manufacturers Association	Korea AEO Association	Security Cooperation Committee of Seodaemun Police Station	Korea Industrial Safety Association
Korea Exchange	Seoul West Crime Victim Support Center	Korea Emissions Market Association	Korea Construction Engineers Association
Korea Electric Engineers Association	Military Operations Research Society of Korea	Military Robotics Society	Defense Breach Response Council

# Certifications

## Certifications for Environmental Management Systems

Category	2023	2022	2021	
ISO 14001	Certification retention	Certification retention	Certification retention	
Green Business (Ulsan Plant)	Certification retention	Certification retention	Certification retention	

## Safety and Health Management Certifications

Category	2023	2022	2021	
ISO 45001 (Ulsan Plant)	Certification retention	Certification retention	Certification acquisition	
ISO 45001 (Angang & Busan Plants)	Certification retention	Certification retention	Certification retention	

## Information Security Management Certification

Category	2023	2022	2021	
ISO 27001 (Angang Plant)	Certification retention	Certification retention	Certification retention	

## Certifications for Quality Management Systems

Category	2023	2022	2021	
ISO 9001	Certification retention	Certification retention	Certification retention	
AS9100 (Angang Plant)	Certification retention	Certification retention	Certification retention	
IATF 16949 (Ulsan & Angang Plants)	Certification retention	Certification retention	Certification retention	
Defense Quality Management System (Angang & Busan Plants)	Certification retention	Certification retention	Certification retention	



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## General Disclosures

GRI Standard	Disclosure	Page	Remarks
GRI 2: General Disclosures	2-1 Organizational details	5	
	2-2 Entities included in the organization's sustainability reporting	2	
	2-3 Reporting period, frequency and contact point	2	
	2-4 Reporting period, frequency and contact point	N/A	Not applicable as this is an inaugural publication
	2-5 External assurance	72, 73	
	2-6 Activities, value chain and other business relationships	5-11	
	2-7 Employees	59	
	2-8 Workers who are not employees	59	
	2-9 Governance structure and composition	42	
	2-10 Nomination and selection of the highest governance body	42	
	2-11 Chair of the highest governance body	42	
	2-12 Role of the highest governance body in overseeing the management of impacts	42	
	2-13 Delegation of responsibility for managing impacts	42	
	2-14 Role of the highest governance body in sustainability reporting	42	
	2-15 Conflicts of interest	43	
	2-16 Communication of critical concerns	42	
	2-17 Collective knowledge of the highest governance body	43	
	2-18 Evaluation of the performance of the highest governance body	43	
	2-19 Remuneration policies	43	
	2-20 Process to determine remuneration	43	
	2-21 Annual total compensation ratio	Business Report	

GRI Standard	Disclosure	Page	Remarks
GRI 2: General Disclosures	2-22 Statement on sustainable development strategy	4	
	2-23 Policy commitments	20, 45	
	2-24 Embedding policy commitments	20, 45	
	2-25 Processes to remediate negative impacts	17, 46	
	2-26 Mechanisms for seeking advice and raising concerns	17, 36, 46	
	2-27 Compliance with laws and regulations	58, 62	
	2-28 Membership associations	63	
	2-29 Approach to stakeholder engagement	17	
	2-30 Collective bargaining agreements	36, 61	

## Material Issues Disclosures

GRI Standard	Disclosure	Page	Remarks
GRI 3: Material Topics	3-1 Process to determine material topics	15	
	3-2 List of material topics	16	
	3-3 Management of material topics	16	

## Response to Climate Change

GRI Standard	Disclosure	Page	Remarks
	3-3 Management of material topics	16, 22-24	
GRI 302: Energy	302-1 Energy consumption within the organization	24, 56	
	302-2 Energy consumption outside of the organization	-	Metrics not managed
	302-3 Energy intensity	24, 56	
	302-4 Reduction of energy consumption	24	
	302-5 Reductions in energy requirements of products and services	-	N/A

