

CREATING SUSTAINABLE FUTURE

2024 Sustainability Report



ASIA Holdings

ASIA Cement

HALLA Cement

ASIA Paper MFG

About This Report

Report Overview

ASIA Holdings, ASIA Cement, HALLA Cement, and ASIA Paper MFG have been publishing integrated sustainability reports since 2022. These reports aim to transparently disclose the overall performance of our sustainable management activities to stakeholders. This year's sustainability report is the second integrated report that outlines the ESG management strategies and activities of ASIA Holdings and the entities described in the scope of this report, actively addressing stakeholders' interests in Environmental, Social, and Governance (ESG) issues. ASIA Holdings and all its subsidiaries are committed to continuing their efforts to fulfill social responsibilities that align with stakeholders' expectations and demands.

Reporting Period

The report covers the period from January 1, 2023, to December 31, 2023, and includes activities and information for some significant achievements up to the first half of 2024. Quantitative performance data for the past three years (2021-2023) are also provided to track yearly trends. Certain data points beyond the aforementioned reporting period are individually annotated.

Reporting Scope

The report covers all domestic operations of ASIA Holdings, ASIA Cement, HALLA Cement, and ASIA Paper MFG, encompassing their ESG management activities and quantitative performance. If there are discrepancies in the reporting scope or changes in data compared to previous reports, additional explanations are provided.

Reporting Principles and Standards

The report follows the Global Reporting Initiative (GRI) Standards 2021, adhering to the Sustainability Accounting Standards Board (SASB) and Task Force on Climate-related Financial Disclosures (TCFD) recommendations. There have been no significant changes in the reporting scope, boundaries, or measurement methods compared to the previous reports. Any changes in data collection methods that have been updated as of 2023 are individually annotated. Quantitative performance data in the environmental sector, such as greenhouse gas emissions, energy consumption, and waste disposal, may change as the information submitted to the government in compliance with the relevant regulations is finalized after the publication date of this report. Once confirmed, this information will be published through the Environmental Information System (ENV-INFO SYSTEM).

Independent Assurance

The report content and data have been third-party verified by the British Standards Institution (BSI), an independent assurance provider, to ensure transparency and reliability of this report. The statement of the assurer can be found in the Appendix 'Independent Assurance Opinion Statement' of this report.

Publisher

ASIA Holdings, ASIA Cement, HALLA Cement, and ASIA Paper MFG

Report Publication
(Contact)

ASIA Holdings Business Administration Team Tel: 02-527-6700 / Fax: 02-527-6749 / www.asiaholdings.co.kr
ASIA Cement Planning Team Tel: 043-649-5000 / Fax: 043-648-5011 / www.asiacement.co.kr
HALLA Cement HRD & Communication Team Tel: 02-6902-3230 / Fax: 02-6902-3292 / www.hallacement.co.kr
ASIA Paper MFG Planning and Management Team Tel: 031-8086-8615 / Fax: 031-434-7409 / www.asiapaper.co.kr

Contents

01 Overview

- 005 CEO Message
- 008 Company Profile

03 Focus Issues

- 028 Issue #1. Responding to Climate Change
- 032 Issue #2. Establishing a Circular Economy System
- 036 Issue #3. Workplace Health and Safety

05 Performance Data

- 133 Financial Performance
- 137 Environmental & Social Performance
- 137 - ASIA Cement
- 145 - HALLA Cement
- 153 - ASIA Paper MFG

02 ESG Fundamental

- 018 ESG Management System
- 022 Stakeholder Communication
- 024 Materiality Assessment

04 Sustainability at Asia

- 042 ASIA Holdings
- 052 ASIA Cement
- 053 - Environmental
- 062 - Social
- 075 - Governance
- 082 HALLA Cement
- 083 - Environmental
- 090 - Social
- 103 - Governance
- 108 ASIA Paper MFG
- 109 - Environmental
- 116 - Social
- 125 - Governance

06 Appendix

- 165 GRI Standards Index
- 168 SASB Index
- 169 TCFD Index
- 170 Supply Chain ESG Policy
- 171 Supplier Code of Conduct
- 172 Awards
- 172 Certifications
- 173 ESG Ratings
- 173 Membership Associations
- 174 Independent Assurance Opinion Statement

01



Overview

- 05 CEO Message
- 08 Company Profile

CEO Message

ASIA Holdings

Dear Valued Stakeholders of ASIA Holdings,

We sincerely appreciate the unwavering interest and support you have extended to ASIA Holdings throughout the years.

With your ongoing encouragement as our bedrock, we have charted a history of growth and development over the past five decades. We are dedicated to continuing this journey towards sustainable growth and aim to reciprocate the trust and support of all our stakeholders.

Since 2012, ASIA Holdings has consistently published sustainability reports, culminating in the integrated 2022 report covering the ESG management philosophies and activities of ASIA Holdings, ASIA Cement, HALLA Cement, and ASIA Paper MFG. These reports are designed to provide valuable insights to our stakeholders.

Our 2024 Sustainability Report, in particular, reflects the initiatives and improvements in ESG management driven by the ESG Committee. It elaborates on our efforts to uphold ASIA Holdings' fundamental management philosophy of "Creating Value with Consideration for People and the Environment."

At ASIA Holdings, we continue to evaluate our ESG management capabilities, adapting to evolving management paradigms and identifying opportunities amidst challenges. We kindly seek your continued interest and advice to ensure that these efforts can successfully create value for all stakeholders.

Thank you.

ASIA Holdings CEOs **Lee, Hoon Beom** and **Oh, Ki Ho**

CEO Message

ASIA Cement

HALLA Cement

Dear Valued Stakeholders,

We sincerely thank you for your unwavering interest and support extended to ASIA Cement and HALLA Cement.

Since 2021, when the two companies jointly launched the vision 'ECO TOGETHER 2025', sustainability has been a core value at both ASIA Cement and HALLA Cement. We are committed to achieving significant milestones, including creating accident-free workplaces, implementing low-carbon management through recycled resources, and enhancing corporate competitiveness through improved financial performance.

ASIA Cement and HALLA Cement regard corporate environmental and social responsibilities as paramount obligations. We have actively implemented facility upgrades for environmental improvements and process enhancements. Additionally, we consistently engage in various social contribution activities to foster community harmony and undertake ecological restoration efforts to preserve biodiversity. In particular, to ensure transparent and compliant ethical management, we have established an Ethics Management Committee and an Internal Transactions Committee within the Board of Directors. Furthermore, we operate a Risk Management Committee to identify and preemptively address changes in the management environment and potential business risks, ensuring comprehensive risk management that considers environmental and social concerns.

Going forward, ASIA Cement and HALLA Cement assure all stakeholders that every employee is fully committed to simultaneously achieving both survival and growth.

Thank you.

ASIA Cement CEOs **Lim, Kyeong Tai and Kim, Woung Chong**
HALLA Cement CEOs **Lim, Kyeong Tai and Hwang, Sok Yong**

CEO Message

ASIA Paper MFG

Dear Valued Stakeholders,

ASIA Paper MFG is pleased to present this report to highlight and share our achievements in sustainable management and our ongoing improvements.

Guided by a sustainable management framework, ASIA Paper MFG is committed to enhancing our competitive edge. We aspire to be recognized not only for our financial performance but also for our contributions to social value, by fostering an industry atmosphere that prioritizes the environment. In doing so, we aim to earn recognition from both customers and stakeholders.

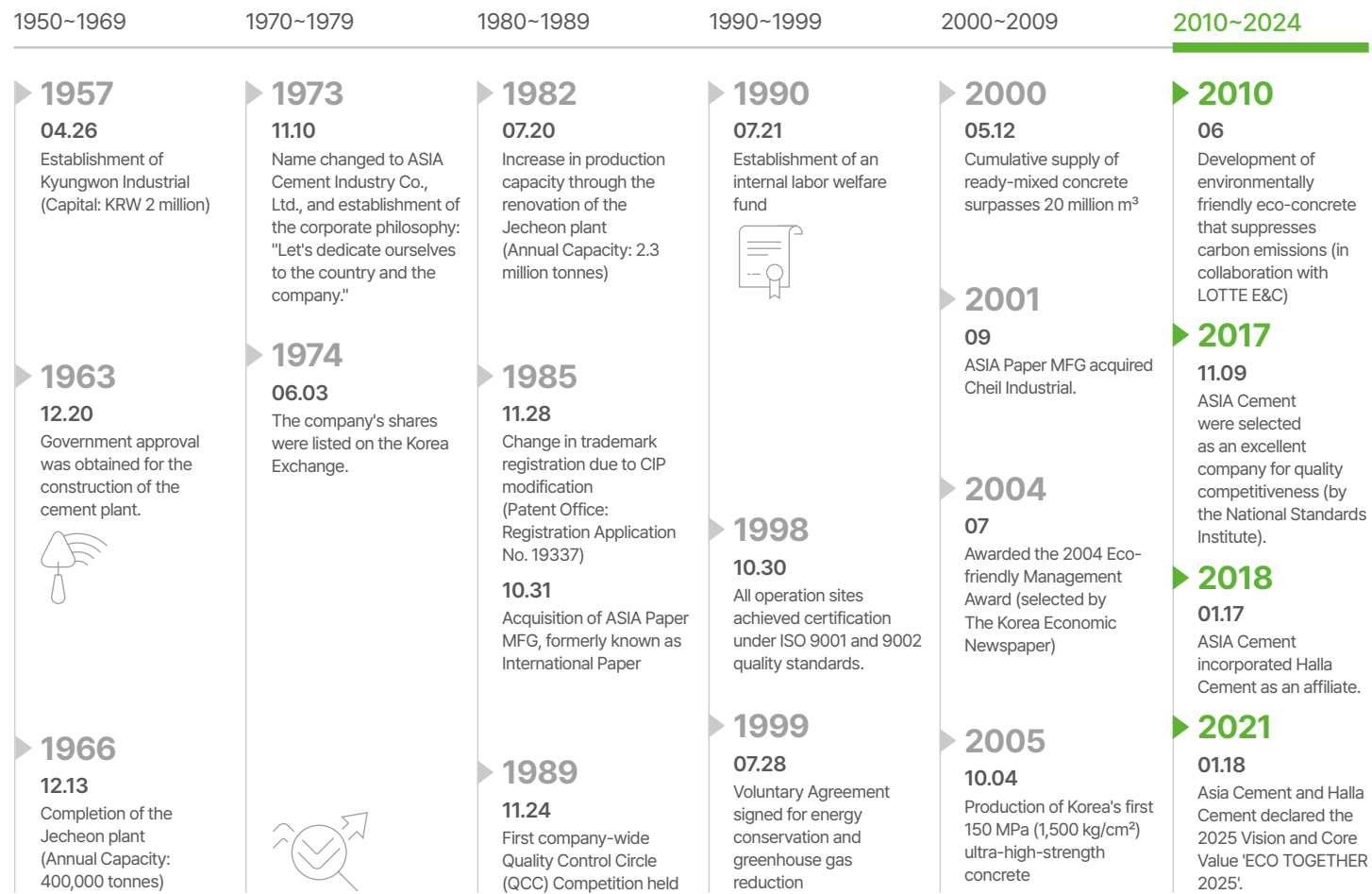
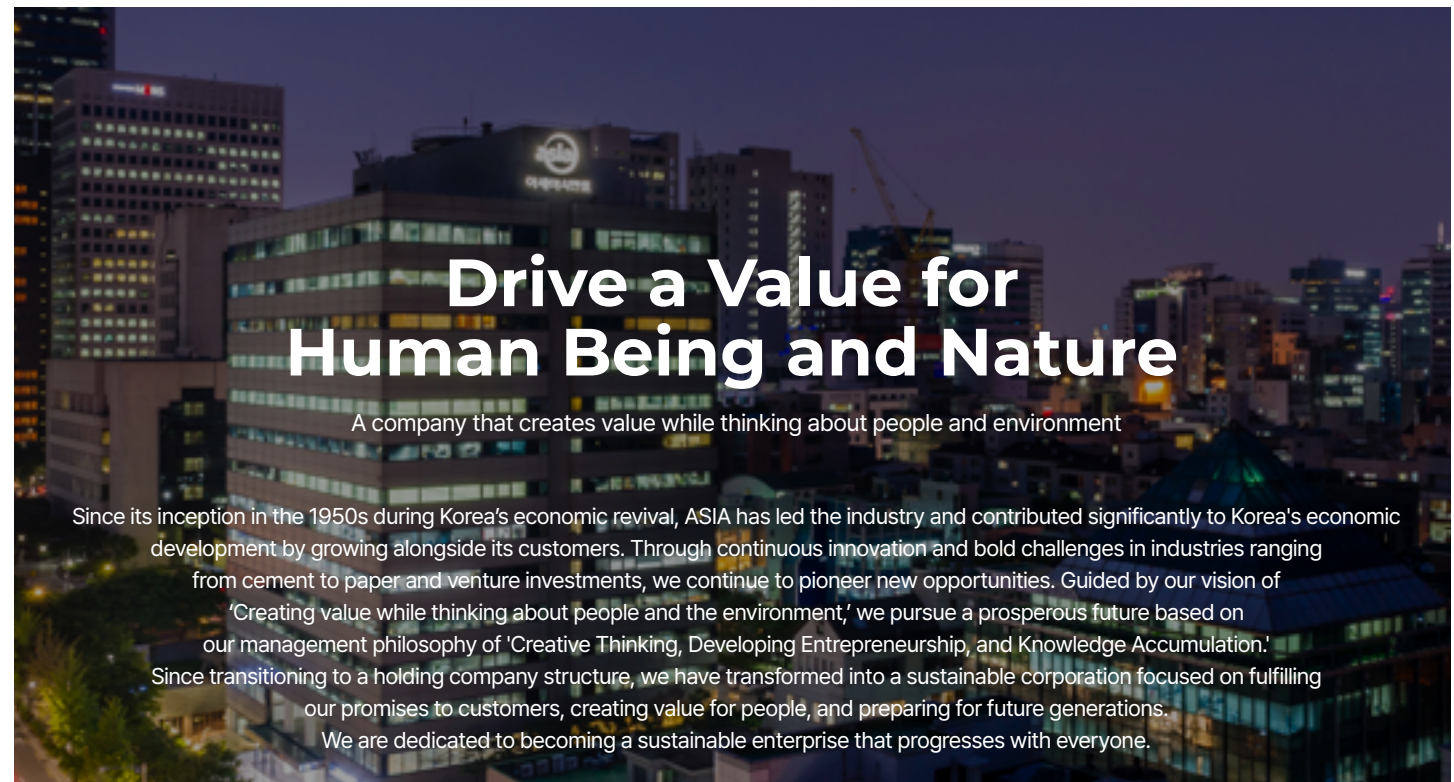
ASIA Paper MFG contributes to the recycling of resources throughout its entire process, from raw material procurement to product shipment, actively promoting recycling systems. Operating under ESG management principles, we have obtained various health, safety, and environmental management certifications, such as ISO 14001 and FSC. We produce our products in smart eco-factories aimed at reducing greenhouse gases and pollutants. Through investments in technological advancements, we are driving initiatives such as linerboard for fresh food packaging, contributing to significant market improvements and enhancing consumer convenience. We diligently fulfill our corporate responsibilities, as evidenced by commendations from local governments and presidential awards for our sincere tax obligations.

The sustainability of a company is highly uncertain if it fails to gain the trust of its customers and stakeholders in environmental, social, and governance matters. At ASIA Paper MFG, prioritizing environmental safety and health management is at the forefront of our operations. We are dedicated to workplace safety and health activities to achieve zero severe accidents and reduce medical leave accidents. Furthermore, we are committed to establishing a robust internal safety management system and enhancing safety awareness, led by our Safety and Health Center. Our concerted efforts are directed toward achieving an annual zero-accident rate across the entire production site, not just in specific areas. We will continue striving for meaningful value creation through consistent environmental protection and safety and health activities.

Together with all our employees, we will spare no effort in advancing and evolving into a company that grows and thrives together.

Thank you.

ASIA Paper MFG CEOs **Yu, Seung Hwan and Lee, Hyun Tak**



Company Profile



To enhance corporate governance transparency, ASIA transitioned to a holding company structure in 2013. Since then, it has been fostering growth across various sectors, including its cement business segments such as ASIA Cement, HALLA Cement, and ASIA Industrial Development, and the paper business segments consisting of ASIA Paper MFG, Kyungsan Paper, Cheil Industrial, Yujin Fiber Board, Apack, and AP Recycling, as well as other ventures such as Wooshin Venture Investment, Gyeongju World, and Ahnong. ASIA is advancing towards a future marked by continued growth and development.

Revenue for the Year 2023 (Consolidated Basis)	KRW 2,115,887 million
Operating Profit for the Year 2023 (Consolidated Basis)	KRW 240,394 million

Company	ASIA Holdings
Established on	April 26, 1957
CEO	Lee, Hoon Beom and Oh, Ki Ho
Headquarters	430, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Business	Management consulting, rental business and others
Number of Employees*	9 (as of December 31, 2023)

* Including non-registered executives

ASIA Business Sectors

Cement

The cement industry is an essential infrastructure sector that operates under the principle of economies of scale, requiring substantial initial investment costs. ASIA Cement and HALLA Cement engage in the production and sale of construction base materials, focusing on minimizing inefficiencies, improving operational effectiveness through sound management practices, and striving for new product development and business innovation. ASIA Industrial Development specializes in the production of construction aggregates, directly influenced by national SOC investment projects and the construction cycle.

Paper

The paper business involves producing various papers and paper products using pulp and recycled paper as the main ingredients. ASIA Paper MFG specializes in producing linerboard, kraft paper, and gypsum linerboard, enhancing cost savings by improving the efficiency of incineration boilers and solid fuel boilers. Meanwhile, it has been bolstering its capacity to collect recovered paper and actively cultivating affiliations with manufacturers of linerboard, corrugated board, and corrugated boxes to continuously maximize synergies. Furthermore, we are actively promoting alternative energy projects and striving for cost savings and revenue generation through recycling. Our affiliates engaged in the paper business include ASIA Paper MFG, as well as Cheil Industrial, Yujin Fiber Board, and AP Recycling.

Venture Investment, Leisure, and Education

Venture investment focuses on innovative ventures and small to medium-sized enterprises with growth potential, supporting their success through investment. Wooshin Venture Investment invests in various sectors such as ICT, biotech and medical, and manufacturing, creating tangible results. In the leisure sector, Gyeongju World stands out as a themed park that has gained nationwide popularity, extending beyond the southern region. It offers consumers unique experiences and services in unconventional spaces, including attractions, entertainment, and dining options. Additionally, through Mungyeong Academy, ASIA operates Mungyeong Girls' High School and Munchang High School, striving to provide an excellent educational environment for students to grow into individuals with outstanding character and capabilities.

Company Profile



Striving for Excellence in Quality and Trust

ASIA Cement has firmly held its ground in the domestic cement industry for over half a century. We manufacture a diverse range of construction materials, including cement, ready-mix concrete, dry mortar, specialty cement, and aggregates. Through a robust distribution network serving ready-mix concrete companies, construction companies, distributors, and the government's Public Procurement Service, we deliver these products to our customers. Our relentless dedication and passion ensure top-notch quality and customer satisfaction at all times.

Revenue for the Year 2023
(Separate Basis)

KRW 561,469 million

Operating Profit for the Year 2023
(Separate Basis)

KRW 75,614 million

Company	ASIA Cement
Established on	October 1, 2013
CEO	Lim, Kyeong Tai and Kim, Woung Chong
Headquarters	430, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Business	Manufacturing and selling cement, ready-mixed concrete, dry mortar, and aggregate
Number of Employees*	492 (as of December 31, 2023)

* Including non-registered executives

Our Locations

ASIA Cement operates nationwide with its headquarters in Seoul and its main cement production plant in Jecheon. In addition, it runs cement distribution centers, ready-mix concrete and dry mortar plants, and sales offices across the country.

Seoul

- **Head Office**
- 430, Nonhyeon-ro, Gangnam-gu, Seoul

Metropolitan Area

- **Suwon Plant**
- 1006, Deokyeong-daero, Gwonseon-gu, Suwon-si, Gyeonggi-do
- Cement and ready-mix concrete
- **Seoul Plant for Ready-Mix Concrete**
- 108, Anyangcheondong-ro, Dongan-gu, Anyang-si, Gyeonggi-do
- Ready-mix concrete and dry mortar
- **Deokso Logistics Center**
- 40, Deokso-ro, Wabu-eup, Namyangju-si, Gyeonggi-do
- Cement

- **Bugok Storage Site**
- 201, Ganamu-ro, Uiwang-si, Gyeonggi-do
- Cement

- **Yongin Plant**
- 15, Hyeongyeong-ro 17beon-gil, Namsa-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do
- Ready-mix concrete and dry mortar



Chungcheongbuk-Do

- **Jecheon Plant**
- 14, Songhaksan-ro, Songhak-myeon, Jecheon-si, Chungcheongbuk-Do
- Cement, aggregate and GPC

Central Region

- **Daejeon Plant**
- 25, Bangdumal 1-gil, Daedeok-gu, Daejeon
- Cement and ready-mix concrete
- **Hongseong Plant**
- 48, Chungseo-ro 966beon-gil, Guhang-myeon, Hongseong-gun, Chungcheongnam-do
- Facility rental
- **Jungbu Plant**
- 60, Arirang-ro 55beon-gil, Daedeok-gu, Daejeon
- Ready-mix concrete

Daegu Region

- **Daegu Plant**
- 2, Gyeonghocheondong-gil, Yammok-myeon, Chilgok-gun, Gyeongsangbuk-do
- Cement, ready-mix concrete and dry mortar
- **Daegu Branch Office**
- 1773, Dalgubeol-daero, Seo-gu, Daegu
- Cement and dry mortar

Our Business

Cement

4,410K tonnes per annum (production capacity)

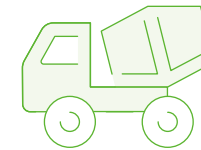
Among the players in the domestic cement industry, ASIA Cement possesses the richest limestone deposits known for their highest quality. We continue to uphold our reputation for producing highly fluid cement ideal for constructing skyscrapers.



Ready-Mix Concrete

5,040K m³ per annum (production capacity)

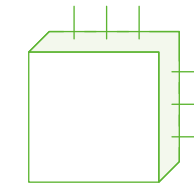
Ready-Mix Concrete is manufactured at plants equipped with concrete production facilities and transported to designated locations without solidifying. Due to the necessity of completing all processes from manufacturing to placing before cement and water hydration occur, it is suitable mainly for local operations with a limited supply radius beyond certain distances.



Dry Mortar

2,140K tonnes per annum (production capacity)

Dry mortar is an innovative building material that combines cement with dry-screened sand and various additives in ideal proportions for specific purposes, facilitating convenience and efficiency by simply adding water at the site for immediate use.



Aggregate

814K m³ per annum (production capacity)

The crushed aggregate for concrete undergoes rigorous quality inspections. It obtained KS certification on May 24, 2006, demonstrating its proven excellence. The aggregate is produced using low-grade limestone from ASIA Cement's own limestone mines. The installation of state-of-the-art dust prevention facilities, rigorous quality control, and fully automated production systems across all stages ensures the production and supply of environmentally friendly products.



GPC

500K tonnes per annum (production capacity)

To meet the high functionality, high quality, and cost-saving requirements of concrete due to the skyscraperization, enlargement, and sophistication of building structures, we offer customized pre-mixed cement with various functional additives for uniform quality products.



Company Profile



Creating New Values through Change and Innovation

Established in 1978, HALLA Cement Corp. has contributed to national economic development as a producer of cement, a basic construction material. Based on the extensive technological expertise accumulated over the past 40 years, the company has produced high-quality Portland cement, slag cement, and specialty cement with various functions.

Revenue for the Year 2023
(Separate Basis)

KRW 625,225 million

Operating Profit for the Year 2023
(Separate Basis)

KRW 67,766 million

Company	HALLA Cement
Established on	January 27, 1978
CEO	Lim, Kyeong Tai and Hwang, Sok Yong
Headquarters	225, Sangye-gil, Okgye-myeon, Gangneung-si, Gangwon-do, Republic of Korea
Business	Manufacturing and selling cement
Number of Employees*	525 (as of December 31, 2023)

* Including non-registered executives

Our Locations

HALLA Cement operates its headquarters and main plant located in Okgye-myeon, Gangneung-si, Gangwon-do, along with production plants in Gwangyang, Pohang, and Incheon, as well as distribution centers and sales offices nationwide.

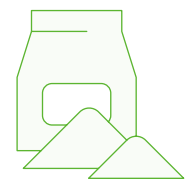
- Seoul Office / Central Office / Special Sales Office**
- 3F, ASIA Tower, 430, Nonhyeon-ro, Gangnam-gu, Seoul
- Incheon Plant / Sales Office**
- 79, Seohae-daero, Jung-gu, Incheon
- Uiwang Distribution Center / Sales Office**
- 105, Ganamu-ro, Uiwang-si, Gyeonggi-do
- West Regional Office / Maepo Distribution Center**
- 337-35, Simokbugang-ro, Bugang-myeon, Sejong
- Janghang Distribution Center**
- 268-6, Jangsan-ro, Janghang-eup, Seocheon-gun, Chungcheongnam-do
- Gwangju Sales Office**
- 1201B, A-dong, IBC Knowledge Industry Center, 43-10, Cheomdangwagi-ro 208beon-gil, Buk-gu, Gwangju
- Samho Distribution Center / Sales Office**
- 291 Sinhang-ro, Mokpo-si, Jeollanam-do
- Gwangyang Plant / Sales Office**
- 159, Saneop-ro, Gwangyang-si, Jeollanam-do
- Jeju Regional Office / Distribution Center**
- 294-34, Wolgak-ro, Hallim-eup, Jeju-si, Jeju
- Choseong-ri Distribution Center**
- 40, Cheongsin-ro 118beon-gil, Cheongsan-myeon, Yeoncheon-gun, Gyeonggi-do
- headquarters / Okgye Plant / Yeongdong Sales Office**
- 225, Sangye-gil, Okgye-myeon, Gangneung-si, Gangwon-do
- Yangju Office**
- 203, Sewon Medical Plaza, 6, Goeupnam-ro, Yangju-si, Gyeonggi-do
- Concrete Research Center / Technical Support Team**
- 70, Iseopdaechon-ro 561beon-gil, Hobeop-myeon, Icheon-si, Gyeonggi-do
- Pohang Plant / Sales Office**
- 41, Daesong-ro 101beon-gil, Nam-gu, Pohang-si, Gyeongsangbuk-do
- Eumsung Distribution Center**
- 58, Hanbul-ro, Eumseong-eup, Eumseong-gun, Chungcheongbuk-do
- Yeongnam Regional Office / Onsan Distribution Center**
- 290, Sanam-ro, Onsan-eup, Ulju-gun, Ulsan
- Daegu Sales Office**
- 1773, Dalgubeol-daero, Seo-gu, Daegu
- Changwon Distribution Center / Sales Office**
- 410, Jeokhyeon-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do

Our Business

In January 2018, HALLA Cement was incorporated into ASIA Cement as an affiliate, which has over 60 years of history. As a result, it has become the third-largest domestic cement manufacturer in terms of integrated market share, encompassing both coastal and inland markets with a nationwide distribution network. We have a nationwide presence with 5 branches (Central, West, South, Jeju, and Special Sales) and over 10 distribution centers. Our key customers include ready-mix concrete companies, construction companies, distributors, secondary product manufacturers, and government procurement.

At HALLA Cement, we lead industry change and innovation through technological prowess and service excellence. We operate a customer-centric concrete research center to provide differentiated technical support services. Upholding a management policy that prioritizes safety, health, and environmental values, we are committed to safe operations and actively engage in environmentally friendly mine restoration, endangered species recovery projects, and community support initiatives. HALLA Cement will continue striving for sustainable growth under the mission of fulfilling corporate social responsibilities, ensuring a future of sustainable development.

Cement



We produce Ordinary Portland Cement (OPC), known for its uniform quality and versatile characteristics suitable for various construction applications. In addition, we manufacture Blast Furnace Slag Cement (SC) by blending Portland cement with granulated blast furnace slag, a by-product of the steel manufacturing process, after partially grinding the granulated slag.

7,600K tonnes per annum

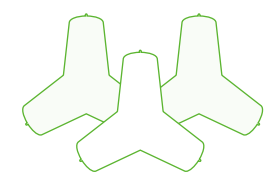
Slag cement production capacity

4,200K tonnes per annum

Portland cement production capacity

Specialty Cement

Approximately 10 types of specialty cement are manufactured, optimized for various uses, including early-strength type cement, steam-curing type cement, low-heat cement, ground solidification and filling type cement, road pavement type cement, and aerated concrete type cement.



Other Products

In addition to cement, we manufacture basic construction materials such as Ground Granulated Blast Furnace Slag (SP), fly ash (FA), and aggregates for construction and civil engineering.



Company Profile



A trusted partner dedicated to enhancing quality of life and creating a more vibrant world

Since its establishment in 1958, ASIA Paper MFG has grown into a specialized industrial paper manufacturer. We have established a dual-factory system with a total capacity of one million tonnes at our factories in Sejong and Sihwa, using pulp and recycled paper as primary materials. We specialize in custom manufacturing and selling base paper such as linerboard, kraft paper, and gypsum linerboard used in construction finishing materials, tailored to the specific characteristics of products produced by our customers. This contributes to enhancing not just the paper industry in Korea but also industrial competitiveness. Moving forward, we will continuously pursue change and innovation to emerge as a comprehensive paper manufacturer, dedicating ourselves to expanding market presence and enhancing competitiveness.

Revenue for the Year 2023
(Separate Basis)
KRW 531,151 million

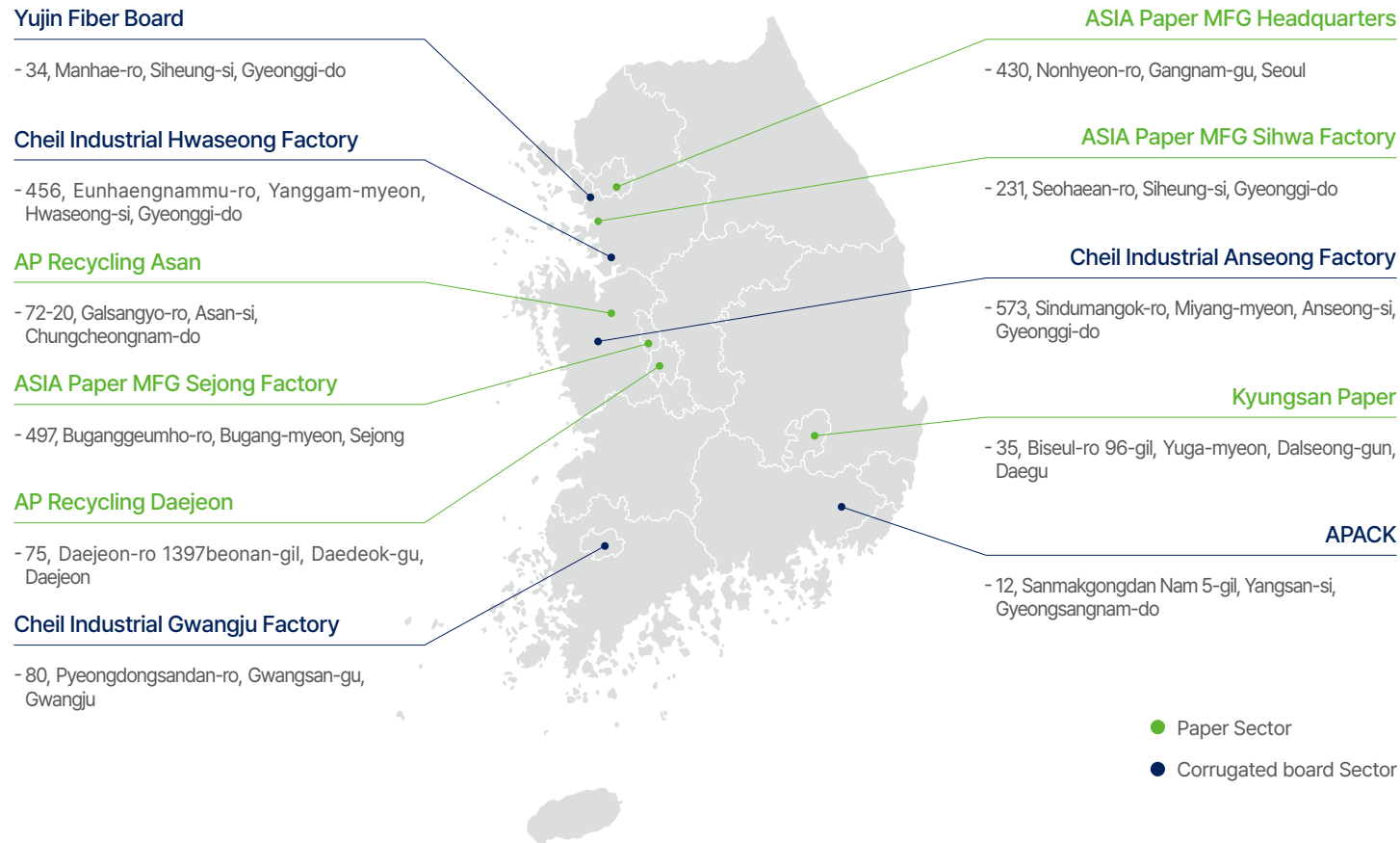
Operating Profit for the Year 2023
(Separate Basis)
KRW 68,521 million

Company	ASIA Paper MFG
Established on	March 7, 1958
CEO	Yu, Seung Hwan and Lee, Hyun Tak
Headquarters	430, Nonhyeon-ro, Gangnam-gu, Seoul, Republic of Korea
Business	Manufacturing and selling linerboard and other products
Number of Employees*	272 (as of December 31, 2023)

* Including non-registered executives

Our Locations

ASIA Paper MFG operates the Sejong factory, located in Sejong City, which is the first factory, and the Sihwa factory, newly completed within the Sihwa National Industrial Complex as the second factory. We also have our headquarters in Seoul. Additionally, our subsidiaries, such as Kyungsan Paper, Cheil Industrial, Yujin Fiber Board, APACK, and AP Recycling, are located across the country.



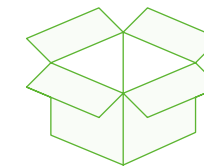
A comprehensive paper maker creating value for customer and the environment

ASIA Paper MFG strives to contribute to the future, humanity, and the environment with the vision of 'achieving sustainable business as a comprehensive paper manufacturer.' Through our management philosophy of 'proactive action,' 'creative thinking,' and 'knowledge accumulation and development,' we aim to grow into a company that creates greater value.



Our Products

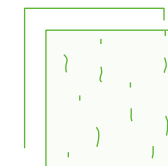
Linerboard



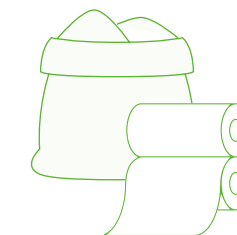
Linerboard is used for both interior and exterior packaging of diverse industrial and agricultural products (corrugated boxes). ASIA Paper MFG possesses technology and equipment that can produce various basis weights and colors, as well as high strength and stiffness, meeting the high-quality demands of customers worldwide.

Gypsum Linerboard

Gypsum linerboard has various functions depending on the color, such as IVORY (general), GREEN (antibacterial), PINK (fire-resistant), BLUE (waterproof), and GRAY (back paper). Generally, gypsum linerboard is divided into surface paper and back paper, and it is custom-produced with various basis weights required by the market, mainly used as construction materials.



Kraft Paper



Kraft paper is classified into different basis weights such as 75g/m², 80g/m², and 90g/m² and is used for many purposes, including packaging bags for various products.

02



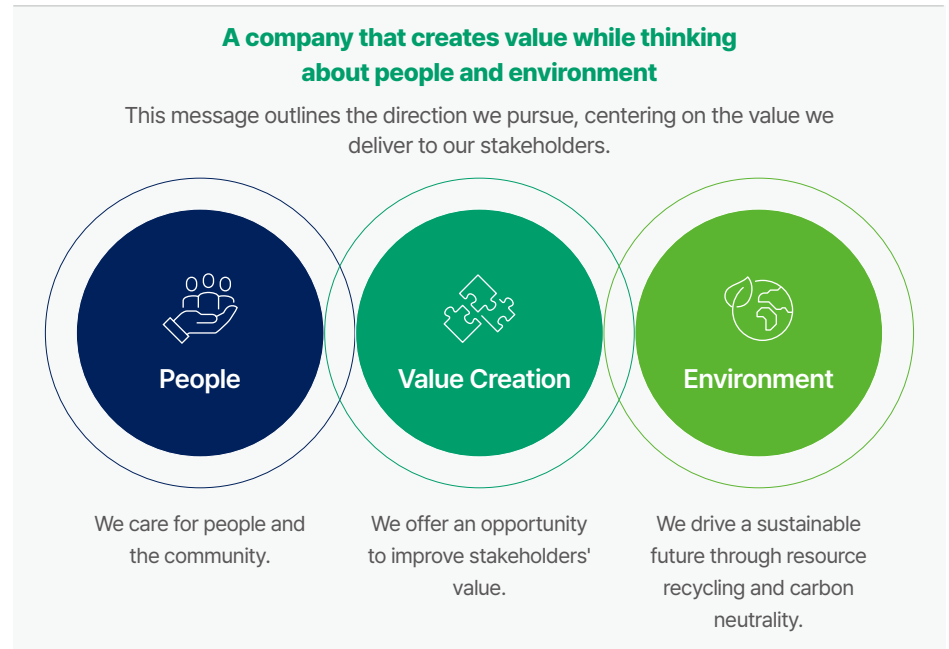
ESG Fundamental

- 18 ESG Management System
- 22 Stakeholder Communication
- 24 Materiality Assessment

ESG Management System

Vision

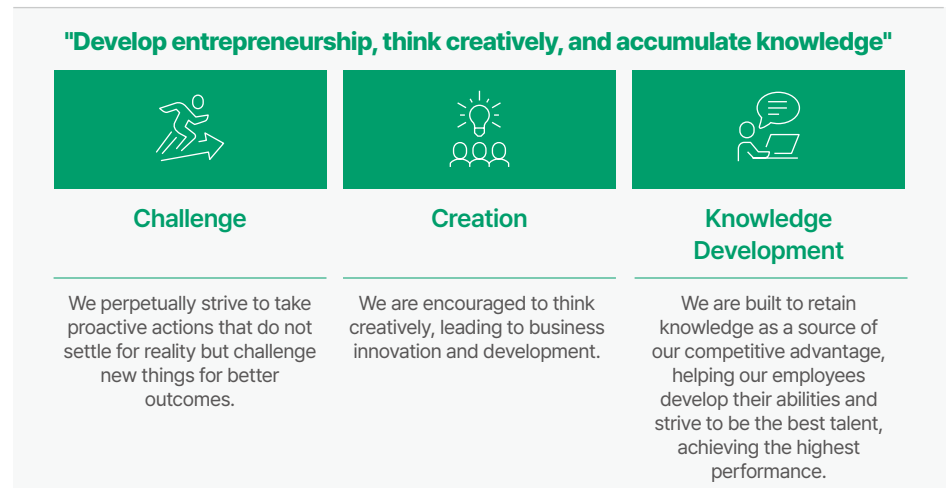
ASIA aspires to create value while considering people and the environment. Our management philosophy emphasizes developing entrepreneurship, creative thinking, and knowledge accumulation. We strive to realize our vision of pursuing sustainable value by setting and working towards specific management goals focused on respect for people, value creation, and environmental stewardship.



ESG Management Goals

Respect for People Management	Value Creation Management	Environmental Management
<ul style="list-style-type: none"> Talent development and work-life balance Workplace health and safety, and employee health management Respect and protection of human rights 	<ul style="list-style-type: none"> Enhancement of product quality and responsibility Ethical and compliance management practices Social contribution Establishment of an ESG management system 	<ul style="list-style-type: none"> Response to climate change Implementation of environmental management Establishment of a circular economy system

Management Philosophy



ESG Management Structure

ASIA' ESG management is overseen by the Board of Directors and the ESG Committee. Also, ASIA Holdings, ASIA Cement, HALLA Cement, and ASIA Paper MFG have established dedicated ESG departments to implement ESG management practices.



ESG Committee

In 2021, ASIA Holdings, ASIA Cement, HALLA Cement, and ASIA Paper MFG established the ESG Committee comprising non-executive directors and executives from each company. The ESG Committee is an advisory body that supports the decision-making process for ESG management strategies and policies at ASIA Holdings and its affiliates' boards of directors. To strengthen the expertise and independence of the committee, more than half of its members are non-executive directors with expertise in the fields of environment, society, and governance. The chairman of the ESG Committee is elected from among these non-executive directors.