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GRI Standard	Disclosure	Page	Remarks	
GRI 305: Emissions	305-1	Direct (Scope 1) GHG emissions	24, 55	
	305-2	Energy indirect (Scope 2) GHG emissions	24, 55	
	305-3	Other indirect (Scope 3) GHG emissions	-	Overlaps from previous pages/ notes not translated:
	305-4	GHG emissions intensity	24, 55	
	305-5	Reduction of GHG emissions	24	
	305-6	Emissions of ozone-depleting substances	-	Not aggregated as the emissions from the production process are insignificant
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	55	
<b>Supply Chain Management</b>				
	3-3	Management of material topics	16, 31, 32	
GRI 308: Supplier	308-1	New suppliers that were screened using environmental criteria	32	
	308-2	Negative environmental impacts in the supply chain and actions taken	-	Overlaps from previous pages/ notes not translated:
GRI 414: Social Assessment	414-1	New suppliers that were screened using social criteria	31, 32	
	414-2	Negative social impacts in the supply chain and actions taken	32	
<b>Occupational Health</b>				
	3-3	Management of material topics	16, 27-30	
GRI 403: Occupational Health	403-1	Occupational health and safety management system	27	
	403-2	Hazard identification, risk assessment, and incident investigation	29, 30	
	403-3	Occupational health services	28	
	403-4	Worker participation, consultation, and communication on occupational health and safety	27	

GRI Standard	Disclosure	Page	Remarks
GRI 403: Occupational Health	403-5	Worker training on occupational health and safety	29
	403-6	Promotion of worker health	28, 35
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	28
	403-8	Workers covered by an occupational health and safety management system	27
	403-9	Work-related injuries	61
	403-10	Work-related ill health	-

**Ethical Management**

	3-3	Management of material topics	16, 45-47
GRI 205: Anti-Corruption	205-1	Proportion of spending on local suppliers	45, 46
	205-2	Proportion of spending on local suppliers	46
	205-3	Confirmed incidents of corruption and actions taken	62

**Enterprise-wide Risk Management**

	3-3	Management of material topics	16, 45-47
GRI 205: Anti-Corruption	205-1	Proportion of spending on local suppliers	45, 46
	반부패	Proportion of spending on local suppliers	46
	205-3	Confirmed incidents of corruption and actions taken	62

**Other than Material Topics**

GRI 201: Economic Performance	201-1	Direct economic value generated and distributed	11, 53, 54
	201-2	Financial implications and other risks and opportunities due to climate change	23
GRI 301: Materials	301-1	Materials used by weight or volume	58
	301-2	Energy consumption within the organization	58

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GRI Standard	Disclosure	Page	Remarks
GRI 303: Water	303-1	Interactions with water as a shared	25
	303-2	Management of water discharge-related impacts	25
	303-4	Water discharge	56
	303-5	Water consumption	56
GRI 306: Effluents	306-1	Waste generation and significant waste-related impacts	26
	306-2	Management of significant waste-related impacts	26
	306-3	Waste generated	57
	306-4	Waste diverted from disposal	57
GRI 401: Employment	401-1	Disclosure 401-1 New employee hires and employee turnover	59
	401-2	Disclosure 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	35
	401-3	Disclosure 401-3 Parental leave	60

GRI Standard	Disclosure	Page	Remarks
GRI 404: Training and Education	404-1	Average hours of training per year per employee	60
	404-2	Programs for upgrading employee skills and transition assistance programs	34
	404-3	404-3 Percentage of employees receiving regular performance and career development reviews	34
GRI 405: Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	33, 43, 59
	405-2	Ratio of basic salary and remuneration of women to men	60
GRI 413: Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	37