ESG Highlights of ASIA in 2023



2023 ESG Management Performance



Activities	Achievements	Expected Benefits
Shareholder returns	<ul style="list-style-type: none"> Repurchased KRW 12 billion of its own shares (2023.02.03~2024.02.15) Canceled KRW 12 billion of the repurchased shares on 2023.04.10 (KRW 4 billion), 2023.07.31 (KRW 4 billion), and 2024.03.15 (KRW 4 billion) Distributed dividends of KRW 8.6 billion (total amount of the interim and year-end dividends) 	<ul style="list-style-type: none"> Enhance shareholder value
Refurbishing the No. 1 kiln at Jecheon Factory	<ul style="list-style-type: none"> Multi-staging of the calciner, a facility for the decarbonization of kiln raw materials Renovation of auxiliary facilities for main raw material input 	<ul style="list-style-type: none"> Increase in the use of alternative fuels and reduction of pollutant emissions
Refurbishing facilities to increase the fuel substitution rate at Jecheon Factory	<ul style="list-style-type: none"> Renovation of waste synthetic resin supply facilities for main raw materials and intermediate storage facilities 	
Establishing the Integrated Pollution Prevention and Control (IPPC) System at Jecheon Factory (1st year)	<ul style="list-style-type: none"> Operating a task force team for a IPPC permit Contract with a professional consulting firm 	<ul style="list-style-type: none"> Compliance with environmental regulations Obtain process flow diagrams (PFD)
Carbon neutrality campaign at Jecheon Factory	<ul style="list-style-type: none"> CoCoo (Carbon "O" Asiacement) campaign Employees' daily practices for carbon neutrality 34 projects, including waste reduction and energy saving 	<ul style="list-style-type: none"> Active ESG management (awareness improvement) Reduce environmental costs through energy saving and waste reduction
Eco-friendly product certification	<ul style="list-style-type: none"> Five types of ready-mixed concrete products are certified with Low-Carbon certification by Environmental Product Declaration. 	<ul style="list-style-type: none"> Strengthen eco-friendly management and sales power
Strengthened safety training	<ul style="list-style-type: none"> Safety training for all employees at the Safety Experience Center Customized special programs for all supervisors Safety leadership training for office supervisors 	<ul style="list-style-type: none"> Prevent industrial accidents through a strongly embedded safety culture
National Quality Circle Contest	<ul style="list-style-type: none"> Gold Award at the 49th National Quality Circle Contest: Turtle Quality Circle (7 consecutive years of Gold Awards) 	<ul style="list-style-type: none"> Higher recognition of the Quality Circles Enhance corporate reputation
Shareholder returns	<ul style="list-style-type: none"> Repurchased KRW 12 billion of its own shares (2023.07.20~2024.02.29) Canceled KRW 5 billion of the repurchased shares (2024.03.15) Distributed dividends of KRW 9.7 billion (total amount of the interim and year-end dividends) 	<ul style="list-style-type: none"> Enhance shareholder value
Embedding the World-Class Safety Culture	<ul style="list-style-type: none"> Safety culture improvement consulting Participated in Large and Small Enterprises Mutual Cooperation Project 	<ul style="list-style-type: none"> Embed a safety culture and achieve zero major accidents
Investing to increase the use of alternative fuels for carbon neutrality	<ul style="list-style-type: none"> Completed K3 pre-heater refurbishing investment Refurbished the calciner Installed a new stockyard and input line 	<ul style="list-style-type: none"> Increase the processing capacity of alternative fuels Reduce nitrogen oxide (NOx) emissions Reduce carbon emissions
Preparing for the transition to an Integrated Pollution Prevention and Control (IPPC) System	<ul style="list-style-type: none"> Operating a company-wide task force team for a IPPC permit Responding to strengthened regulations on hexavalent chromium (establishing and implementing reduction plans) 	<ul style="list-style-type: none"> Ensure continuity of plant operations Enhance corporate reputation
Contributing to the local community	<ul style="list-style-type: none"> Expanded our contribution to the local community through the establishment of a social contribution foundation with the cement industry 	<ul style="list-style-type: none"> Enhance community trust through transparent public projects
Environmental conservation and biodiversity	<ul style="list-style-type: none"> Ongoing project for the restoration of endangered species of wild flora and fauna to enhance biodiversity in the Baekdudaegan Mountains 	<ul style="list-style-type: none"> Lay the foundation for mine ecological restoration and securing related research data



Activities	Achievements	Expected Benefits
Smart Eco-Factory Project	<ul style="list-style-type: none"> Participated in the Ministry of Environment's support project (total investment of KRW 5.2 billion: KRW 2.3 billion for Sejong factory, KRW 2.9 billion for Sihwa factory) 	<ul style="list-style-type: none"> Greener production facilities by reducing odors, cutting greenhouse gases, and using renewable energy
Integrated Pollution Prevention and Control (IPPC) System	<ul style="list-style-type: none"> Achieved the IPPC permits in accordance with laws on the integrated management of pollution facilities Installed SCR (Selective Catalytic Reduction) equipment at the Sejong factory 	<ul style="list-style-type: none"> Sensible adherence to environmental regulations
Strengthening Environmental Management Systems	<ul style="list-style-type: none"> Certified with ISO 14001 	<ul style="list-style-type: none"> Systematized environmental management tasks
Supporting Suppliers with ESG Practices	<ul style="list-style-type: none"> Support for suppliers co-working in the factories for safety improvements (internal safety committee meetings, safety and health management costs, safety equipment, and safety training) 	<ul style="list-style-type: none"> Expanded scope of safety management
Shareholder Returns	<ul style="list-style-type: none"> Repurchased KRW 20 billion of its own shares (2023.03.24~2023.12.19) Distributed dividends of KRW 20.5 billion (total amount of the quarterly and year-end dividends) 	<ul style="list-style-type: none"> Enhance shareholder value



ECO TOGETHER 2025



ASIA Cement and HALLA Cement established the shared vision 'ECOTOGETHER 2025' in 2021 to prepare for the rapidly changing business environment and maximize synergies between the two companies in the cement industry, aiming to advance their environmental management systems. Through initiatives like reducing greenhouse gas emissions and increasing the utilization of recycled materials, they aim to establish a foundation for achieving environmental management goals. Additionally, they strive to create zero-accident workplaces by consistently enhancing risk management and promoting safety activities.

Achieve a 25% increase in EBITDA compared to the 2020 levels by 2025

- Cost savings and profitability increase through enhancing efficiency of and optimizing the usage of alternative fuels and raw materials.

* EBITDA: A profitability metric indicating a company's cash generation capability through operational activities



Achieve a 25% reduction in CO₂ emissions compared to the 2020 levels By 2025

- Proactive and systematic approach to setting company-wide medium to long-term carbon neutrality scenarios and goals
- Preemptive implementation of optimal reduction measures for greenhouse gas emissions by emission source



ZERO accidents (ZERO, 0)

- Setting and implementing improvement goals through safety awareness and safety culture diagnosis
- Construction of zero-accident workplaces through continuous improvement in risk management and safety activities

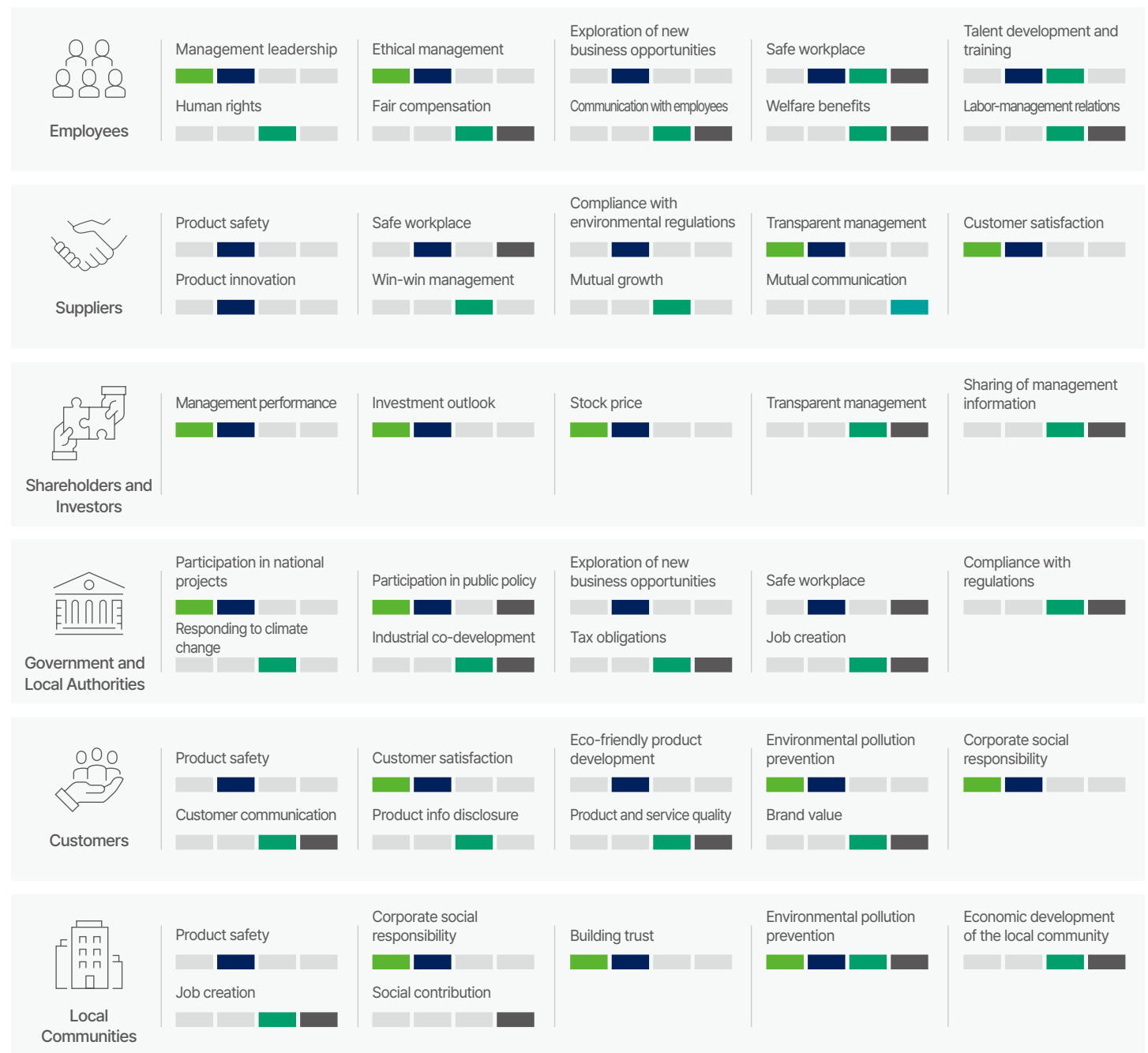


Stakeholder Communication

ASIA Holdings, ASIA Cement, HALLA Cement, and ASIA Paper MFG recognize the importance of communication with stakeholders and strive for seamless conversation. Each company categorizes stakeholders into six groups: employees, suppliers, shareholders and investors, government and local authorities, customers, and local communities, establishing suitable communication channels for each group. Through these efforts, we aim to transparently provide timely information to key stakeholders who affect our business operations and solicit their feedback.

Stakeholders' Key Interests

ASIA Holdings ASIA Cement HALLA Cement ASIA Paper MFG



On an ongoing basis Monthly Quarterly Semi-annual Annual Biennial



Materiality Assessment

ASIA conducted a materiality assessment to identify sustainability issues surrounding the company and to derive stakeholders' interests and material issues that affect our business activities. This year, we introduced a double materiality assessment, considering both impact materiality and financial materiality. This approach aims to assess sustainability issues by considering their impact on business operations as well as on the environment and society. By doing so, we are committed to evolving into a company that fosters shared value, taking into account both the well-being of people and the environment.

STEP 1. Issue Pool

To identify the impact of sustainable management issues, we constructed an issue pool consisting of 20 issues based on those disclosed in the 2022 Sustainability Report and the 2023 ESG Fact Book, along with global issues, peer industry reporting issues, and domestic and international sustainability standards (GRI, UNSDGs, TCFD, SASB, KCGS).

STEP 2. Materiality Assessment

• Impact materiality: Analyzing the materiality of the impact on society and the environment due to corporate activities from an external perspective (inside-out).

• Financial materiality: Analyzing the materiality of external sustainability factors affecting the company's financial condition from an internal perspective (outside-in).

The sustainability management issues exposed in the media, reporting issues from peer industry companies, domestic and international sustainability standards, global trend analysis, and stakeholder surveys were categorized into social/environmental impacts and financial aspects, quantified, and analyzed to determine the materiality of each issue.

STEP 3. Materiality Issues

Through the materiality assessment, we have identified the top three material issues that require priority attention. These material issues are detailed on the Focus Issues pages of this report, showcasing our management strategies, key activities, achievements, and plans. We strive to report transparently and comprehensively to stakeholders.

Stakeholder Survey

In March 2024, ASIA conducted a stakeholder survey targeting employees, suppliers, shareholders and investors, customers, local communities, and academic institutions and associations. The survey aimed to assess the materiality of our sustainability issues. The results show that stakeholders identified environmental management systems, establishing a circular economy system, and workplace health and safety as issues of high materiality. Particularly, all environmental issues ranked highest in terms of significant materiality across the board.

Survey Results

How stakeholders perceive the materiality of each Issue:
 Moderate High Very High

Rank	Issue	Employees	Suppliers	Shareholders and Investors	Customers	Local Communities	Academic institutions and Associations
1	Environmental Management Systems	■	■	■	■	■	■
2	Establishing a Circular Economy System	■	■	■	■	■	■
3	Workplace Health and Safety	■	■	■	■	■	■
4	Responding to Climate Change	■	■	■	□	■	■
5	Business Performance	■	■	■	■	■	■
6	Business Ethics and Compliance	■	■	■	■	■	□
7	Product Quality and Responsibility	■	■	■	■	■	□
8	Talent Development and Work-Life Balance	■	■	■	■	■	□
9	Human Rights	■	■	■	■	■	□
10	R&D and Technological Innovation	■	■	■	■	■	□

Materiality Assessment Outcomes



1) Material issues reported in the 2022 Sustainability Report and 2023 ESG Fact Book
 2) New issues added to ASIA's sustainability issue pool in 2024

ESG Material Issues Management at ASIA

Material Issue	Management Approach	Target	GRI	Reporting Pages
Material Issue #1. Responding to Climate Change	As part of the commitment to establish a low-carbon paradigm, ASIA Cement and HALLA Cement have announced the vision 'ECO TOGETHER 2025,' which includes a target to reduce greenhouse gas emissions by 25%. The two companies have formed a joint Carbon Neutrality Committee to develop long-term carbon neutrality roadmaps for both companies. ASIA Paper MFG is prioritizing climate change mitigation efforts by expanding the use of renewable energy, improving energy efficiency across operations, enhancing emission inventories within the value chain, and strengthening collaborative reduction efforts.	- 25% reduction in greenhouse gas emissions by 2025 (ASIA Cement and HALLA Cement). - 42% reduction in greenhouse gas emissions by 2030 (ASIA Paper MFG).	302, 305	28-31
Material Issue #2. Establishing a Circular Economy System	ASIA is actively pursuing various initiatives to achieve a circular economy in the cement and paper industries. These initiatives include expanding the use of alternative fuels and raw materials, improving process efficiency, and developing eco-friendly products. ASIA Cement and HALLA Cement are committed to maximizing the use of alternative fuels linked to financial performance through the joint vision 'ECO TOGETHER 2025'. Additionally, ASIA Paper MFG promotes resource efficiency by reusing water, using waste as alternative fuels, reusing process-generated waste within operations, and recovering waste heat to minimize resource consumption.	- 25% increase in EBITDA through maximizing the efficiency of alternative fuel and raw material usage (ASIA Cement and HALLA Cement).	301, 306	32-35
Material Issue #3. Workplace Health and Safety	ASIA recognizes the importance of health and safety for all employees and suppliers, including staff and contractors. We are committed to creating a safe and healthy workplace by ensuring the proper use of personal protective equipment, providing worker education and training, and monitoring and improving the work environment.	- Zero safety accidents.	403	36-39

03



Focus Issues

- 28 Issue #1. Responding to Climate Change
- 32 Issue #2. Establishing a Circular Economy System
- 36 Issue #3. Workplace Health and Safety

Focus Issue #1

Response to climate change

Cement Division



The impacts of climate change are intensifying, accelerating the global transition to a decarbonized society. Major developed countries, including the EU and the United States, have declared carbon neutrality by 2050. China has also joined the global climate response movement, committing to carbon neutrality by 2060. In October 2020, South Korea's president announced the '2050 Carbon Neutrality' target in a National Assembly address. This was followed by the establishment of the '2050 Carbon Neutrality Commission' in 2021. That same year, the 'Carbon Neutrality Framework Act' was enacted, legislating the goal of reducing national carbon emissions by more than 35% compared to 2018 levels by 2030. These developments have increased social interest and government eco-friendly policies, demanding greater corporate efforts to address climate change each year.

Issue context and materiality	The cement industry emits significant amounts of greenhouse gases during the combustion of fuel and the clinker production process. The increase in cement production is directly related to the absolute increase in greenhouse gas emissions, exposing the industry to risks of higher operating and capital expenditures due to emission regulations. Simultaneously, the cement industry has continuously improved efficiency to reduce greenhouse gas emissions per unit of production. In 2021, the domestic cement industry declared its commitment to carbon neutrality by 2050 through the 'Cement Green New Deal Committee'.	
	ASIA Cement	HALLA Cement
Strategy	To proactively respond to the government's 2050 carbon neutrality policy and establish a low-carbon paradigm, ASIA Cement and HALLA Cement announced the vision 'ECO TOGETHER 2025,' aiming to reduce greenhouse gas emissions by 25%. They have also established a joint Carbon Neutrality Committee to discuss carbon neutrality strategies and develop a mid- to long-term roadmap for achieving carbon neutrality.	
Goals	Reduce greenhouse gas emissions by 25% by 2025 compared to 2020 levels	Reduce greenhouse gas emissions by 25% by 2025 compared to 2020 levels

Paper Division



Issue context and materiality	ASIA Paper MFG manufactures its products using recycled paper resources as the primary raw material. This operational characteristic positively influences resource recycling and serves to alleviate climate change by reducing factors such as deforestation. Nonetheless, the combustion of fuels and the operation of equipment in the production process emit greenhouse gases, necessitating ongoing efforts to minimize environmental impact. Responding to climate change through the implementation of improved energy efficiency, fuel transition, and process refinements not only aligns with significant societal expectations but also presents financial opportunities, including potential cost savings on energy and operations, access to government subsidies, and incentives.
Strategy	Based on the fundamental principle of mitigating climate change impacts, we are expanding the use of renewable energy, improving process energy efficiency, enhancing emission inventories within the value chain, and strengthening collaborative efforts for emission reduction.
Goals	<ul style="list-style-type: none"> ✓ Reduce greenhouse gas emissions by 42% by 2030 (Scope 1 + Scope 2) ✓ Increase the renewable energy usage rate to over 15% by 2030 ✓ Achieve carbon neutrality by 2050

Focus Issue #1

Cement Division

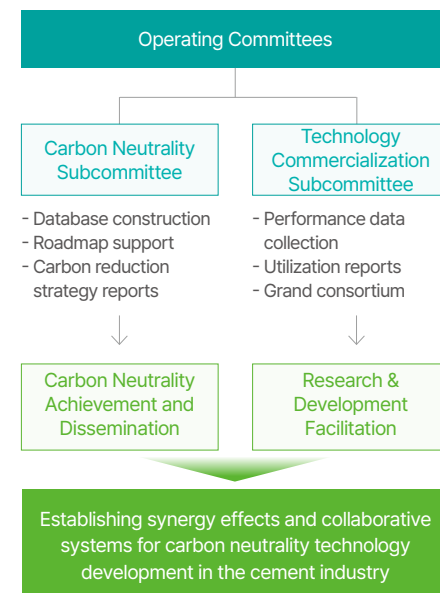
Carbon Neutrality Committee

As government carbon neutrality plans become more concrete, the cement industry is facing the need for a proactive and active approach to carbon-neutral policies. The cement industry, including ASIA Cement and HALLA Cement, has been designated as one of the four major carbon-emitting industries along with steel, petrochemicals, and refining. These industries are crucial to South Korea's key export sectors and the foundation of its manufacturing industry, making carbon emissions an inevitable part of their production structure. To overcome these industrial characteristics and transition to a low-carbon structure, the cement industry requires comprehensive structural improvements across the entire value chain. This includes expanding the use of alternative raw materials for limestone, alternative fuels for bituminous coal, and implementing hydrogen-based kilns. These measures necessitate significant capital investments. In response to these challenges, ASIA Cement and HALLA Cement announced a new integrated vision, 'ECO TOGETHER 2025,' in January 2021. To implement this vision and actively address carbon neutrality, they established the 'Carbon Neutrality Committee,' a task force encompassing planning, production, and sales across both companies. The committee includes executives and employees from various departments such as planning, production, and sales. It is designed to respond to the rapidly changing climate environment, technological advancements, and shifts in the business landscape, while presenting the optimal direction for carbon neutrality to align with the low-carbon paradigm.

Key Activities of the Carbon Neutrality Committee

2021.01~11	2021.12	2022	2023
<ul style="list-style-type: none"> ✓ Launched the Carbon Neutrality Committee ✓ ASIA/HALLA TFT activities and formulated the 2050 Carbon Neutrality Plan (draft) 	<ul style="list-style-type: none"> ✓ Developed a carbon neutrality roadmap for both companies 	<ul style="list-style-type: none"> ✓ Established short-term foundational measures 	<ul style="list-style-type: none"> ✓ Ensured mid- to long-term maintenance and optimization

Carbon Neutrality Cooperation Unit Structure



In 2023, ASIA Cement and HALLA Cement established the Carbon Neutrality Cooperation Unit under the Korea Cement Association to enhance and propagate carbon neutrality R&D advancements within the cement industry. This unit operates under a steering committee that includes the Ministry of Trade, Industry and Energy, the Korea Institute for Industrial Technology Evaluation and Management, project managers from the cement industry, collaborative units, external experts, and other stakeholders.

In particular, through the Technology Commercialization Subcommittee, they have participated in the government-initiated Grand Consortium and signed a memorandum of understanding (MOU). The government has decided to allocate a total of KRW 935.2 billion by 2030 to support carbon neutrality technology development across the four major carbon-emitting industries, including the cement sector, under its 'Industrial Sector Carbon Neutrality R&D Promotion Strategy' announced in 2023. The Grand Consortium is a broader cooperative framework aimed at facilitating carbon neutrality technology exchange and dissemination across the entire sector, including companies not participating in this specific carbon neutrality technology development initiative. ASIA Cement and HALLA Cement are expected to foster inter-company synergies and establish collaborative frameworks through their involvement in the Carbon Neutrality Cooperation Unit and the Grand Consortium activities, contributing to the transition towards a low-carbon society.

Focus Issue #1

Cement Division

Climate Change Risks and Opportunities

The implementation of a GHG emissions trading scheme and the increasing market demand for low-carbon products due to climate change present risks and opportunities that impact products, services, manufacturing processes, customers, markets, research and development, and supply chains. ASIA Cement and HALLA Cement have categorized the risks and opportunities arising from climate change into transition risks and physical risks to better grasp their financial implications. They have conducted a detailed analysis of these factors and their financial ramifications for the companies.

ASIA Cement

* Time Range: Short-term(within 1 year), Medium-term(1 year to less than 5 year), Long-term(5 years and beyond)
Impact Level: L: Low, M: Moderate, H: High

	Climate Change Risks and Opportunities	Impact level*			Financial Impact of Climate Change Risks	Financial Impact of Climate Change Opportunities	
		Short-term	Mid-term	Long-term			
Transition	Policy/Regulation	• National GHG emission reduction targets • Emissions Trading Scheme • Climate change and environmental disclosure requirements	H	H	M	• Cost of emissions permit purchases • Increased information disclosure costs due to strengthened reporting obligations	• Cost savings in facility investment due to expansion of environmental policies and government support programs • Reduced cost of capital acquisition due to transparent disclosure
	Technical Evalution	• High-efficiency energy equipment • Research and development of eco-friendly products/processes	H	H	M	• Increased investment in facilities and infrastructure	• Energy cost savings through introduction of high-efficiency equipment
	Market	• Low-carbon/eco-friendly certified products	L	M	M	• Increased costs for eco-certification of products • Increased costs for research and development	• Increased demand and revenue from low-carbon/eco-friendly products
Physical	Reputation	• Consumer preference for eco-friendly companies and brands	L	L	M	• Increase in cost of capital acquisition • Decline in revenue due to decreased product demand	• Decrease in cost of capital acquisition • Contribution of human capital through recruitment and retention of talented personnel
	Emergency	• Sudden natural disasters such as typhoons, floods, and droughts	M	M	H	• Asset and human losses due to disasters • Supply disruptions due to transportation delays	• Increased company trust and reputation through adequate disaster response and recovery
	Chronic	• Changes in weather patterns such as sea level rise, temperature increase, and dust storms	L	M	H	• Increase in various operating costs including heating, cooling, and facility maintenance	• Increased demand and revenue from low-carbon and eco-friendly products capable of adapting to new climate patterns

HALLA Cement

	Climate Change Risks and Opportunities	Impact level*			Financial Impact of Climate Change Risks	Financial Impact of Climate Change Opportunities	
		Short-term	Mid-term	Long-term			
Transition	Policy/Regulation	• National GHG emission reduction targets • Emissions Trading Scheme	H	M	M	• Cost of emissions permit purchases • Early replacement of outdated equipment due to government policy changes	• Cost savings in facility investment due to expansion of environmental policies and government support programs
	Technical Evalution	• High-efficiency energy equipment • Research and development of eco-friendly products/processes	H	H	M	• Expenditure for introducing new technologies	• Energy cost savings through the introduction of high-efficiency equipment such as K2/K3 preheater modifications
	Market	• Low-carbon/eco-friendly certified products	L	M	M	• Increased costs for eco-certification of products • Increased costs for research and development	• Increased demand and revenue from low-carbon/eco-friendly products
Physical	Reputation	• Establishment of community reputation and empathy in the location of the business facility	M	M	M	• Revenue decline due to delays or interruptions in procurement and business permits	• Contribution of human capital through recruitment and retention of talented personnel
	Emergency	• Sudden natural disasters such as typhoons, floods, and droughts	M	M	H	• Asset and human losses due to disasters • Supply disruptions due to transportation delays	• Increased company trust and reputation through adequate disaster response and recovery
	Chronic	• Changes in weather patterns such as sea level rise, temperature increase, and dust storms	L	M	H	• Various operational cost increases such as heating, ventilation, air conditioning (HVAC), and equipment maintenance	• Introduction of new products and services capable of adapting to new climate patterns

Focus Issue #1

Paper Division

Efforts to Address Climate Change

ASIA Paper MFG is actively striving towards the government's low-carbon green growth policy aiming for carbon neutrality by 2050. In the paper industry, various measures are being implemented to reduce greenhouse gas emissions, including process efficiency improvements, introduction of energy-saving equipment, and transitioning to eco-friendly energy sources such as solar heat and waste energy instead of fossil fuels. ASIA Paper MFG is committed to reducing greenhouse gas emissions through participation in carbon neutrality support projects and proactive investments across multiple facets.

In 2023, we were chosen to receive support from the Ministry of Environment's 'Smart Eco-Factory Construction Project' and successfully completed the project within five months. This initiative resulted in a substantial reduction of greenhouse gases and environmental pollutants, transitioning the facility into an eco-friendly factory enhanced by ICT-driven energy efficiency. Apart from this project, ongoing investments are aimed at further reducing environmental pollutants that contribute to global warming, showcasing our continuous commitment to address climate change.

ASIA Paper MFG

	Climate Change Risks and Opportunities	Impact level*			Financial Impact of Climate Change Risks	Financial Impact of Climate Change Opportunities	
		Short-term	Mid-term	Long-term			
Transition	Policy/Regulation	• Climate change and environmental disclosure requirements • National GHG emission reduction targets	M	M	M	• Cost incurred from purchasing emission allowances • Reduction in facility investment costs due to expanded environmental policies and government support programs	• Increase in information disclosure costs due to strengthened disclosure obligations • Reduced cost of capital acquisition due to transparent disclosure
	Technical Evalution	• Competition in eco-friendly product and technology development • Expansion of high-efficiency, low-emission facilities	M	M	H	• Increase in costs for product and technology research and development • Cost savings in manufacturing costs through eco-friendly process innovation	• Revenue growth from new product launches • Loss of research and development investment and revenue decline in case of development competition
	Market	• Regulatory changes in major pulp exports and imports • Shift in customer preferences towards eco-friendly products	L	M	H	• Increased raw material procurement costs • Revenue decline if customer needs are not met	• Revenue growth due to response to eco-friendly demand
Physical	Reputation	• Demands from investors and stakeholders to address climate change-related issues	L	M	M	• Stock price decline and investment withdrawal in case of inadequate response • Customer attrition	• Reduced cost of capital acquisition and revenue increase thanks to excellent reputation
	Emergency	• Sudden natural disasters such as typhoons, floods, and droughts	M	M	H	• Incurred costs for facility and equipment damage restoration • Decreased collateral value of owned real estate • Production disruptions due to factory operation and raw material supply interruptions, finished product losses	• Enhanced corporate trust and reputation through appropriate disaster response and recovery
	Chronic	• Changes in weather patterns such as sea level rise, temperature increase, and dust storms	L	M	H	• Increased operational and management costs for factories, logistics warehouses, etc.	• New products and services capable of adapting to new climate patterns

Focus Issue #2

Establishing a circular economy system

Cement Division

Circular economy is an economic model that seeks sustainability by minimizing resource use during extraction and production, maximizing product longevity through reuse, and recycling as much waste as possible at the end of its lifecycle, thereby reducing consumption of finite resources and carbon emissions. In South Korea, the comprehensive revision of the existing 'Resource Circulation Act' into the 'Promotion Act for the Transition to a Circular Economy Society' took effect from January 1, 2024, marking a significant step towards implementing a circular economy system. We are actively promoting various initiatives such as expanding the use of alternative fuels and raw materials, enhancing process efficiency, and conducting research and development on eco-friendly products to achieve circular economy practices in the cement and paper industries.

Issue context and materiality	Cement production is a resource-intensive industry that heavily relies on limestone and raw materials. The environmental model of utilizing recycled resources such as slag and plastics as alternative raw materials or fuels can reduce the extraction and usage of natural resources. This not just conserves natural resources but mitigates the environmental impacts of mining activities. Additionally, alternative fuels emit less carbon dioxide compared to bituminous coal, which helps in reducing greenhouse gas emissions. By recycling by-products and waste resources that would otherwise be landfilled or incinerated outside of the company as alternative raw materials or fuels, we can prevent environmental pollution and significantly contribute to the transition to a circular economy society.					
Strategy	<table border="1"> <tr> <th>ASIA Cement</th> <th>HALLA Cement</th> </tr> <tr> <td>ASIA Cement and HALLA Cement jointly announced the vision of 'ECO TOGETHER 2025,' in 2021. We set a goal to maximize the use of alternative fuels linked to financial performance and established large-scale investment plans, including improving the calcination process, to further expand the use of fuels and raw materials utilizing recycled resources.</td> <td>ASIA Cement and HALLA Cement jointly announced the vision of 'ECO TOGETHER 2025,' in 2021. We set a goal to maximize the use of alternative fuels linked to financial performance and established large-scale investment plans, including improving the calcination process, to further expand the use of fuels and raw materials utilizing recycled resources.</td> </tr> </table>	ASIA Cement	HALLA Cement	ASIA Cement and HALLA Cement jointly announced the vision of 'ECO TOGETHER 2025,' in 2021. We set a goal to maximize the use of alternative fuels linked to financial performance and established large-scale investment plans, including improving the calcination process, to further expand the use of fuels and raw materials utilizing recycled resources.	ASIA Cement and HALLA Cement jointly announced the vision of 'ECO TOGETHER 2025,' in 2021. We set a goal to maximize the use of alternative fuels linked to financial performance and established large-scale investment plans, including improving the calcination process, to further expand the use of fuels and raw materials utilizing recycled resources.	
ASIA Cement	HALLA Cement					
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Goals	<p>Maximize the efficiency of alternative fuel and raw material use to achieve a 25% increase in EBITDA by 2025</p> <p>Achieve a fuel substitution rate of 65% by 2025</p>	<p>Maximize the efficiency of alternative fuel and raw material use to achieve a 25% increase in EBITDA by 2025</p> <p>Achieve a fuel substitution rate of 38% by 2025</p>				



Paper Division

Issue context and materiality	The linerboard produced by ASIA Paper MFG is primarily made using recycled paper resources from domestic and international sources. As a major user of recycled paper resources, ASIA Paper MFG plays a crucial role in increasing the recycling rate of paper resources and contributing to forest conservation. The production process of these products requires energy resources and water resources. Recognizing its role as an essential link in the resource recycling system, ASIA Paper MFG strives to contribute by minimizing the water and energy resources input in the production process. This is achieved through measures such as water reuse, use of waste as alternative fuel, utilization of waste generated within the process, and waste heat recovery, thereby contributing to the reduction of the carbon footprint.
Strategy	Minimizing resource consumption through activities such as water reuse, use of waste as alternative fuel, utilization of waste generated within the process, and waste heat recovery to reduce water and energy use in the process
Goals	<ul style="list-style-type: none"> Continue to incinerate and recover waste heat from 100% of process-generated waste, excluding waste soil Reuse 1,000 tonnes of process water in 2024 (Sihwa factory)

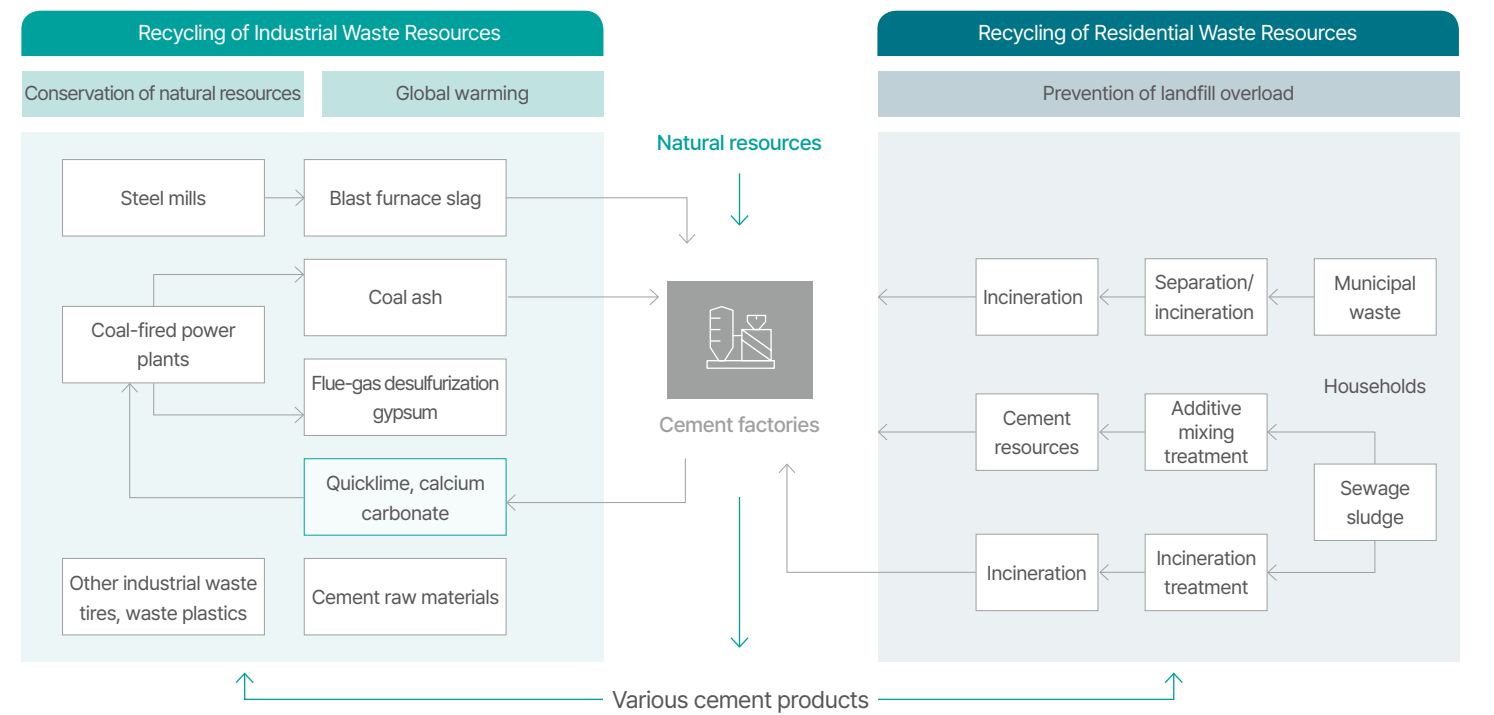


Focus Issue #2

Cement Division

ASIA Cement and HALLA Cement have established a circular economy system by utilizing various industrial waste materials and domestic household wastes such as industrial by-products and sewage sludge as recycled resources in cement production, replacing natural raw materials. This effort aims to create a cycle where resources are efficiently used, production processes are streamlined, and waste materials are recycled, contributing to environmental sustainability. Industrial by-products like slag from the steel industry, coal ash from thermal power plants, and other industrial residues are used as raw materials in cement production. This not just improves cement quality but contributes to the management of domestic industrial waste. Household waste, including various types of synthetic resins and general household and urban waste, is processed as alternative fuels, reducing fossil fuel consumption and preventing environmental pollution caused by waste disposal.

Recycling of Recycled Resources in Cement Manufacturing Process



The utilization of recycled resources in the cement industry not just reduces environmental pollution caused by waste landfill and incineration but contributes to the reduction of natural resource usage, such as limestone, clay, and iron ore. Furthermore, it plays a significant role in reducing national carbon emissions.

The Presidential Committee on Carbon Neutrality, the national R&D control tower for carbon neutrality, selected Korea's top 100 core carbon-neutral technologies in May 2023. In the cement sector, the development strategy aims to secure core technologies necessary for converting current fuels and raw materials to low-carbon alternatives to a commercially viable level by around 2030. This includes substituting limestone with non-carbonate raw materials, reducing clinker usage and replacing it with mixed materials, and replacing bituminous coal with recycled fuels.

Focus Issue #2

Cement Division

As part of national policies aimed at reducing greenhouse gas emissions and achieving carbon neutrality, ASIA Cement is actively developing various process technologies and researching eco-friendly products in collaboration with national projects. One key initiative involves developing alternative raw materials and upgrading facility systems to replace limestone, a major source of carbon emissions. This effort is crucial for reducing greenhouse gases and achieving carbon neutrality. Specifically, ASIA Cement is focusing on optimizing and validating cement calcination processes to minimize reliance on bituminous coal as an energy source. Instead, there's a push to increase the use of alternative fuels. This strategy aims to significantly decrease emissions of air pollutants such as NOx and SOx. It is anticipated that these efforts will secure key technologies for low-carbon cement production and enhance the foundation for green industries.

HALLA Cement conducts comprehensive material analysis of all recycled resources prior to their introduction, verifying compliance with environmental standards and assessing potential interference with cement manufacturing processes. Following contract agreements, continuous quality monitoring ensures ongoing compliance with relevant regulations. Only materials that are deemed safe through this rigorous monitoring process are recycled. Feedback on the quality of incoming resources is provided to suppliers, encouraging voluntary quality improvements. HALLA Cement prioritizes resolving stakeholder complaints through continuous and proactive communication with the local community. Annually, it publishes the status of recycled waste imports twice on its website.

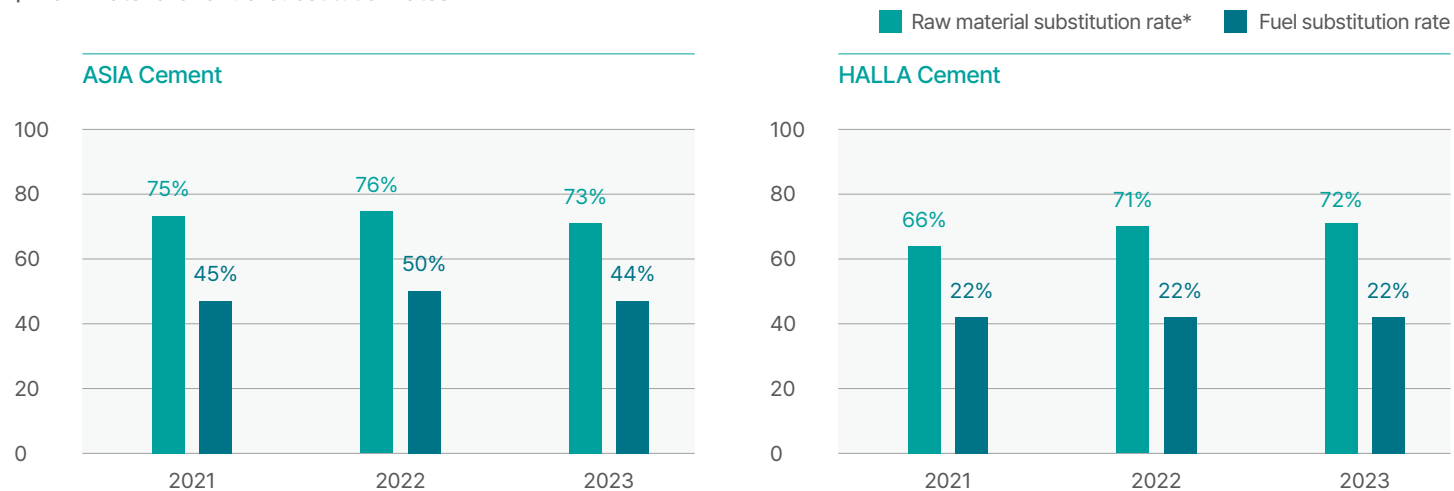
| Use of recycled materials in cement manufacturing process

Applied processes	Recycled materials input	Generated mainly from	Substitute
Raw materials	Coal ash	Thermal power plants	Clay raw materials
	Sewage sludge	Water treatment and wastewater treatment	Clay raw materials
	Scrap metal	Metal and automotive industries	Siliceous raw materials
	Slag	Metal/refining ironworks	Ferruginous raw materials
Calcination	Waste tires	Automotive maintenance shops	Bituminous coal fuel
	Waste synthetic resin	Plastic manufacturing plants	Bituminous coal fuel
Grinding	Desulfurization gypsum	Coal-fired power plants, desulfurization processes in refining industrie	Additives

| Material usage in 2023

ASIA Cement		tonnes
Limestone		4,599,907
Other by-products		850,960
HALLA Cement		tonnes
Limestone		7,064,336
Other by-products		1,516,144

| Raw material and fuel substitution rates

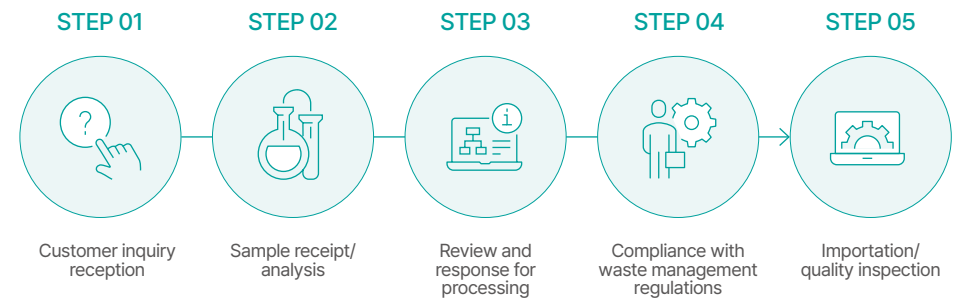


*Based on raw materials excluding limestone
* Changes in calculation criteria have led to discrepancies from the previous year's report.

Focus Issue #2

Cement Division

| Procedure for recycling resources



Cement manufacturing processes enable stable recycling of recycled resources through high-temperature calcination, exceeding 1,450°C (with actual gas temperatures reaching approximately 2,000°C). Since harmful substances can completely decompose at temperatures as high as 2,000°C, it is possible to prevent secondary pollution. A combined capacity of 12 million tons in cement production facilities ensures stable processing of recycled resources. Furthermore, comprehensive recycling facilities such as waste tire shredders, waste synthetic resin crushers and grinders, and organic waste input equipment are installed and operated to handle recycled resources efficiently and safely.

Focus Issue #2

Paper Division

South Korea is the 7th largest producer of paper in the world. As of 2023, the annual production volume is 10.68 million tonnes, with containerboard accounting for 5.5 million tonnes of this total*. The demand for printing paper, which was once dominant, is declining as industries evolve. At the same time, the scale of the packaging sector and specialty papers is growing larger. Globally, with the rise of environmental movements such as the anti-plastic and Less Plastic initiatives, paper is becoming a popular eco-friendly and sustainable alternative.

80% of the domestically produced paper in South Korea is recycled paper made from 'paper resources'. The remaining 20% is sourced from trees harvested in accordance with rigorous international forestry management standards such as FSC (Forest Stewardship Council). ASIA Paper MFG primarily produces linerboard using both domestic and international paper resources. ASIA Paper MFG is a major user of recovered paper and plays a crucial role in increasing the recycling rate of paper resources and contributing to forest conservation. In 2023, ASIA Paper MFG collaborated with the Korea Paper Association to launch the 'Paper Industry Awareness Improvement Campaign.' The campaign involved creating informative animations about paper recycling and proper disposal, which were distributed through various channels such as news media and contributed cards. The aim was to raise awareness about the societal significance and importance of paper recycling, thereby enhancing environmental awareness of paper.

ASIA Paper MFG not only focuses on raw materials but also on minimizing the environmental impact of the manufacturing process. They achieve this by recycling process water and utilizing waste generated during product manufacturing. Additionally, ASIA Paper MFG strives to meet the usage targets for recycled resources in accordance with the Ministry of Environment's 'Guidelines for Recycling Designated Operators.'

* Korea Paper Association - Paper production volume by country, and Domestic annual supply and demand status

| Percentage of recycled input materials (%)

Year	Category	Percentage (%)
2021	Total	93
	Sejong	92
	Sihwa	97
2022	Total	93
	Sejong	90
	Sihwa	98
2023	Total	92
	Sejong	90
	Sihwa	98

| Material usage in 2023 (tonnes)

Category	Domestic recovered paper	Domestic pulp	Imported recovered paper	Imported pulp
Total usage	767,736	6,089	93,007	65,365
Sejong factory	565,620	4,622	194	60,711
Sihwa factory	202,116	1,467	92,813	4,654

Focus Issue #3

Workplace health and safety

Cement Division



Paper Division



A safe and healthy workplace is a fundamental human right, as affirmed by major international organizations such as the United Nations Sustainable Development Goals (SDGs), the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD), and the World Health Organization (WHO). Despite significant updates to South Korea's Industrial Safety and Health Act, workplace safety incidents continue to be a major concern. The enactment of the Serious Accidents Punishment Act aims to tackle these issues by enhancing safety requirements and increasing awareness through expanded inspections and regulations.

ASIA is dedicated to ensuring that all employees, including those from our partner companies, work under health and safety conditions. We uphold this commitment by promoting the proper use of personal protective equipment, providing training and education for workers, and implementing rigorous monitoring and improvement measures.

Issue context and materiality	In the cement industry, workplace hazards can arise from activities such as the installation and maintenance of plant infrastructure, the operation of large machinery, and quarrying operations involving heavy materials like stone. Besides the risk of sudden accidents, factors such as noise exposure and dust inhalation can also adversely affect workers' health.	
	ASIA Cement	HALLA Cement
Strategy	In all aspects of our business operations, safety and health are prioritized as top concerns. We establish and enforce safety and health policies and regulations, with dedicated safety and health teams including the CEO.	
Goals	<ul style="list-style-type: none"> ✓ Achieving zero-accident workplace ✓ Operating a self-regulated health and safety management system 	<ul style="list-style-type: none"> ✓ Achieving zero-accident workplace ✓ Achieving world-class level Safety Awareness

Issue context and materiality	In the paper industry, the use of large machinery and equipment in production processes poses risks of accidents, and similar caution is required for noise and dust generated in factories.	
Strategy	To prioritize environmental safety and health in management and create a safe and pleasant working environment, we have established the 'Environmental Safety and Health Management Policy' and actively involve all employees in its implementation.	
Goals	<ul style="list-style-type: none"> ✓ ZERO serious accident ✓ Reducing medical leave accidents 	

Key achievements in 2023



- Education for all employees at safety experience center
- Development of tailored specialized program for all management supervisors
- Safety leadership competency enhancement training for office management supervisors
- Introduction of the 'Safety Call System' for risk management
- Human error prevention management - RCA(Root Cause Analysis) education and improvement of reporting procedures for near-miss

33,459 hours

Total safety training hours

1

Serious accident
(One serious accident involved personnel from a supplier)



- Top 10% ranking in safety awareness assessments by a third-party consulting firm
- Training and promotions to reduce human errors
- 3GO campaign for world-class safety awareness
- K2 preheater risk management task force
- Participation in large and small-medium enterprises mutual cooperation project - received a special award for top-performing health education

35,605 hours

Total safety training hours

0

Serious accident



- Biannual safety and health center inspections in response to Serious Accidents Punishment Act
- Quarterly joint safety and health inspections with partners
- Establishment of permanent safety committee meetings with partner companies

6,076 hours

Total safety training hours

0

Serious accident

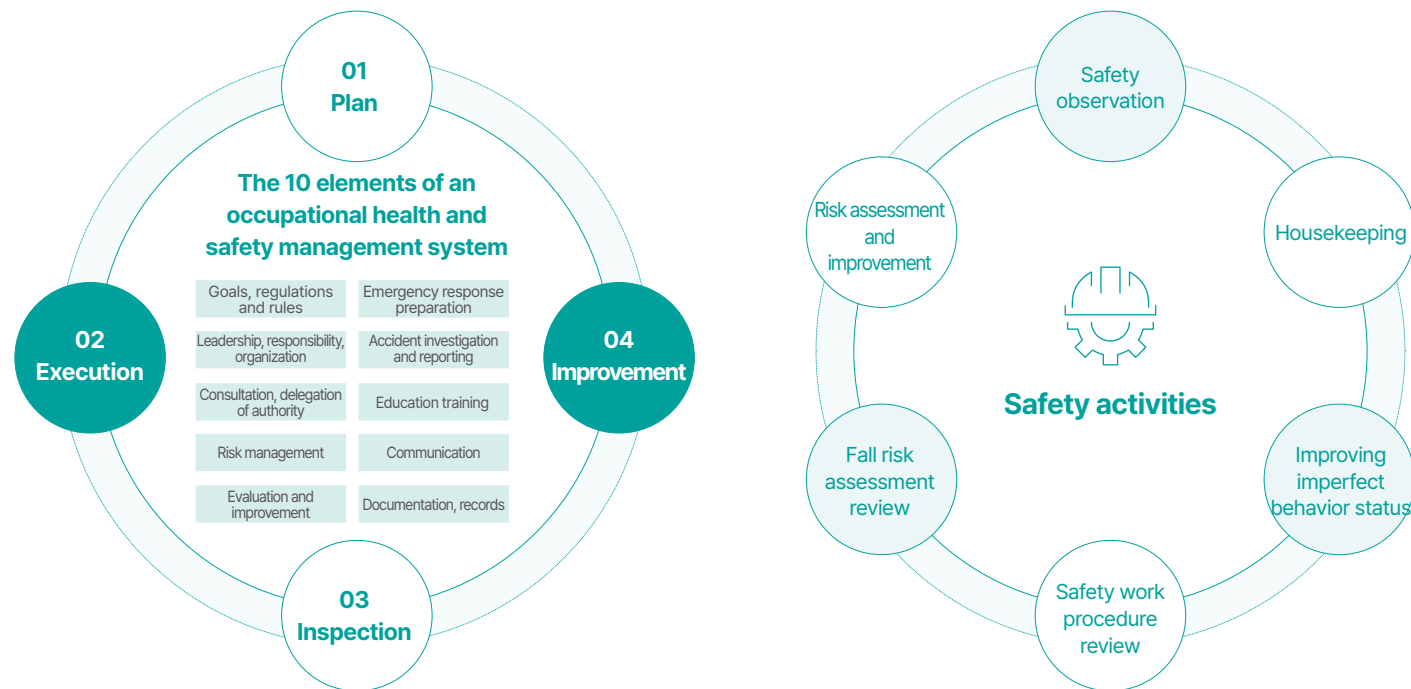


Focus Issue #3

Workplace health and safety

ASIA's Safety Management Principles

ASIA practices safety management under the principle that safety is the foremost value in corporate management. We obtain necessary certifications related to safety management practices and strive to enhance the level of safety culture and safety management through continuous inspection and improvement efforts. We also establish a dedicated safety organization to conduct safety education and other initiatives aimed at spreading internal safety culture, ensuring that all employees internalize a sense of awareness towards safety.



| ASIA Holdings' safety and health certification status

ASIA Cement	HALLA Cement	ASIA Paper MFG
 <p>KOSHA-MS (Jecheon plant)</p>	 <p>ISO45001 (Okgye plant, Incheon plant, Gwangyang plant and Pohang plant)</p>	 <p>KOSHA-MS (Sihwa factor and, Sejong factory)</p>
 <p>KOSHA-MS (Okgye plant)</p>	 <p>Safety Experience Training Center Certificate (HALLA Cement's Safety experience center, located in Okgye site)</p>	

Safety experience center

As a part of establishing a systematic education infrastructure for industrial accident prevention and fostering a safety culture, ASIA Cement and HALLA Cement operate safety experience centers in Jecheon and Okgye. The safety experience centers are designed as experiential educational facilities focused on the field, where participants can learn safety rules and regulations through active participation and idea development. In addition, ASIA Cement and HALLA Cement are actively responding to social demands and concerns regarding safety and health by expanding safety education not just to employees but to external participants such as ASIA Holdings Group affiliates, partners, and local residents.

- ASIA Cement's safety experience center
- ✓ Opened on November 1, 2022
 - ✓ Investment amount: KRW 820 million
 - ✓ 1 safety training room and 6 booths for experiential education
 - Conveyors, confined spaces, air tools and hot work, energy isolation, high-altitude work, general facilities and equipment
 - ✓ Formation of TF team for each booth
 - Booth design, training scenario development, in-house instructor training and operation
 - ✓ Designated as mandatory training for all employees
 - A total of 750 people completed training (454 employees, 296 partners)
 - ✓ Special education
 - For external visitors (total of 20 visitors)



- HALLA Cement's Safety experience center
- ✓ Opened in May 2009
 - ✓ Korea Occupational Safety and Health Agency's official safety experience training center
 - Designated as the second private sector in 2019
 - Used as a specialized public safety training center
 - ✓ 14 themed safety experience booths with an area of 408m²
 - Conveyor safety, energy blocking, personal protective equipment, etc.
 - ✓ Considering the introduction of VR (Virtual Reality) education facilities
 - Facility reorganization scheduled for 2025
 - ✓ Operation of professional in-house instructor program
 - ✓ Provision of regular safety training throughout the year
 - For employees, partners, and external personnel
 - mplementation of mandatory safety training for new employees

04



Sustainability at Asia

042 ASIA Holdings

052 ASIA Cement

053 Environmental

062 Social

075 Governance

082 HALLA Cement

083 Environmental

090 Social

103 Governance

108 ASIA Paper MFG

109 Environmental

116 Social

125 Governance

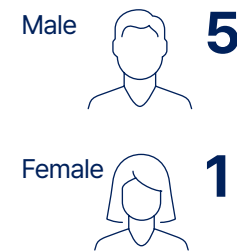
ASIA Holdings



- 43 Board of Directors
- 47 Risk Management
- 48 Ethical Management
- 50 Enhance Shareholder Value

Board of Directors

Board of Directors Composition by Gender



Composition of the Board of Directors

According to Article 29 of the Articles of Incorporation, ASIA Holdings' board of directors consists of three or more members, up to twelve, appointed by the shareholders' meeting. As of May 2024, ASIA Holdings' board of directors comprises a total of six members, including four executive directors and two non-executive directors. The candidates for directorship to be appointed at the shareholders' meeting are determined by the board of directors and confirmed as proposals to be submitted to the shareholders' meeting. For shareholder proposals, the board of directors submits them to the shareholders' meeting as proposals within the legal scope.

Board Members

	Name	Term	Initial Appointment	Gender	Career Highlights
Executive Directors	Lee, Hoon Beom (CEO)	2023.03 ~ 2025.03	2021.03	Male	- Graduated from the Graduate School of New York University - Chairman of ASIA Cement - Chairman of HALLA Cement - Chairman of Asia Paper MFG - CEO and Chairman of Asia Holdings
	Lee, In Beom	2023.03 ~ 2025.03	2023.03	Male	- Master of Business Administration (MBA) from MIT Sloan School of Management - Vice Chairman of ASIA Cement - Vice Chairman of ASIA Paper MFG - Vice Chairman of ASIA Holdings
	Oh, Ki Ho (Chairman of the board and CEO)	2023.03 ~ 2025.03	2021.03	Male	- Graduated from School of Business at Korea University of Foreign Studies - President of ASIA Cement - CEO of ASIA Holdings
	Kim, Tae Hyeng	2024.03 ~ 2026.03	2022.03	Male	- Graduated in Business Administration from Hankuk University of Foreign Studies - Business Management Executive of ASIA Holdings
Non-executive Directors	Choi, In Seok	2023.03 ~ 2025.03	2023.03	Male	- Director of the Planning and Coordination Office, National Police Agency - Lawyer at Yulchon Law Firm
	Kim, Joo Yeon	2023.03 ~ 2025.03	2023.03	Female	- Legal Affairs Department of Korean Air - Fair Trade Commission - Lawyer at Sejong Law Firm

The Expertise, Independence, and Conflict of Interest Prevention

The Board of Directors is composed of internal experts with business-related expertise and experience, as well as non-executive directors who are external experts in legal and administrative fields, to ensure swift and strategic decision-making. In compliance with Article 297-2 of the Commercial Act to prevent conflicts of interest, a thorough review of executive director candidates is conducted before their nomination to prevent the appointment of individuals who do not meet the qualification requirements stipulated by relevant laws, have been subject to administrative or judicial sanctions for legal violations, or have been responsible for damaging corporate values or infringing shareholder rights. Additionally, one-fourth of the total board members are composed of non-executive directors to ensure supervisory functions and independence.

Board of Directors

Board Skill Matrix

	Lee, Hoon Beom	Lee, In Beom	Oh, Ki Ho	Kim, Tae Hyeng	Choi, In Seok	Kim, Joo Yeon
Economy/Finance/Management	○	○	○			
Risk Management	○	○	○			
Human Resources Management			○	○		
Law/Regulatory/Public Policy	○	○	○	○	○	○
Compliance			○	○	○	○
Governance	○	○	○	○		
Accounting			○	○		
Sales/Marketing				○		
IT/Digital				○		
ESG	○	○	○	○	○	○
Industry Expertise	○	○	○	○		
International Experience	○	○	○			
Organization Operating Experience	○	○	○			
Policy Advice					○	○

Performance Evaluation and Compensation

Director compensation is determined by the board of directors within the approved limit of KRW 5 billion by the shareholders' meeting, considering factors such as market competitiveness, contributions to the company, compliance management, achievement of ethical management goals, position, and duties.

Compensation for 2023

(KRW million)

Category	Number of Directors	Total Compensation	Average Compensation
Executive Directors	4	1,012	253
Non-executive Directors	2	56	28

Training for the Board

Our company plans and conducts various educational programs to enhance the expertise of independent directors and foster knowledge related to risks. In 2023, we conducted education sessions on market conditions, overall business performance, and business plan reporting.

Training for Non-executive Directors in 2023

Date	Organizer	Attendance	Description
2023.04.19	ASIA Holdings	All (2 Attendees)	Management performance reporting and Business plan reporting

Board of Directors

Board Operations

The board of directors serves as the decision-making body for company management, deliberating and managing matters as stipulated by laws or articles of incorporation, including the establishment and execution of basic management policies and other important issues. According to the articles of incorporation, the chairman of the board has the authority to convene the board of directors.

Board Operations in 2023

Session	Date	Attendance	Agenda	Result
1st	2023.02.01	75%	Decision on the acquisition of treasury stock	Approved
2nd	2023.02.20	75%	Approval of the financial statements for the 58th fiscal year (2022) following the conclusion of internal accounting	Approved
			Report on the operational status of the internal accounting management system	Reporting
3rd	2023.02.28	75%	Proposal for the convocation of the 58th regular shareholders' meeting	Approved
			Decision on cash dividend based on the 58th surplus appropriation statement (draft)	Reporting
4th	2023.03.06	75%	Report on the evaluation of the operational status of the internal accounting management system	Reporting
5th	2023.03.10	75%	Decision on cancellation of treasury stock	Approved
6th	2023.03.15	75%	Approval of the finalization of the 58th financial statements	Approved
7th	2023.03.23	100%	Determination of the results of the 58th regular shareholders' meeting resolutions	Approved
			Appointment of CEO	Approved
8th	2023.04.07	100%	Decision on the acquisition of treasury stock	Approved
9th	2023.05.25	100%	Decision on the acquisition of treasury stock	Approved
10th	2023.07.10	100%	Decision on cancellation of treasury stock	Approved
			Determination of dividend record date for interim dividend	Approved
11th	2023.07.26	100%	Decision on interim dividend	Approved
12th	2023.09.11	100%	Decision on the acquisition of treasury stock	Approved
13th	2023.11.21	100%	Report to the Board of Directors on the ESG materiality assessment results and environmental management	Reporting performance
14th	2023.12.20	100%	Decision on the acquisition of treasury stock	Approved

Board of Directors

Board committees

ASIA Holdings operates the Ethics Management Committee and Internal Transactions Committee within the Board of Directors to promote and disseminate a sound corporate culture through the establishment of objective and transparent decision-making processes, and to fulfill its social responsibilities through the continuous dissemination and expansion of an ethical-based corporate culture for clean and transparent management. Each committee is composed of executive directors and non-executive directors with expertise according to their roles, operating independently, with an independent director serving as the chairman of the committee.

Internal Transactions Committee

The Internal Transactions Committee manages the entire decision-making process related to internal transactions and aims to create a corporate culture that fulfills social responsibilities by establishing objective and transparent decision-making processes regarding internal transactions.

Ethics Management Committee

The Ethics Management Committee aims to promote the spread of proper corporate ethics and to create a clean and transparent corporate culture. Accordingly, it has the authority to establish ethical agendas for corporate management overall, to manage the drafting of ethical regulations, and to decide whether to refer violations to the Personnel Committee.

| 2023 Board committees' Activities

Committee	Members	Date of Meeting	Agenda	Attendance
Internal Transactions Committee	Choi, In Seok (Chairperson) Oh, Ki Ho Kim, Joo Yeon	2023.04.19	Acquisition of shares in related company	100%
Ethics Management Committee	Kim, Joo Yeon (Chairperson) Oh, Ki Ho Kim, Tae Hyeng	2023.04.19	Inspection of compliance with ethical codes and guidelines for newly incorporated subsidiaries	100%

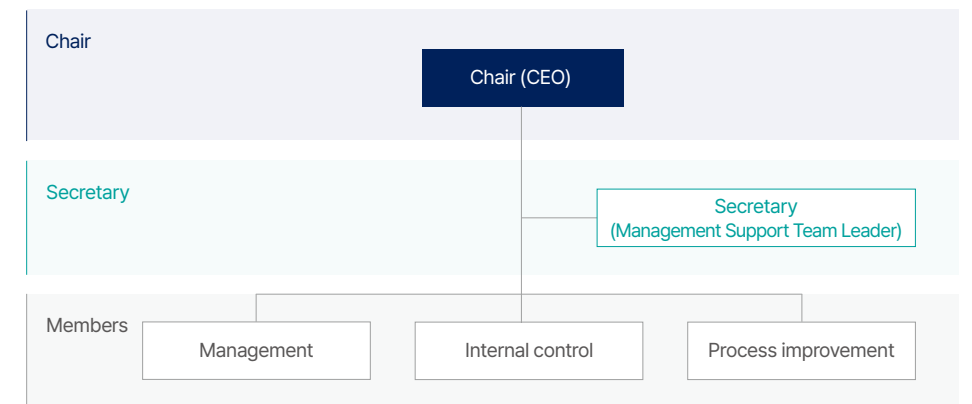
Risk Management

Risk Management System

ASIA Holdings has established and operates a risk management system centered around the Risk Management Committee to respond promptly to changes in the external environment and risks. The Risk Management Committee, as a dedicated organization for risk management, is chaired by the CEO and sets specific risk management items for each area to monitor. It strives to address identified risks before they significantly impact the company's operations.

In cases where there are risks requiring management, the committee conducts thorough investigation and root cause analysis to establish response measures. These measures are then reported to the chairman for review, who subsequently instructs the relevant teams to implement the response measures. Furthermore, the Management Support Team and Internal Control Team utilize risk assessments and risk management strategies to analyze the impact on financial statements and enhance internal accounting management systems.

| Composition and Operation Procedure of the Risk Management Committee



Risk Factors

ASIA Holdings categorizes risks as shown in the table below and establishes management measures for each type of risk.

Category	Risk Factors
Financial risks	Exchange rate fluctuations and interest rate fluctuations
Ethical risks	Corruption and human rights violations
Environmental risks	Environmental regulations, climate change and environmental complaints and accidents
Health and safety risks	Safety incidents, responses to the enactment and amendment of industrial safety and health regulations, etc.
Financial risks	Exchange rate fluctuations and interest rate fluctuations

Ethical Management

Ethical Management System

ASIA Holdings aims to cultivate a robust corporate culture and foster sustainable growth by upholding proper corporate ethics and promoting moral enhancement. To achieve this goal, we've implemented the Code of Ethics outlining the appropriate conduct and ethical principles that ASIA Holdings must uphold for all stakeholders. This code is crafted to be comprehensible and actionable, offering guidance for ethical decision-making in various business scenarios. You can find the Code of Ethics on our website for easy reference.

Additionally, we have established and operate an Ethics Management Committee within the Board of Directors to lead in ethical and compliance management. The chairperson of the Ethics Management Committee is appointed by a resolution of the Board of Directors, and the committee is composed of at least two directors. The Ethical Management Committee holds the authority to make critical policy decisions concerning the advancement of ethical management, to formulate and revise regulations pertaining to ethical management, and to assess and sanction actions related to breaches of ethical management regulations.



Business Ethics, Compliance Audit, and Risk Management

ASIA Holdings evaluates its overall systems and operations through an independent and objective internal audit system. At ASIA Holdings, we conduct regular audits and implement improvement measures based on audit findings. This promotes organizational enhancement and fosters ethical awareness among employees.

Efforts to Spread Ethical Culture

To enhance ethical awareness among employees, we annually prepare a pledge for all employees to sign, committing to practicing ethical management. In addition, all members receive compliance and ethics education from the time of employment, participating in various legal obligations and hierarchical education to enhance ethical awareness. Especially since 2021, employees have been required to participate in mandatory training sessions covering ethics education, awareness enhancement for people with disabilities, sexual harassment prevention, and workplace harassment prevention. This initiative aims to enhance awareness of professional ethics and non-discrimination, encouraging active participation in such efforts.

Employee Ethics Training Completion Rate in 2023

100%

Ethical Management

Reporting Unethical Behavior and Whistleblower Protection

We provide a platform for anonymous reporting of misconduct, irregularities, and unethical behavior through the customer support menu on our website. Reports may include instances of misconduct such as job-related irregularities, corruption, damage to reputation, acceptance of gifts or bribes from external stakeholders, abuse of dominant positions, workplace harassment, and suggestions for improvement. In the event of misconduct, the HR committee reviews and takes action to prevent recurrence. Reporting through the company website ensures anonymity, and ASIA Holdings' Ethics Committee regulations guarantee the protection of identities for those who report unethical conduct under their real names, ensuring no unfair treatment.

Cyber Report



Enhance Shareholder Value



Transparent and Timely Disclosure

ASIA ensures that all shareholders receive timely, sufficient, and fair corporate information through the Financial Supervisory Service Electronic Disclosure System and the Korea Exchange Electronic Disclosure System. To facilitate effective communication with shareholders, we provide the email addresses of our Investor Relations (IR) departments on our website. Foreign shareholders can also contact the IR department via our website and email. Over the past three years, ASIA Holdings, ASIA Cement and ASIA Paper MFG has not been flagged for any delinquent filings. We rigorously review our disclosure processes and provide comprehensive training to our disclosure personnel to ensure all mandatory disclosures are accurately made.

Voting Rights Exercise

ASIA is committed to protecting the inherent rights of shareholders by ensuring fair voting rights in accordance with the Commercial Act and related laws. To uphold shareholders' fundamental rights, we detail the principles and activities adhered to by the company in our Corporate Governance Charter. When necessary, we follow legal procedures to restrict the voting rights of certain shareholders, ensuring full compliance with relevant laws and regulations.

Shareholder Proposal Rights

Under Articles 363-2 and 542-6 of the Commercial Act, shareholders who have continuously held at least 1.0% of the total issued shares (excluding non-voting shares) for six months prior to the record date of the general meeting can propose agenda items, such as the election of directors. Proposals must be submitted in writing or electronically at least six weeks before the meeting date (based on a date six weeks prior to the date of the previous year's regular shareholder meeting). Upon receiving a shareholder proposal, the company verifies the shareholder's status, conducts a legal review of the proposal, and sends a confirmation of receipt either in writing or electronically. Detailed procedures for shareholder proposals are available in the Stakeholder Communication section under the Governance part of our websites. In the past three years, there have been no shareholder proposals at general shareholders' meetings, nor any public letters from institutional investors fulfilling their stewardship responsibilities.

Enhance Shareholder Value

Shareholder Return Policy and Future Plans

ASIA is committed to providing stable and predictable dividends to reward our shareholders. We have consistently paid dividends for the past 42 years since 1982. Our dividend amounts are determined by evaluating industry dividend rates and trends, management performance, cash flow, and necessary investments for sustainable growth, within the limits of net income for the period excluding distributable income and non-operating losses from separate financial statements. ASIA Holdings, ASIA Cement, and ASIA Paper MFG announce dividend-related information through the 'Cash and In-kind Dividend Decision Disclosure' three weeks prior to the shareholders' meeting for ASIA Holdings and ASIA Cement, and two weeks prior for ASIA Paper MFG. After approval at the shareholders' meeting, we finalize and announce the dividend payment dates.

In fiscal year 2023, ASIA Holdings issued an interim dividend of KRW 600 and a final dividend of KRW 4,400. Additionally, ASIA Holdings executed a KRW 12 billion share buyback and a KRW 8 billion share cancellation, resulting in a dividend payout ratio of 51.2% and a shareholder return rate of 123% on a standalone basis. ASIA Cement issued an interim dividend of KRW 30 and a final dividend of KRW 225, and also conducted a KRW 12 billion share buyback and a KRW 5 billion share cancellation, resulting in a dividend payout ratio of 19.8% and a shareholder return rate of 44.2% on a standalone basis. ASIA Paper MFG issued an interim dividend of KRW 500 and a final dividend of KRW 1,920 and executed a KRW 20 billion share buyback, resulting in a dividend payout ratio of 31.6% and a shareholder return rate of 62.5% on a standalone basis.

For the fiscal year 2024, ASIA Holdings plans to distribute over 50% of net income as dividends. ASIA Cement plans to allocate over 40% of net income for shareholder returns, including dividends, share buybacks, and cancellations. As announced in the 2023 fair disclosure, ASIA Paper MFG has completed a KRW 20 billion share buyback and plans to cancel over 75% of the shares acquired in the fiscal year 2023 by the fiscal year 2024.

| Summary of Dividend History

ASIA Holdings

Continuous Dividend Payouts		Average Dividend Yield(%)	
Interim Dividends	Final Dividends	Last Three Years Last	Five Years
2	42	2.7	2.4

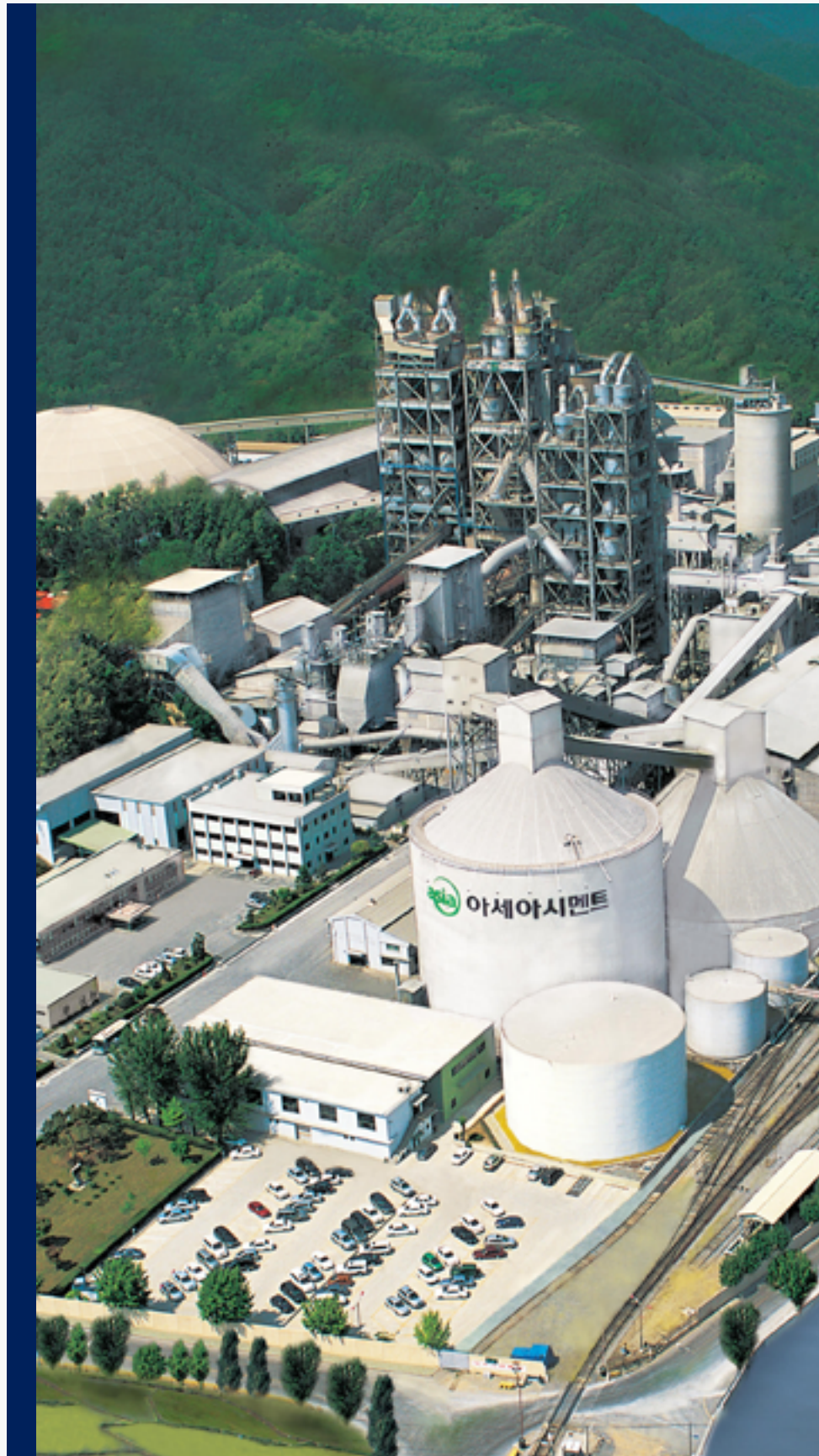
ASIA Cement

Continuous Dividend Payouts		Average Dividend Yield(%)	
Interim Dividends	Final Dividends	Last Three Years Last	Five Years
1	11	2.1	2.0

ASIA Paper MFG

Continuous Dividend Payouts		Average Dividend Yield(%)	
Interim Dividends	Final Dividends	Last Three Years Last	Five Years
1	8	3.0	2.6

ASIA Cement



- Environmental
- 53 Environmental Management System
- 56 Carbon Neutrality
- 58 Environmental Stewardship in Operations
- 60 Cultivating a Green Culture
- 61 Environmental Investment & Green Procurement
- 61 Biodiversity

- Social
- 62 Workplace Health and Safety
- 65 Employee Empowerment
- 67 Human Rights
- 68 Sustainable Supply Chain
- 70 Community Engagement
- 72 Product Responsibility
- 74 Information Security

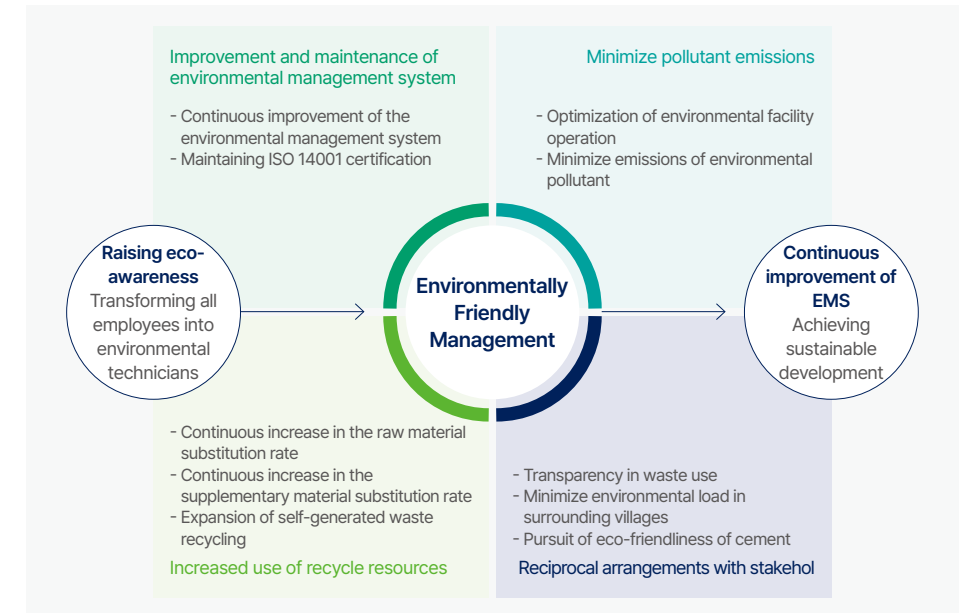
- Governance
- 75 Board of Directors
- 79 Risk Management
- 80 Ethical Management

Environmental Management System

Environmental Management Strategy

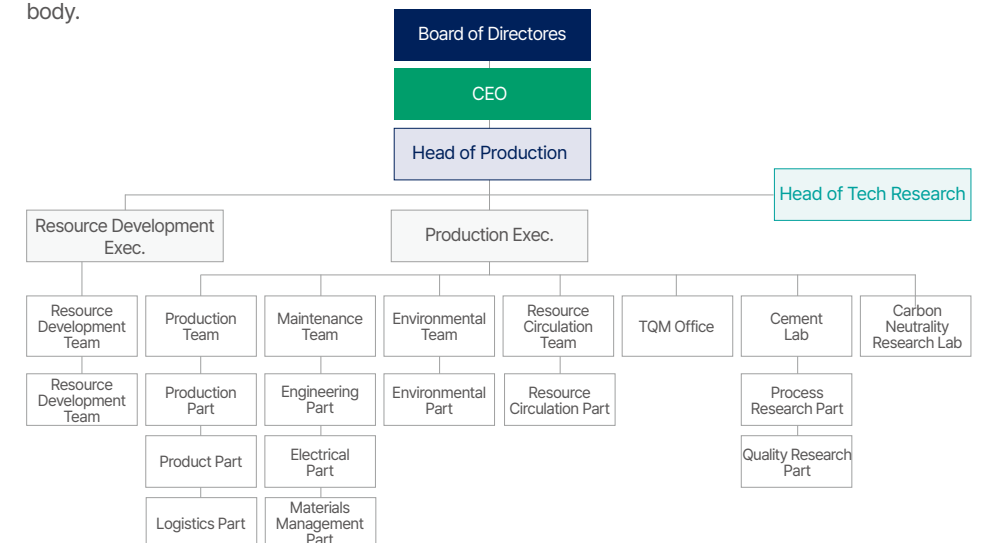
ASIA Cement established an environmental policy of 'preventing environmental pollution and creating environmental performance through continuous improvement of the environmental management system,' and obtained ISO 14001 certification for all its business sites in 2007. Based on this, we practice eco-friendly management to minimize negative environmental impacts during the manufacturing process and achieve environmentally sound and sustainable development.

Goal and Action Plan



Environmental Management System

The CEO of ASIA Cement holds overall responsibility and authority for establishing and enhancing the company's environmental management policies, as well as identifying and implementing improvement measures. Each team's environmental improvement program goals and outcomes are reported to the CEO through the head of the Production Division for review. The most significant results are then presented to the Board of Directors, the highest decision-making body.



Environmental Management System

Environmental Management Plan-Do-Check-Action System

ASIA Cement's environmental management follows a systematic Plan-Do-Check-Action (PDCA) system. In the Plan phase, we establish and implement our environmental management policies. During the Do phase, we continuously improve our environmental management system, increase the use of recycled resources, and work to minimize pollutant emissions. In the Check phase, we conduct internal environmental audits and receive evaluations from professional institutions, while investigating and analyzing our internal environmental conditions. Based on these findings, we set improvement goals, which are then addressed in the Action phase.



Environmental Aspect Identification and Impact Assessment

At ASIA Cement, we identify the environmental aspects of our activities, products, and services. We periodically assess, confirm, review, and evaluate their direct and indirect environmental impacts to maintain our environmental management system.

Environmental baseline assessment

Installation or renovation of new facilities and equipment. In case of replacement necessity, an evaluation is conducted from the review stage to identify all potential environmental aspects and impacts to minimize the environmental impact.

Environmental Impact Assessment

Identification of all environmental aspects and impacts related to organizational activities, products, and services, determining significant environmental aspects that trigger significant environmental impacts

Criteria	Identification of Environmental Impacts	Material environment aspects identified*
Resource Development	1. Drilling, blasting, loading, and transportation work 2. Crushing and transportation work, etc.	8 case
Production	1. Raw material grinding and storage 2. Sintering process, etc.	19 case
Mechanical	1. Mechanical construction 2. Civil engineering works, etc.	2 case
Electrical	1. Electrical construction 2. Substation equipment management, etc.	-
Technical Research	1. Waste heat power generation facilities 2. Radiation work, etc.	1 case
Raw Materials	1. Handling of raw materials and bituminous coal 2. Lubricant storage tanks, etc.	1 case
Resource Circulation	1. Storage of recyclable waste 2. Waste crushing and input, etc.	1 case
Environmental	1. Business site waste disposal 2. Fugitive dust, etc.	6 case

* Environmental impact assessments are conducted biannually. The number of Material environment aspects identified based on the latest assessment conducted in 2022.

Environmental Management System

Integrated Pollution Prevention and Control (IPPC) System

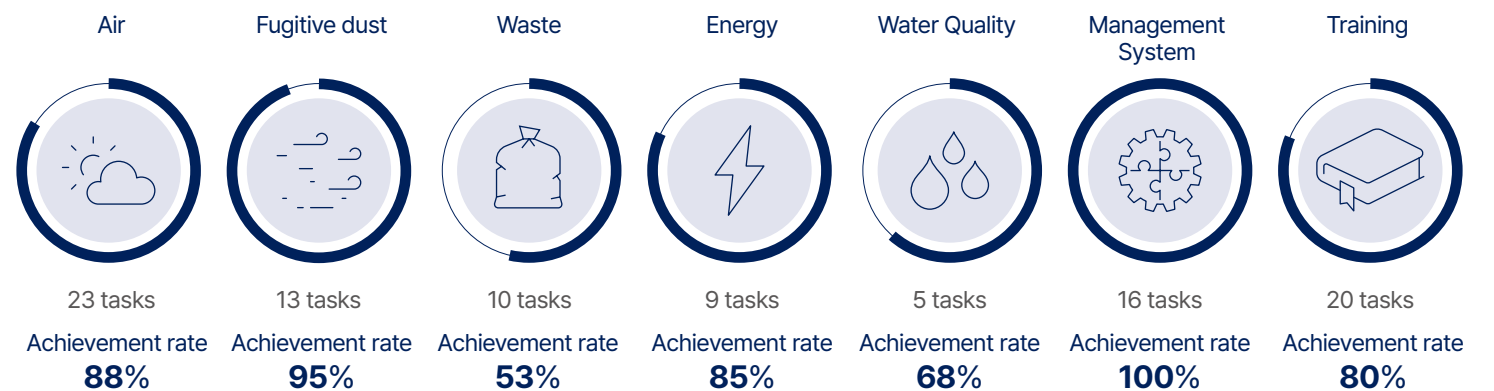
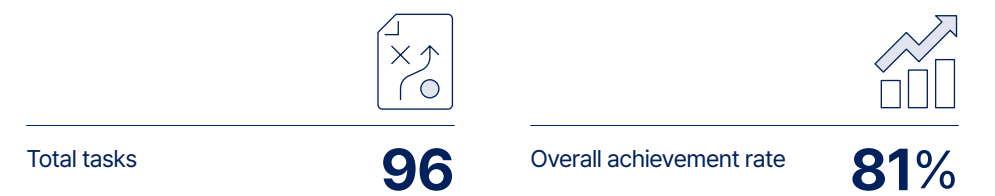
In 2023, the Ministry of Environment introduced the Integrated Pollution Prevention and Control (IPPC) Directive to the cement manufacturing industry. This legal regulation aims to minimize and optimize pollutant emissions by integrating management approaches for various environmental media, such as air, water, and soil, for industries and large-scale facilities with significant environmental impacts. It also aims to prevent the intermedia transport of pollutants (*). ASIA Cement is required to obtain IPPC approval by July 2027. In response to the adoption of this system, we are enhancing activities such as environmental impact assessments, the development of environmental prevention plans, and the establishment of environmental management systems. Through these efforts, we anticipate strengthening our environmental management capabilities and contributing to sustainable business practices.

* The phenomenon of pollutants being spread, such as waste generation during wastewater treatment, and air pollutant emissions and soil pollution during waste disposal.

Environmental Improvement Program

Since adopting ISO 14001 in 2007, ASIA Cement has established a policy to conduct business activities with a focus on 'continuous improvement of its environmental management system to prevent environmental pollution and generate environmental performance'. One of the systems aligning with this environmental management approach is the 'Environmental Improvement Program'. Each year, the Environmental Team conducts departmental task selection meetings to review the previous year's progress and select tasks that address environmental issues and minimize environmental burdens. The contribution rate of each task area is calculated and reported annually to the executives of the Production Division to facilitate continuous environmental improvement and achieve environmental goals and objectives. The current Environmental Improvement Program is also being implemented at the headquarters organization where the Sales Division is located, with efforts underway to expand comprehensive environmental improvement initiatives throughout the company.

| 2023 Environmental Improvement Program Achievements



Carbon Neutrality

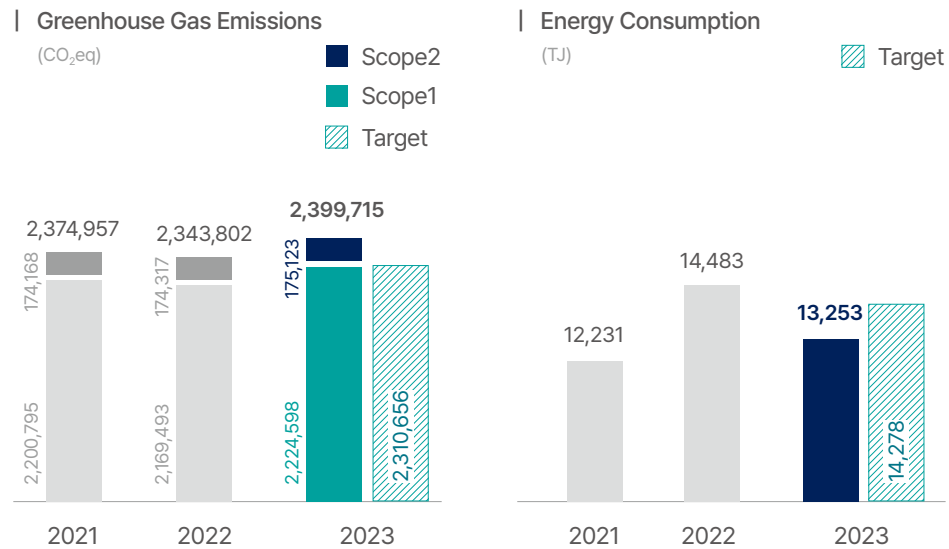
The cement industry, with its high energy consumption and reliance on raw materials, faces a pressing challenge in addressing climate change issues and reducing carbon emissions. The clinker calcination process, which involves heating limestone to convert it into clinker, and the combustion of fossil fuels, particularly bituminous coal, are the primary sources of greenhouse gas emissions for ASIA Cement. Recognizing this challenge, ASIA Cement is committed to achieving carbon neutrality to sustain its competitive edge and fulfill its environmental and social responsibilities.

Reduction of Greenhouse Gas Emissions

In 2021, ASIA Cement, in collaboration with HALLA Cement, introduced its unified vision, 'ECO TOGETHER 2025,' with the goal of reducing carbon emissions by 25% by 2025. To achieve this, we are focusing on increasing the use of alternative fuels in the combustion process, which accounts for 30% of our greenhouse gas emissions. From January 2020 to March 2023, we invested KRW 70 billion to enhance the clinker production process and will continue to invest in this area moving forward. Additionally, we are committed to ongoing research and development aimed at substituting traditional limestone with non-carbonate materials to reduce emissions from the limestone calcination process, which represents 60% of our GHG emissions.