# SASB Index

## Industrial Classification: Extractives & Minerals Processing (Metals & Mining)

Topic	Metric	Scope	Measurement unit	SASB Code	Reporting Page
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	CO <sub>2</sub> -eq(t), %	EM-MM-110a.1	24, 55
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and analysis	N/A	EM-MM-110a.2	24
Air Quality	Air emissions of the following pollutants: (1) CO, (2) NOx (excluding N <sub>2</sub> O), (3) SOx, (4) particulate matter (PM10), (5) Hg, (6) Pb, and (7) VOCs	Quantitative	ton	EM-MM-120a.1	55
Energy Management	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	GJ, %	EM-MM-130a.1	24, 56
Water Management	(1) Total fresh water withdrawn, (2) total fresh water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	m <sup>3</sup> , %	EM-MM-140a.1	56
	Number of incidents of non-compliance associated with water quality permits, standards, and regulations	Quantitative	case	EM-MM-140a.2	21, 58
Waste & Hazardous Materials Management	Total weight of non-mineral waste generated	Discussion and analysis	ton	EM-MM-150a.4	57
	Total weight of tailings produced	Quantitative	ton	EM-MM-150a.5	Not managed because it is not primarily emitted in production
	Total weight of waste rock generated	Quantitative	ton	EM-MM-150a.6	Not managed because it is not primarily emitted in production
	Total weight of hazardous waste generated	Quantitative	ton	EM-MM-150a.7	57
	Total weight of hazardous waste recycled	Quantitative	ton	EM-MM-150a.8	unmanaged metrics
	Number of significant incidents associated with hazardous materials and waste management	Discussion and analysis	case	EM-MM-150a.9	unmanaged metrics
	Description of waste and hazardous materials management policies and procedures for active and inactive operations	Discussion and analysis	N/A	EM-MM-150a.10	25, 26
Biodiversity Impacts	Description of environmental management policies and practices for active sites	Discussion and analysis	N/A	EM-MM-160a.1	unmanaged metrics
	Percentage of mine sites where acid rock drainage is: (1) predicted to occur, (2) actively mitigated, and (3) under treatment or remediation	Quantitative	%	EM-MM-160a.2	N/A
	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	%	EM-MM-160a.3	N/A

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Topic	Metric	Scope	Measurement unit	SASB Code	Reporting Page
Security, Human Rights & Rights of Indigenous Peoples	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Quantitative	%	EM-MM-210a.1	N/A
	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Quantitative	%	EM-MM-210a.2	N/A
	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Discussion and analysis	N/A	EM-MM-210a.3	N/A
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and analysis	N/A	EM-MM-210b.1	unmanaged metrics
	Number and duration of non-technical delays	Quantitative	Case, day	EM-MM-210b.2	N/A
Labor Relations	Percentage of active workforce covered under collective bargaining agreements, broken down by U.S. and foreign employees	Quantitative	%	EM-MM-310a.1	36, 61
	Number and duration of strikes and lockouts	Quantitative	Case, day	EM-MM-310a.2	No occurrences
Workforce Health & Safety	(1)MSHA all-incidence rate, (2) fatality rate, (3) near-miss frequency rate (NMFR) and (4) average hours of health, safety, and emergency response training for (a) full-time employees and (b) contract employees	Quantitative	ratio	EM-MM-320a.1	61
Business Ethics & Transparency	Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and analysis	N/A	EM-MM-510a.1	45-47
	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	tons available for sale	EM-MM-510a.2	N/A
Tailings Storage Facilities Management	Tailings storage facility inventory table: (1) facility name, (2) location, (3)ownership status, (4) operational status, (5) construction method, (6)maximum permitted storage capacity, (7)current amount of tailings stored, (8)consequence classification, (9) date of most recent independent technical review, (10) material findings, (11)mitigation measures, (12) site-specific EPRP	Quantitative	Various	EM-MM-540a.1	Not managed because it is not primarily emitted in production
	Summary of tailings management systems and governance structure used to monitor and maintain the stability of tailings storage facilities	Discussion and analysis	N/A	EM-MM-540a.2	Not managed because it is not primarily emitted in production
	Approach to development of Emergency Preparedness and Response Plans (EPRPs) for tailings storage facilities	Discussion and analysis	N/A	EM-MM-540a.3	Not managed because it is not primarily emitted in production
Activity Metric	Production of (1) metal ores and (2) finished metal products	Quantitative	Tons available for sale	EM-MM-000.A	14
	Total number of employees, percentage contractors	Quantitative	Number, %	EM-MM-000.B	59