Reducing Energy Consumption

ASIA Cement actively participates in the Voluntary Energy Efficiency Target System organized by the Ministry of Trade, Industry and Energy (since September 2020) and the Korea Energy Efficiency Partnership (KEEP30, since October 2022), making significant efforts to achieve energy savings. The Jecheon plant sets annual reduction targets for each energy source and reduces energy consumption and costs by utilizing government-supported high-efficiency equipment. By using alternative fuels, we have reduced the consumption of bituminous coal and have been supplying hot gas generated during the production process to a waste heat recovery power plant located on the Jecheon plant site since 2015. The waste heat recovery power plant is operated by SGC Energy, with which we have signed a related MOU. This initiative helps reduce fossil energy use in the local community and has saved us approximately KRW 2 billion in electricity costs as of 2023.



Carbon Neutrality Research Lab

In May 2023, ASIA Cement established the Carbon Neutrality Research Lab to achieve carbon neutrality. The lab is composed of a diverse team of experts, including researchers, equipment specialists, and process experts. They are dedicated to various research projects, such as national projects for developing carbon neutrality technologies and material component technologies, as well as reviewing process improvements to innovate cement plants and reduce carbon emissions. Through these efforts, they strive to contribute to our carbon neutrality goals. Through continuous innovation and technological advancement, we aim to achieve carbon neutrality, fulfill our environmental responsibilities, and create economic value, thereby contributing to ASIA Cement's sustainable management.

Project #1.

Development of High-Chlorine Containing High-Early-Strength Type Special Ceramic Binder (Cement) Manufacturing Technology

- ✓ **Background and Purpose**
By replacing imported Japanese coal ash with landfilled coal ash from domestic thermal power plants and using it as a raw material for cement, we aim to expand the recycling of domestic waste and industrial by-products, thereby contributing to the establishment of a circular resource society.
- ✓ **Achievements**
Successful demonstration of the developed technology ("ASIA Cement successfully demonstrated domestic coal ash recycling technology", The Korea Economic Daily and others)
- ✓ **Future Plans**
Coordination with industry stakeholders for market application and establishment of industrial standards (KS standards)

Project #2.

Development of 15% Limestone Blended Cement Technology

- ✓ **Background and Purpose**
Develop a low-carbon blended cement manufacturing technology that incorporates up to 15% limestone as a cement additive while ensuring equal or superior quality compared to traditional cement.
- ✓ **Achievements**
Two technology patents pending and two external awards received.
- ✓ **Future Plans**
Assess the performance of limestone blended cement considering carbon emission metrics and explore potential applications for the developed product.

Project #3.

Project #3. Development of Technology for Manufacturing and Utilizing Portland Cement by Substituting Limestone with Non-carbonate Raw Materials of 5wt.% or More

- ✓ **Background and Purpose**
Utilize low-carbon industrial waste materials (such as slag, waste concrete, etc.) as cement raw materials to reduce carbon dioxide emissions.
- ✓ **Achievements**
Collaborated with the steel industry to jointly develop non-carbonate raw material technologies. Filed 2 patents and published 2 papers (1 awarded with a technology prize).
- ✓ **Future Plans**
Derive optimal blending modulus conditions with the expansion of non-carbonate raw material usage.

Project #4.

Project #4. Development of Technology to Increase Cement Calcination Process Fuel Replacement Rate to Over 65% through Optimization of Waste Synthetic Resin Supply and Combustion Process

- ✓ **Background and Purpose**
Introducing technologies such as raw material conversion and fuel conversion in the cement industry to reduce carbon emissions and address issues related to waste disposal.
- ✓ **Achievements**
Establishment of demonstration facilities for increasing the substitution rate of waste synthetic resin (including automated systems for storage, sorting, and transportation of waste synthetic resin, as well as cement kiln feeding systems) and identification of necessary technologies for reducing atmospheric emissions of pollutants from calcination facilities.
- ✓ **Future Plans**
Evaluate the operational performance of waste synthetic resin feeding systems and develop technologies to reduce atmospheric emissions (NO_x, SO_x, etc.) from calcination facilities, followed by the introduction of demonstration facilities.

Environmental Stewardship in Operations

Air Pollutants

ASIA Cement monitors the emission status of air pollutants from its major emission facilities. Regular checks and measurements of air pollutant emissions from all emission facilities are conducted by specialized measurement agencies. The measurement results are input into the Air Emission Source Management System operated by the National Institute of Environmental Research.

Dust and Fugitive Dust

ASIA Cement undertakes various activities for fine dust management. To suppress fugitive dust generated during transportation stages in the manufacturing process, we operate fugitive dust suppression facilities that exceed the standards required by relevant regulations. Additionally, we monitor the air quality around the Jecheon plant area quarterly to ensure that it does not exceed the standard levels. ASIA Cement signed an agreement with the Ministry of Environment in December 2019 and has been implementing voluntary fine dust reduction activities. At ASIA Cement, we will continue our efforts to reduce fine dust emissions by shortening the operation hours of crushing facilities, expanding watering facility operations, and implementing vehicle usage restrictions. We have designated vulnerable areas where fugitive dust emissions are of concern and continuously evaluate and manage them. These efforts have reduced the generation of dust and fugitive dust, contributing to the improvement of the surrounding environment and positively impacting sustainable environmental management. Moving forward, we will keep developing effective strategies for managing vulnerable areas and make improvements to minimize environmental impacts.

Nitrogen Oxides (NOx) and Sulfur Oxides (SOx)

ASIA Cement, as a total emissions management target facility, applies a real-time monitoring system based on the Tele Monitoring System (TMS) and ensures that NOx and SOx emissions are kept within the annual emission allowance allocated for each year. In 2025, we plan to install Selective Catalytic Reduction (SCR), becoming the first in the cement industry to do so. SCR is an effective technology for reducing nitrogen oxide emissions, and it is expected to play a more effective role in reducing atmospheric pollutants and protecting the environment compared to the SNCR, thanks to its high NOx removal efficiency.

Chemical Substance Management

Recycled resources used at ASIA Cement's Jecheon plant may contain chemical components used by recycling resource discharge companies. We comply with chemical substance management regulations by maintaining chemical components within legal limits and investigating and reporting the discharge amounts of chemical substances contained in recycled resources.

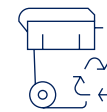
Odor Monitoring

ASIA Cement has implemented a real-time odor monitoring system at site boundaries and emission outlets, securing odor data 24/7. Utilizing this data, we have laid a foundation for more effective odor reduction. Ultimately, through the odor monitoring system, we fulfill our responsibility to the surrounding environment and pursue sustainable management.

Environmental Stewardship in Operations

Recycling Rate in 2023

72%

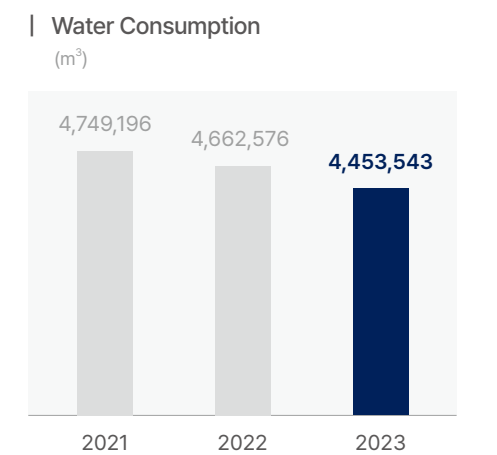
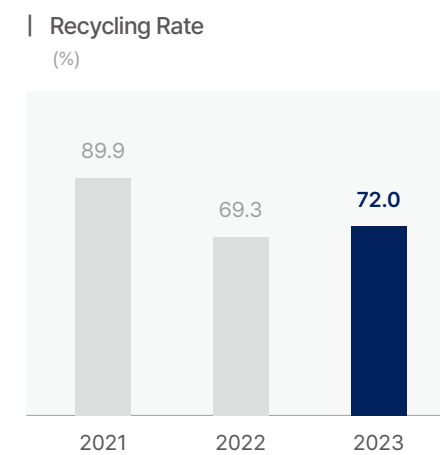
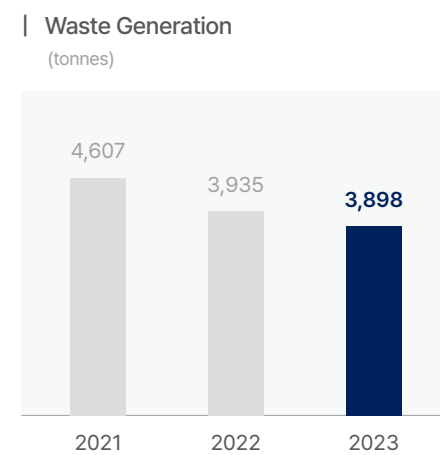


Waste Management and Recycling

Waste generated at the Jecheon plant is classified into general waste and designated waste. Depending on the type of waste, the company either processes it in the shredding facility operated by the workplace or entrusts its disposal to external incineration companies. To minimize waste disposal costs and the risk of regulatory violations, ASIA Cement plans to pursue waste reduction targets by department, manage waste collection bins, operate waste oil storage facilities, and inspect incoming waste at waste storage facilities as key policies. ASIA Cement actively utilizes alternative fuels such as waste synthetic rubber and waste synthetic resin to reduce bituminous coal usage. Furthermore, by operating facilities that can recycle industrial by-products, we lower the unit heat consumption and save costs. Through continuous technological development and the recycling of industrial by-products, we lead environmentally friendly practices in the cement industry. In 2023, to enhance environmental protection and safety management at the Jecheon plant, we designated a new waste storage facility within the plant. This storage facility not only ensures the proper storage of waste but also significantly reduces environmental risks that may arise during the waste disposal process. We will efficiently operate designated waste storage to minimize environmental and safety risks and continually reduce environmental risks through ongoing improvements.

Water Consumption and Wastewater Discharge Management

ASIA Cement's Jecheon plant primarily uses water as indirect cooling for its production equipment, managing it with industrial water pumps and recovery pumps. Most of the used water is reclaimed at the pond facility and reused for circulation. The Jecheon plant ensures that water discharges comply with relevant regulations concerning water pollutants. To further enhance water conservation, we adjust the water level in the artificial wetland, which is a natural facility designed to mitigate non-point source pollution, before discharging industrial water outside the plant. This approach aims to increase the proportion of recycled water and optimize our overall water use.



Cultivating a Green Culture

Environmental Training

ASIA Cement provides the following environmental training programs to employees and partner companies to maintain a high level of environmental awareness and responsibility, and to strengthen the foundation for sustainable operations.

Employee Environmental Awareness Training

ASIA Cement is conducting environmental training in 2024 with the aim of enhancing employees' environmental awareness. Despite the prolonged streamlining of environmental training due to the COVID-19 pandemic, in 2024, we conducted comprehensive environmental awareness training organized by 'EN Environment.' This initiative aimed to cultivate correct environmental consciousness among employees, ensure legal compliance, and enhance their ability to manage environmental responsibilities effectively. Moreover, we have expanded the target audience for environmental awareness training from office workers, production facility managers, and executive officers to include personnel from partner companies, contributing to the dissemination of an eco-friendly culture within the industry.

Chimney TMS Training

Since 2022, the chimney Tele Monitoring System (TMS) training has been conducted for each department's practitioners. It has covered chimney structure, operational principles, and regular inspection and maintenance methods, contributing to accident prevention and safe chimney operation.

Legal Environmental Training

To strengthen compliance with environmental laws and regulations, we conduct legal environmental training for practitioners. This training focuses on enhancing understanding of key environmental regulations and requirements and emphasizes legal compliance.

Environmental Pollution Accident Response Training

To enhance the initial response and accident recovery capabilities in case of environmental accidents, ASIA Cement conducts regular training sessions for its employees. These sessions involve creating scenarios based on various environmental accident situations, followed by practical training and feedback. Through these exercises, we strive to minimize environmental damage and ensure prompt recovery in similar situations.

| Environmental Pollution Accident Response Training Process



Carbon Neutrality CoCoo Campaign

Since 2023, ASIA Cement has been carrying out the CoCoo (Campaign of Carbon "O" Asiacement) campaign at its Jecheon plant. CoCoo is a voluntary cultural movement where each team collectively challenges and achieves carbon neutrality tasks. Exceptional team practices are shared on the website, and incentives are provided to outstanding teams to encourage active employee participation. In 2023, practical tasks included utilizing electronic documents, reducing the use of disposable items, maintaining appropriate indoor temperatures, and promoting the use of buses for commuting, all aimed at reducing carbon emissions in employees' daily activities within the workplace. Additionally, carbon-neutral diets were implemented in the cafeteria, and waste reduction events were organized.

Environmental Investment & Green Procurement

Environmental Investment

To protect the environment and address climate change, ASIA Cement is making significant environmental investments, particularly focusing on the modification of kiln processes to increase the use of alternative fuels and raw materials. Over the past three years, our average annual environmental investment has been approximately KRW 15.6 billion, and we plan to continue substantial investments in 2024.

Green Procurement

ASIA Cement thoroughly analyzes incoming raw materials to ensure they meet environmental standards. We focus on green procurement and minimize pollutants such as heavy metals, NOx, and SOx, which cause environmental pollution. NOx, and SOx. We also encourage our suppliers to adopt environmental management systems and are exploring real-time communication for green procurement.

Biodiversity

Environmental Impact Assessment

ASIA Cement conducts environmental impact assessments in the vicinity of its operations to understand the environmental effects and address stakeholder demands. The results of these assessments are utilized as monitoring data for the operation area. Through these assessments, we can predict and analyze the effects of our business activities on the local natural and living environments. Moving forward, we aim to develop measures to address potential environmental impacts resulting from our operations through regular environmental impact assessments and continuous monitoring.

In 2023, two on-site surveys were conducted regarding the aquatic plants and animal populations inhabiting Mudocheon Stream, a water system surrounding the business site. The survey findings predicted a decrease in fish and benthic macroinvertebrates in the river sections passing through farmland and roads due to non-point source pollution from upstream agricultural land, villages, and roads. As for aquatic plants, the plants observed in the surveyed areas are mostly common species found in typical rivers, and no species of conservation value were identified. Additionally, invasive species such as Japanese hop, Sicyos angulatus, common ragweed, Ambrosia trifida L., and frost aster were identified, prompting the development of management strategies.

Ecological Restoration of Mines

ASIA Cement is committed to environmentally friendly mine development and production. Since initiating environmental impact assessments in 2003, the company has been conducting regular post-environmental impact assessments (21st year) to understand the environmental effects of its mining and post-mining operations, implement mitigation measures outlined in environmental impact assessment reports, and ensure compliance with agreements. Specifically, we strictly adhere to the natural environment survey and classification criteria set forth by the Ministry of Environment. We manage and implement survey methods for each flora and fauna. As part of the plan for mine expansion initiated in 2022, we are currently reviewing the establishment of a long-term master plan, selection of expansion scope, management of ecological ratings, and formulation of ecological restoration plans. Our objective is to re-negotiate environmental impact assessments by 2030. Furthermore, a temporary transplant site has been established to aid in mine restoration, with the initiative to plant 100 trees annually since 2023. These trees will be utilized for future mine restoration efforts.

Planting at Temporary Transplant Site for Mine Ecological Restoratio

100 trees/year

Workplace Health and Safety

ASIA Cement strives to achieve zero accidents through the establishment and compliance with safety and health policies and regulations. Since transitioning to KOSHA-MS safety and health management system certification in 2022, we have maintained certification through continuous management and have dedicated safety and health teams to implement systematic safety and health management.

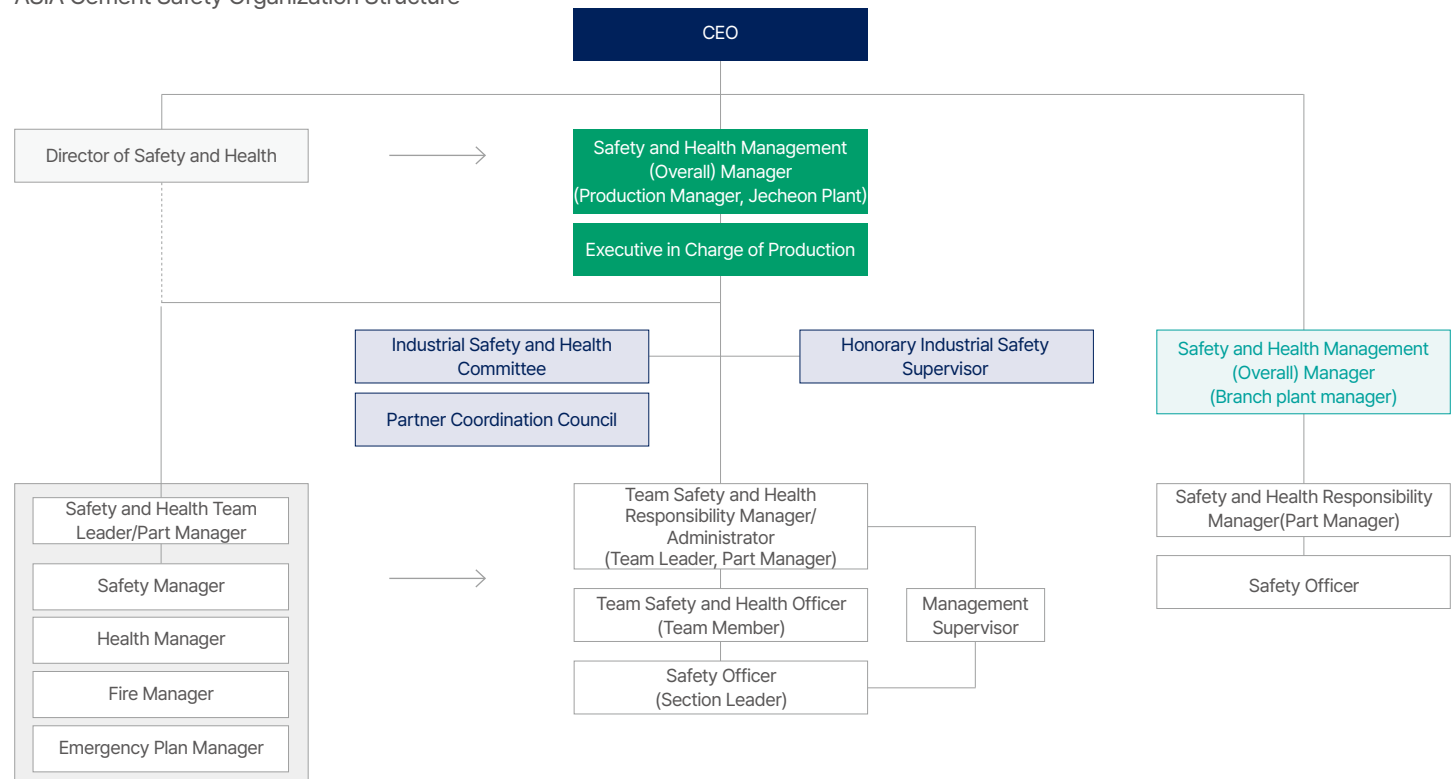
Health and Safety Management Plans and Inspections

We prioritize workplace safety and manage it through various safety management activities. We conduct annual safety forums for management and executives to report on the annual safety and health management plan and provide leadership development training. Since 2022, we have expanded these forums to twice a year to conduct mid-term reviews of safety and health management plans and implement improvement measures accordingly. In the monthly Visible Felt Leadership (VFL) activities, management visits work sites to communicate their commitment to safety and discuss safety and health matters with workers. We also conduct regular Safety First Asiacement (SFA) activities by supervisory managers to improve safety and prevent accidents by addressing unsafe behaviors among on-site workers. The Jecheon Plant and each branch plant, as well as all partner companies, undergo annual safety and health activity evaluations. The evaluation results are used as data for improvement, and rewards are given to outstanding workplaces, departments, and contributors.

Safety Risk Assessment

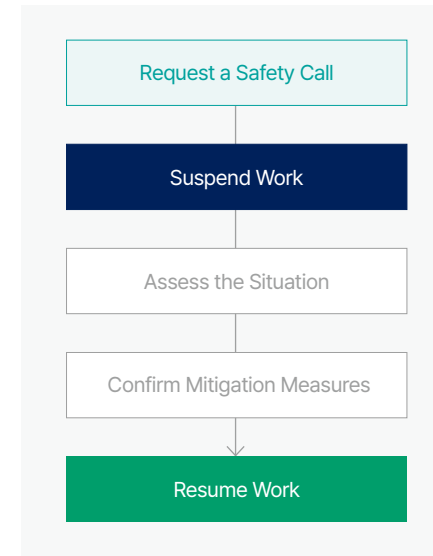
ASIA Cement identifies, eliminates, or mitigates risks through multifaceted risk assessments. Partner companies also conduct risk assessments, and all partner companies that meet certification requirements receive risk assessment certification from the Korea Occupational Safety and Health Agency and maintain it. Additionally, we provide relevant professional education courses to encourage active participation and develop the expertise of employees.

ASIA Cement Safety Organization Structure



Workplace Health and Safety

| Safety Call Procedure



Efforts for Workplace Safety Accident Prevention

Since 2020, ASIA Cement has been managing annual performance, setting goals, and undertaking activities to achieve them based on leading indicators of occupational injuries, including work time loss and medical treatment injuries.

Safety Work Permit Procedure

Through the safety work permit procedure, we proactively identify risk factors, prepare protective equipment, confirm energy isolation procedures, and conduct a risk assessment on-site through pre-job training, ensuring the identification of on-site risk factors and executing necessary protective measures to prevent accidents. To enhance on-site safety management, we have formed a safety patrol team to intensively inspect and improve on-site safety compliance during maintenance periods.

Safety Call System

In 2023, ASIA Cement introduced the Safety Call System, allowing on-site workers to request work stoppage directly when they perceive hazardous situations, ensuring a safe working environment. Upon receiving a Safety Call report, work is immediately halted, and after identifying the situation, improving the risk factors, and confirming the improvements, work is resumed.

Strengthening High-Risk Safety Standards

We have enhanced high-risk safety standards to obligatorily assess the risk of falls during high-altitude work. Through checks on factors such as fall distance calculation, work methods, appropriate fall protection selection, and safety measures around the workplace, we strive to prevent fall accidents.

Safety Education

Enhancement of Hierarchical Safety Leadership Skills

Since 2021, ASIA Cement has implemented training programs aimed at enhancing hierarchical safety leadership skills. These initiatives are designed to motivate team members to broaden their safety responsibilities beyond their individual job roles, fostering a proactive approach to problem-solving and safety coaching within the organization. The safety leader hierarchy is divided into members, section leaders, team members (office management supervisors), and mid-level managers. Level 1 education on safety culture and safety leadership was completed by each hierarchy in 2023, and completion of Level 2 and Level 3 education is scheduled by 2025.

Specialized Education for Management Supervisors

ASIA Cement provides tailored specialized education programs for direct and partner management supervisors to strengthen their role awareness and sense of responsibility and to establish an on-site safety culture. Additionally, in accordance with Article 16 of the Industrial Safety and Health Act, legal safety education for management supervisors is provided through external professional instructor education. In 2023, leveraging the expertise of safety consulting and education professionals, we conducted internal pre- and post-assessments, education sessions, and response evaluations. These efforts aimed to analyze personnel factors influencing safety culture and identify areas for improvement. Moving forward, we plan to conduct ongoing education for management supervisors, incorporating feedback from improvement plans and educator surveys to continually update education content.

Workplace Health and Safety

Safety Training Hours in 2023

33,459 hours

* Total number of employees and direct contractor employees

Employee Safety Training Rate in 2023

100%

Safety Experience Center

ASIA Cement completed the renovation of the first floor of the Jecheon plant in 2022 to establish a Safety Experience Center for educational purposes. We also conducted an internal instructor training program to enable employees to serve as internal instructors. Since 2023, we have provided company-wide education for all employees, including those from partner companies, at the Safety Experience Center to strengthen internal and external safety capabilities.

Employee Health Management Program

Hearing Conservation Program

To prevent noise-induced hearing loss and occupational diseases among employees, ASIA Cement identifies noise-generating areas within production sites and creates and distributes noise maps based on noise levels. Additionally, in 2023, we provided customized earplugs to 239 employees at the Jecheon plant to minimize the reduction in soundproofing effectiveness due to variations in individual ear canal sizes.

Health Checkups and CPR Training

ASIA Cement supports annual health checkups for employees and conducts additional specialized health checkups for on-site workers. Furthermore, we operate an in-house health management office where healthcare professionals offer health counseling, medication, and post-examination follow-ups for employees. We also conduct emergency treatment and CPR training for employees and have expanded the installation of AEDs throughout the workplace to ensure prompt responses to emergencies.

Health and Safety Management for Supplier Workers

Health and Safety Committee

Partner companies also participate in monthly safety and health committee meetings under the supervision of the factory's safety and health manager. We support various aspects of partner safety management, including joint safety inspections with partners at least once a quarter, regular evaluations of safety and health activities, and the application of evaluation results.

Health Check-ups and Post-Examination Management for Supplier Workers

ASIA Cement supports post-examination management for partner workers who undergo health check-ups. Through an agreement with the Chungbuk Workers' Health Center, we provide health counseling based on the results of health examinations and distribute safety equipment to workers and observers based on the outcomes of both general and specialized health assessments conducted annually.

| Safety and Health Grievance Resolution for Supplier Workers (2023)

	Received	Resolved	Resolution Rate
Health and Safety Committee	14 cases	14 cases	100%
Others (SNS, etc.)	36 cases	36 cases	100%
Total	50 cases	50 cases	100%

Employee Empowerment

Employee Diversity and Recruitment of Outstanding Talent

ASIA Cement seeks 'Challengers' with aspirations for a bright future, 'Creators' who pursue constant innovation, and 'Knowledgeable' individuals who strive for excellence in every aspect. To achieve this, we exclude factors such as gender, age, education, and other irrelevant criteria from our evaluation process and operate fair recruitment procedures to select talents solely based on their abilities.

To foster diversity, we have instituted preferential policies for socially disadvantaged groups, such as individuals with disabilities and veterans, during the recruitment of new employees. Moreover, we intend to enhance the representation of female employees in non-field technical positions in our future hiring plans. Furthermore, we actively employ local residents to create employment opportunities and stimulate the local economy. Among the new field employees hired from 2019 to 2022, 83% are residents of Jecheon, where the production plant is located. In addition, we work with Korea Polytechnics to implement educational programs for prospective field workers, aiming to secure talented individuals.

Labor-Management Cooperation and Communication

ASIA Cement perceives labor unions as partners based on mutual trust and strives for continuous development together. Every week, we explain our management direction through sharing key issues and information among labor and management practitioners, and we incorporate feedback from field workers' suggestions into our personnel policies when establishing them.

To foster mutual trust between labor and management, we conduct labor-management reconciliation training once a year, involving participation from management and union members. Additionally, we organize stress-related lectures and communication training programs to promote communication and establish a culture of reconciliation. Moreover, we ensure transparency in management by sharing our performance and the status of our workforce through quarterly labor-management meetings and management briefing sessions.

Work-Life Balance

ASIA Cement has introduced flexible working hours and staggered shift systems to achieve a work-life balance. Given the seasonal nature of the industry, we operate a flexible working system, taking into account periods of concentrated work, compliance with the legal 52-hour workweek, and productivity enhancement. Moreover, we comply with mandatory protection measures such as shortened working hours, childcare leave, and family care leave for female employees who are pregnant, giving birth, or raising children, as required by law. Additionally, we reduce the financial burden on employees through internal labor welfare funds, covering childbirth and medical expenses.

In 2024, we will review the introduction of regular employee consultations and an Employee Assistance Program (EAP) to promote the mental and physical well-being of employees, foster a healthy organizational culture, and improve working conditions.

Employee Empowerment

Expenditures on employee benefits and welfare per employee in 2023

KRW **31 million**

Average hours of job-specific training per participant in 2023

(based on management level)

9.2 hours

Employee Benefits and Welfare

ASIA Cement operates various welfare programs divided into four areas: housing, family, health, and leisure, aiming to enhance the quality of life for employees. These programs include financial support for housing-related loans, children's education funds, and daily living expenses, as well as support for leisure activities such as company clubs and condo usage. Following the transition of the severance pay system from a progressive stage system to a statutory scheme, to address potential disadvantages for those eligible for statutory severance pay and to incentivize the retention of top talent, we established the Retirement Pay Support in 2023. Through the Retirement Bonus System, we provide support upon retirement, offering KRW 700,000 per year for employees with over 10 years but less than 20 years of service, and KRW 1,200,000 per year for those with over 20 years of service. Moving forward, we will continue to support efficient welfare programs that enable employees to balance work and life effectively.

Employee Talent Development

ASIA Cement develops and provides capacity enhancement programs for organizational and job development. We offer education in foreign languages, computer utilization, humanities, and social sciences for self-development, along with fostering in-house instructors and supporting professional qualifications acquisition. We also conduct sales workshops. Additionally, employees can apply for external education at their discretion to attend courses necessary for their needs. Furthermore, for positions at the level of team leader or higher, we provide sustainable management education through the Seri Pro online education program. Moving forward, we will continue to identify and provide tailored courses and professional development programs to meet the educational needs of our employees.

Fair Performance Evaluation and Compensation

ASIA Cement focuses on individual performance and competency improvement, aligning vision and management policies with personal metrics. We define and evaluate key behavioral indicators for both short-term performance goals and long-term competencies, providing feedback on both aspects. The results of performance evaluations are also used for promotions and personnel transfers, establishing a merit-based system.

Training System(Corporate-wide Training)



Human Rights

Human Rights Protection Policy

ASIA Cement establishes policies and regulations in various fields to prevent human rights violations among stakeholders. Through recruitment regulations, environmental, health and safety policies, and an ethics code of conduct and guidelines, we strive to protect the human rights of stakeholders. To prevent internal human rights issues, we make use of a mentoring program, promptly sharing and resolving relevant content in cases of human rights violations or grievances.

Human Rights Education for Employees

ASIA Cement considers people as valuable assets and strives to prevent workplace harassment and sexual violence by conducting various online education programs. In 2023, we conducted human rights-related education for a total of 503 employees.

Grievance Resolution

ASIA Cement operates a grievance resolution process to address and resolve human rights issues that may arise due to work environments and conditions. Consultation channels such as email and phone are available for each worker based on their work environment and conditions. When a human rights issue arises, employees can request consultation and resolution through various means. Grievance handling personnel will review, investigate, and address the issue accordingly. The applicant will receive feedback on the related results, and if necessary, corrective actions will be taken to rectify the human rights issue. Additionally, through 'Yeolrinsori', which is operated as an intranet and is highly accessible, employees can report and seek counseling for unfair work practices, sexual harassment, bullying in the workplace, and various other grievances.

Number of human rights complaints reported and resolved

	2021	2022	2023
Number of reports	5	6	4
Resolved Cases	5	6	4

Grievance Resolution Process



Sustainable Supply Chain

Establishing a Sustainable Supply Chain

We are striving to establish a sustainable supply chain by evaluating and systematically managing the social and environmental risks and practices of our suppliers, in addition to their quality, supply stability, and production capabilities, including compliance with fair trade, safety, health, and environmental management. In May 2024, we enacted a supply chain code of conduct and incorporated this to our purchasing regulations. The supply chain code of conduct at ASIA Cement establishes principles for sustainability that partners must adhere to in the areas of human rights, environment, ethics, and safety.

Supply Chain ESG Assessment

Partner selection and evaluation involve assessing safety and health levels through self-assessment. Contracts and registrations are not allowed for partners who do not meet safety standards. Furthermore, regular assessments, including ESG factors such as human rights, safety, and environment, are conducted to evaluate sustainability risks among partners. In 2023, evaluations were conducted for a total of 29 companies, resulting in the discovery of one high-risk partner, which was issued warnings and requested corrective actions. In 2024, we plan to establish a unified ESG performance evaluation system for the supply chain and develop detailed evaluation indicators to enhance sustainability assessments of partners

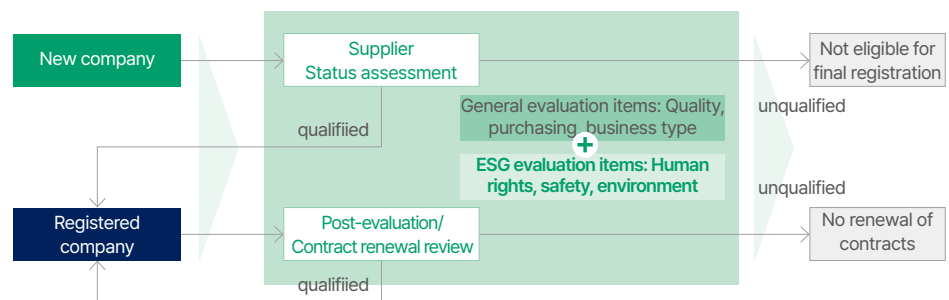
| Suppliers Overview

(cases)

Category	2021	2022	2023
Number of suppliers identified*	587	580	535
Key suppliers	17	21	26
Assessed suppliers	6	27	29
Assessed key suppliers	1	7	7
Suppliers with high risk	1	2	1
Suppliers with high risk that agreed on corrective action	1 (Warning)	2 (Warning)	1 (Warning)
Suppliers with contracts terminated as a result of the assessment	0	0	0

* Tier 1 suppliers that are registered as business partners and have transactions with ASIA Cement in the current year. The number of suppliers reported differs from the previous year's report due to changes in the calculation criteria.

| Partner Selection and Evaluation Process



Sustainable Supply Chain

Sustainability Management Support for Partners

ASIA Cement provides partners with educational programs aimed at enhancing compliance with relevant laws and regulations concerning integrity, safety, environment, and social responsibility within the supply chain to expand sustainability practices. We offer legal and labor services to protect the working conditions of supplier workers, with a particular focus on safety. Additionally, we operate various support systems, especially in the safety sector. Efforts include conducting maintenance on safety facilities to ensure a safe working environment for supplier operations. Furthermore, we conduct annual safety experience education sessions for partners using our safety experience education facility within the factory to raise awareness about safety.

Win-win Growth

ASIA Cement supports the professional development of our partners by encouraging safety awareness through rewards for accident-free performance, covering safety education expenses, and providing financial assistance for obtaining relevant certifications. We also cover health check-up costs for partner employees to ensure a healthy work environment. Furthermore, we contribute to quality job creation by directly hiring partner employees based on job characteristics. In terms of financial support, we provide low-interest loans to ready-mix concrete mixer truck operators to replace aging trucks and prevent accidents. We have also implemented a system that allows cash payments for transactions with small and medium-sized enterprises (SMEs) up to KRW 5 million, aiming to identify and support areas where practical assistance is needed. We regularly conduct supplier meetings to gather feedback on preventing freight vehicle accidents and improving systems, ensuring effective communication with our partners. By collaborating to address and resolve the issues raised, we have successfully reduced the frequency of accidents. Additionally, we address partners' concerns in real-time, ensuring prompt responses to their issues through social media.

| Status of Complaints Received from Partners

(2023)

Category	Received	Resolved	Resolution Rate
Roundtable discussions	14 cases	14 cases	100%
Cyber reports	0 cases	0 cases	N/A
Total	14 cases	14 cases	100%

| Financial and Non-financial Support for Partners in 2023

Partner participation in health and safety training

296 individuals

Rewards for accident-free partners

KRW 34 million

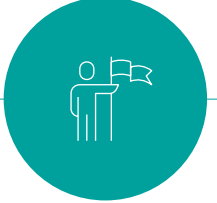


Loan for purchasing ready-mix concrete mixer trucks

8 cases
KRW 4.88 million

Community Engagement

ASIA Cement, as a company committed to growing alongside our society and fulfilling our social responsibilities, plans and implements long-term corporate social contribution projects. Our dedicated Social Contribution Department serves as a communication channel between the company and local residents, maintaining mutually beneficial relationships. To promote development alongside local communities, we sponsor various events and systematically implement social contribution projects through Social Contribution TF projects. Furthermore, to contribute to the local economy, we are expanding communication channels and touchpoints by signing agreements to purchase local currency and engaging in various cooperative projects.

Three Focus Areas and Action Programs

		
Social development by nurturing talent	Volunteer to share love	Mutual growth with local communities
<p>Set up a school foundation</p> <ul style="list-style-type: none"> - Select scholarship students and foster young leaders <p>Established Seobong Cultural Foundation</p> <ul style="list-style-type: none"> - Nurture athletic students and promote sports including marathon <p>Supporting local scholarship foundations</p> <ul style="list-style-type: none"> - Sponsor students from low-income families and discover talent 	<p>Saving lives</p> <ul style="list-style-type: none"> - Donate blood and sign MOUs for blood donation <p>Providing medical service</p> <ul style="list-style-type: none"> - Provide medical services for those in need <p>Improving housing conditions of low-income families</p> <ul style="list-style-type: none"> - Volunteer for the Repairing Houses of Love 	<p>Raising local development fund</p> <ul style="list-style-type: none"> - Sponsor international events, support local welfare facilities, and recycle resources <p>Cleaning up the environment</p> <ul style="list-style-type: none"> - Clean up roads and rivers <p>Boosting local economies</p> <ul style="list-style-type: none"> - Sign MOU to purchase local gift certificates

Volunteer Hours per Employee in 2023

2.5 hours

Dream Tree Leader Discovery

ASIA Cement conducts scholarship programs in partnership with educational institutions such as the Mungyeong Academy, Seobong Cultural Foundation, and the ASong Scholarship Association to discover and nurture creative and outstanding talents into the next generation of leaders.

Mungyeong Academy | Following the legacy of the founder, Seobong Lee Dong-nyeong, who was dedicated to regional development and nurturing talent, Mungyeong Academy established Mungyeong Girls' High School and Munchang High School in Mungyeong City. The academy aims to contribute to the advancement of local education and to cultivate outstanding talents for future leadership.

Seobong Cultural Foundation | Founded in 1985, the Seobong Cultural Foundation is a scholarship organization aimed at discovering outstanding talents to lead the future of South Korea. Since 1999, it has continuously provided scholarships to individuals with excellent academic achievements. Additionally, we have been sponsoring the Seobonggi Short Marathon, held annually in Mungyeong City, to contribute to the development of sports in South Korea, expand the marathon community, and discover marathon athletes.

Community Engagement

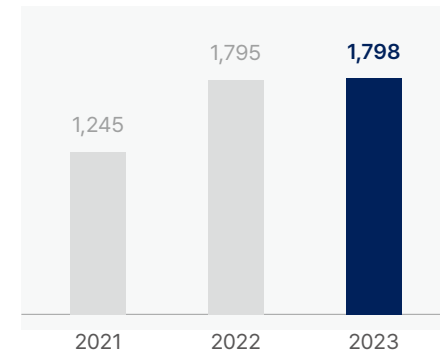
Love Volunteer Service

At ASIA Cement, including our headquarters and all nationwide workplaces, we actively engage in acts of love and sharing through a variety of social contribution initiatives. Our focus is on supporting vulnerable groups across society and fostering a happier community for everyone.

Life-sharing Activities | To overcome health crises such as blood shortages for emergency surgeries and critically ill patients, and to support life-saving blood donations, ASIA Cement signed a Memorandum of Understanding (MOU) with the Chungbuk Blood Center in 2016 to conduct regular blood donation four times a year. In recognition of these efforts, we were honored to receive the Blood Management Director's Commendation in commemoration of World Blood Donor Day in June 2021. Additionally, as part of our efforts for environmental improvement and health promotion for surrounding communities, we sponsor traditional Korean medicine for the elderly to contribute to their health and well-being.

Housing Environment Improvement Activities | ASIA Cement is committed to improving living conditions for elderly and economically disadvantaged individuals through its "Repairing Houses of Love" project. In partnership with the Korean Red Cross, the company selects and renovates 4 to 5 households annually, creating safe and clean living spaces and promoting messages of hope. Additionally, ASIA Cement actively supports Habitat for Humanity Korea's "Building Houses of Hope" project, in collaboration with its subsidiary HALLA Cement. This initiative focuses on constructing secure homes for vulnerable populations, providing them with better living conditions. Through these efforts, ASIA Cement aims to deliver hope and support to our neighbors.

Expenditures on Social Contribution (KRW million)



Operation of the Fund Management Committee

On February 17, 2022, as part of the 'Cement industry's voluntary fundraising agreement aims to expand contributions to local communities,' ASIA Cement established a Fund Management Committee. Through this committee, our objective is to manage social contribution funds transparently, directing them towards activities that benefit the local communities and neighboring areas surrounding our production facilities. By strategically planning and executing social contribution projects aimed at improving the quality of life for local residents, we aim to enhance communication with the community, stimulate economic revitalization, and facilitate mutual growth.



Local Co-prosperity Development

ASIA Cement continues its sponsorship activities, such as contributing to local development funds and supporting local events, to grow as a company dedicated to hopeful sharing by systematically implementing social contribution TF projects.

Support for Local Development Funds | We have supported the Jecheon City Talent Development Foundation by providing scholarships to children and teenagers in our local community, fulfilling our corporate social responsibility obligations. Additionally, we sponsored the Jecheon International Music and Film Festival by redirecting corporate profits to the local community to contribute to regional economic development and the advancement of cultural and artistic industries.

Furthermore, we have allocated KRW 300 million to expand automatic car wash facilities to improve the welfare and living environment of residents near our production plants. This initiative has reduced individual car washing costs and time losses for residents. Car washing fees were collected from non-resident vehicles to operate the facility as a revenue-generating business, benefiting the welfare of residents and contributing to increased revenue, facility expansion, and job creation for local residents.

Product Responsibility

Quality Management System

ASIA Cement is committed to providing customers with the highest quality products they can trust. To achieve this, we implemented ISO 9001 (Quality Management System) in 1998 and ISO 14001 (Environmental Management System) in 2007 across all our operations. Our goal is to not only ensure superior quality but also supply eco-friendly products to our customers continuously. Our quality policy focuses on the continuous improvement of the quality management system, enhancement of customer service, and production efficiency. We strive for relentless quality innovation activities to meet these objectives. To achieve customer satisfaction, we reflect on and address quality and product complaints annually in the second half of the year, aiming for 'Zero Customer Complaints.'

Activation of Quality Improvement Activities in Circles

ASIA Cement pioneered the introduction of QC (Quality Control) activities in the industry in 1969 and has maintained continuous QC circle activities for over 50 years. We promote suggestion activities and individual improvement efforts within each QC circle, driven by a culture of continuous improvement. Our management's strong interest in QC circle activities underpins ongoing support for training and reward systems for suggestions and improvements, fostering active participation in QC circles. We consistently conduct QC circle activities addressing various themes, such as cost reduction, quality and productivity improvement, and customer satisfaction, to resolve issues related to production facilities and cement product quality. To ensure the continuous discovery of excellent improvement themes, we hold an annual in-house quality control circle competition. This event facilitates the sharing and evaluation of improvement activities and ideas. Thanks to these proactive and vigorous QC circle activities, ASIA Cement has won the Gold Prize at the National Quality Circle Contest for seven consecutive years from 2017 to 2023.

Product Safety

ASIA Cement ensures the safety of its products by using strict standards and safe, non-toxic raw materials in cement manufacturing. From the manufacturing process to the final product, we conduct thorough inspections and quality checks. To provide customers with accurate information and build trust, we regularly commission certified agencies to conduct quality inspections and publish the results on our website. We also conduct quarterly radiation tests on our cement products through the Korea Atomic Energy Research Institute and submit analyses of alternative fuels and raw materials to the Ministry of Environment every half-term. ASIA Cement is dedicated to consistently publishing objective data on the quality and safety of our cement products. We are committed to manufacturing cement that prioritizes both human health and environmental sustainability.

Radiation Test Report for Cement Products



Product Responsibility

Low-Carbon certified products

5 Types of ready-mix concrete (certified in 2023)

5 Types of dry mortar (certified in 2022)

Research and Development for Sustainability

The cement manufacturing process emits carbon dioxide, a greenhouse gas, due to the decarbonization of limestone, the main raw material. ASIA Cement is working to reduce greenhouse gas emissions and achieve carbon neutrality by developing technologies to discover and utilize various raw materials that can replace limestone. Our research is linked to national projects focused on developing admixtures and blended cement using unused inorganic resources. Through the development of carbon-reducing eco-friendly cement and low-carbon product production, we are contributing to national goals of achieving carbon neutrality. In 2023, we obtained low-carbon certification for five types of ready-mix concrete products, and in 2022 for five types of dry mortar products. We continue to acquire environmental certifications for our ready-mix concrete and dry mortar products.

Research and Development Case 1.

Carbon Neutrality Core Technology Development Project

To strengthen national competitiveness through leading carbon neutrality technology in the cement industry, the Ministry of Trade, Industry, and Energy launched the 'Carbon Neutrality Core Technology Development Project' in 2023. ASIA Cement's R&D team, as the lead organization for the 'Development of technologies for mixed materials and mixed cement using inorganic unused resources,' aims to develop 'Multi-component admixture low-carbon mixed cement blended using SCMs' by 2030, in collaboration with 11 institutions.

The purpose of this project is to develop admixtures that can be used in large quantities to reduce the clinker content in cement without compromising quality. By expanding the application of these admixtures in blended cement, we aim to contribute to the achievement of carbon neutrality in the cement industry. The detailed objectives include proposing a revision to the KS standard to increase the substitution rate of admixtures in Portland cement from 10% to 15% and suggesting a new KS standard for multi-component blended cement (with a maximum admixture content of 35%). Through the execution of this project, we aim to gain expertise in admixture application and align with our ESG management principles.

Research and Development Case 2.

Development and Application of Dry Mortar Products for Reducing Inter-floor Noise

In response to severe social issues arising from inter-floor noise, which has led to violent crimes, the Ministry of Land, Infrastructure, and Transport announced a measure in December 2023, stipulating that completion approval would be denied for multi-family housing that fails to meet inter-floor noise standards. To address this social issue, we have worked with domestic construction companies and developed and applied dry mortar products designed to reduce inter-floor noise in some construction sites. Furthermore, we have registered patents for 'mortar mixing technology for inter-floor noise reduction according to strength grades' using eco-friendly cement substitutes, and has secured various dry mortar mixing technologies for noise reduction in apartment buildings. Additionally, we have launched upper-buffering dry mortar products for noise reduction, which have been well-received in the market. Moving forward, we will continue our research on improving the performance of dry mortar products for inter-floor noise reduction to meet the increasing demands of government regulations, quality standards, and the quality of life for residents.

Customer Satisfaction Management

ASIA Cement actively listens to customer feedback and strengthens its quality support system to preemptively address quality issues in a rapidly changing customer environment. We conduct annual customer satisfaction surveys, sending questionnaires to our clients to evaluate our quality and service. Based on the survey results, we analyze the causes of lower satisfaction areas and implement solutions. Additionally, we continuously seek customer feedback to resolve issues related to their requirements.

Customer Satisfaction Score in 2023 (Converted to 100 points, average satisfaction level for each item)

92 points

Information Security

Information Security Management System

ASIA Cement conducts security activities in each responsible organization under the guidance and supervision of the Chief Information Security Officer (CISO). The IT team and General Services team work together to disseminate security policies throughout the organization and perform support activities such as checking compliance with information security regulations. To protect all information assets and critical information held by ASIA Cement and to create an environment in which they can be safely utilized, detailed information security regulations are operationalized for employees, external customers, and special contractors.

Efforts to Strengthen Information Security

ASIA Cement has established an integrated security system to handle and manage personal information more securely and efficiently across the entire system. We continuously monitor amendments to laws related to personal information and ensure that our personal information processing system meets legal and technical requirements. We consistently enhance internal regulations such as information management and protection rules. Through our internal accounting management system, we conduct checks on both internal and external personnel and perform IT audits. We also develop and implement action plans to address issues discovered during internal audits. Furthermore, to prevent cyber security incidents such as hacking, we operate firewalls and VPNs. Regular log reviews and monitoring enable us to continuously improve and address any issues identified.

Investment in and Education on Information Security

ASIA Cement invests in security systems and infrastructure to enhance information security. We allocate budgets considering both fixed costs for maintaining information security systems and variable costs for additional system replacements, server configurations, and other dynamic investments. In 2023, we replaced our network firewall with a next-generation firewall and implemented redundancy configurations to enhance security and stability. Moving forward, we will continue to strengthen our information security levels to securely protect our company's information. We plan to expand our investments in information security continuously. We conduct education on personal information and information security for employees at least once a year. In 2023, we conducted online training to enhance employees' awareness of recent changes in the Personal Information Protection Act and examples of information breaches, aiming to strengthen their security awareness.

Information Security Activity: Example 1.

Information security response mock training activity (supported by KISA)

ASIA Cement participates in cyber crisis response drills conducted by Korea Internet & Security Agency (KISA) once a year to strengthen its information security. Through APT, simulated penetration, and detection response training, we conduct activities to pre-check and improve security vulnerabilities. We disclose the status of our information security operations on the KISA Information Security Disclosure Comprehensive Portal, enhancing trust in our information security operations.

Information Security Activity: Example 2.

The 'Digital CleanUp Event' for Information Security

ASIA Cement conducts an annual 'Digital CleanUp Event' to enhance security awareness among employees and increase resource utilization. The event involves organizing unnecessary personal information, company confidential data, and large email files stored on personal computers to improve security practices and maximize resource efficiency.

Information Security Management System



Board of Directors

Composition of the Board of Directors

The Board of Directors of ASIA Cement is composed of 8 members, including 6 executive directors and 2 non-executive directors. Directors are appointed at the shareholders' meeting, and the candidates for these positions are selected by the board and finalized as proposals for the shareholders' meeting. If there are shareholder proposals, the board submits them to the shareholders' meeting within the legal framework.

	Name	Term	Initial Appointment	Gender	Career Highlights
Executive Directors	Lee, Hoon Beom	2023.03~2025.03	2013.10	Male	- Graduated from the Graduate School of New York University - Chairman of Asia Holdings - Chairman of Asia Paper MFG - Chairman of HALLA Cement - Chairman of ASIA Cement
	Lee, In Beom	2024.03~2026.03	2022.03	Male	- Master of Business Administration (MBA) from MIT Sloan School of Management - Vice Chairman of Asia Holdings - Vice Chairman of Asia Paper MFG - Vice Chairman of ASIA Cement
	Lim, Kyeong Tai (Chairman of the board and CEO))	2024.03~2026.03	2020.03	Male	- Graduated from Chungbuk National University - CEO and President of HALLA Cement - CEO and President of ASIA Cement
	Kim, Woung Chong (CEO)	2023.03~2025.03	2021.03	Male	- Graduated from Sungkyunkwan University - CEO and Vice President of ASIA Cement
	Yang, Seung Jo	2023.03~2025.03	2013.10	Male	- Graduated from Cheongju University - Head of Management Support Division of ASIA Cement
Non-executive Directors	Choi, Byung Joon	2023.03~2025.03	2021.03	Male	- Graduated from Inha University - Head of Production Division of ASIA Cement
	Park, Jin Won	2023.03~2025.03	2021.03	Male	- Former President of the National Institute of Environmental Research - Former President of Korea Waste Energy Technology Council - Professor at the Department of Chemical Engineering at Yonsei University
	Shin, Young Shik	2023.03~2025.03	2021.03	Male	- Former Chief Prosecutor of Criminal Division 2 at the Incheon District Prosecutors' Office - Former Member of the KOSDAQ Market Corporate Review Committee at the Korea Exchange - Former Member of the Financial Dispute Mediation Committee at the Financial Supervisory Service - Managing Partner of Jungburo Law Firm

The Expertise, Independence, and Conflict of Interest Prevention

The Board of Directors consists of executive directors with business-related expertise and experience, along with non-executive directors who are specialists in law, industry, and ESG. This composition ensures swift and strategic decision-making. Non-executive directors are appointed based on the requirements stipulated in the Commercial Act, as well as criteria such as expertise, fairness in duties, ethical responsibility, and diligence. In compliance with Article 297-2 of the Commercial Act, we prevent conflicts of interest. Specifically, our non-executive directors are appointed as individuals who do not have significant business relationships with the company and are capable of making independent decisions, free from influence by management and controlling shareholders.

Board of Directors

Board Skill Matrix

	Lee, Hoon Beom	Lee, In Beom	Lim, K yeong Tai	Kim, Woung Chong	Yang, Seung Jo	Choi, Byung Joon	Park, Jin Won	Shin, Young Shik
Economy/Finance/Management	○	○	○		○			
Risk Management	○	○	○	○				
Human Resources Management			○		○			
Law/Regulatory/Public Policy			○	○				○
Compliance			○	○	○			○
Governance	○	○	○	○				
Accounting					○			
Sales/Marketing				○				
IT/Digital								
ESG	○	○	○	○			○	○
Industry Expertise	○	○	○	○	○	○	○	
International Experience	○	○					○	○
Organization Operating Experience	○	○	○	○				

Performance Evaluation and Compensation

Director compensation is determined by the board of directors within the approved limit of KRW 5 billion by the shareholders' meeting, considering factors such as market competitiveness, contributions to the company, compliance with management regulations, achievement of ethical management goals, and their specific positions and duties.

Compensation for 2023

(KRW million)

Category	Number of individuals	Total compensation	Average compensation per person
Executive Directors	6	2,209	368
Non-executive Directors	2	72	36

Training for the Board

Our company plans and conducts various educational programs to enhance the expertise of independent directors and foster knowledge related to risk management. In 2023, we conducted training sessions on market conditions, overall business performance, and business plan reporting.

Training for Non-executive Directors in 2023

Date	Organizer	Attendance	Description
2023.04.19	ASIA Cement	All (2 Attendees)	Management performance reporting and Business plan reporting

Board of Directors

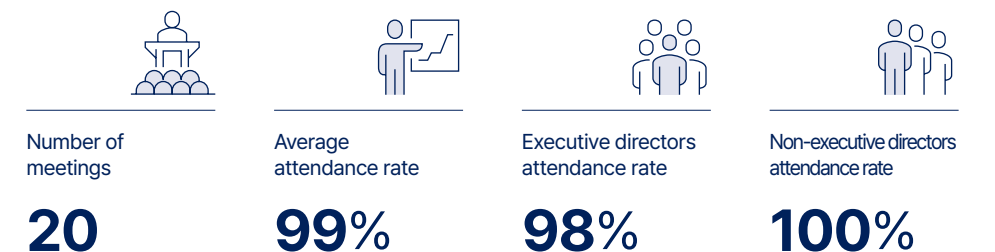
Board Operations

The board of directors serves as the decision-making body for company management, deliberating and managing matters as stipulated by laws or articles of incorporation, including the establishment and execution of basic management policies and other important issues. According to the articles of incorporation, the chairman of the board has the authority to convene the board of directors.

Board Operations in 2023

Session	Date	Attendance	Agenda	Result
1st	2023.02.01	100%	Decision on the acquisition of treasury stock	Approved
2nd	2023.02.06	100%	Approval of the financial statements for the 10th (2022) following the conclusion of internal accounting	Approved
3rd	2023.02.20	100%	Report on the operation status of the internal accounting management system	Reporting
4th	2023.02.22	100%	Renegotiation of import credit card and credit line with Shinhan Bank	Approved
5th	2023.02.28	100%	Proposal for the convocation of the 10th regular shareholders' meeting	Approved
			Decision on cash dividend based on the 10th surplus appropriation statement (draft)	Approved
6th	2023.03.13	100%	Renegotiation of comprehensive credit limit and secured loan of credit sales (Woori Bank)	Approved
			Proposal for new operating funds borrowing (Woori Bank)	Approved
7th	2023.03.15	100%	Approval of the finalization of the 10th financial statements	Approved
8th	2023.03.23	100%	Determination of the results of shareholders' meeting resolutions	Approved
			Appointment of CEO	Approved
9th	2023.03.30	100%	Guarantee insurance joint guarantee for Asia Industry Development recovery deposit	Approved
10th	2023.04.05	100%	Extension and renewal of operating funds (KDB Bank)	Approved
11th	2023.04.24	75%	Stock trading contract signing (Gyeongju World)	Approved
12th	2023.05.03	100%	Modification and new borrowing of comprehensive credit limits (Woori Bank)	Approved
13th	2023.07.17	100%	Decision on the acquisition of treasury stock	Approved
14th	2023.10.17	100%	Determination of dividend record date for interim dividend	Approved
15th	2023.10.23	100%	Increase in joint guarantee guarantee insurance for recovery deposits of affiliate companies	Approved
16th	2023.11.06	100%	Decision on interim dividend (cash dividend)	Approved
17th	2023.11.06	100%	Decision on the acquisition of treasury stock	Approved
18th	2023.11.21	100%	Report to the Board of Directors on the ESG materiality assessment results and environmental management performance	Reporting
19th	2023.11.23	100%	Change of comprehensive credit limits and new borrowing (Woori Bank)	Approved
20th	2023.12.21	100%	Setting of pledge right for railway post-payment fare deferred payment contract	Approved

Board of Directors Meetings and Attendance Rate in 2023



Board of Directors

Board committees

ASIA Cement operates the Ethics Management Committee and Internal Transactions Committee within the Board of Directors to promote and disseminate a sound corporate culture through the establishment of objective and transparent decision-making processes, and to fulfill its social responsibilities through the continuous dissemination and expansion of an ethical-based corporate culture for clean and transparent management. Each committee is composed of executive directors and non-executive directors with expertise according to their roles, operating independently, with an independent director serving as the chairman of the committee.

Internal Transactions Committee

The Internal Transactions Committee manages the entire decision-making process related to internal transactions and aims to create a corporate culture that fulfills social responsibilities by establishing objective and transparent decision-making processes regarding internal transactions.

Ethics Management Committee

The Ethics Management Committee aims to promote the spread of proper corporate ethics and to create a clean and transparent corporate culture. Accordingly, it has the authority to establish ethical agendas for corporate management overall, to manage the drafting of ethical regulations, and to decide whether to refer violations to the Personnel Committee.

| 2023 Board committees' Activities

Committee	Members	Date of Meeting	Agenda	Attendance
Internal Transactions Committee	Shin, Young Shik (Chairperson)	2023.01.26	Renewal of lease contract with related company	100%
	Park, Jin Won Lim, Kyeong Tai	2023.04.19	Acquisition of shares in related company	100%
Ethics Management Committee	Lim, Kyeong Tai (Chairperson) Shin, Young Shik Yang, Seung Jo	2023.02.14	Anti-corruption crisis response report	100%

Risk Management

Integrated Risk Management

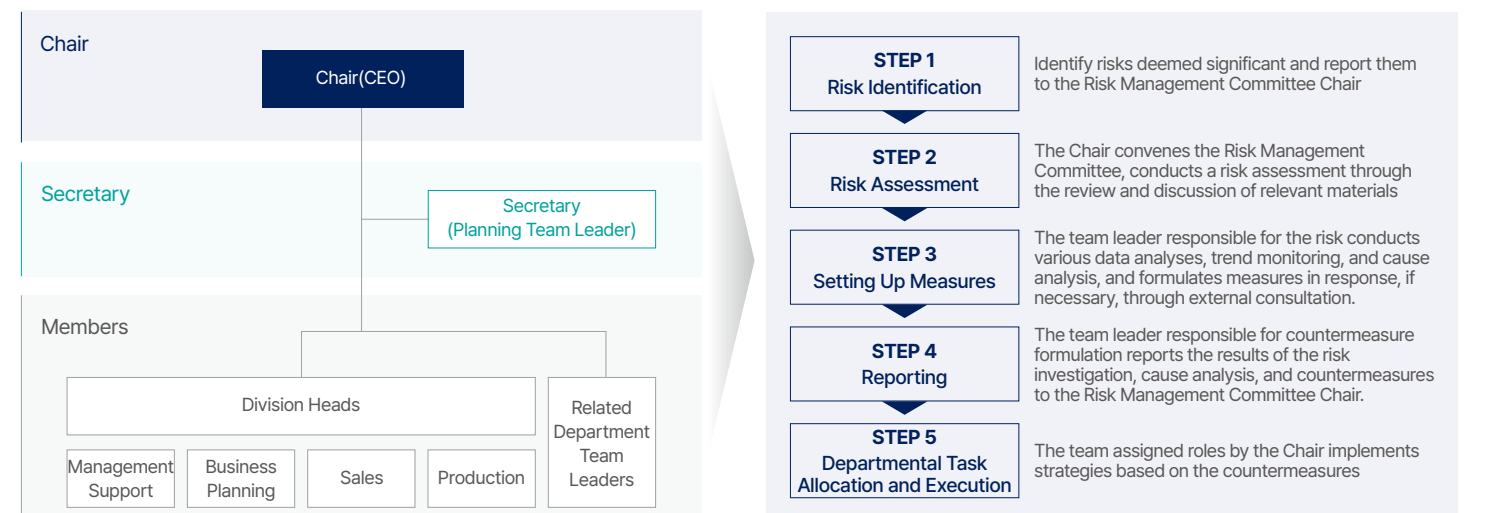
ASIA Cement proactively identifies risks that could impact corporate management and has established a risk management system to monitor and manage these risk factors, enabling us to respond effectively to rapidly changing domestic and international trends. The Risk Management Committee at ASIA Cement, dedicated to overseeing risk management, categorizes potential business risks into six areas: market risk, financial risk, fuel risk, equipment and technology risk, personnel risk, and environmental risk. This comprehensive approach ensures that social and environmental aspects are holistically considered and managed within our risk management strategy.

Category	Risk Factors
1. Fuel risks	International supply trends and price fluctuations of various types of bituminous coal
2. Financial risks	Trends in domestic and international financial markets, interest rate fluctuations, currency exchange trends, and sudden increases in trade accounts and notes receivable
3. Personnel risks	When there is a shortage of appropriate personnel considering retirement age
4. Market Risks	When there are abrupt changes in demand trends, alternative trends, prices, and market share
5. Facility and Technology risks	When considering equipment replacement and the application of new technologies
6. Environmental risks	Changes in environmental regulations, climate change agreements, and occurrences of environmental complaints and accidents

Risk Management Committee

ASIA Cement has established a 'Risk Management Committee' to respond to changes in the business environment, setting up and operating management standards and risk management processes to identify and prevent potential business risks. The Risk Management Committee discusses management risk issues, establishes response measures, and adjusts departmental responsibilities to execute problem-solving strategies. In 2023, the Risk Management Committee held meetings in the first half (February 20, 2023) and the second half (August 21, 2023), attended by the committee chairman (CEO), secretary, and division heads to identify and manage current risks facing ASIA Cement.

Composition and Operating Procedures of the Risk Management Committee



Ethical Management

Ethical Management Policy and System

ASIA Cement has established ethical norms and codes of ethics based on the principles of respecting individual dignity and diversity, as well as fair competition and transparency in accounting, to promote sound corporate ethics. These norms and codes have been proclaimed to all employees and stakeholders through the company's website. Moreover, we have established and currently operate the Ethics Management Committee and the Internal Transactions Committee under the Board of Directors. These committees are dedicated to fostering an objective and transparent decision-making process concerning internal transactions. Additionally, we are committed to advancing corporate ethics and nurturing a clear and transparent corporate culture by setting ethical agendas within our overall management framework and overseeing ethical regulations. To enhance corporate transparency, we operate internal control and audit systems and implement improvement measures for issues identified through regular audits to promote organizational improvement and foster ethical awareness among employees.

Efforts to Spread Ethical Culture

ASIA Cement conducts legal and ethical education for all employees from the time of their employment and raises awareness of ethical consciousness among employees through mandatory online education and various hierarchical education programs. In particular, through mandatory online courses on ethics and human rights violations, we aim to foster practical awareness of professional ethics and encourage active participation in preventing discrimination. Additionally, we annually have all employees draft an Ethics Management Pledge to reinforce ethical practices and elevate the ethical consciousness of organizational members.

Ethics Consultation and Reporting

ASIA Cement operates an online whistleblowing system on its website to receive reports on misconduct and other unethical behaviors. Employees and external stakeholders can report issues such as bribery, solicitation, workplace harassment, and sexual harassment through the company's whistleblowing system. In the event of misconduct, the HR committee reviews and takes action to prevent recurrence. Reporting through the company website ensures anonymity, and the Ethics Committee regulations guarantee the protection of identities for those who report unethical conduct under their real names, ensuring no unfair treatment. Furthermore, immediate separation of the victim from the perpetrator is implemented, followed by investigation and disciplinary procedures. In 2023, we expanded the accessibility of our internal whistleblowing system by introducing 'Yeolrinsori' on the groupware for employees to report and seek counsel on misconduct and ethical issues. Leveraging groupware enhances accessibility, allowing immediate reporting of situations. Through this, we receive reports on internal procedural violations, unethical behavior, harassment, and other personal grievances and suggestions. We strictly adhere to confidentiality principles and maintain a policy of non-disclosure to third parties regarding reported matters.

Ethical Management

Fostering a Fair Trade Culture

ASIA Cement endeavors to establish transparent trade relationships by defining principles of fair competition and trade within its code of ethics. By institutionalizing principles of fair competition and trade on its website, we provide guidelines for ethical decision-making in situations where employees may encounter ethical conflicts during their work processes. We also make efforts to create a culture of fair competition with competitors and fair trade with partners. To promote fair trade, we've implemented a fair trade bidding system for specific items. Furthermore, we mandate that our partners abide by compliance agreements focused on preventing corruption and upholding integrity with each contract. This ensures their understanding and adherence to laws concerning corruption prevention, antitrust regulations, and fair trade practices.

HALLA Cement

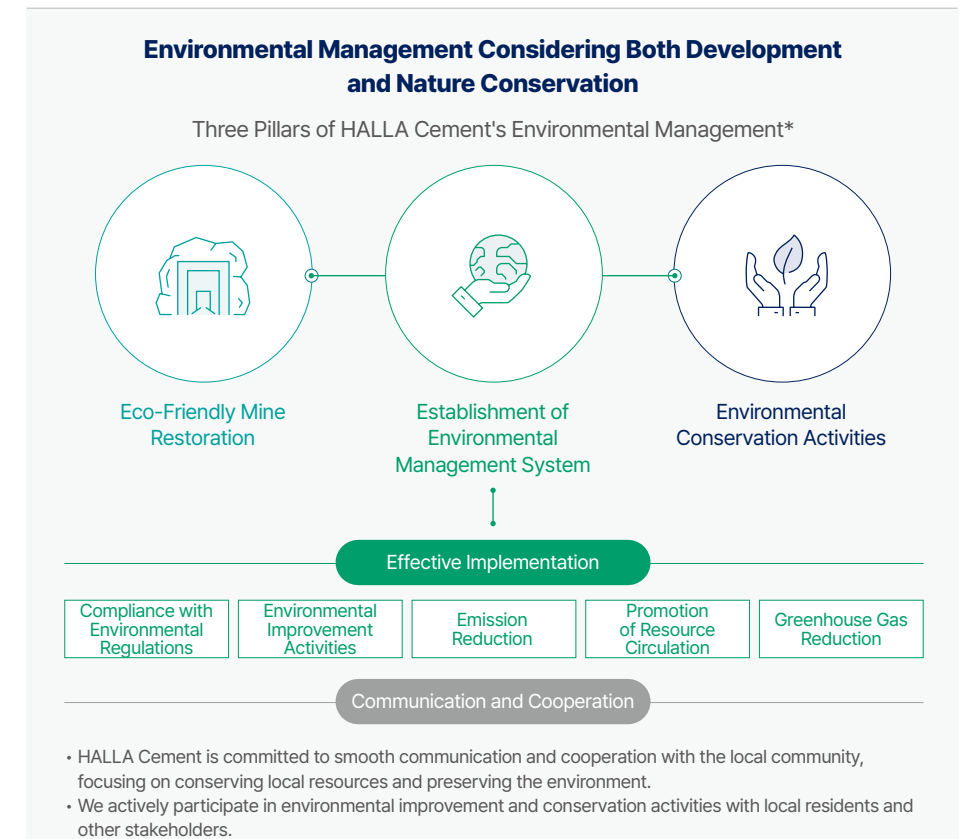


- Environmental
- 83 Environmental Management System
- 85 Carbon Neutrality
- 87 Environmental Stewardship in Operations
- 88 Cultivating a Green Culture
- 89 Biodiversity
- Social
- 90 Workplace Health and Safety
- 93 Employee Empowerment
- 96 Human Rights
- 97 Sustainable Supply Chain
- 98 Community Engagement
- 100 Product Responsibility
- 102 Information Security
- Governance
- 103 Board of Directors
- 106 Risk Management
- 107 Ethical Management

Environmental Management System

Environmental Policy

HALLA Cement is dedicated to environmental management that balances development with nature conservation, addressing societal demands for environmental preservation. Our environmental management strategy is based on three pillars: establishing an environmental management system, eco-friendly mine restoration, and environmental conservation activities. We have been continuously renewing our ISO 14001 Environmental Management System certification, which we acquired in 2002, to minimize the environmental impact of our business activities and products.



Environmental Management Governance

HALLA Cement discusses the environmental tasks and monitoring issues implemented by each department in various meetings. General environmental management matters are discussed in the weekly management meeting, the monthly team leaders' meeting, and the KPI meeting, all chaired by the Head of Production Division. Significant legal issues or environmental investment matters are reported at the monthly IPM meeting or to the Board of Directors.



Environmental Management System

Regulatory Compliance and Monitoring

HALLA Cement proactively eliminates the risks of environmental regulation violations by continuously monitoring and improving identified issues through environmental assessments at its workplaces. We employ real-time monitoring systems within our workplace, including CCTV, odor monitoring systems, and air dispersion modeling, to anticipate and prevent potential pollutant emissions in advance. We also validate them post-occurrence.

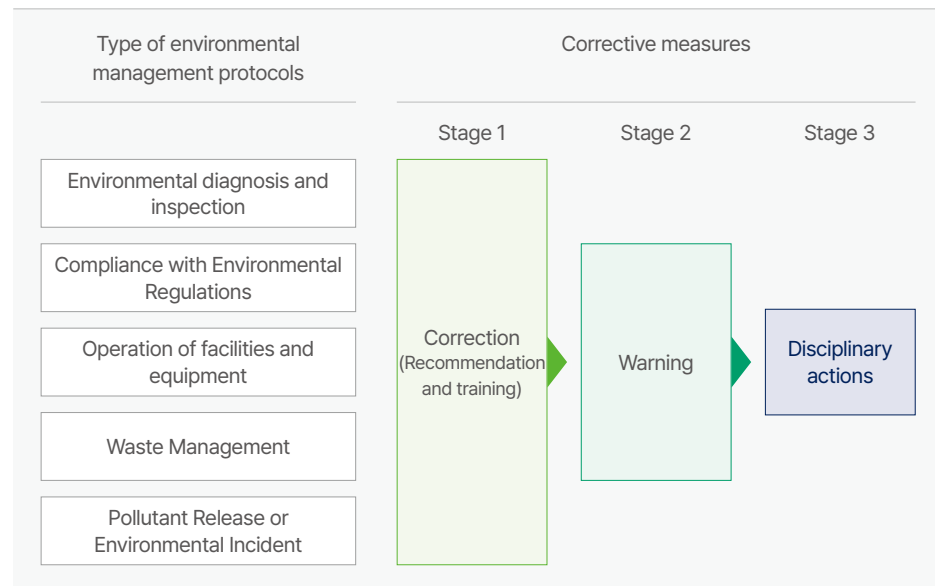
Internal Environmental Assessment

We conduct regular quarterly internal environmental assessments to identify environmental risks, which are then communicated to all employees. Improvement activities stemming from these assessments are also initiated. Furthermore, major environmental risks identified in the biennial internal environmental assessments are singled out. Meetings with area-specific team leaders and executives are held to prioritize improvements and environmental investments. These endeavors are integral parts of our internal initiatives to mitigate environmental risks, and we intend to consistently pursue them in the future.

Environmental Management Protocols and Corrective Measures

In 2023, HALLA Cement established penalties for non-compliance with environmental management protocols to raise awareness among employees and instill a sense of responsibility. By clearly systematizing the types of violations and corrective measures for each stage, we have increased the effectiveness and reinforced employees' awareness of compliance with environmental protocols.

| Types of Environmental Management and Measures for Violations by Stage



Carbon Neutrality

Mid- to Long-term Carbon Neutrality Scenario and Targets

HALLA Cement is committed to its 'ECO TOGETHER 2025' vision, which seeks to balance environmental and social contributions with transparent management, going beyond mere profit generation. Alongside efforts to improve and maximize the use of alternative fuels and raw materials, we are establishing comprehensive medium- to long-term carbon neutrality scenarios and goals for our entire operation. We are also devising optimal strategies for reducing greenhouse gas emissions from various sources and developing proactive implementation plans. To support these initiatives, we have planned a significant investment of approximately KRW 100 billion from 2023 to 2027.

| Greenhouse Gas Reduction Project Progress

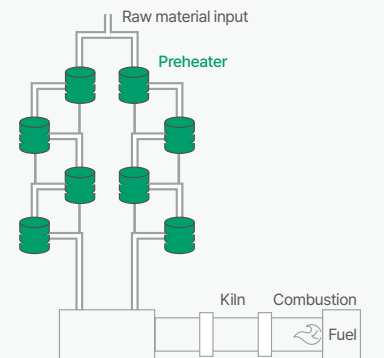
Project	Implementation Plan	~2025	~2030	~2040
Increased utilization of alternative fuels in preheater (P/H)	2023: K3 P/H KHD retrofit 2024: K2 P/H KHD retrofit	○		
Improvement of heat source per unit through cooler modification	Pursuit of cooler modification by line Reduction of 15kcal/kg/Line (Thermal efficiency improvement from 68% to 75%)			○
Installation of new waste heat power generation	Installation of 20MW (Kiln No.2 and No.3)		○	

Greenhouse Gas Emissions Reduction

HALLA Cement is establishing proactive implementation plans by deriving optimal reduction strategies for greenhouse gas emissions from various emission sources in the production process. Particularly, we are actively pursuing greenhouse gas reduction by reducing fossil fuel input and increasing the use of recycled resources in the manufacturing process. To achieve this, we are undertaking large-scale equipment investments with the goal of completing the retrofitting of the preheaters for Kiln 3 and Kiln 2 by 2025.

Increasing Alternative Fuel Input through Preheater Retrofit

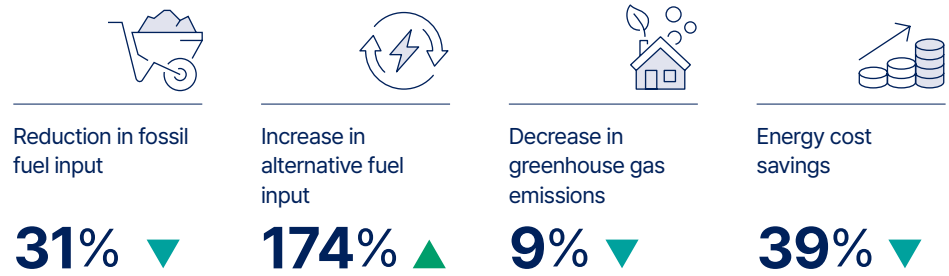
A preheater utilizes exhaust gases from a kiln to remove carbon dioxide from raw materials, making them easier to calcine, and reducing energy consumption, serving as a preheating device. Clinker, the precursor to cement, is produced by calcining raw materials inside a rotating kiln, where raw materials are placed in an iron cylinder and heated directly to approximately 1450°C. By retrofitting the preheater equipment of the kiln, we aim to address issues such as the imbalance of fuel and air mixture when increasing the amount of alternative fuels input and develop the capability to use larger-sized fuels without the need for preprocessing. Additionally, by dismantling the existing cyclone and installing a new cyclone, we can improve the heat exchange efficiency of the inputted fuel.



Carbon Neutrality

HALLA Cement completed the retrofitting of the K3 kiln preheater (P/H KHD) in 2023, and plans to proceed with the retrofitting of the K2 kiln preheater (P/H KHD) in 2024. With the preheater retrofit, it is expected that fossil fuel input will decrease, leading to a visible reduction in greenhouse gas emissions.

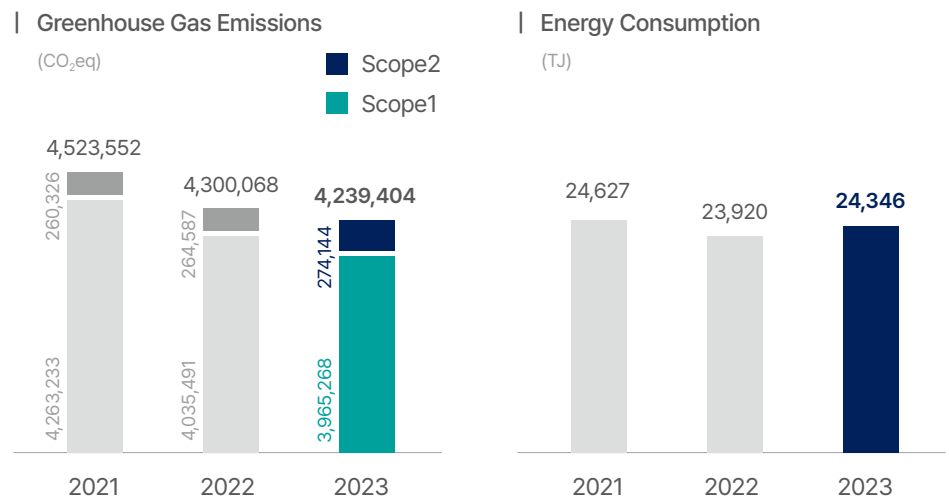
| Expected Effects of Preheater Retrofit



* (Using the aggregated standards of K2 and K3, the projected annual input, usage, emissions, and costs before and after improvements are compared.)

Reducing Energy Consumption

Regarding energy usage reduction, HALLA Cement participated in the 'Voluntary Energy Efficiency Target Program for 2020' organized by the Korea Energy Agency. We made efforts to reduce energy consumption by replacing conventional incandescent bulbs with LED lights and, in 2021, by utilizing support from the Ministry of Environment, converting fans on Line 4 of the kiln from traditional fluid coupling to inverters. In 2024, we are exploring the installation of waste heat power generation facilities to harness the waste heat produced in our factory. Additionally, we are actively pursuing eco-friendly energy practices, such as installing solar panels on our premises to generate electricity.



Environmental Stewardship in Operations

HALLA Cement aims to continue its environmental management by focusing on strict management of pollutant emissions and efficient environmental management, in line with the 'Integrated Environmental Management System' implemented in the cement industry since 2023 and related environmental regulations. We will quantitatively assess risks identified during internal environmental assessments, develop improvement tasks in collaboration with factory environmental improvement meetings, and implement them accordingly.

Air Pollutants

HALLA Cement plans to conduct self-monitoring of the kiln stack for air pollutants and regularly monitor compliance with legal standards. Currently, we implement pollution concentration management through TMS (Tele Monitoring System) data management every five minutes, integrated with an internal notification system. This initiative aims not just to concentrate on managing emission levels of major pollutants but to smoothly prepare for the application of the 'Integrated Environmental Management System.'

For key regulated substances (such as hydrogen cyanide THC and total hydrocarbons THC), we continuously monitor the raw materials and fuels containing the causative agents from the import stage to prevent their emission as air pollutants. Additionally, various activities are undertaken to manage fine dust emissions. As part of these efforts, we conduct biannual inspections of our bag filters, a key preventative measure, to conduct intensive inspection and management, managing the sources of fine dust emissions. Additionally, we have been continuously implementing activities to reduce the operating hours of shredding facilities as part of voluntary fine dust reduction efforts, as agreed upon with the Ministry of Environment on January 25, 2019.

Chemical Substance Management

Due to the increase in domestic chemical accidents, the government has strengthened regulations (Chemical Substances Control Act, Act on Registration, Evaluation, etc. of Chemicals). Consequently, HALLA Cement obtained a usage permit for hazardous chemicals in 2018 for use in its waste heat power generation facilities. Subsequently, we conducted various legally required procedures, including employee training, facility improvements, and emergency response training for leakage incidents. In 2019, to prevent the inherent risks of chemical accidents, we invested in facilities with the latest technology in the treatment process, eliminating the use of hazardous chemicals at the source. Operations involving hazardous chemicals have been discontinued and returned.

Waste Management and Recycling

HALLA Cement is committed to resource circulation and management by practicing continuous segregation and disposal of waste generated from the factory, starting from the generation stage. We operate our own sorting facility to manage waste types, distinguishing between combustible and non-combustible waste. Combustible waste is recycled internally to minimize waste disposal. In 2023, we established operational rules for designated waste storage facilities to strengthen the waste management procedures at the workplace. We rigorously manage the storage facility by specifying waste intake times. We conduct inspections of the storage facility at least once a week and share inspection findings to minimize environmental risks.

At HALLA Cement, we engage in continuous and proactive communication with the local community to address stakeholder concerns, and disclose the status of recycled waste usage on our website twice a year.

Recycling Rate in 2023

74%

Environmental Stewardship in Operations

Cultivating a Green Culture

received environmental training in 2023

40 employees

Water Consumption and Wastewater Discharge

HALLA Cement's Okgye Plant utilizes a diverse range of water sources, including river water, groundwater, and municipal water from 20 different intake points. To ensure effective water usage management, we aggregate and analyze water usage monthly to detect any leaks and minimize unnecessary water consumption.

We completely recycle the industrial water used in the manufacturing process at the Okgye plant, ensuring zero discharge of process wastewater. However, during the groundwater intake process at the waste heat power generation facility, some wastewater is generated, which we actively manage. Additionally, wastewater generated from three small-scale car wash facilities undergoes physicochemical treatment processes to minimize discharge concentrations before being released.

Environmental Training

HALLA Cement's Okgye plant conducts annual environmental education for employees by inviting external professional education institutions, aiming to continuously raise environmental awareness among employees. Additionally, we incorporate environmental law compliance and factory environmental management into compulsory training sessions for newly hired employees and team leaders, implementing structured hierarchical training programs.

Environmental Training for Partners

We integrate environmental considerations into the biannual safety assessments of our partners to evaluate their environmental management standards. Depending on the assessment outcomes, we offer incentives to exemplary companies and provide re-evaluation opportunities for those that fall short. Additionally, we reassess the continuation of contracts for consistently underperforming companies.

Environmental Activities in Local Communities

HALLA Cement fosters participation from all employees at the Okgye plant and partners in the 'Clean and Beautiful Street Campaign' held twice a year. This initiative aims to engage with the local community by jointly addressing environmental issues. Participants contribute by cleaning up litter around the factory periphery and managing fugitive dust in areas susceptible to air pollution within the factory premises.

Biodiversity

Mine restoration area (accumulated)

1,127 ha

Tree planting (accumulated)

153,000 trees

Environmental Impact Assessment of the Plant

In accordance with the Environmental Impact Assessment Act, HALLA Cement successfully completed environmental impact assessment consultations in 2003 and rigorously conducts post-assessment surveys to submit results to relevant agencies annually. Environmental impact assessments categorize topographies/geology, flora and fauna, water quality, and air quality as major management items. We establish committees to verify agreed-upon implementation statuses for topographies/geology restoration plans, flora and fauna ecological system restoration, dam construction, and water quality pollution prevention, while conducting continuous monitoring.

Plan and Pilot Program for Ecological Restoration of Mines

HALLA Cement prioritizes the conservation of natural environments and the eco-friendly restoration of mines as core values, consistently dedicating towards this goal. To objectively and fairly manage compliance with the environmental impact assessment agreements and restoration plans, we operate mine monitoring committee and forestry restoration council, revising and reviewing detailed and systematic natural-friendly restoration plans every five years.

Our ecological restoration plan focuses on mining plans, stability analysis, terrain restoration plans, vegetation restoration plans, and habitat restoration for endangered species, aiming to contribute to the preservation of natural environments within the business area. The mine area restored by HALLA Cement since 1993 totals 1,127,000m², with 170,000m² dedicated to pilot restoration construction. Additionally, we have been making continuous efforts to transform the Baekdudaegan Mountain Range into ecological forests since 2004, planting 153,000 trees on approximately 1,200,000m² over the years.

Efforts to Preserve Biodiversity

HALLA Cement is dedicated to improving biodiversity in the Baekdudaegan Mountain Range, where our plant is situated, by restoring habitats for endangered species. Our goal is to lay the groundwork for long-term ecological restoration by reviving breeding and habitat areas for various organisms. Currently, we are implementing habitat restoration projects focusing on insects, birds, plants, and mammals. We have ongoing successful programs, particularly those targeting the protection of endangered species like the Parnassius bremeri. Additionally, we conduct activities to enhance habitat environments for insects and plants, such as planting Siberian lily and Common astilboides. Furthermore, we install artificial nests and consistently monitor and conserve habitats for species such as mandarin ducks and flying squirrels.

Example of Ecological Conservation Activity 2.

ECO-Baekdudaegan 2+

The 'Eco-Baekdudaegan 2+ Campaign' is a prominent environmental initiative undertaken in partnership with private organizations. Its primary objective is to rejuvenate the ecological integrity of the Baekdudaegan Mountain Range, which serves as the cornerstone of the natural ecosystem on the Korean Peninsula. Through activities like tree planting and experiential environmental education, we actively contribute to this cause. Our dedication to these efforts led to our recognition as the 'Best Restoration Workplace for Endangered Species' for consecutive years from 2021 to 2023, earning us the prestigious Environment Minister's Award.



Example of Ecological Conservation Activity 2.

Wildlife Protection with Local Residents

HALLA Cement has been partnering with the Wonju Regional Environmental Office and citizen environmental groups since 2008 to conduct winter wildlife feeding events aimed at protecting habitats and preserving wildlife populations. This initiative has been ongoing for 16 years. The activities include installing expert-selected feeding stations, providing food, collecting traps, and conducting continuous monitoring. Additionally, we operate a wildlife transplantation and restoration center in collaboration with local environmental organizations and residents. Wild plants propagated at this center will be used as restoration materials for mine recovery areas in the future.

Workplace Health and Safety

Safety Management Policy

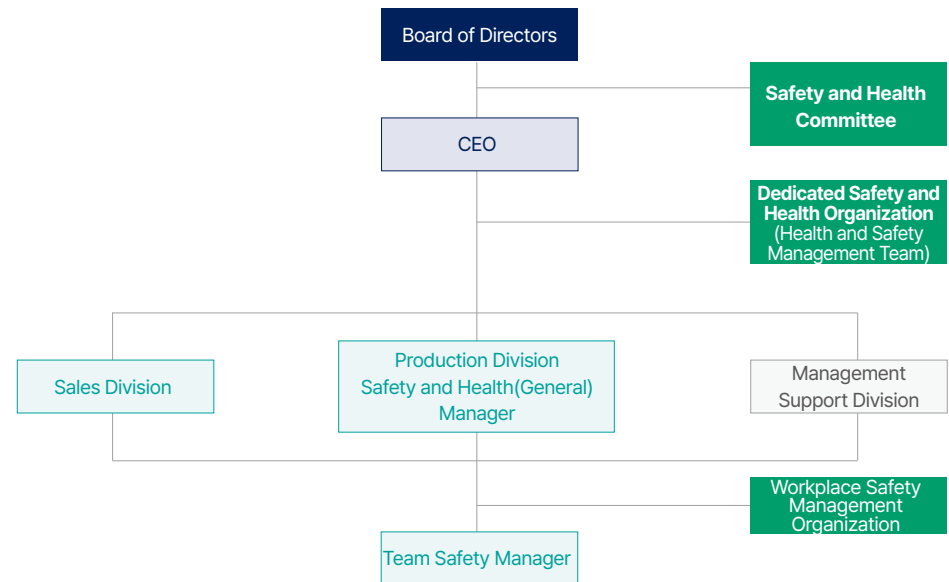
HALLA Cement's safety and health goal is to achieve a 'zero-accident workplace through human-centered management.' To this end, we have established a policy to meticulously execute our safety and health management plans, systematically improve high-risk safety facilities, and implement detailed action plans in accordance with relevant regulations. As a workplace certified with the International Standard ISO 45001 and the Korea Occupational Safety and Health Agency's KOSHA-MS, we have established and operate a systematic safety and health management system based on these standards.