# Activities Aligned with UN SDGs

UN SDG Indicators	Poongsan's Approach	Reporting page	UN SDG Indicators	Poongsan's Approach	Reporting page
<b>1 NO POVERTY</b> 	End of Hunger · Community Engagement	37	<b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b> 	Innovation and Infrastructure · Quality Management · Sustainable Innovation and Technology	40-41, 50-51
<b>3 GOOD HEALTH AND WELL-BEING</b> 	Good Health and Well-being · Health & Safety	27-30	<b>10 REDUCED INEQUALITIES</b> 	Reduced Inequalities · Talent Development · Human Rights Management	33-34, 36
<b>4 QUALITY EDUCATION</b> 	Quality Education · Talent Development	33-34	<b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b> 	Responsible Consumption and Production · Reducing Environmental Pollutants · Circular Economy · Supply Chain Management · Quality Innovation Activities	25-26, 31-32, 41
<b>5 GENDER EQUALITY</b> 	Gender Equality · Talent Development · Human Rights Management	33-34, 36	<b>13 CLIMATE ACTION</b> 	Climate Action · Environmental Management · Climate Change Response	19-24
<b>6 CLEAN WATER AND SANITATION</b> 	Clean Water and Sanitation · Water Management	25	<b>15 LIFE ON LAND</b> 	Life on Land · Internalization of Environmental Management · Soil Pollutant Management	20-21, 25
<b>7 AFFORDABLE AND CLEAN ENERGY</b> 	Sustainable Energy · GHG Emissions Management · Energy Use Management	24	<b>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</b> 	Peace, Justice and Strong Institutions · Organizational Culture · Human Rights Management · Ethical Management	35-36, 45-47
<b>8 DECENT WORK AND ECONOMIC GROWTH</b> 	Decent Work and Economic Growth · Talent Development · Labor Relations · Organizational Culture · Sustainable Innovation and Technology	33-36, 50-51			

# GHG Emissions Verification Statement

MPC-23-047

POONGSAN Corporation.

## Verification Scope

Korean Standards Association has conducted verification for GHG emissions based on GHG report provided by POONGSAN Corporation which includes Scope1 and Scope2 emissions.

## Verification Standards and Guidelines

To conduct verification activities, verification team applied verification standards and guidelines. The standards and guidelines are as follows.

- Guidance for reporting and verification of GHG emissions trading scheme (No. 2023-221 provided by Ministry of Environment, Republic of Korea)
- Verification Guidelines for the Operation of the Greenhouse Gas Emission Trading System (No. 2021-112 provided by Ministry of Environment, Republic of Korea)
- For matters not specified in other guidelines, refer to 2006 IPCC Guidelines, KS I ISO 14064-1: 2018 and KSI ISO 14064-3: 2019

## Level of Assurance

POONGSAN Corporation's GHG emissions satisfies the under Reasonable Assurance (less than ±5.0% of total emissions).

## Verification Conclusion

As a result of verification activities, verification team has found no significant errors, omissions, and misstatements. Therefore, Korean Standards Association confirms that following emissions data are adequately quantified.

2023 Emissions(Scope1, Scope2)

(Unit: tCO<sub>2</sub>eq)

Year	Scope 1	Scope 2	Total
2023	60,253.51	163,164.675	223,416

\*Decimal place is not considered when calculating the emission of each workplace.

\*This emission is based on the March 2024 and the final emission value is subject to change.

March 28, 2024



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To readers of 2023 Poongsan Sustainability Report

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**Independent Assurance Report**

## Introduction

Korea Management Registrar (KMR) was commissioned by Pong to conduct an independent assurance of its 2023 Sustainability Report (the "Report"). The data and its presentation in the Report is the sole responsibility of the management of Poongsan. KMR's responsibility is to perform an assurance engagement as agreed upon in our agreement with Poongsan and issue an assurance statement.

## Scope and Standards

Poongsan described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR's assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.

- GRI Sustainability Reporting Standards 2021
- Universal standards
- Topic specific standards
  - GRI 205: Anti-Corruption
  - GRI 302: Energy
  - GRI 305: Emissions
  - GRI 308: Supplier Environmental Assessment

- GRI 403: Occupational Health and Safety
- GRI 414: Supplier Social Assessment

As for the reporting boundary, the engagement excludes the data and information of Poongsan's partners, suppliers and any third parties.

## KMR's Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report's performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service's DART and public databases.

## Limitations and Recommendations

KMR's assurance engagement is based on the assumption that the data and information provided by Poongsan to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.



### Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with Poongsan on the revision of the Report. We reviewed the Report’s final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, it is our opinion that the Report applied the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

#### Inclusivity

Poongsan has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

#### Materiality

Poongsan has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

#### Responsiveness

Poongsan prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of Poongsan’s actions.

#### Impact

Poongsan identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

### Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

### Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021:2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with Poongsan and did not provide any services to Poongsan that could compromise the independence of our work.

September 2024  
Seoul, Korea

CEO *E. J. Hwang*



PONGSAN