Health and Safety Management Organizational Structure

To ensure effective implementation of safety management, HALLA Cement has established a dedicated safety management organization. The Safety and Health Committee meets quarterly to discuss and make decisions on the progress of safety and health management plans and company-wide safety and health issues. The Safety and Health Management Office ensures the safety and health responsibilities of management and oversees company-wide safety and health operations. The workplace safety management organization handles safety and health activities at the workplace level and assists the safety and health management officers.

Additionally, we operate various systems across all job levels to maintain field safety. These include Visual Felt Leadership activities by executives, regular safety audits by team leaders, Safety Observation Report by supervisors, and a safety patrol system. These measures aim to check the implementation of safety and health practices, identify problems, and develop and execute effective improvement plans. Moreover, technical employees form their own safety circles, Eoulrim to independently carry out various safety and health improvement activities, promoting a culture of voluntary safety and participation.

Dedicated Safety and Health Organization



Workplace Health and Safety

Embedding a Safety Culture

Safety Culture Consulting

HALLA Cement has conducted consulting to diagnose and enhance the current level of Safety Awareness. Our level of Safety Awareness is at Stage 3 (3.6), described as a 'system-based safety awareness that relies on understanding and calculation,' ranking us in the top 10% among approximately 130 domestic facilities. Based on these evaluations, we have derived improvement directions and established execution plans to achieve Stage 4, akin to a global standard of Safety Awareness.

To further advance our level of Safety Awareness to a World Class level, we plan to conduct self-assessments by mid-2025 and implement improvements, followed by an external audit in late 2025.

HALLA Cement's safety awareness is Level 3 out of 5.

- The company's safety-first policy and management's commitment to safety are trusted by the employees.
- An excellent safety management system is established along with on-site management led by individual teams.
- A lack of communication, insufficient competency, outdated facilities and dilemma situations are obstacles to improving safety awareness.

Level 1	A lack of safety awareness and reliable practices
Level 2	Safety awareness based on passive behavior and follow-up
Level 3	System-based safety awareness that relies on understanding and calculation
Level 4	Proactive action-oriented safety awareness
Level 5	Safety awareness based on mutual trust/cooperation and support for productive behavior

Level of Safety Awareness



Safety Culture 3GO Campaign Poster



Company-wide Health and Safety Campaign

Based on the safety culture consulting results, HALLA Cement has been conducting the 'World Class Safety Culture 3GO Campaign' at all sites since April 2023. Led by the Safety and Health Management Office and the Safety Management Team, this company-wide campaign promotes safety and health practices. The '3GO Campaign' includes three themes: Δ1 GO: Go for Adhering to the 3 Actions and 3 Prohibitions Δ2 GO: Go for Reducing Human Errors Δ3 GO: Go for Increasing Safety Behaviors Various execution programs will be promoted and implemented through extensive company-wide communication until the end of the year.

Employee Health and Safety

All employees of HALLA Cement and its internal partners undergo regular health check-ups, specialized screenings, and pre-employment medical examinations. Every Wednesday, the Okgye plant operates a 'Healthcare Office' where services such as blood pressure and blood sugar checks, cholesterol monitoring, stress counseling, medication dispensing, and basic medical treatments are provided. Healthcare programs including smoking cessation and musculoskeletal management are also conducted through this office. Additionally, external professional firms conduct biannual workplace environmental measurements, sharing results with employees and executing workplace improvement activities as necessary. To prevent the spread of COVID-19, thermal scanners have been installed at each entry point to manage access based on normal body temperatures. Various programs are implemented to enhance safety awareness, and the company promotes an internal safety culture through events such as Health and Safety Month.

Workplace Health and Safety

Safety Incident Response and Risk Assessment

At HALLA Cement, any workplace safety accidents are promptly reported to management, utilizing both wireless and in-person channels, in strict compliance with the 'Accident Investigation and Reporting' regulations. Our relevant teams, along with the safety management team, collaboratively investigate the root causes of accidents and disseminate the findings to employees to devise preventive measures. Moreover, we conduct comprehensive risk assessments and, based on the findings, implement control measures and relevant improvement initiatives tailored to the identified risk levels. Furthermore, we have established a robust emergency response system and regularly conduct drills to ensure preparedness and minimize potential damages in the event of emergencies.

Task Force Team for K2 Preheater Risk Management

HALLA Cement is committed to the successful and safe completion of our K2 kiln preheater retrofit project, aimed at reducing greenhouse gas emissions. We have established a 'Risk Management Project TFT' to oversee this significant investment, comprising all members of our safety management team. Weekly safety campaigns and TBM(*) are conducted, along with pre-risk assessment coaching. Additionally, we conduct daily patrols to promptly address unsafe behaviors and conditions through safety dialogues.

* TBM (Tool Box Meeting): A meeting held near the work site before starting work, where supervisors and workers gather to discuss and review the work details and safety procedures.

Support for Safety Management by Partners

All partners are required to adopt the same safety and health management system as HALLA Cement, which includes holding safety and health council meetings, conducting safety and health inspections by executives, and implementing improvement activities. Based on the annual safety and health evaluation results of partners, we reward outstanding partners and provide retraining and penalties for those with deficiencies.

Partner Risk Assessment | Starting in 2024, we are implementing a 1:1 coaching program for our partners. Through this program, the Safety Management Team provides risk assessment training and ongoing coaching to new companies or those that received low scores in the risk assessment section of the Contractor Safety Management (CSM).

Safety Eoulrim Activities | We have expanded the safety Eoulrim activities that were conducted for HALLA Cement employees to include partners, and are making improvements centered on safety. As of May 2024, five partners have participated. Participation is voluntary, with applications being accepted. The Safety Management Team has conducted two training sessions and holds monthly safety Eoulrim meetings to coach on strengths, deficiencies, and areas needing improvement.

Large and Small-Medium Enterprises Mutual Cooperation Project | Starting in 2023, we have been participating in the government's Large and Small-Medium Enterprises Mutual Cooperation Project. This government-driven project aims to develop collaborative solutions for safety and health by fostering voluntary alliances between large and small-to-medium enterprises and spreading best practices. Through the Mutual Cooperation Project, HALLA Cement shares its safety and health training expertise with its matched partners by conducting workshops, while we receive consulting services to establish a self-regulation system centered on risk assessment. In recognition of these achievements, we were honored as an outstanding company in this sector for 2023. Additionally, in July 2023, we received a special award for top-performing health education at the 'Health and Safety Education Institutions Best Practices Presentation Conference,' organized by the Ministry of Employment and Labor and hosted by the Korea Occupational Safety and Health Agency.

Employee Empowerment

48%

of female employees have served over 10 years at HALLA Cement.

Recruitment of Talented Individuals and Workforce Diversity

HALLA Cement strives to create an environment where all employees can communicate effectively and work harmoniously while respecting each other's diversity. We actively recruit talented individuals from the Gangwon-do region, where our production plant is located, contributing to local employment and the revitalization of the regional economy. Through these efforts, we aim to enhance our competitiveness and establish a foundation of mutual growth with the local community.

At HALLA Cement, we are dedicated to securing and fostering female talent. We are actively implementing various measures to create a stable working environment for female employees, including providing childbirth support funds, maternity leave before and after childbirth, parental leave, and shortened working hours during the child-rearing period. We offer equal working conditions for the same duties through open recruitment and a job-based wage system, ensuring no gender discrimination.

Collaborative Labor-management Culture

HALLA Cement operates its labor union based on the joint principle that 'mutual trust and respect between labor and management secure corporate competitiveness.' We strive to establish a cooperative system through productive, collaborative, humanistic, and lawful labor-management relations. To facilitate smooth communication between labor and management, we have renamed the existing 'Labor-Management Council' to the 'One-Heart Council,' emphasizing mutual cooperation and symbiosis. Through this council, we share management information and hold open discussions to improve working conditions.

Additionally, we hold annual management briefings in various regions such as Okgye, Seoul, Gwangyang, Pohang, and Incheon, where management and employees share opinions. We also operate small group activities called 'Eoulrim,' in which field workers participate to identify improvements, share best practices, and support team building through monthly meetings that include mutual celebration and encouragement.

Work-Life Balance

HALLA Cement operates various systems to support the work-life balance of its employees. Through comprehensive welfare programs, we aim to enhance employees' financial stability and well-being, fostering a healthy and rewarding work environment.

Continuous Employment System

To offer continuous employment opportunities for employees after retirement and improve productivity, HALLA Cement introduced the Continuous Employment System in January 2022. This system allows retired employees to work for an additional two years beyond their retirement age.

Maternity Protection Programs

Moreover, we comply with mandatory protection measures such as shortened working hours, childcare leave, and family care leave for female employees who are pregnant, giving birth, or raising children, as required by law.

Maternity Protection Programs

We have reduced both day and night working hours through revised shift patterns, minimizing the need for substitute work. Furthermore, assigning one team to handle day shifts for equipment inspection and maintenance tasks helps enhance employee health and safety by alleviating the burden of night shifts.

Employee Empowerment



Employee Unity Event 'Teambuilding'

We are implementing a company-wide teambuilding where all administrative and technical employees gather every two years by job category to improve communication and teamwork.

The 2023 teambuilding event, held under the theme 'Communication and Harmony for ECO TOGETHER 2025!', was attended by approximately 170 HALLA Cement administrative employees. The teambuilding event, originally held biennially, was held for the first time in four years since 2019 due to the COVID-19 pandemic. On the first day, the theme 'POWER VISION_Knocking on the Door of Hope' encouraged employees' passion and collaboration through song adaptation and NANTA performances. The second day emphasized communication and unity through a company-wide sports event called 'HALLA OLYMPIC.' Through these activities, employees reaffirmed their commitment to the 'ECO TOGETHER 2025' vision and enhanced their unity through teambuilding.

Fringe Benefits

Personnel & Housing Support



- Accommodation support
- Housing loan
- Loans for immediate call
- Cement support in housing
- Children's tuition support
- Leaves
- Retirement pension

Family Events Support



- Gift and condolences

Health and Leisure



- A five-day workweek
- Accommodation arrangement for summer vacation
- Comprehensive medical checkups for employees and spouses
- Group insurances
- Selective fringe benefit system
- Vacation (summer vacation and annual leave)

Others



- Rewards for long-serving employees and employees of the year
- Mutual aid
- Various outreach participation recognition system

Talent Development

HALLA Cement establishes and implements diverse and systematic training programs to proactively respond to environmental changes surrounding the business and to nurture talent capable of creating the future.

Enhancing Common Competencies by Hierarchical Level

Each year, we select leadership themes common to each hierarchical level in line with the company's management policy and conduct leadership training tailored to each level. Through this, we provide opportunities to cultivate the ability to generate and execute new ideas.

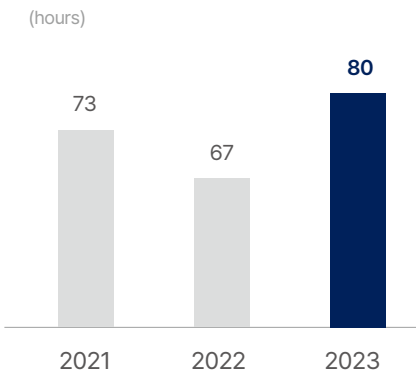
For managers, we support ongoing learning of business and leadership trends through the SERI Pro online course to enable agile responses to internal and external changes in the organization. Additionally, we provide onboarding education to assist newly promoted individuals and those assuming new positions in adapting to their new roles.

Enhancing Job Expertise

We are planning and conducting training sessions on common job duties for each department, including production and sales, to enhance employees' job performance and problem-solving abilities in the field. We also actively provide educational opportunities for individual capacity development by allowing employees to take external specialized training courses through discussions with their immediate superiors. Additionally, we have developed e-learning content and established an e-learning center for 'Cement Quality and Manufacturing Processes' using the skills and expertise of HALLA Cement employees. Since 2021, we have ensured that all employees continuously participate in online courses on the cement manufacturing process.

Employee Empowerment

Average hours of training per employee



Expenditures on employee training for the Year 2023

KRW 282 million

Employee Training System

Hierarchy Education	Job Training	Legally Required Certification Training
Managers <ul style="list-style-type: none"> • Executive leadership training • Manager leadership training • Team member leadership training • Online leadership training for managers (SERI Pro) • Onboarding training for promoted employees (Executives, Team leaders, Managers, Assistant managers) • Junior staff workshop • Teambuilding 	<ul style="list-style-type: none"> • Division-specific job training • Individual competency development training • New employee induction • New employee (OJT) • New employee mentoring • Programs for prospective technical staff • Cement learning center (Cement manufacturing) e-Learning • Key talent development training 	Common <ul style="list-style-type: none"> • Workplace sexual harassment prevention • Workplace disability awareness improvement • Workplace bullying prevention • Personal information protection
Technical Staff <ul style="list-style-type: none"> • Supervisor and members leadership training • Teambuilding 		Applicable employees <ul style="list-style-type: none"> • Legal qualification and certification training

Enhancing Adaptability of New Employees

To help new employees understand the company and quickly adapt to new working environment, we implement a comprehensive Induction program. Following this, a mentoring program pairs new hires with experienced mentors who provide support, helping them adapt to the organization and efficiently carry out their responsibilities. Additionally, every two years, we conduct junior employee workshops to foster the growth of future leaders and provide opportunities for junior employees to network and exchange ideas.

Developing Key Talents

For key talents identified through the Organization & HR Review, we offer online key talent courses that foster management thinking and capabilities through theoretical learning and case studies across various management domains. We plan to expand relevant programs continuously to nurture key talents as future leaders, including offline courses.

Job-Based Performance Evaluation and Compensation

HALLA Cement implements a job-based HR system and performance evaluation linked to compensation to motivate employees and achieve business goals. Performance evaluation items conducted annually include management performance and Safety performance. We establish specific achievement criteria and conduct performance evaluations based on these criteria. Management performance includes EBITDA, plant productivity, manufacturing costs, and safety performance includes improvement progress of safety activity, transparency of safety incident reporting, number of accidents

Human Rights

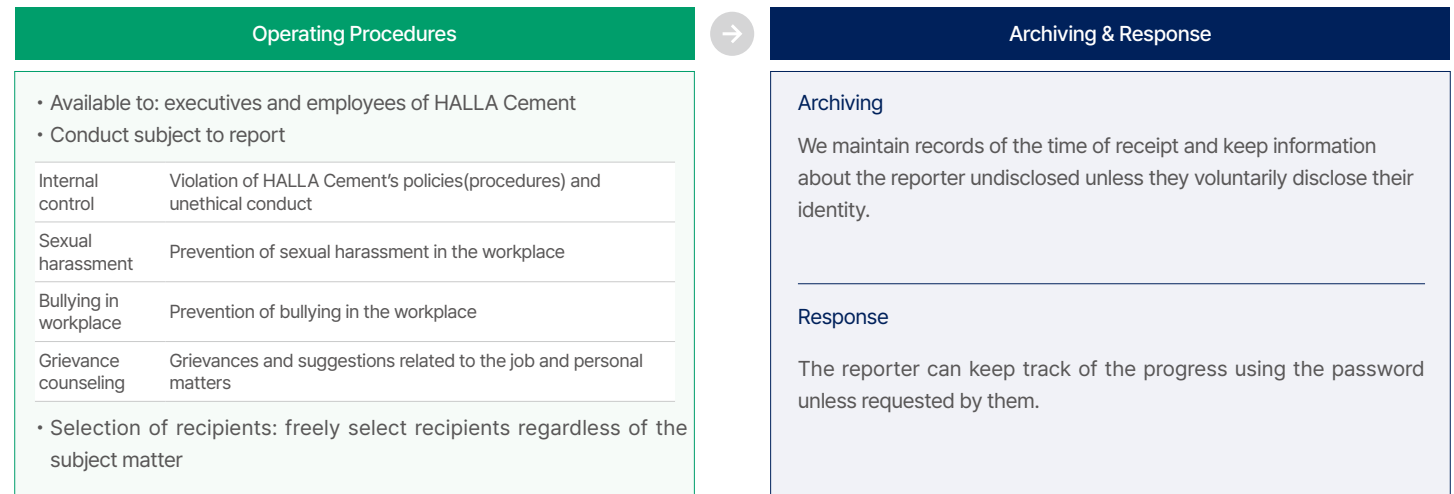
Respect for Human Rights within the Company

HALLA Cement recognizes the importance of human rights management within the organization and conducts annual education for all employees to establish a culture of respect for human rights. These educational programs cover topics such as prevention of workplace harassment, prevention of workplace bullying, and improving awareness of disabilities. We regularly train our employees on how to use the 'Yeolrinsori' complaint handling system on our company portal. This is part of our efforts to provide support and strengthen human rights protection in the workplace if any violations occur. We will continue to make ongoing efforts to strengthen human rights protection within the workplace through regular training sessions like these.

Complaint Handling System 'Yeolrinsori'

HALLA Cement provides a channel called 'Yeolrinsori' through which employees can submit and report unfair business practices, acts of sexual harassment, workplace bullying, and various grievances. 'Yeolrinsori' operates through the company's intranet to facilitate easy access, strictly adhering to the principle of confidentiality and maintaining confidentiality of information, as well as adhering to the principle of non-disclosure to third parties. In accordance with the principles of 'Yeolrinsori,' both the recipient and the content of submissions are freely chosen. Based on the 'principle of preventing defamation and slander,' submissions that are unclear in content or target, or constitute unfounded defamation or slander, are not processed.

Yeolrinsori Process



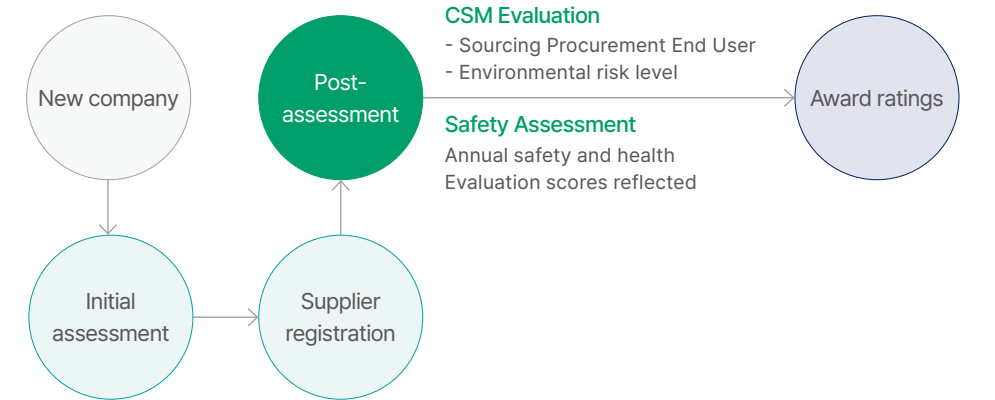
Sustainable Supply Chain

Establishing a Sustainable Supply Chain

HALLA Cement evaluates and systematically manages social and environmental risks, including financial soundness, supply stability, quality, fair trade compliance, safety, health, and environmental factors, to establish a sustainable supply chain. For new partners, we conduct initial assessments, including ESG screenings. For registered partners, an annual post-evaluation is conducted to assess compliance with regulations, environmental risk related to complaints, and safety and health evaluation results. Based on this evaluation, a rating is assigned, which is utilized when selecting and purchasing partners, in efforts to build a healthy supply chain.

Sustainable Supply Chain

Supplier ESG Assessment Evaluation Process



Suppliers Overview

Category	2021	2022	2023
Number of suppliers monitored	76	71	82
Total suppliers in the supply chain (estimated)	643	617	622
Suppliers assessed on their social impacts	76	71	82
Partners screened through social impact assessment	0	0	0

Win-win Growth

HALLA Cement operates various support programs to stabilize the management of partners and promote mutual growth. Economically, it provides support for facilities, equipment, and venues through leasing or funding, and offers incentives to partners through performance sharing. Additionally, it provides education venues and manuals for safety support. Starting from the second half of 2023, we are reviewing the implementation of payment linkage for all contracts to promote cooperation and stabilize the supply chain of small and medium-sized enterprises (SMEs). The payment linkage system, if agreed upon by the suppliers, will adjust the payment to reflect fluctuations in the prices of key raw materials, thereby contributing to the stability of their operations. Furthermore, we establish partner company councils, engage in regular communication to share our management status, address partners' difficulties, and strive to create a culture of mutual growth based on mutual communication by sharing online newsletters and ethical management matters.

Partner Support Program

Category	Support Programs
Safety support	Providing internal and external safety training for partner employees Conducting risk assessment training and providing technical support Providing safety management support to ensure partner safety
Financial support	Providing operational funds to partners upon request (financial liquidity support for partner companies.) Early disbursement of holiday payments for holidays such as Lunar New Year and Chuseok
Education support	Sharing HALLA's know-How for partners' autonomous improvement activities
Others	Supporting improvements in partner work environments

Community Engagement

Social Contribution Strategy and Goals

HALLA Cement prioritizes "Corporate Social Responsibility" as a core value. We are committed to conserving local ecosystems, protecting wildlife, supporting socially vulnerable groups, and stimulating the local economy to enhance community welfare and development.

In accordance with the "Voluntary Fund Formation Agreement for Expanding Community Contributions," established by seven major cement companies in Korea, we launched the 'Gangneung Fund Management Committee' in November 2021. This committee, led by HALLA Cement, which has its main factory in Gangneung, will oversee the creation and management of funds dedicated to social contributions in the Gangneung-Okgye area. HALLA Cement has established a cooperative fund of KRW 3 billion and will implement a range of development programs aimed at directly supporting local communities and residents.

Social Contribution System



Social Contribution Department

HALLA Cement operates a General Administration & Community Relations Team at our headquarters in Okgye-myeon. They actively lead social contribution activities. Additionally, employees at our branch plants in Gwangyang, Pohang, and Incheon engage in various social volunteer activities, such as blood donation drives and fundraising for vulnerable groups. This fosters communication and collaboration with local communities. The HRD & Communication Team at our Seoul office plans and implements various social contribution activities, including sponsoring Habitat for Humanity Korea's 'Building Houses of Hope' project with cement and participating in volunteer construction work. This localized organizational structure promotes close communication and direct support with local communities, allowing HALLA Cement to continue growing together with society.

MAIN BUSINESS

Fund Support Project

HALLA Cement sets aside a certain amount of funds each year to support local development and community welfare projects. Since 2003, it has been operating a local development fund centered around Gangneung, Okgye-myeon, supporting various projects such as sports promotion, school development funds, and cultural welfare event sponsorship. Furthermore, since 2017, through the Okgye-myeon Prosperity Association, it has been conducting environmental improvement activities for mediation and resolution of grievances related to factory operations. Moving forward, we will actively pursue new support projects reflecting the demands of the local community.

Approximately **KRW 3 billion**
Average Annual Contribution

Education Support Project

In 2003, HALLA Cement collaborated with the local community in the Gangneung Okgye area to establish the Okgye-myeon HALLA Cement Scholarship Foundation to promote the educational environment in the region. Through this foundation, KRW 800 million has been contributed to provide scholarships to local students, supporting both high school and university education. This initiative aims to nurture outstanding talent and contribute to the development of the local community through education.

1,100 recipients
have benefited from the scholarship (cumulative).



Ecological and Environmental Experience Education

Since 2004, we have been operating an ecological and environmental experiential learning program targeting elementary, middle, and high school students, conducting various experiential activities. To date, we have conducted over 531 experiential activities, with a total of 25,502 young participants experiencing and appreciating the value of ecology and the environment.

531 sessions
of experiential education have been held (cumulative).



63,000

Annual average bathhouse users

6,000

Annual average fitness centers users

Community Support Projects

HALLA Cement is committed to enhancing the cultural welfare of residents in the Okgye-myeon area. We have opened the Okgye-myeon Cultural Center located within the employee apartment complex for residents to utilize. Additionally, we operate various facilities such as bathhouses and fitness centers. Furthermore, we provide 50 apartments within the employee apartment complex for rent at affordable prices to offer quality residential environments and welfare facilities to residents. We will continue to actively promote the maintenance and improvement of these facilities to contribute to the enhancement of the quality of life for local residents.

Building Houses of Hope project

Since 1998, HALLA Cement has been the first in the domestic construction materials industry to support Habitat for Humanity Korea's Building Houses of Hope project. We have donated the cement required for housing construction at no cost, and our employees consistently volunteer their time for this project.

Cultural Heritage Guardian Movement

Since 2008, as part of the 'One Company, One Cultural Heritage' initiative, we have been engaging in volunteer activities to preserve cultural heritage within the Gangneung area. Under agreements with Gangneung Hyanggyo, our employees voluntarily participate in these activities to protect cultural heritage for future generations.

Save the local farm campaign

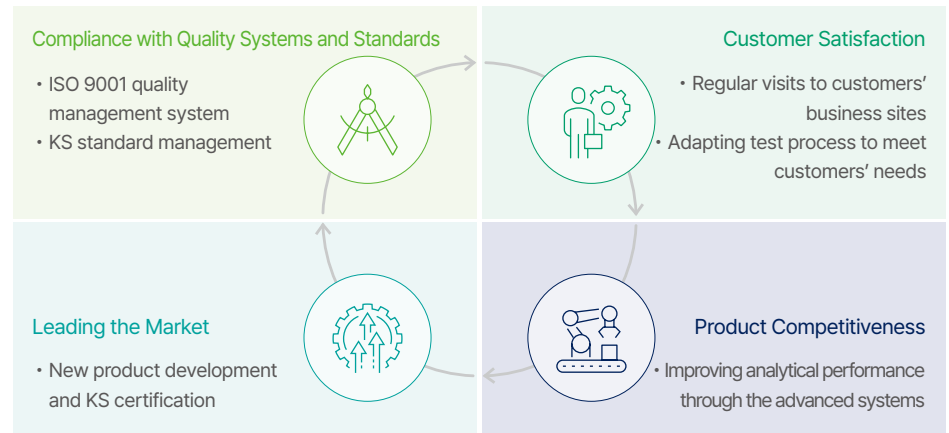
To enhance corporate social value and promote mutual prosperity with local communities, we have been purchasing local agricultural products annually since 2008, distributing them free of charge to all employees.

* For activities related to the preservation of local ecosystems and wildlife protection, please refer to page 89 under 'Biodiversity.'

Product Responsibility

Quality Management System

HALLA Cement strives to provide high-quality products and services in order to fulfill its role as a long-term business partner with customers and end consumers. To achieve this, we are strengthening communication with customers by establishing the foundation of our quality system through the adoption of ISO 9001 quality management system and compliance with KS standards. We regularly visit our customers to provide proactive quality management and service improvement, enhancing communication with them.



Research and Development and Quality Improvement

In pursuit of customer-centric quality management beyond conventional metric-centered approaches, we established a concrete laboratory in 2019 to conduct concrete experiments and research. Additionally, since 2020, we have been organizing internal concrete competitions to unearth and share concrete mixture knowledge considering both quality and cost-effectiveness. Moreover, we conduct research and technical seminars for quality optimization using statistical methods, striving continuously to improve our products and provide more suitable products and services that meet the evolving demands of the market environment.

Product Safety

HALLA Cement strengthens the management of radioactivity in our cement products by commissioning the Korea Atomic Energy Research Institute, a certified institution, to conduct artificial and natural radioactivity tests at least four times a year. Cement, due to its nature of solidifying and immobilizing heavy metals, does not release heavy metals during consumer usage. However, HALLA Cement strictly manages the content of heavy metals in cement raw materials. The test results are disclosed on our website.

Product Responsibility

70%

of products were EPD certified (based on sales volume in 2023)

Development of Eco-friendly Products

HALLA Cement actively conducts environmental labeling certification for our products to quantitatively measure the environmental impact of raw material extraction, production, transportation/distribution, use, and disposal throughout the entire process. The proportion of products for which environmental impact has been measured through the Environmental Product Declaration (EPD) certification is 70%, and this applies to Ordinary Portland Cement (OPC) products shipped from all factories. Through this, we aim not just to identify the environmental impact of our products but to provide accurate environmental information to our customers. Furthermore, we continue to expand the development of environmentally friendly products such as Good Recycled (GR) certified slag cement, and Korea Eco-Label certified slag cement and special cement (CEM FILL PRO), which improve the environmental performance of the products.

Environmentally Friendly Cement

Blast Furnace Slag Cement (SC)

- Contributes to carbon reduction by utilizing by-products of the steel industry, blast furnace slag powder
- Certified as Good Recycled (GR) (applicable to products shipped from Gwangyang and Pohang plants)
- Eco-label certification (applicable to products shipped from the Pohang plant)

Specialty Cement

- CO₂ emission reduction: CEM FILL PRO, CEM PILE, CEM PPO, CEM MAT, Cement for flow concrete
- Eco-label certification (applicable to products shipped from the CEM FILL PRO Pohang plant)

Research and Development Cases

Evaluation of Concrete Performance Using Recycled Aggregates

Recycled aggregates are recognized as a key technology for sustainable construction, addressing the current depletion of natural aggregates. Particularly, they are acknowledged as a resource recycling technology that enables the sourcing of aggregates from recycled concrete, garnering attention since the 1990s with continuous research efforts. In 2023, HALLA Cement conducted an evaluation of recycled aggregate concrete performance as a national research commissioned project. Through this, we derived and proposed an optimal cement mixture to achieve performance equal to or exceeding that of Type I ordinary Portland cement. By sharing improvement strategies for recycled aggregate concrete performance through this research, we anticipate contributing to promoting resource circulation within the construction industry and reducing natural resource consumption and waste generation.

Customer Satisfaction

HALLA Cement conducts biennial customer satisfaction surveys to assess the level of customer satisfaction and understand the company's market competitiveness, aiming to enhance service and quality. The company's customer satisfaction index has been continuously increasing since the 2008 survey, but it showed a slight decrease to 91.6% in the 2023 survey compared to 2021, dropping by 0.8 percentage points.

The 2023 customer satisfaction survey covered six dimensions: accounting processes, sales representatives, shipping/transportation, product quality, technical support services, and relationship-building activities. Particularly high satisfaction levels were observed in accounting processes and sales representative customer management. Customer dissatisfaction and improvement suggestions identified through the customer satisfaction survey will be addressed by seeking improvement measures and formulating follow-up action plans for each team. In line with this, for 2024, initiatives such as the development of a real-time shipping status inquiry app, enhancements in cement color, and technical seminars and site visits will be conducted.

Customer Satisfaction score in 2023

92

Information Security

Information security breach incident in 2023

0 case

Information Security Management System

HALLA Cement has established an information security system in accordance with relevant laws and regulations. We have appointed a Chief Information Security Officer (CISO) and dedicated teams and personnel for information security across the organization. Additionally, our IT team, HR team, and Compliance support team collaborate to support compliance with security policies and information security regulations. Furthermore, we operate information security regulations for employees, visitors, and contractors to protect and safely utilize information assets and critical information.

Establishment of Information Security Plan and Inspection Activities

We continuously monitor relevant laws and regulations to enhance our information security policies, establish action plans, and address identified issues. To comply with the Personal Information Protection Act, we monitor legal revisions and ensure our personal information processing systems meet legal and technical requirements. We also conduct regular monitoring of firewall and VPN operations and log reviews to prevent cybersecurity incidents, taking corrective actions when necessary. In 2023, we enhanced our security measures by organizing file servers, emails, and checking for illegal software to mitigate risks.

With the increase in remote work, improving information security awareness and preventing breaches have become more crucial. We are preparing appropriate measures to address these challenges. Over the past three years, we have maintained a record of zero information security violations and will continue to strengthen our measures to prevent any incidents involving customer personal data.

Information Security Training

HALLA Cement conducts annual information security training to raise awareness among employees. We also regularly share the latest security-related cases through bulletin boards and email notifications to promote information security awareness and knowledge sharing actively.

Information Security Activity Case 1

Cyber Crisis Response Simulation Training

To enhance employee awareness of information security and identify cyber threats, we conducted a cyber crisis response simulation training in 2023, organized by the Korea Internet & Security Agency (KISA). The training was carried out in two sessions, with the second session showing improved responses compared to the first. The simulation confirmed that penetration attempts and vulnerabilities were effectively preemptively blocked. In 2024, we plan to conduct similar training sessions in both the first and second half of the year to continually assess vulnerabilities. Additionally, we will perform regular monitoring of various security systems and obtain monthly approvals for the results.

Information Security Activity Case 2

Information Protection Campaign

Through semi-annual information protection events, we have enhanced employee awareness of security measures. Our security activities included organizing file servers and emails, and checking for illegal software to mitigate risk factors. We also share the latest security-related cases through bulletin boards and email notifications to strengthen our security efforts continuously. These initiatives are part of our ongoing commitment to maintaining high standards of information security and protecting our company's and customers' data.

Board of Directors

Composition of the Board of Directors

HALLA Cement verifies the compliance of director candidates with relevant laws such as the Commercial Act and Articles of Incorporation, alignment with business objectives, professional competence, and ethical standards. The board of directors of HALLA Cement consists of five executive directors, enhancing the independence of the board and improving the transparency of board operations through careful appointment procedures. Additionally, directors and auditors are appointed through a fair and legal shareholder approval process, requiring the consent of the majority of voting shareholders present at the shareholders' meeting. The CEO is appointed based on the attendance of the majority of directors and the consent of the majority of attending directors, and we adopt a system of having two CEOs to enhance management professionalism.

Board Members

* All members are executive directors

Name	Term of Office	Date of Initial Appointment	Gender	Career Highlights
Lee, Hoon Beom	2024.03~2026.03	2018.01	Male	- Graduated from the Graduate School of New York University - CEO and Chairman of ASIA Holdings - Chairman of ASIA Paper MFG - Chairman of ASIA Cement - Chairman of HALLA Cement
Lim, Kyeong Tai (Chairman of the board and CEO)	2024.03~2026.03	2018.01	Male	- Graduated from Chungbuk National University - CEO and President of ASIA Cement - CEO and President of HALLA Cement - Chairman of the Board at HALLA Cement
Hwang, Sok Yong (CEO)	2024.03~2026.03	2018.09	Male	- Graduated from Hankuk University of Foreign Studies - Head of Sales Division of HALLA Cement - CEO and Managing Director of HALLA Cement
Lee, Keon Hee	2024.03~2026.03	2018.01	Male	- Graduated from MIT Sloan School of Management - Head of Corporate Planning Division of ASIA Cement - Head of Management Support Division of HALLA Cement
Kim, Young Hwan	2024.03~2026.03	2021.03	Male	- Master of Business Administration (MBA) from Kwandong University School of Business and Public Administration - Head of Production Division of HALLA Cement

Board Skill Matrix

	Lim, Kyeong Tai	Hwang, Sok Yong	Lee, Hoon Beom	Lee, Keon Hee	Kim, Young Hwan
Economy/Finance/Management	○	○	○	○	○
Risk Management	○			○	○
Human Resources Management	○	○	○	○	○
Legal/Regulatory/Public Policy	○			○	○
Compliance				○	
Governance	○		○	○	
Accounting				○	
Sales/Marketing				○	○
IT/Digital				○	
ESG	○		○	○	
Industry Expertise	○	○	○	○	○
International Experience			○	○	○
Organization Operating Experience	○		○		
Academic/Professor/Researcher	○	○			○

Board of Directors

Number of meetings

11 times



Average attendance rate

98%



Board of Directors Operations

HALLA Cement's board meeting schedule is managed on an annual basis. Agenda items for the board meetings are notified to board members at least three days before the meeting date, in accordance with the Articles of Incorporation and Board Regulations, to allow sufficient time for review. If the board meeting schedule changes, the reasons are communicated immediately. Additionally, if a board member cannot attend in person due to unavoidable circumstances, video and audio conferencing methods are employed to ensure fair decision-making by the board.

Board Operations in 2023

Session	Date	Attendance	Agenda	Result
1st	2023.02.13	80%	The Agenda item for reporting on the 2023 Safety and Health Management Plan (reported items)	Reporting
			Report on the operation status of the Internal Accounting Management System (reported items)	Reporting
			Approval of FY22 financial statements	Approved
2nd	2023.03.16	100%	Approval of FY22 sales report	Approved
			Appointment of directors	Approved
			Approval of the 25th regular shareholders' meeting	Approved
			Approval of corporate operating general fund loans (individual transactions)	Approved
3rd	2023.03.17	100%	Approval of corporate operating general fund loans (individual transactions)	Approved
4th	2023.03.17	100%	Approval of corporate operating general fund loans (individual transactions)	Approved
5th	2023.03.17	100%	Approval of corporate operating general fund loans (individual transactions)	Approved
6th	2023.04.10	100%	Approval of existing bonds (imported funds)	Approved
			Approval of existing bonds (retail finance)	Approved
7th	2023.04.24	100%	New approval of import letter of credit	Approved
8th	2023.06.30	100%	Korea Development Bank loan borrowing	Approved
9th	2023.07.31	100%	Approval of existing bonds (import funds loans)	Approved
10th	2023.09.11	100%	Operation and appointment of the Fair Trade Compliance organization and its members	Approved
			Establishment of subcommittees and appointment of committee members	Approved
11th	2023.10.18	100%	Approval of partial revision (draft) of Articles of Incorporation	Approved
			Comprehensive revision of internal accounting management regulations	Approved
			Approval of holding of extraordinary shareholders' meeting	Approved

Board Committees

HALLA Cement recognizes the necessity, as per laws and regulations, for the board to establish subcommittees to ensure efficient detailed decision-making in management. Accordingly, to promote transparent and fair business practices, we currently operate the Ethics Management Committee, Internal Transactions Committee, and Safety and Health Committee.

Board of Directors

2023 Board committees' Activities

Committee	Members	Date of Meeting	Agenda	Attendance
Safety and Health Committee	Lim, Kyeong Tai (Chairman) Hwang, Sok Yong Lee, Keon Hee Kim, Young Hwan	2023.02.13	Review of the 2023 safety and health management plan	100%
		2023.05.26	Analysis of recent court rulings concerning significant accidents, their implications, and proposed improvement measures	100%
		2023.07.17	Review of progress on the Safety and Health Management Plan	100%
Ethics Management Committee		2023.09.11	Appointment of the Fair Trade Compliance organization and its members	100%

Performance Evaluation and Compensation

The compensation status for key executives who hold significant authority and responsibility for planning, operating, and controlling the company's activities for the current business year is as follows. The performance of directors is evaluated comprehensively based on the overall business performance of the previous business year, the degree of achievement of individual goals set for directors, and other relevant factors. Director compensation is paid within the approved compensation limit at the shareholders' meeting.

Compensation for 2023

(KRW million)

Category	Number of Directors	Total Compensation	Average Compensation
Executive directors	5	2,432	486
Non-executive directors	0	-	-

Training for the Board

HALLA Cement regularly conducts training sessions for its board members, inviting external expert instructors to provide valuable insights on enhancing professional skills and promoting compliance management.

Training for the Board Members in 2023

Category	Description	Attendance
Hierarchy Education	Executive Leadership Training	Kim Young Hwan, Lee Keon Hee, Lim Kyeong Tai and Hwang Sok Yong
	Understanding Fair Trade Law	Kim Young Hwan, Lee Keon Hee and Hwang Sok Yong
	Basic Fair Trade Law Training for Practitioners	Lee Keon Hee, Lim Kyeong Tai and Hwang Sok Yong
Skill Training	Basic Subcontracting Law Training for Practitioners	Kim Young Hwan
	Debt Management Basics in Sales Activities	Hwang Sok Yong
	Latest Construction Techniques in Korea-China Concrete	Hwang Sok Yong
	Fair Trade and Compliance	Hwang Sok Yong
	Unfair Collaborative Practices in Information Exchange	Lee Keon Hee and Hwang Sok Yong
	Education for Internal Accounting Management System Control Performers	Lee Keon Hee and Hwang Sok Yong

Risk Management

Risk Management System

HALLA Cement has established a Crisis Management Committee to reduce the likelihood of crisis situations by streamlining business processes and implementing a continuous monitoring system. In the event of a crisis, this committee aims to minimize damage to stakeholders and management by ensuring a swift and efficient response. The Crisis Management Committee is a key organization for managing risks quickly and effectively, overseeing related decision-making and execution. It comprises each representative directors and Division heads responsible for major issues in their respective areas, and is organized into a separate on-site task force according to their respective areas of responsibility.

| Information security breach incident in 2023



Integrated Financial and Non-Financial Risk Management

Risk is inevitable in corporate management activities. HALLA Cement identifies and manages major risks inherent to the nature of its business, considering both business aspects such as finance, market, and prices, as well as social and environmental factors including environment, safety, and product quality. We establish risk factors integrating these aspects and analyze risks in each area preemptively to manage them to a certain level.

Category	Risk Factors
Environmental	Direct and indirect pollution of water, air, soil, noise, and other environmental issues, environmental impacts and deforestation caused by limestone quarry development, tightening environmental regulations, potential risks associated with recycled resource utilization
Safety	Workplace fatalities, factory equipment accidents, facility occupation by internal or external individuals
Product quality	Defects in products, customer complaints about quality, accidents at product usage sites
Transportation	Fatalities during transportation of products, raw materials, or fuel, delays or accidents in product transportation, collective actions by transportation companies
Labor-management relations	Labor-management conflicts and disputes, conflicts or collective actions by subcontractors and workers
Business Management	Cash flow, sudden changes in market environment (affecting sales and profits), management crisis due to mass resignation of executives, major legal violations, collapse of computer systems, sudden loss of major customers, drastic changes in purchase prices or disruption of the supply chain for primary materials and fuels
Health	Outbreaks of epidemic or infectious diseases, health-threatening natural phenomena (fine dust, yellow dust, etc.)
Disasters	Natural disasters such as typhoons, earthquakes, floods, wildfires, external accidents (facility damage, power outage, short-circuit, flooding, etc.)
Government policies	Sudden changes in regulations, laws, or regulations regarding the cement industry
Media/Public Opinion	Spread of negative media coverage on adverse incidents, dissemination of malicious rumors

Ethical Management

Ethical Management System

HALLA Cement visualizes its leadership and commitment to ethical management through the Ethics Management Committee established within the Board of Directors. We also established an Internal Transactions Committee within the Board to deliberate and resolve transactions with related parties, which forms the basis for fair competition. At HALLA Cement, we strengthen our ethical management system through multiple measures: an internal accounting management system, regular audits and improvement actions from our holding company, ASIA Holdings, the operation of an in-house compliance organization, the enactment of a code of ethics, and regular employee training. In 2024, we plan to enhance our management of ethical and compliance risks by distributing self-assessment checklists to practical departments, conducting evaluations and reviews, and implementing improvements.

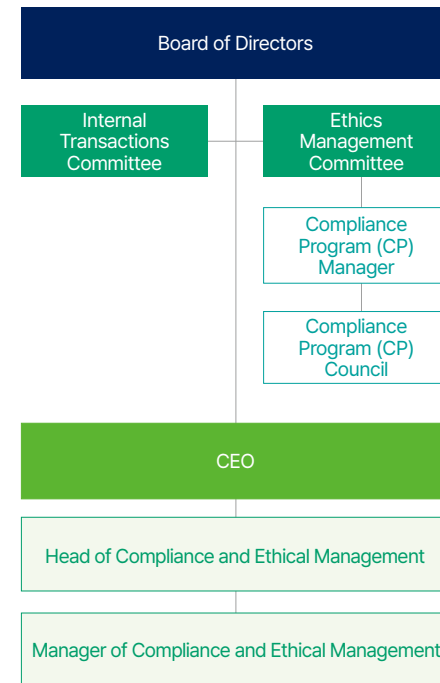
Efforts to Spread Ethical Culture

HALLA Cement has established a code of ethics based on four core principles: serving customers, shareholders, employees, and society. From this foundation, we have developed a code of conduct that offers clear guidelines for handling ethical conflicts that may arise during business operations. Our code of conduct is openly accessible to employees and other stakeholders through our website. We also conduct training for new employees and organizations with high related risks. In 2024, we will regularly conduct code of conduct training for all employees and collect pledge forms to actively promote and strengthen our ethical culture.

Whistleblowing and Complaint Handling System

We swiftly detect any breaches of ethical codes by employees and take appropriate actions against instances like workplace harassment, sexual harassment, and violations of internal policies and legal regulations through the 'Yeolrinsori' platform on our company's intranet. We guarantee anonymity through our whistleblower protection system. If it is confirmed or suspected that company employees are involved in illegal or inappropriate actions, external stakeholders can directly report to the dedicated ethics management department (Compliance Support Team: HALLA-compliance@HALLAcement.co.kr). In 2024, we plan to enhance accessibility for internal and external stakeholders' suggestions and reports by establishing an additional channel through the company's official website.

Ethical management organizational structure



Introduction of Fair Trade Self-Compliance Program (CP)

In 2023, HALLA Cement introduced the Fair Trade Self-Compliance Program (CP) supported by the Korea Fair Competition Federation. Accordingly, under the Ethics Management Committee, compliance officers and managers were appointed, and a Compliance Program (CP) Council was established, consisting of representatives from purchasing, sales, production, and common departments. Compliance Program (CP) manager is appointed through the Board of Directors, and an organization designated as the Compliance Support Team assists and manages them. The CP Council is responsible for setting the basic policies of the Fair Trade Self-Compliance Program (CP), deliberating on important matters, and conducting self-checks and supervision to prevent legal violations in each department. In 2024, stakeholders will be urged to adhere to the voluntary compliance of the CEO through a formal letter, and channels for proposals and reports will be provided. To ensure that employees clearly understand and comply with fair trade principles, we have incorporated guidelines recommended by the Fair Trade Commission into the company regulations and included fair trade guidelines in the code of ethics. For our partners, we ensure strict compliance with laws and regulations regarding integrity and anti-corruption. All employees and agents of companies participating in contracts for construction, services, and goods ordered by HALLA Cement are required to agree to and adhere to the 'Oath of Compliance with Laws and Regulations on Integrity and Prevention of Corruption'. Violations of this oath, including fair trade violations, result in the termination of contractual relationships as part of our stringent measures.

ASIA Paper MFG



- Environmental
- 109 Environmental Management System
- 111 Carbon Neutrality
- 113 Environmental Stewardship in Operations
- 114 Environmental Investment & Green Procurement
- 115 Cultivating a Green Culture
- 115 Biodiversity

- Social
- 116 Workplace Health and Safety
- 118 Employee Empowerment
- 119 Human Rights
- 120 Sustainable Supply Chain
- 121 Community Engagement
- 123 Product Responsibility
- 124 Information Security

- Governance
- 125 Board of Directors
- 129 Risk Management
- 131 Ethical Management

Environmental Management System

Environmental Management Strategy

Committed to sustainable value creation with a focus on human and environmental welfare, ASIA Paper MFG proactively tackles major environmental issues such as climate change, fine dust, waste, and chemical substances. Guided by our environmental management policies, relevant regulations, and internal guidelines, we have established a comprehensive environmental framework. This initiative aims to uphold our core responsibility in the manufacturing sector by achieving low carbon emissions and promoting eco-friendly practices.

ASIA Paper MFG Environmental Management Guidelines

1. Workplace Environmental Management

- Managing environmental goals, training, guidelines, and internal audits for each division.

2. Production Operations and Maintenance

- Creating manuals to minimize pollution during operation, maintenance, and repair of facilities.
- Tailoring maintenance and environmental impact monitoring to each production process.

3. Product Development and Services/Logistics

- Expanding the supply of eco-friendly products to support a low-carbon economy.
- Preparing guidelines to minimize transportation risks.

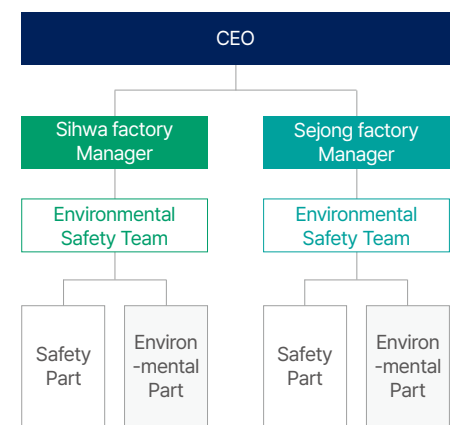
4. Waste Management

- Managing the entire process from waste generation to disposal through comprehensive guidelines covering work scope, terminology, responsibilities, and actions for pollution incidents.

5. New Projects and Mergers & Acquisitions

- Reviewing ESG benefits, investment risks, and response strategies for new investments.
- Conducting environmental management plans and impact assessments for new projects.

Environmental Management Execution Departments and Reporting System



Environmental Management Governance

To ensure effective environmental management at production and business sites, ASIA Paper MFG's top management directly assumes responsibility and authority over environmental management. Accordingly, the CEO declares environmental policies in line with management policies, establishes implementation plans (Plan), executes and operates them (Do), inspects and takes corrective actions (Check), and reviews and improves the results (Action) through the P-D-C-A cycle for continuous improvement. Based on this systematic environmental management system, both the Sihwa factory and Sejong factory obtained ISO 14001 certification in 2023. The Environmental Safety Teams at each factory monitor major environmental issues, collaborate on related tasks, and carry out necessary facility investments for improvements. Based on the environmental management activities and major environmental issues addressed by the Environmental Safety Team and other departments, top management (CEO and factory managers) holds monthly and annual meetings to establish environmental improvement goals. These meetings include making decisions on facility investments, executing plans, and discussing and reporting on key environmental management issues, such as progress and performance.

Smart Eco-Factory Project

In 2023, ASIA Paper MFG was selected for the Ministry of Environment's 'Smart Eco-Factory Project' and successfully completed the five-month initiative. This national project supports small and medium-sized enterprises in transitioning to eco-friendly factories by reducing greenhouse gases and pollutants and improving energy and resource efficiency. From 2020 to this year, the project has supported approximately 200 companies with up to KRW 1 billion each.

We invested a total of KRW 5.2 billion, including government grants and our own funds, with KRW 2.3 billion for the Sejong factory and KRW 2.9 billion for the Sihwa factory. By the end of 2023, we established the Smart Eco-Factories, reducing greenhouse gas emissions, enhancing operational efficiency, and minimizing air pollutants and waste.

At the Sejong factory, we installed high-efficiency equipment to reduce electricity usage and air pollutant emissions and introduced sludge reduction equipment, significantly lowering sludge generation. The Sihwa factory implemented a solar power system on the roof and replaced metal-halide lamps with LEDs. We also introduced a biogas steam boiler to utilize biogas from the wastewater treatment facility and installed a high-efficiency microbubble scrubber to reduce odors and complaints.

With this support from the Ministry of Environment, we expect to reduce greenhouse gas and pollutant emissions and waste. We will continue to strengthen our ESG management system and enhance our role as a socially responsible enterprise.

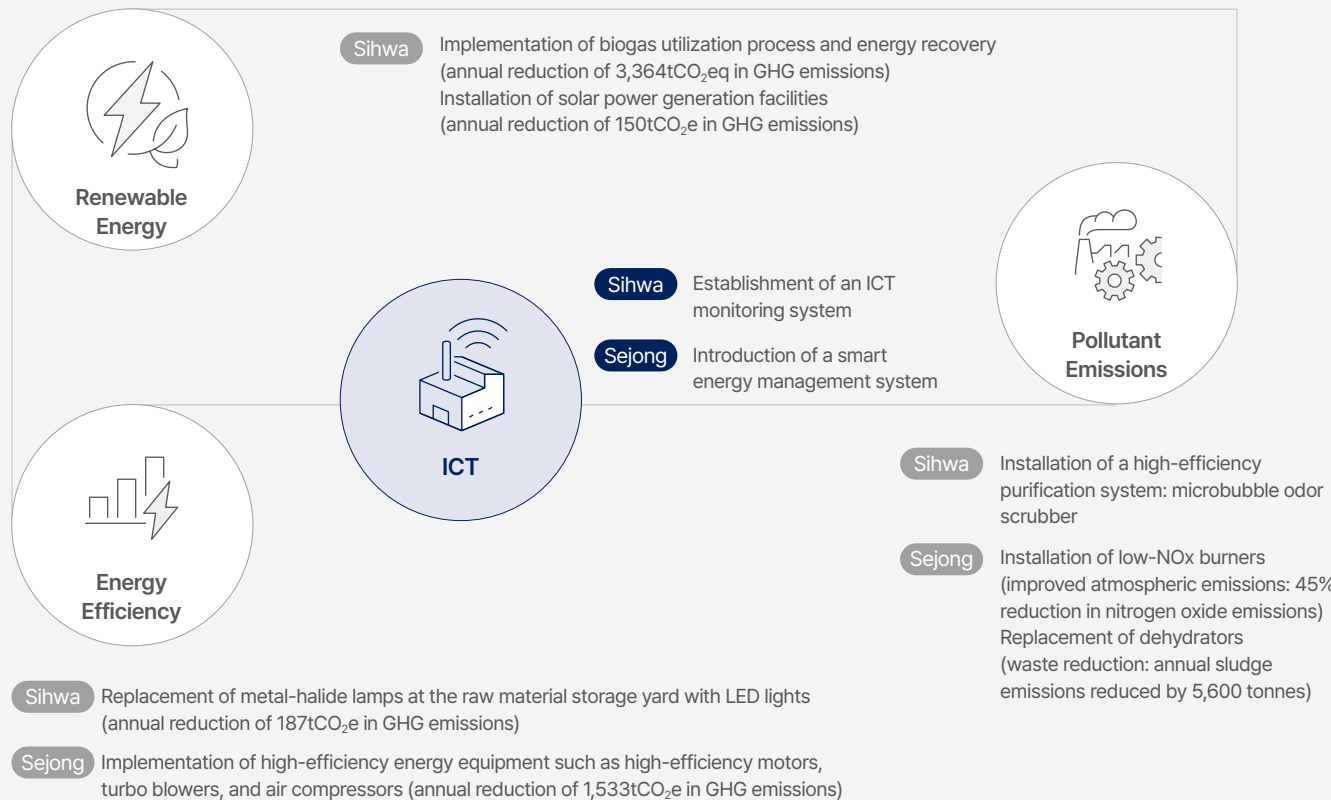


Annual reduction in GHG emissions

5,234tCO₂eq

Annual reduction in energy consumption

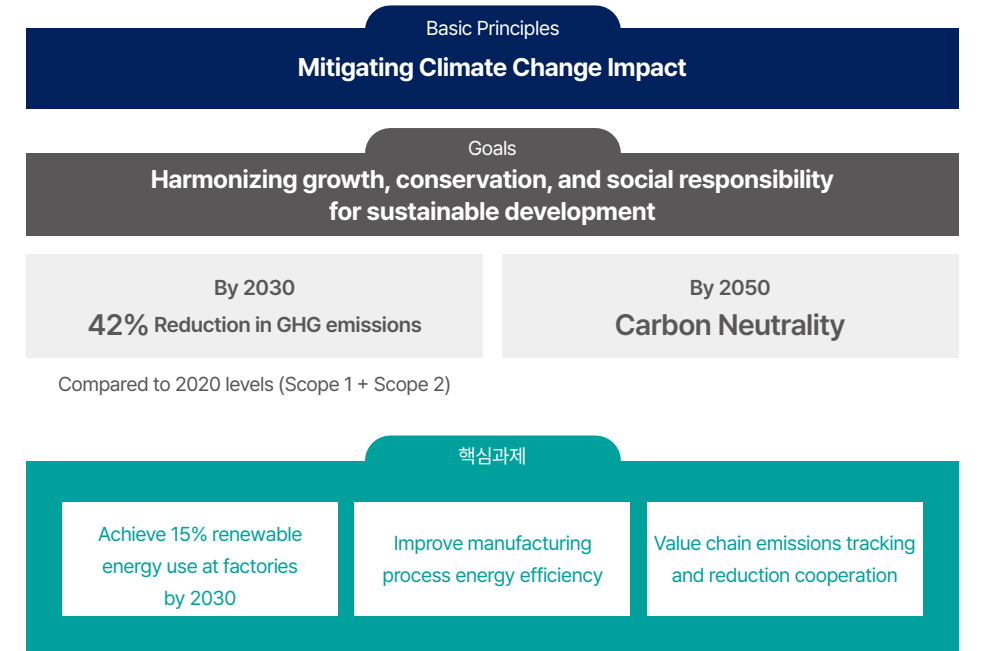
571kW



Carbon Neutrality

Carbon Neutrality and Climate Milestones

ASIA Paper MFG has developed an environmental management vision that reflects our commitment to combating climate change and transitioning to a circular economy, aiming to expand Green Impact. To achieve our mid- to long-term environmental goals, we have set comprehensive targets for greenhouse gas emissions and identified key implementation tasks. Moving forward, we will systematically execute these tasks by enhancing value chain management, expanding external collaboration, and strengthening internal capabilities.



Reduction of GHG Emissions

ASIA Paper MFG has been included in the greenhouse gas emission trading scheme in accordance with the 'Act On The Allocation And Trading Of Greenhouse-Gas Emission Permits' since 2015. Aligned with government initiatives promoting low-carbon and green growth, we are actively pursuing certifications for green technology and eco-friendly business practices. Furthermore, we are fulfilling our greenhouse gas emission targets by implementing facilities dedicated to reducing emissions.

The Sihwa factory has been reducing greenhouse gas emissions by decreasing external electricity usage and utilizing recovered methane gas for steam production through the Smart Eco-Factory Project in 2023. We consistently track our performance to enhance our reduction of greenhouse gas emission units. Our efforts encompass monthly external measurements of methane gas and waste composition to ensure precise goal setting.

The Sejong factory is committed to reducing greenhouse gas emissions through the introduction of high-efficiency equipment and process improvements as part of its environmental operations and performance indicators. We make continuous efforts through ongoing equipment investments to improve greenhouse gas emission units. We actively participate in national energy conservation policies. In 2023, we successfully executed the Smart Eco-Factory Project organized by the Ministry of Environment and the Greenhouse Gas Reduction Project led by the Ministry of Trade, Industry, and Energy. These initiatives have contributed significantly to greenhouse gas reduction. In the future, we will continue to implement ongoing equipment investments to further reduce greenhouse gas emissions.

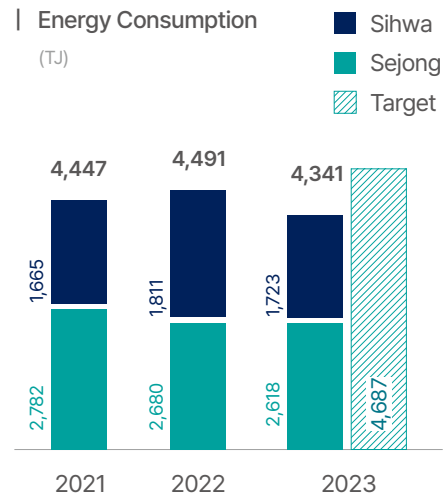
Carbon Neutrality

GHG Emissions Reduction in 2023 (compared to 2022)

5.3%

Energy Reduction in 2023 (compared to 2022)

3.3%



Energy-saving initiatives

Voluntary Energy DR

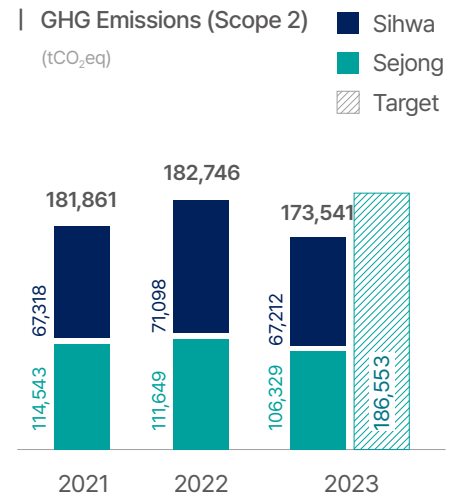
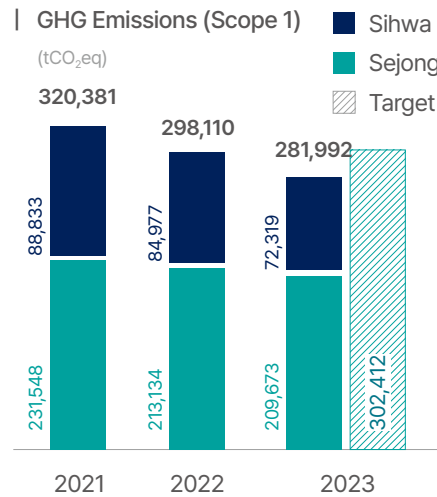
As part of a voluntary agreement with the government, ASIA Paper MFG has set energy reduction targets and is striving to achieve them through energy-saving activities. The voluntary Energy Demand Response (DR) program, in which Sihwa and Sejong factories participate, involves voluntary agreements between energy-consuming facilities and the government to establish reduction targets and implement incentives for goal achievement. This program also contributes to reducing the national power peak. Currently, both Sihwa and Sejong factories have achieved a 100% implementation rate for voluntary energy efficiency targets. We will continue to participate in these initiatives to achieve energy saving goals in the future.

Renewable energy

ASIA Paper MFG is continuously increasing its use of renewable energy to minimize the usage of depleting fossil fuels. As part of the Smart Eco-Factory Project in 2023, the Sihwa factory introduced a biogas steam boiler that utilizes biogas generated from wastewater treatment to produce steam, contributing to energy recovery and conservation. Furthermore, the factory began the shift towards renewable energy by installing a solar power generation system on the roof of the factory building. The Sejong factory produces steam necessary for product manufacturing using renewable energy sources. To maximize the use of renewable energy, continuous quality inspections of incoming waste resources are conducted to improve steam production efficiency per unit, reduce greenhouse gas emissions, and minimize waste generation. Furthermore, efforts are underway to maximize renewable energy usage through waste resource management and the continuous implementation of high-efficiency equipment investments.

Disclosure of GHG Emissions and Energy Consumption

At ASIA Paper MFG, we report the 'greenhouse gas emissions' and 'energy Consumption' generated by our facilities to the government as required by regulations and transparently provides relevant information to stakeholders. To ensure the credibility of greenhouse gas emission data, external verification is conducted annually by third-party verification agencies for both the Sihwa and Sejong factories.



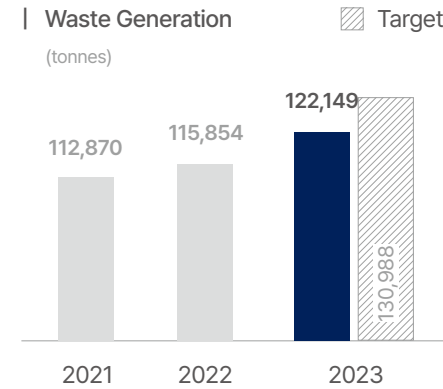
Environmental Stewardship in Operations

ASIA Paper MFG has completed the transition of existing environmental permits for the Sihwa and Sejong factories to the Integrated Pollution Prevention and Control (IPPC) permit in 2023, enhancing our environmental management capabilities. The IPPC system integrates management approaches for various environmental media such as air, water, and soil, aiming to minimize and optimize pollutant emissions through legal regulations and systems. We pledge to continue efforts for environmental protection and fulfill social responsibility through eco-friendly factory operations in the future.

Waste Management and Recycling

In the paper manufacturing process, waste materials such as floorboard, rejects, sludge, and waste soil are generated. Over 90% of ASIA Paper MFG's raw materials come from recycled Old Corrugated Containers (OCC). Waste generated during the recycling of OCC is minimized by utilizing waste-to-energy from the incineration of residual waste in waste incineration facilities, minimizing waste disposal. Residual waste generated after incineration is properly treated through the appropriate systems.

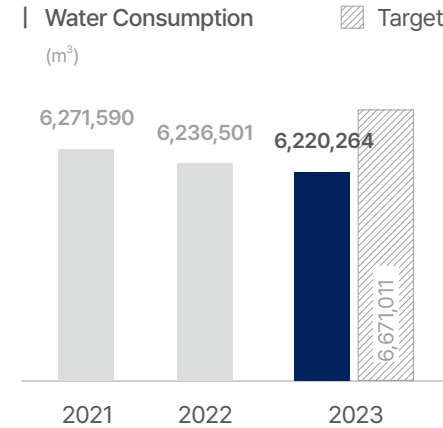
In addition, at the Sihwa factory, activities such as installing waste storage screen doors, operating alarm systems, and improving the exterior walls of the factory are underway to minimize complaints related to waste utilization and improve odor control. At the Sejong factory, measures such as installing waste storage screen doors and implementing deodorant spraying are in place to prevent waste odors. Continuous attention is given to potential impacts on the surrounding environment, with periodic odor measurements and monitoring conducted for both the factory and the neighboring community.



Water Resource Usage and Discharge Management

The Sihwa factory uses industrial water to produce linerboard and gypsum linerboard. To ensure efficient water management, it has upgraded the internal cooling water circulation system, steam condensate, and process reuse water. The factory consistently improves recycling rates to lower pollutant levels in wastewater entering the treatment facility. Regular inspections maintain pipeline integrity, with maintenance conducted 2-3 times monthly for 24 hours, and an annual major maintenance period scheduled for necessary pipe replacements. In response to shifting from COD_{mn} to TOC for organic matter index, measures include enhancing TOC monitoring with new equipment and twice-daily self-measurements.

At the Sejong factory, nearby river water is drawn and treated chemically and physically for use as industrial water. Daily equipment checks ensure smooth operations. Monthly usage aggregation and analysis are used to optimize water usage and quality. In 2024, the factory plans a KRW 600 million investment in fiber-type disk filters to reduce water treatment chemical use compared to current facilities. Wastewater from production processes is reliably treated with advanced methods at the water treatment facilities. A 24/7 Tele Monitoring System (TMS) ensures efficient water treatment process operation, supported by regular maintenance and inspections by accredited agencies to ensure device reliability.



Environmental Stewardship in Operations

Air Pollutants

ASIA Paper MFG conducts regular inspections and maintenance of emission and prevention facilities to minimize the environmental impact of air pollutants discharged from our facilities. We manage these facilities to operate optimally. We monitor air pollutant emissions in real-time through the Tele Monitoring System, and pollutants that cannot be monitored by TMS are regularly measured by specialized measurement companies. Measurement results are transparently managed through the Integrated Environmental Management System and Air Emission Management System. In particular, in 2023, following the transition to integrated environmental permits, we expanded the number of measured items for air pollutants from 20 to 35, conducting self-measurements accordingly. Additionally, we strive to minimize nitrogen oxide and dust emissions by entering into voluntary agreements with the Ministry of Environment and local governments (Siheung City Hall, Sejong City Hall) to mitigate fine dust pollution.

At the Sihwa factory, in 2023, we installed a multi-cyclone (centrifugal dust collector) as a new air pollution prevention facility for the incinerator to improve the efficiency of dust treatment in exhaust gases. Furthermore, we expanded the existing Catalytic Reduction facility (the facility that utilizes catalytic reaction) from one stage to two stages, increasing the efficiency of nitrogen oxide treatment in exhaust gases. At the Sejong factory, a long-term strategy has been devised to mitigate nitrogen oxide emissions. Since 2022, high-efficiency Catalytic Reduction have been installed in the incinerator and solid fuel boiler, and low-NOx burners have also been installed in LNG boilers utilizing natural gas.

Noise and Odor

The Sihwa factory obtained integrated environmental permits in 2023 and conducts self-monitoring of noise annually and odor quarterly. Additionally, a unified odor scrubber has been installed in the wastewater treatment facility to mitigate odors and address relevant complaints. The Sejong factory also holds integrated environmental permits and conducts self-monitoring annually, with additional monitoring of noise and odor four times a year.

ASIA Paper MFG's Sihwa factory is undertaking various environmental investments, including installing a biogas boiler, solar power generators, LED lighting replacements, integrated scrubbers in the wastewater treatment facility, and expanding air pollution control facilities such as cyclone dust collectors and facilities utilizing catalytic reactions. These investments encompass multiple aspects of environmental improvement. Similarly, the Sejong factory has replaced inefficient power facilities and air compressor with high-efficiency equipment to reduce greenhouse gas emissions. It has also installed high-efficiency pollution prevention facilities such as catalytic reduction and low-NOx burners to decrease air pollutant emissions. These multifaceted and ongoing investments in greenhouse gas reduction and environmental improvement demonstrate our commitment to sustainability.

Environmental Investments in 2023 (KRW million)

KRW 7,492 million

Waste handling cost	5,679
Wastewater, air, and waste storage enhancement	1,743
Consulting on Korea Emissions Trading Scheme and GHG verificatio	14
Environmental liability insurance	27
Environmental certification acquisition	29

Environmental Investment & Green Procurement

Cultivating a Green Culture

Environmental Training for Employees and Partners

Under the auspices of each factory's environmental safety team, ASIA Paper MFG conducts environmental safety education for employees and partners. This includes quarterly Material Safety Data Sheet (MSDS) training, annual hazardous chemical safety education, and biennial training for responsible handlers of hazardous chemicals. Furthermore, mandatory legal training for managers based on integrated environmental permits and waste management laws is conducted regularly. A contingency response system has been established to ensure swift and systematic responses to environmental accidents, minimizing human and material damage. Furthermore, prior to conducting environmental maintenance work, we conduct safety permit issuance and safety training once per maintenance project for both employees and partners. This ensures that all parties involved have a comprehensive understanding of environmental safety protocols before commencing any work, minimizing the occurrence of environmental accidents.

Biodiversity

Policy Efforts

Forest regeneration resilience plays a crucial role in maintaining a healthy global ecosystem. Concerns over deforestation and biodiversity loss have heightened societal concerns regarding the paper industry due to excessive logging and forest destruction. ASIA Paper MFG's primary products, including linerboard, corrugated board, and corrugated boxes, are primarily produced from recovered paper, with minimal use of pulp. However, we acknowledge the potential indirect impacts our business activities may have on deforestation and biodiversity. To underscore our commitment to leading efforts in preventing deforestation and restoring natural ecosystems, we publicly disclosed our 'Preventing Deforestation Policy' and 'Biodiversity Policy' on our website in 2023.

| Biodiversity Policy



| Preventing Deforestation Policy



Workplace Health and Safety

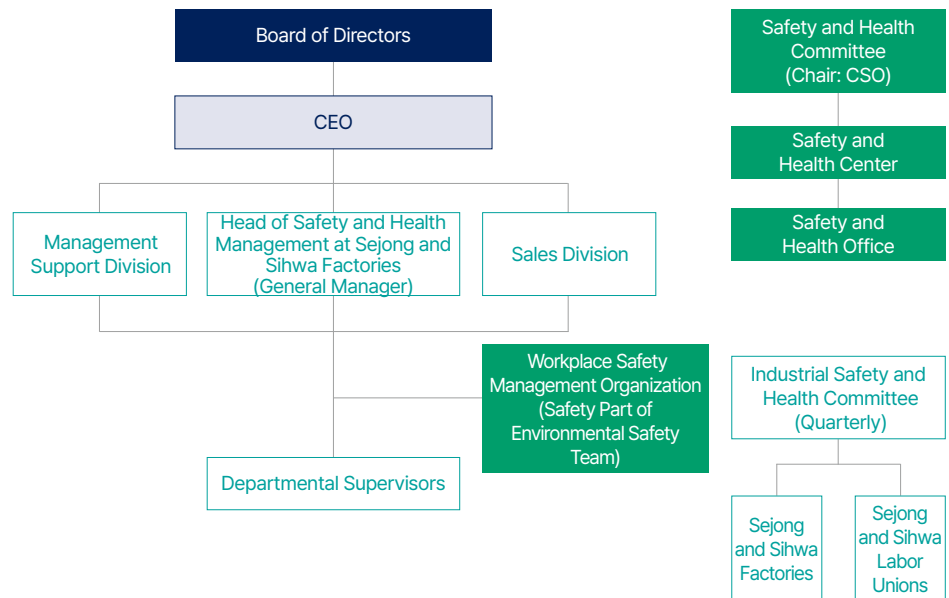
Safety Management Policy

ASIA Paper MFG has established the Environment, Health and Safety (EHS) Management Policy' in 2023 to create a safe and pleasant working environment and encourages active participation and implementation by all employees. This policy emphasizes respect for human dignity and commitment to accident-free operations, compliance with safety and health requirements, continuous improvement, fostering a safety culture, and participation. It also includes efforts to enhance safety and health capabilities and maintain a safety and health management system. Based on this policy, ASIA Paper MFG has been focusing on efficient operation of KOSHA-MS since 2021, supporting safety and health management for partners, strengthening on-site safety inspections and improvement activities. In 2023, efforts were made to create a safer workplace by aligning with ISO 14001 certification. In 2024, we plan to introduce and operate Behavior-Based Safety (BBS) Safety Management to promote a safety culture and implement various safety and health activities.

Dedicated Safety Management Organization

ASIA Paper MFG is dedicated to incorporating feedback from the Safety Council of partners and the Safety and Health Committee of the labor union, in addition to its comprehensive safety and health management efforts. The Safety and Health Center, a separate organization made up of external experts, evaluates safety managers, updates and revises safety and health manuals and procedures, and conducts safety inspections.

Health and Safety Organizational Structure



Permanent Safety Committee

The Permanent Safety Committee comprises the CEOs of ASIA Paper MFG and Gyeongsan Paper, along with the factory managers and safety officers from each company. It serves as a permanent body dedicated to implementing on-site safety practices and ensuring compliance with the Serious Accidents Punishment Act. Meeting on a monthly basis, the committee focuses on enhancing safety across all sites, establishing safety and health systems, and conducting corporate-level inspections. The committee has successfully contributed to reducing accident rates, implementing a continuous hazard identification system, and strengthening safety and health management capabilities.

Risk Assessment

Asia Paper conducts annual assessments to identify hazardous risk factors in terms of workplace safety and health. The company evaluates the potential for injuries or illnesses caused by these factors and implements improvement measures accordingly. In 2023, the Sihwa factory conducted its regular risk assessment, identifying 55 risks, with measures taken for all identified risks. The identified hazards were determined through joint labor-management inspections, review of past accident cases, inspection of work standards, and the creation of a risk equipment list. Employee feedback was also gathered and considered. Workers participate in the risk assessment meetings to select risk mitigation measures and establish improvement plans.

Similarly, the Sejong factory completed its 2023 annual risk assessment, identifying 80 risks, with measures taken for all identified risks. Special emphasis was placed on eliminating site hazards to prevent the three major types of serious accidents: falls, entrapment, and collisions. Additionally, any hazardous risk factors discovered during routine operations are continuously eliminated through periodic risk assessments. Six major in-house partner companies have maintained recognition from the Korea Occupational Safety and Health Agency for their risk assessments.

Workplace Health and Safety

Safety Management and Inspections

We conduct various inspection activities, including monthly safety and health patrols, to identify and address hazardous and risky factors in the workplace, and we share the related information. We prioritize the regular equipment inspections of heavy machinery and hazardous machines and tools within the company to manage potential safety threats to workers. Additionally, we conduct company-wide special fire prevention inspections in preparation for thawing periods and winter. In 2024, to prevent accidents caused by human error, which account for over 90% of incidents, we plan to enhance behavior-based safety management activities. This will involve observing worker behavior in high-risk areas and guiding unsafe actions toward safer practices. To effectively implement these activities, we have selected behavior-based safety management as a key strategic task (KPI). We also plan to provide internal and external training for supervisors to help them identify and respond to hazardous situations in the field.

Promotion of Safety Culture

To embed a strong safety culture, ASIA Paper MFG has established safety work standards for all processes and provides training on these new and revised standards to relevant workers. When unsafe behaviors are observed, immediate corrective actions are taken, and these instances are continuously collected and shared to enhance safety awareness. Additionally, to promote employee health, comprehensive medical check-ups are conducted annually for all employees and their spouses. The safety and health manager conducts health and safety interviews with employees who have findings from general and special examinations. For our partners, we also undertake annual improvements of rest areas, sleeping quarters, and restrooms to ensure a healthy and comfortable working environment.

Support for Partners' Safety Management

To support the safety management of our partners, we hold monthly safety council meetings with partners to discuss safety-related issues. Through these meetings, we gather feedback and develop solutions for requested improvements and support. Additionally, with the contractors accessing ASIA Paper MFG sites, we use a safety feedback system to immediately share safety notices, safety rule violations, and unsafe behaviors. This helps identify and mitigate unsafe conditions. During the annual risk assessments, we assign supporters to assist each company with their evaluations. We also monitor the compliance and implementation of safety regulations by partners, providing them with necessary improvements and related resources.

Response to Incidents and Efforts for Prevention of Recurrence

In the event of an incident, we conduct thorough root cause investigations and implement safety risk management activities. In cases of industrial accidents, we guarantee workers' right to suspend work and activate emergency response protocols, including situation dissemination and hospital transport. We form accident investigation teams, conduct thorough investigations, formulate countermeasures, and follow post-management procedures meticulously, adhering to a structured process of planning, execution, verification, and corrective action. Furthermore, we proactively manage hazards to prevent similar incidents and evaluate compliance with safety and health-related regulations in each department. Non-compliance issues are addressed through corrective measures.

Safety Activity Rate*
(As of 2023, including employees and in-house partners)

15.1 activities / person

* Safety Activity Rate: The annual number of activities per person for the eight safety activities defined by ASIA Paper MFG, which includes identifying and mitigating hazards, emergency response training, and observing worker behavior

Health and Safety Training in 2023

22 hours per employee

Employee Empowerment

Employees have served on average

Male  **16 years**

Female  **20 years**

Recruitment of Talented Individuals and Respect for Diversity

ASIA Paper MFG strives to recruit diverse talents that align with our ideal of personnel and foster an environment where all employees can communicate smoothly and work towards personal and organizational development.

Anchored in the corporate philosophy of being a 'company that creates value while considering humans and the environment,' we pursue a talent profile characterized by 'initiative based on strengthened competitiveness,' 'knowledge-friendliness for customer orientation,' and 'creativity through differentiation.' To select suitable candidates, we employ a systematic process involving document screening, aptitude and personality tests, interviews, and physical examinations.

Moreover, we actively recruit local talents to enhance workforce diversity and contribute to regional employment and economic vitality. We prohibit discrimination against minority groups such as female workers and people with disabilities, clearly stating this commitment in our human rights protection guidelines.

Labor-Management Relationship Based on Mutual Growth and Cooperation

At ASIA Paper MFG, two labor unions are active in the Sejong and Sihwa factories, collaborating under the philosophy of 'mutual growth and cooperation' for decades. ASIA Paper MFG strives for improvement in working conditions, wages, and welfare through negotiations with labor unions. Quarterly labor-management meetings are held to share opinions on current issues and work towards improvement and development.

Work-Life Balance

ASIA Paper MFG ensures work-life balance for its employees through various welfare support programs. Through this, we motivate employees, creating a healthy and enjoyable working environment. We provide support such as life stabilization fund loans, various condolence benefits, medical and health welfare support, and cultural and sports welfare support, along with operating internal clubs. We provide club activity fees for the 14 clubs currently active in June and December. Through these initiatives, our members actively participate in various leisure, volunteer, and social activities.

| Employee benefits and welfare programs

Quality of life	Loans for the quality of life including housing loans
Financial support	Tuition and child support, congratulatory and condolence money and leave, rewards for long-term employment(cash and leave)
Healthcare	Annual medical checkups for employees and their spouses
Welfare	- Recreation facilities, fitness center - Language course, incentives for professional qualifications, club activities - Special allowance for work during holidays

Employee Empowerment

Training and Education in 2023

14 hours per employee

Employee Capacity Building

The cornerstone and future driving force of a company are the talented individuals who possess exceptional capabilities and passion. ASIA Paper MFG is dedicated to cultivating individuals who embody continuous innovation, self-development, the creation of synergy between existing skilled workers and new talents, and the attraction of outstanding personnel. This motto guides our efforts in nurturing talent with growth-oriented and harmonious spirits. To achieve this, ASIA Paper MFG has divided employee education into three categories: hierarchical, common, and job-specific, establishing and implementing systematic training programs.

| Employee Training and Education System

Category	Hierarchical		Job-specific	General	
	Special Training by Job Position	Job Competency	Ethics & Compliance	Personal Development	
Executives	Strategic Management Seminar	-			-
Administrative	Senior managers	Senior Leadership Development Management Skills & Decision Making	Job competency development training by area	Sexual harassment prevention Privacy Disability awareness	Language and culture
	Managers	Job Competency Development		Retirement pension	
Workers		Training for Labor Union Officers			

Human Rights

Human Rights Policy

ASIA Paper MFG establishes basic human rights principles and policies based on international human rights standards, striving to ensure that respect for human rights is integrated into all aspects of its business activities. We apply these human rights guidelines to all workplaces, pledging to adhere to important standards and principles for respecting human rights.

Grievance Resolution

ASIA Paper MFG operates a grievance resolution process to address issues that may arise in the work environment and working conditions of employees. Each factory appoints a grievance coordinator, and consultations can be requested through various channels such as email, phone, or in-person meetings. When a grievance is received, the committee member investigates and reviews the issue and responds with the results, taking necessary measures to prevent the recurrence of similar issues.

ASIA Paper MFG actively addresses concerns regarding the work environment and working conditions of employees, creating an environment where employees can work safely and peacefully.

| Number of human rights complaints reported and resolved

	2021	2022	2023
Number of reports	0	0	0
Resolved Cases	0	0	0

(cases)

Sustainable Supply Chain

Supplier Code of Conduct

ASIA Paper MFG has established the Supplier Code of Conduct outlining the fundamental principles that partners and their subcontractors supplying products and services to ASIA Paper MFG must adhere to.

The Supplier Code of Conduct provides detailed guidelines on seven main topics: labor and human rights, occupational health and safety, environment, ethics and fair trade, management systems, mutual growth, and quality management. Through these guidelines, partners are encouraged to establish a safe working environment, ensure respect and dignity for workers, and operate their businesses in an environmentally friendly and ethical manner, contributing to the sustainable supply chain of ASIA Paper MFG.

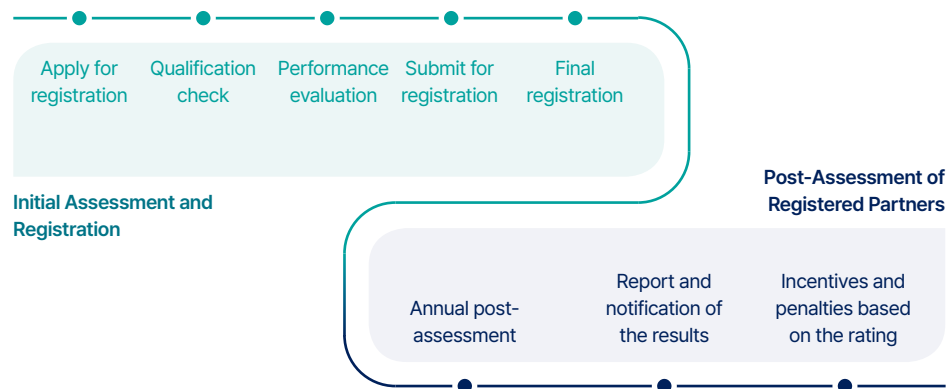
Ethics Pledge

In addition the Supplier Code of Conduct, both employees and partners are required to sign an ethics pledge to ensure transparent and fair transactions with trading partners. The pledge includes compliance with fair trade-related regulations throughout the contracting and implementation process. Furthermore, it is strictly prohibited for them to offer ASIA Paper MFG employees undue benefits or engage in bribery or similar acts. ASIA Paper MFG employees also contribute to a culture of transparent transactions through compliance with the Code of Conduct pledge.

Partner Selection and Assessment

ASIA Paper MFG strives to maintain a stable supply chain through pre-assessment and post-assessment of its partners before registration. After partners are registered, the process involves a basic qualification assessment and an on-site assessment, followed by final registration. Ratings are calculated based on assessments of various criteria at each stage. After the initial assessment and registration of partners, post-assessments are conducted to ensure supply chain stability. Annual post-assessments of partners assess quality, procurement, and basic criteria. The results of these assessments are shared with the partners, and they may receive preferential treatment or sanctions based on their ratings. Additionally, we operate a monthly Safety Council with partners to listen to their safety-related opinions and address grievances or requests from them.

| Partner Registration and Assessment Process



Community Engagement

At ASIA Paper MFG, we believe that 'social contribution is not just a necessary condition for corporate survival but the ultimate core competitiveness of a company.' We engage in various genuine social contribution activities such as visiting marginalized neighbors, participating in Red Cross activities and local volunteer work, and conducting ongoing donation activities. Moreover, we are committed to sustainable management aimed at enhancing the well-being of our stakeholders. This includes initiatives such as fostering local job opportunities through the recruitment of local talent, promoting collaborative management practices with our partners, and fostering a positive labor-management culture.

Efforts for a Greener Neighborhood

Cleanup Neighborhood

We participate in community environmental cleanup activities by cleaning the roads and slopes around the Sejong factory, ensuring visibility on the roads, and improving the environment.

Campaigns with Local Communities

We participated in environmental cleanup campaigns to create a pleasant environment around the Geumgang River. Additionally, ASIA Paper MFG's Sejong factory, along with the Nature Conservation Federation and Bugang-myeon Office, are conducting a campaign to raise awareness and participation in wildfire prevention.

Community Welfare

Respect-for-Elders Tour and Senior Citizens' Community Gatherings

ASIA Paper MFG organizes various activities such as respect-for-elders tour and community gatherings for the senior citizens to enhance the quality of life for local residents. We support regular activities and bring joy to elderly residents in the surrounding areas.

Support for Senior University 'Naiyagara University'

Since 2013, Bugang-myeon in Sejong City has been operating 'Naiyagara University' for the cultural and leisure activities of the elderly. At ASIA Paper MFG, we support Naiyagara University by providing educational materials and other resources to assist in its operation.

Road Cleanup in the Geumho-ri Area



Geumho 3-gu Respect-for-Elders Tour



Community Engagement

Community Development and Sponsorship

Support for disability welfare facility

We regularly invite residents from the facility for people with disabilities, 'House of Bethesda,' for meals and provide regular donations and rice deliveries through the Red Cross volunteer group.

Delivery of Goods to the Community

We provide financial aid to vulnerable groups and families affected by fires. During the COVID-19 pandemic, we supported residents of Geumho-ri with supplies to help them through the winter as part of our efforts to overcome COVID-19. We actively participate in various charitable activities in collaboration with the Korean Red Cross and continuously engage in activities for community development, such as promoting the purchase of local specialties.

Event for living-alone elderlyes organized by Saemaul Council



Employee Engagement and Expenditures on Social Contribution

		2021	2022	2023	Remark
Employee engagement	Number of employees involved in social contributions	persons	10	20	38
	Employee volunteer hours	hours	31	139	169
Expenditures on social contribution	Support programs for local residents	KRW million	6	6	6 Book donation to Bukang-myeon Cultural Welfare Center
	Donations	KRW million	23	13	13
	In-kind support	KRW million	17	16	22
	Total social contribution expenditures	KRW million	46	35	41

* The social contribution expenditures include direct donations, indirect donations through social contribution funds, and in-kind support.

Product Responsibility

Enhancing Quality Control

ASIA Paper MFG manages its quality control system to ensure customer satisfaction. Since receiving the first ISO 9001:2015 Quality Management System certification in 1997, we have continuously undergone reviews and renewals to make improvements and enhancements. The certification scope includes the design, development, production, and sale of linerboard, gypsum linerboard, kraft paper. Based on a systematic quality management system and years of accumulated expertise and experience, we continuously improve and enhance our product quality. We have increased production efficiency and quality through reducing the basis weight of gypsum linerboard and the optimization of high-strength papers such as AK, AT, and AQ. We also plan to analyze foreign products and review the quality of our exports to international markets. Additionally, we are working to improve the reliability of our testing by replacing outdated equipment, such as burst strength testers and internal bond strength testers.

Efforts to Reduce Social and Environmental Impact of Products

FSC Council Chain of Custody (CoC) Certification

ASIA Paper MFG has obtained the Chain of Custody certification. This certification verifies that the linerboard and gypsum linerboard produced by the company use forest resources that are responsibly sourced both environmentally and socially. In 2023, we established a forest protection policy to contribute to global environmental improvement, committing to preventing deforestation not just in our operations but among our partners. We do not use pulp produced from illegally logged wood.

Increasing the Proportion of Domestic Recycled Materials

To improve the quality of industrial paper in terms of tensile strength, compression strength, and burst strength, and to increase the proportion of domestic recycled materials used in production, we have introduced state-of-the-art size press technology. As a result, our production capacity that contributes to environmental improvement has increased, allowing for the use of more domestic recycled materials. This contributes to the activation of recycling domestic old corrugated containers while also reducing carbon emissions associated with the transportation of imported raw materials.

Development of Eco-Friendly Paper

At ASIA Paper MFG, we have developed eco-friendly paper specialized in protecting and maintaining the freshness of fresh and frozen food products. We have obtained patents for this paper. Compared to traditional packaging materials such as aluminum foil and paraffin paper, ASIA Paper MFG's eco-friendly paper not just offers superior cooling functionality but facilitates smooth recycling, alleviating the environmental impact caused by conventional packaging materials.

Communication with Partners and Customers

For quality management with partners, we utilize our expertise and equipment to analyze the causes of product defects. Additionally, quarterly paper quality meetings are held with customers to share key issues and discuss relevant solutions.



Collaboration with Academic and Research Institutions for Quality Assurance and Technological Development

ASIA Paper MFG actively participates in collaborative research with academic and research institutions for continuous quality improvement and technological development.

Seoul National University (2006-2008)
Development of anti-bursting technology

Kookmin University (2019-2021)
- Comparative study on the quality characteristics of recycled paper materials

Konkuk University (2021)
- Analysis of characteristics of recovered paper (paper resources) raw materials

Chungbuk National University (2022-present)
- Comparative study on the quality characteristics of recovered paper as raw materials

Information Security

Information Security Management System

ASIA Paper MFG manages security activities under the guidance and supervision of the Chief Information Security Officer (CISO) to ensure information security. Relevant departments, such as the planning and IT departments, collaborate to disseminate security policies throughout the organization and perform support activities such as checking compliance with regulations.

Information Security Regulations and Operational Standards

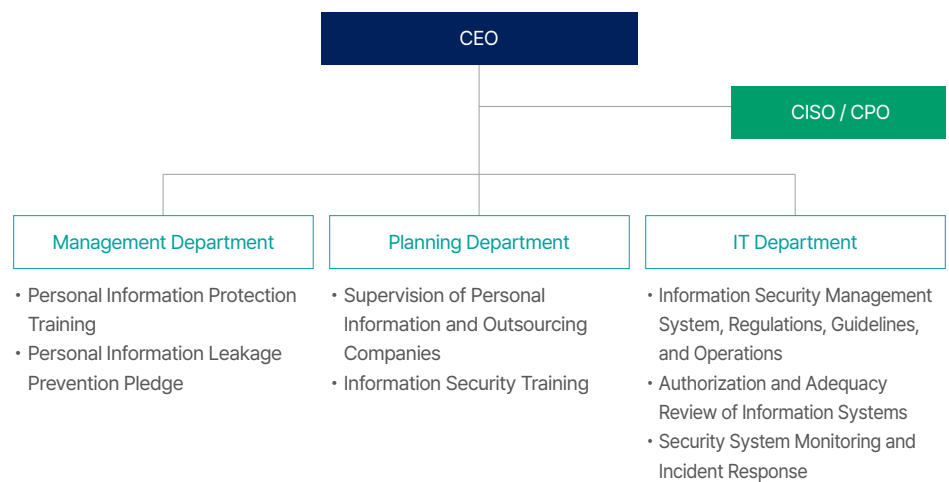
Through the internal accounting management system, we conduct inspections and IT audits on internal and external personnel. We establish and implement action plans to address issues identified in internal audits. Additionally, we operate firewalls and VPNs to prevent cybersecurity incidents like hacking and continuously improve by monitoring and reviewing logs regularly.

Public Disclosure of Personal Information Handling Guidelines

ASIA Paper MFG, in compliance with Article 30 of the Personal Information Protection Act and the Standard Guidelines for Personal Information Protection, has established guidelines for handling personal information to protect data subjects and address related complaints promptly and efficiently. These guidelines are publicly available on our website, and personal information is protected and managed according to these guidelines.

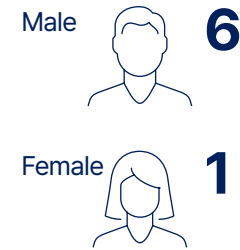
Simulation Training for Information Security (Supported by KISA)

As part of its efforts to strengthen information security, ASIA Paper MFG participates twice a year in cyber crisis response simulation training conducted by Korea Internet & Security Agency (KISA). We disclose the current status of our information security operations on KISA's Information Security Public Disclosure Comprehensive Portal, thereby enhancing the credibility of its information security management.



Board of Directors

Board Composition by Gender



Composition of the Board of Directors

As of May 2024, the board of directors of ASIA Paper MFG consists of a total of seven directors, including five executive directors and two non-executive directors. To ensure independence, directors of the board are appointed by the shareholders' meeting, and the personal information of director candidates, as well as their affiliations and relationships with recommending parties and major shareholders, are disclosed through notices of shareholders' meetings.

Composition of the Board of Directors

	Name	Term	Initial Appointment	Gender	Career Highlights
Executive Directors	Lee, Hoon Beom	2022.03 ~ 2025.03	2020.03	Male	- Graduated from the Graduate School of New York University - CEO and Chairman of ASIA Holdings - Chairman of ASIA Cement - Chairman of HALLA Cement - Chairman of ASIA Paper MFG
	Lee, In Beom	2024.03 ~ 2027.03	2007.03	Male	- Master of Business Administration (MBA) from MIT Sloan School of Management - Vice Chairman of ASIA Holdings - Vice Chairman of ASIA Cement - Vice Chairman of ASIA Paper MFG
	Yu, Seung Hwan (Chairman of the board, CEO)	2023.03 ~ 2025.03	2019.12	Male	- Graduated from Chuna-Ang University - CEO of Cheil Industrial - CEO of Yujin Fiber Board - CEO of ASIA Paper MFG
	Lee, Hyun Tak (CEO)	2024.03 ~ 2026.03	2020.03	Male	- Graduated from Ajou University - CEO of Kyungsan Paper - Sejong Factory Manager of ASIA Paper MFG - CEO of ASIA Paper MFG
	Lee, Chang Ho	2024.03 ~ 2026.03	2020.03	Male	- Graduated from Kangwon National University - Production Director of ASIA Papertec - Sihwa Factory Manager of ASIA Paper MFG
Non-executive Directors	Yoo, Wan Hee	2024.03 ~ 2027.03	2024.03	Male	- Graduated from Seoul National University - Non-executive Director at NHN Corporation - Partner Accountant at Hanul Accounting Firm
	Cho, Won Kyoung	2023.03 ~ 2025.03	2023.03	Female	- Graduated from Seoul National University School of Law - Lawyer at Kim & Chang Law Firm - Professor at Sungkyunkwan University Law School

Board Expertise, Independence, and Conflict of Interest Prevention

The board of directors is comprised of executive directors who possess both specialized knowledge and experience in the company's business, as well as non-executive directors with expertise in legal and administrative fields. In compliance with Article 297-2 of the Commercial Act, the company prevents conflicts of interest. We ensure that individuals who do not meet the qualifications required by relevant laws, have been subject to administrative or judicial sanctions for legal violations, or are responsible for damaging corporate value or infringing on shareholder rights, are not appointed as executive directors. To this end, the company conducts a comprehensive evaluation of candidates before presenting them as nominees at the shareholders' meeting. Additionally, more than one-fourth of the total board members are composed of non-executive directors to guarantee the board's supervisory functions and independence.

Board of Directors

Board Skill Matrix

	Yu, Seung Hwan	Lee, Hyun Tak	Lee, Hoon Beom	Lee, In Beom	Lee, Chang Ho	Yoo, Wan Hee	Cho, Won Kyoung
Technology		○			○		
Leadership	○	○	○	○	○	○	○
Global Business		○	○	○			
Financial	○		○	○		○	
Legal & Regulatory	○			○			○
Sales & Marketing	○	○	○	○			
IT			○	○			
ESG	○	○	○	○	○	○	○
Risk Management	○					○	○
Independency						○	○

Performance Evaluation and Compensation

The remuneration for executive directors, non-executive directors, and auditors has been approved by the shareholders' meeting within the approved limit, and it has been resolved by the board of directors. The amount is determined based on the duties and responsibilities assigned to each position, considering the payment basis, compensation system, evaluation criteria for compensation decisions, and other relevant factors.

Compensation for 2023

(KRW million)

	Number of Directors	Total Compensation	Average Compensation
Executive Directors	5	2,255	451
Non-executive Directors	2	64	32

Training for the Board

Our company plans and conducts various educational programs to enhance the expertise of independent directors and foster knowledge related to risks. In 2023, we conducted education sessions on market conditions, overall business performance, and business plan reporting.

Training for Non-executive Directors

Date	Organizer	Attendees	Description
2023.02.28	ASIA Paper MFG	Kim Dong Hoon and Lee Bong Jae	Report on current management performance issues
2023.03.17	ASIA Paper MFG	Lee Bong Jae and Cho Won Kyoung	Report on current management performance issues
2023.06.20	Listed Companies Association	Lee Bong Jae	Training for non-executive directors
2023.10.16	ASIA Paper MFG	Lee Bong Jae and Cho Won Kyoung	Report on internal audit results and current management performance issues

Board of Directors

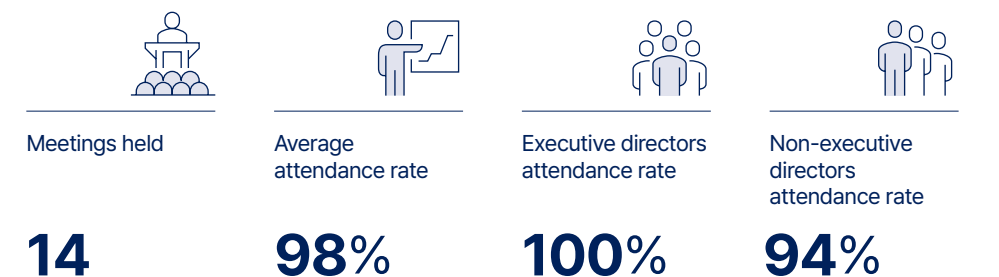
Board Operations

The board of directors serves as the decision-making body for company management, deliberating and managing matters as stipulated by laws or articles of incorporation, including the establishment and execution of basic management policies and other important issues. According to the articles of incorporation, the chairman of the board has the authority to convene the board of directors.

Board Operations in 2023

Session	Date	Attendance	Agenda	Result
1st	2023.01.09	100%	Approval of real estate acquisition	Approved
2nd	2023.01.16	100%	Report on social contribution activities performance and plans	Approved
3rd	2023.02.02	100%	Approval of financial statements for the 67th fiscal year (pre-audit)	Approved
4th	2023.02.28	100%	Convening and adoption resolution of the 67th regular shareholders' meeting and electronic voting	Approved
			Approval of evaluation report on internal accounting control system audit for 2022	Reporting
4th	2023.02.28	100%	Report on the evaluation of operation status of internal accounting control system for 2022	Reporting
5th	2023.03.09	100%	Approval of financial statements for the 67th fiscal year (post-audit)	Approved
6th	2023.03.17	71%	Appointment of CEO(s) resolution	Approved
7th	2023.03.23	100%	Determination of trust agreement for acquisition of treasury stocks	Approved
8th	2023.04.06	100%	Approval of investment for establishment of factory for the expansion of corrugated board business	Approved
9th	2023.06.02	100%	Determination of loan agreements with Woori Bank	Approved
10th	2023.07.17	100%	Determination of loan agreements with KDB Bank	Approved
			Determination of trust agreement for acquisition of treasury stocks	Reporting
10th	2023.07.17	100%	Reporting on results of risk management activities	Reporting
11th	2023.09.11	100%	Determination of record date for determining shareholders entitled to quarterly dividends	Approved
12th	2023.10.16	100%	Determination of cash dividend for Q3	Approved
			Reporting on internal audit results	Reporting
13th	2023.11.01	100%	Determination of installation of branches and application for business registration	Approved
14th	2023.11.21	100%	Report to the Board of Directors on the environmental management and environmental management performance	Reporting
			Reporting on ESG materiality assessment and results	Reporting
			Reporting on risk management status	Reporting

Board of Directors Meetings and Attendance Rate in 2023



Board of Directors

Board committees

ASIA Paper MFG is establishing a sound corporate culture through the dissemination of proper corporate ethics and the establishment of an objective and transparent decision-making process. To fulfill our social responsibilities through continuous dissemination and expansion of an ethics-based corporate culture for clean and transparent management, we operate several committees within the Board of Directors: the Ethics Management Committee, the Internal Transactions Committee, the Compensation Committee, the Risk Management Committee, and the Non-executive Director Recommendation Committee. The chairpersons of all board committees are non-executive directors.

| 2023 Board committees' Activities

Ethics Management Committee

It establishes ethical agendas for corporate management overall and to manages the drafting of ethical regulations.

Committee Members	Date of Meeting	Agenda	Attendance	Result
Yu Seung Hwan, Lee Bong Jae (Chairperson) and Cho Won Kyoung	2023.03.17	Report and evaluation of the Ethics Management Committee's activities	100%	Reporting
	2023.04.19	Report on the activity plan of the ESG Management Council	100%	Reporting
	2023.11.21	Report to the Board of Directors on the environmental management and environmental management performance	100%	Reporting
	2023.11.21	Reporting on ESG materiality assessment and results	100%	Reporting

Internal Transactions Committee

It manages the entire decision-making process for internal transactions, ensuring an objective and transparent decision-making process.

Committee Members	Date of Meeting	Agenda	Attendance	Result
Yu Seung Hwan, Lee Bong Jae and Cho Won Kyoung (Chairperson)	2023.03.17	Report and evaluation of the Internal Transactions Committee's activities	100%	Reporting
	2023.10.16	Reporting on internal audit results	100%	Reporting

Compensation Committee

It supports the company's long-term development by designing transparent and rational compensation policies.

Committee Members	Date of Meeting	Agenda	Attendance	Result
Lee Chang Ho, Lee Bong Jae (Chairperson) and Cho Won Kyoung	2023.03.17	Composition of the Compensation Committee and activity evaluation report	100%	Reporting

Risk Management Committee

The Risk Management Committee establishes risk management policies aligned with the business strategy and makes management decisions on acceptable levels of risk.

Committee Members	Date of Meeting	Agenda	Attendance	Result
Lee Hyun Tak, Lee Bong Jae (Chairperson) and Cho Won Kyoung	2023.03.17	Composition of the Risk Management Committee and activity evaluation report	100%	Reporting
	2023.07.17	Reporting on results of risk management activities	100%	Reporting
	2023.11.21	Reporting on risk management status	100%	Reporting

Non-executive Director Recommendation Committee

It nominates independent directors to support balanced and efficient management

Committee Members	Date of Meeting	Agenda	Attendance	Result
Lee Hyun Tak, Lee Bong Jae and Cho Won Kyoung (Chairperson)	2023.06.02	Composition of the Non-executive Director Recommendation Committee and activity evaluation report	100%	Reporting

Risk Management

Integrated Risk Management System

ASIA Paper MFG has established a risk management system that prevents potential risks arising from economic, environmental, and social changes in the business environment. This system enables timely detection of unusual signs and is regularly reviewed. The Head of the Management Support Division is responsible for risk management, reporting risk management activities to the board of directors. Related activities were reported at the board meeting held on July 17, 2023. Specifically, we aim to minimize the impact on business by clearly defining roles and responsibilities for each division and using a standardized reporting system for quick decision-making and early response. The identified risks and opportunities are used to establish and modify the business and strategic direction and policies for the next year. The risk management officer oversees actions, plans, and execution proportionate to the potential impact on the suitability of the environment, products, and services in response to these risks and opportunities.

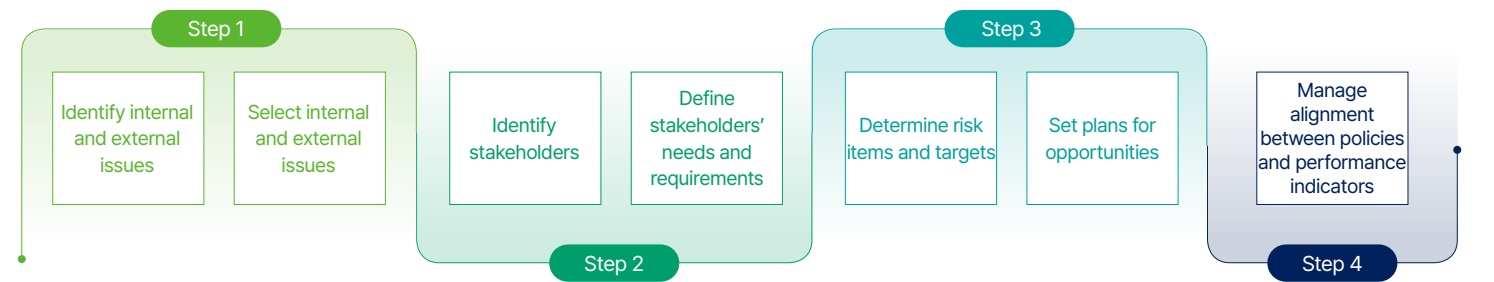
Risk Management and Response Process

At ASIA Paper MFG, we analyze and manage risks based on internal and external factors. We have established a preemptive risk management system for each type of risk, which includes evaluation, planning, monitoring, and deriving improvement activities to prevent issues. For identified risks, the relevant departments respond according to predefined manuals based on the definition and type of risk. To prevent recurrence, we conduct educational activities.

Identifying Risk Factors and Impacts for Stakeholder Issues

Each department head at ASIA Paper MFG conducts an annual evaluation at the end of the year according to the Policy Management Operation Rules. This evaluation considers internal and external issues and stakeholder requirements identified and analyzed by each team and assesses their importance. These issues and requirements are linked to performance indicators to determine the impact of each risk and opportunity. The 'Issues, Stakeholders, Risk, and Performance Indicator Correlation Table' created by each department head is used to establish the quality and environmental targets for the following year.

Process of Aligning Issues, Stakeholders, Risks, and Performance Indicators



Risk Management

Key Risks

In the paper industry, fluctuations in raw material prices have a significant impact on profitability. The primary raw materials, imported pulp and recycled imported paper resources, are influenced by the global economy and exchange rate fluctuations. Domestic recycled paper resources also experience irregular price changes due to market conditions for imported pulp and recycled imported paper resources, factory operating rates, demand, and changes in export volumes. ASIA Paper MFG identifies foreign exchange risk, raw material risk, and sales price risk as major industry risks and monitors and manages these areas in response to the market environment.

Foreign Exchange Risk

We manage foreign exchange risks with the goal of minimizing the impact of exchange rate fluctuations on foreign currency-denominated debt, thereby ensuring financial stability and management predictability. For importing major raw materials like pulp and paper resources, we use payment methods such as T/T (telegraphic transfer) after the arrival of goods to minimize risks associated with non-delivery and payment settlements. We are rigorously managing foreign exchange risks to achieve financial stability and management predictability by minimizing the impact of exchange rate fluctuations on our financial structure.

Raw Material Risk

In 2022, amidst a subdued phase of COVID-19, inflation and market downturns for products and raw materials sharply escalated from the second half onward due to the aftermath of quantitative easing. In 2023, market stagnation persists with conditions of oversupply and weak demand likely to prolong into the long term. While short- and medium-term price forecasting remains challenging, we diligently monitor market dynamics to mitigate risks and explore strategic solutions.

Sales Price Risk

Setting optimal sales prices to secure adequate profits is an essential and indispensable element for sustainable growth. Key factors in determining sales prices include raw material costs, transportation expenses, energy costs, and exchange rates. In particular, market conditions for key raw materials such as imported pulp, recycled imported paper, and domestically recycled paper significantly influence pricing decisions. As external variables such as exchange rate and oil price fluctuations expand, domestic and international political and economic uncertainties are making it increasingly difficult to predict trends and their impacts. Even amid challenging circumstances, we manage sales price risks through our independent business judgment.

Ethical Management

Code of Ethics and Conduct Guidelines

Asia Paper has established 'Ethics Charter', 'Code of Ethics', and 'Job Ethics and Conduct Guidelines' for to declare its commitment to ethical management and define the principles and standards to be adhered to by employees and stakeholders.

The Ethics Charter is established to guide the faithful performance of the company's social responsibilities and inherent roles, aiming to uphold an esteemed corporate image that contributes to customers, shareholders, and the national community. We call for compliance with these standards as a commitment to fulfilling the company's social responsibilities and inherent roles faithfully.

The Code of Ethics outlines the behavior standards and value judgments that employees need to follow to embody the spirit of the Code of Ethics' charter within the workplace. The Job Ethics and Conduct Guidelines serve as a tool to help employees understand and apply ethical management policies accurately. These guidelines provide specific criteria and procedures for ethical actions, aligning with the company's management philosophy and ensuring the promotion of ethical practices.

Enhancing Ethical Management Practices

ASIA Paper MFG has established Code of Ethics' charter, and Code of Ethics and Job Ethics and Conduct Guidelines to ensure that no direct or indirect human rights violations or damages arise from our business operations. We strictly adhere to these ethical principles and guidelines throughout our management activities. Specifically, we enforce the Ethical Management Pledge each time employees access our ERP system to continually reinforce awareness.

Furthermore, we urge our employees and partners to comply with ethical norms and guidelines through initiatives like the Ethical Management Pledge. Separate versions are tailored for employees and business partners, ensuring correct ethical understanding and adherence in various contexts. Additionally, our job Ethics and Conduct Guidelines provide detailed guidelines organized by section, outlining fundamental principles and specific actions for reference.

Whistleblowing Policy

To listen to valuable feedback from our stakeholders such as employees, customers, and partners, we have established a 'Communication Plaza' and a 'Cyber Report' menu on our website.

The 'Communication Plaza' integrates various external opinions, including general inquiries, while the 'Cyber Whistleblowing' allows stakeholders to report misconduct related to transactions with us or internal wrongdoing by our employees.

Both employees and external individuals can use these platforms, and we promise to protect the identity of whistleblowers in accordance with internal information security regulations. We ensure confidentiality regarding personal information (email) and the content of the reports.

05



Performance Data

- 133 Financial Performance
- 137 Environmental & Social Performance
- 137 - ASIA Cement
- 145 - HALLA Cement
- 153 - ASIA Paper MFG

Financial Performance

ASIA Holdings

Consolidated Statement of Financial Position

	2023.12.31	2022.12.31	2021.12.31
(KRW)			
Asset			
Current Asset	873,549,386,331	881,507,374,671	800,688,243,838
Non-current Assets	2,398,536,619,550	2,300,868,573,409	2,314,582,141,564
Total Assets	3,272,086,005,881	3,182,375,948,080	3,115,270,385,402
Liabilities			
Current liabilities	561,839,258,545	518,884,523,788	482,831,435,041
Non-current liabilities	730,151,668,983	798,714,350,007	916,223,145,795
Total liabilities	1,291,990,927,528	1,317,598,873,795	1,399,054,580,836
Capital			
Equity attributable to owners of the parent company	1,077,694,141,364	981,905,721,805	908,227,683,144
Capital	10,955,120,000	10,955,120,000	10,955,120,000
Other paid-in capital	-190,934,822,054	-204,752,035,022	-197,033,550,900
Retained earnings (deficit)	1,250,859,297,526	1,169,725,363,363	1,089,657,180,907
Other capital components	6,814,545,892	5,977,273,464	4,648,933,137
Non-controlling shareholders' equity	902,400,936,989	882,871,352,480	807,988,121,422
Total capital	1,980,095,078,353	1,864,777,074,285	1,716,215,804,566
Total capital and liabilities	3,272,086,005,881	3,182,375,948,080	3,115,270,385,402

Consolidated Statement of Comprehensive Income

	2023.11 ~ 2023.12.31	2022.11 ~ 2022.12.31	2021.11 ~ 2021.12.31
(KRW)			
Profit (sales)	2,115,887,323,161	2,072,300,589,648	1,846,503,739,538
Cost of sales	1,654,211,299,693	1,622,285,055,666	1,423,398,419,756
Gross profit	461,676,023,468	450,015,533,982	423,105,319,782
Selling and administrative expenses	221,281,028,533	217,437,681,851	194,239,575,444
Operating profit (loss)	240,394,994,935	232,577,852,131	228,865,744,338
Financial profits	12,628,100,263	10,198,932,184	6,436,094,386
Financial cost	35,251,102,139	37,050,444,818	33,511,160,767
Other non-operating income	12,555,690,060	17,298,683,712	17,063,721,681
Other non-operating expenses	10,435,875,537	12,637,514,858	8,577,530,338
Equity method investment profit (loss)		-1,378,771	502,475,281
Net profit (loss) before corporate tax expenses	219,891,807,582	210,386,129,580	210,779,344,581
Corporate tax expense (profit)	44,290,423,443	46,877,319,073	-27,847,412,437
Net profit (loss)	175,601,384,139	163,508,810,507	201,244,923,832

Financial Performance

ASIA Cement

Consolidated Statement of Financial Position

(KRW)

	2023.12.31	2022.12.31	2021.12.31
Asset			
Current Asset	442,211,955,202	407,821,475,088	410,920,110,394
Non-current Assets	1,678,175,960,561	1,632,188,257,337	1,626,402,180,089
Total Assets	2,120,387,915,763	2,040,009,732,425	2,037,322,290,483
Liabilities			
Current liabilities	408,050,991,646	337,683,357,648	304,078,712,009
Non-current liabilities	663,213,430,741	723,644,087,871	813,654,955,790
Total liabilities	1,071,264,422,387	1,061,327,445,519	1,117,733,667,799
Capital			
Equity attributable to owners of the parent company	1,035,263,351,019	964,657,092,412	905,943,853,564
Capital	19,479,045,000	19,479,045,000	19,479,045,000
Other paid-in capital	564,144,649,186	572,440,064,086	572,442,564,086
Retained earnings (deficit)	450,443,767,349	371,780,843,068	315,494,004,723
Other capital components	1,195,889,484	957,140,258	-1,471,760,245
Non-controlling interest	13,860,142,357	14,025,194,494	13,644,769,120
Total capital	1,049,123,493,376	978,682,286,906	919,588,622,684
Total capital and liabilities	2,120,387,915,763	2,040,009,732,425	2,037,322,290,483

Consolidated Statement of Comprehensive Income

(KRW)

	2023.11 ~ 2023.12.31	2022.11 ~ 2022.12.31	2021.11 ~ 2021.12.31
Revenue	1,200,454,909,494	1,040,145,906,143	892,569,417,094
Cost of sales	929,837,350,307	804,125,313,088	656,232,718,469
Gross profit	270,617,559,187	236,020,593,055	236,336,698,625
Selling and administrative expenses	123,730,928,406	118,049,781,242	107,689,776,603
Operating profit (loss)	146,886,630,781	117,970,811,813	128,646,922,022
Financial profits	3,883,873,679	3,192,802,677	3,489,500,304
Financial cost	29,462,085,643	31,949,650,311	30,078,656,179
Other non-operating income	1,211,661,059	3,586,146,439	1,577,694,203
Other non-operating expenses	9,886,785,926	9,886,348,158	7,322,765,361
Equity method investment profit (loss)		-1,378,771	502,475,281
Net profit (loss) before corporate tax expenses	112,633,293,950	82,912,383,689	96,815,170,270
Corporate tax expense (profit)	23,197,852,952	19,008,105,691	15,911,231,211
Net profit (loss)	89,435,440,998	63,904,277,998	99,216,930,747

Financial Performance

HALLA Cement

Statement of Individual Financial Position

(KRW)

	2023.12.31	2022.12.31	2021.12.31
Asset			
Current Asset	202,002,766,641	196,235,963,717	172,537,097,012
Non-current Assets	825,020,682,136	801,880,176,747	799,704,606,958
Total Assets	1,027,023,448,777	998,116,140,464	972,241,703,970
Liabilities			
Current liabilities	218,034,942,741	211,309,425,503	144,341,311,208
Non-current liabilities	493,390,807,015	508,453,157,503	568,417,706,490
Total liabilities	711,425,749,756	719,762,583,006	712,759,017,698
Capital			
Capital	61,153,003,551	61,153,003,551	61,153,003,551
Other paid-in capital	27,023,213,089	27,023,213,089	27,023,213,089
Retained earnings	227,421,482,381	190,177,340,818	171,306,469,632
Total capital	315,597,699,021	278,353,557,458	259,482,686,272
Total liabilities and equity	1,027,023,448,777	998,116,140,464	972,241,703,970

Statement of Individual Comprehensive Income

(KRW)

	2023.11 ~ 2023.12.31	2022.11 ~ 2022.12.31	2021.11 ~ 2021.12.31
Revenue	625,225,476,057	532,425,946,723	446,079,755,692
Cost of sales	506,615,366,856	441,305,472,555	358,627,769,736
Gross profit	118,610,109,201	91,120,474,168	87,451,985,956
Selling and administrative expenses	50,843,536,362	47,323,460,603	43,282,033,820
Operating profit	67,766,572,839	43,797,013,565	44,169,952,136
Net profit before corporate tax expenses	45,641,021,253	20,476,331,331	22,814,802,335
Corporate tax cost	8,262,237,822	3,028,111,227	5,725,943,109
Net profit	37,378,783,431	17,448,220,104	17,088,859,226
Other comprehensive P&L	-134,641,868	1,422,651,082	652,027,138
Total comprehensive profit for the current period	37,244,141,563	18,870,871,186	17,740,886,364

Financial Performance

ASIA Paper MFG

Consolidated Statement of Financial Position

(KRW)

	2023.12.31	2022.12.31	2021.12.31
Asset			
Current Asset	403,603,823,024	441,835,691,580	359,222,505,286
Non-current Assets	644,573,941,817	593,112,570,114	610,370,747,914
Total Assets	1,048,177,764,841	1,034,948,261,694	969,593,253,200
Liabilities			
Current liabilities	153,102,582,951	174,449,422,525	168,731,264,246
Non-current liabilities	45,317,862,554	56,212,817,166	86,441,140,053
Total liabilities	198,420,445,505	230,662,239,691	255,172,404,299
Capital			
Equity attributable to owners of the parent company	849,757,319,336	804,286,022,003	714,420,848,901
Capital	44,782,510,000	44,782,510,000	44,782,510,000
Other paid-in capital	215,341,737,811	235,356,221,661	235,356,221,661
Other capital components	237,460,963	-133,141,150	-269,247,250
Retained earnings (deficit)	589,395,610,562	524,280,431,492	434,551,364,490
Non-controlling interest	0	0	0
Total capital	849,757,319,336	804,286,022,003	714,420,848,901
Total capital and liabilities	1,048,177,764,841	1,034,948,261,694	969,593,253,200

Consolidated Statement of Comprehensive Income

(KRW)

	2023.1.1 ~ 2023.12.31	2022.1.1 ~ 2022.12.31	2021.1.1 ~ 2021.12.31
Revenue	908,334,402,467	1,023,392,875,106	945,734,471,576
Cost of sales	719,154,140,010	810,820,698,004	760,439,760,302
Gross profit	189,180,262,457	212,572,177,102	185,294,711,274
Selling expenses	45,879,363,421	50,358,719,531	44,237,234,012
Maintenance cost	55,718,396,301	52,766,419,181	47,182,358,506
Operating profit (loss)	87,582,502,735	109,447,038,390	93,875,118,756
Financial profits	6,729,523,910	4,524,510,277	2,044,926,073
Financial cost	4,237,539,262	4,210,911,973	3,121,160,244
Other non-operating income	12,389,233,847	15,362,779,816	15,470,326,890
Other non-operating expenses	1,582,253,290	3,603,419,674	1,106,146,172
Net profit (loss) before corporate tax expenses	100,881,467,940	121,519,996,836	107,163,065,303
Corporate tax expense (profit)	19,828,292,408	27,119,824,323	16,166,270,787
Net profit (loss)	81,053,175,532	94,400,172,513	90,996,794,516

Environmental and Social Performance

ASIA Cement

Environmental

The scope of environmental quantitative data reporting for ASIA Cement includes all 12 domestic sites, including Seoul Headquarters, Jecheon, Daegu, and Yongin. Due to limitations in data aggregation, certain reporting indicators (resource, waste, water, air pollutants and environmental training) were reported based on the Jecheon plant, encompassing 95% of total production activities (based on cement production volume), aiming to transparently and accurately inform stakeholders about the environmental impact of our business operations.

Greenhouse Gases and Energy

		2021	2022	2023	Remark
Greenhouse gas emissions	Total GHG emissions	tCO ₂ eq	2,374,957	2,343,802	2,399,715
	Scope 1 emissions	tCO ₂ eq	2,200,795	2,169,493	2,224,598
	Scope 2 emissions	tCO ₂ eq	174,168	174,317	175,123
	Greenhouse gas emission intensity (per clinker production)	tCO ₂ e/tonne-cl	0.75	0.76	0.79
Energy consumption	Total energy consumption	TJ	12,231	14,483	13,253
	Fossil fuels	TJ	5,921	7,693	6,933
	Alternative fuels (recycled resources)	TJ	2,681	3,153	2,669
	Electricity	TJ	3,639	3,643	3,659
	Energy intensity (per clinker production)	TJ/tonne-cl	0.0039	0.0047	0.0043

Scope 1: Emissions from sources owned or controlled by the business (direct emissions)

Scope 2: Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the business (indirect emissions)

* The total greenhouse gas emissions and total energy consumption are the sums of truncated amounts at the site unit level, which may differ from the sum of each detailed item.

Eco-friendly Vehicles

	2021	2022	2023	Remark	
Eco-friendly vehicles	Percentage of eco-friendly vehicles in fleet	%	0.0	9.1	9.1

Use of Resources

		2021	2022	2023	Remark	
Raw materials used	Calcareous materials	tonnes	4,897,241	4,810,175	4,710,726	
	Clay materials	tonnes	237,917	198,165	226,322	
	Siliceous materials	tonnes	123,390	127,063	104,874	
	Ferrous materials	tonnes	85,692	88,926	78,713	
	Gypsum	tonnes	176,920	200,566	148,285	
	Slag	tonnes	190,638	177,071	170,818	
Alternative raw materials	Admixture	tonnes	12,841	8,601	11,130	
	Alternative raw materials usage	tonnes	381,371	368,187	343,629	Recycled resources
	Raw material substitution rate	%	75	76	73	Excluding limestone
Alternative fuels	Total alternative fuel usage	tonnes	208,121	275,407	261,404	Excluding waste oil derived fuel
	Waste oil derived fuel	tonnes	25,267	18,213	5,914	
	Fuel substitution rate	%	45	50	44	

Environmental and Social Performance

ASIA Cement

Environmental

Waste

		2021	2022	2023	Remark		
Waste generation	Total	tonnes	4,607	3,935	3,898		
	General waste	tonnes	3,842	2,591	2,427		
	Designated waste	tonnes	765	1,344	1,471		
Waste disposal	General waste	Incineration	tonnes	98	104	94	
		Recycle	tonnes	3,744	2,483	2,328	
	Designated waste	Incineration	tonnes	38	36	49	
		Solidification	tonnes	108	324	627	The final disposal is landfill, with intermediate treatment (solidification)
		Landfill	tonnes	407	746	322	
Recycle	tonnes	212	238	473			
Recycling of waste	Recycled waste	tonnes	4,143	2,725	2,805		
	Percentage of waste recycled	%	89.9	69.3	72.0		

Water

		2021	2022	2023	Remark	
Water withdrawal	Total	m ³	4,749,196	4,662,576	4,453,543	
	Surface water (river water)	m ³	4,694,466	4,607,022	4,387,656	
	Groundwater	m ³	50,086	51,521	60,570	
	Municipal water	m ³	4,644	4,033	5,317	
Water consumption		m ³	4,749,196	4,662,576	4,453,543	Excluding reused water (all wastewater from the wheel washing facility is reused. Laboratory wastewater is outsourced for treatment.)

Air Pollutants

		2021	2022	2023	Remark	
Air pollutants emissions	NOx	tonnes	4,737	4,750	4,473	Excluding nitrous oxide (N ₂ O)
	SOx	tonnes	5.5	3.4	3.1	
	Total suspended particles (TSP)	tonnes	43.7	50.3	52.2	
	Hydrogen chloride	tonnes	7.4	12.7	7.7	

Environmental and Social Performance

ASIA Cement

Environmental

Environmental Investments

		2021	2022	2023	Remark	
Investment criteria	Air	KRW million	13,372	6,754	23,075	Differences in the 2021 and 2022 environmental investment amounts in the previous year's report due to changes in the scope and method of calculation
	Water	KRW million	2,217	0	31	
	Others	KRW million	0	0	83	
Total amount		KRW million	15,589	6,754	23,189	

Green Procurement

		2021	2022	2023	Remark	
Green procurement	Procurement of eco-certified products and services	KRW million	131	175	129	Korea Eco-labeled copper slag
	Procurement of non-certified products and services	KRW million	993	1,179	1,038	Low-carbon raw and subsidiary materials (silica stone, fly ash, and clean slag)
	Total green procurement	KRW million	1,124	1,354	1,167	
Total procurement		KRW million	58,520	65,288	75,953	
Percentage of green procurement		%	1.9	2.1	1.5	

Eco-friendly Products and Services

		2021	2022	2023	Remark	
Sales of eco-certified products and services	Ready-mix concrete	KRW million	0	0	12,238	Low-carbon certified ready-mix concrete
	Dry mortar	KRW million	0	15,670	22,652	Low-carbon certified dry mortar
	Total	KRW million	0	15,670	34,890	
Percentage of sales from eco-friendly products and services		%	0	3.3	6.2	

Environmental Training

		2021	2022	2023	Remark
Number of employees that received environmental training	persons	3	61	10	

Compliance with Environmental Regulations

In 2023, there were two violations of environmental regulations due to inadequate measures to control the generation of fugitive dust. ASIA Cement have since taken corrective actions on the identified issues to prevent the recurrence of similar violations.

Environmental and Social Performance

ASIA Cement

Social

The scope of social quantitative data reporting for ASIA Cement includes all 12 domestic sites, including Jecheon, Daegu, Yongin, and Seoul, except for the data on social contribution, which is limited to the Jecheon plant. ASIA Cement strives to report the environmental impact of our business activities to stakeholders as accurately and transparently as possible.

Workforce

		2021	2022	2023	Remark	
Number of employees	persons	486	493	492		
	Seoul	38	52	52		
Number of employees by region	persons	99	96	96		
	Gyeonggi	99	96	96		
	Chungcheong and Daejeon	313	310	308		
	Gyeongbuk and Daegu	36	35	36		
Number of employees by employment contract	persons	457	463	465		
Permanent employees	Male	457	463	465		
	Female	19	22	22		
Temporary employees	Male	7	8	4		
	Female	3	0	1		
Number of employees by employment type	persons	464	471	469		
Full-time employees	Male	464	471	469		
	Female	22	22	23		
Part-time employees	Male	0	0	0		
	Female	0	0	0		
	Percentage of female employees	4.5	4.5	4.5		
Women and minorities	Percentage of women in management positions	Executives	0.0	0.0	0.0	
		Senior managers	0.0	0.0	0.0	Assistant manager and above
	Managers	27.8	25.6	26.5	Employees on an annual salary	
	Employees with disabilities	3 (0.6)	3 (0.6)	2 (0.4)		
	Recipients of national patriots' and veterans' benefits	23 (4.7)	20 (4.1)	20 (4.1)		

New Hires and Turnover

		2021	2022	2023	Remark
New hires	Entry-level	22	28	15	
	Experienced	0	0	0	
Turnover	Total turnover	29 (6.0)	17 (3.4)	23 (4.7)	
	Voluntary turnover	10 (2.1)	7 (1.4)	5 (1.0)	
Average years of service	years	15.3	15.0	15.6	This report is based on the actual date of hire, while the business report is based on the date of the company split in 2013, resulting in differences in the data.

Environmental and Social Performance

ASIA Cement

Social

Labor Practice

		2021	2022	2023	Remark
Labor union and collective bargaining	Number of employees covered by collective agreements	486	493	492	
	Percentage of employees covered by collective agreements	100	100	100	
Labor-management communication	Number of labor-management council meetings held	5	5	5	

Talent Development and Compensation

		2021	2022	2023	Remark	
Training and education	Overall training and education	Total employee training hours	12,268	10,321	15,873	Due to COVID-19, various education-related programs were operated on a reduced scale. However, with the full resumption of these programs starting in 2023, the education budget for 2023 saw a significant increase compared to 2021 and 2022
		Average hours of training per employee	25.2	20.9	32.3	
	Expenditures on training	141,887,700	220,589,399	590,477,962		
	Expenditures on training per employee	291,950	447,443	1,200,158		
Job-specific training	Number of employees that received job-specific training	97	77	86		
	Total job-specific training hours	696	646	788		
	Average hours of job-specific training per employee	7.2	8.4	9.2		
Performance review	Percentage of employees that received regular performance reviews	Total	41.4 (201)	39.6 (195)	41.9 (206)	
		Male	43.3 (201)	41.4 (195)	44.3 (206)	
		Female	0	0	0	
Compensation	Average salary of employees	Average annual salary per employee	84	91	92	
		Male average annual salary	86	92	94	
		Female average annual salary	44	49	49	
		Average salary ratio of women to men	51.3	53.5	52.4	

Work-Life Balance

		2021	2022	2023	Remark
Parental leave	Number of employees on parental leave	Male	0	1	0
		Female	1	1	1
Return to work rates	Male	N/A	100	N/A	
	Female	100	100	100	
Retention rates after 12 months of return	Male	0	N/A	100	
	Female	100	100	100	
Employee benefits and welfare	Expenditures on employee benefits and welfare	10,987	14,614	15,215	
	Expenditures on employee benefits and welfare per employee	23	30	31	

Environmental and Social Performance

ASIA Cement

Social

Work-Life Balance

			2021	2022	2023	Remark	
Retirement plans	Number of employees enrolled in the retirement plan	Total	persons	466	471	483	
		Defined Benefit (DB) plan	persons	417	415	433	
		Defined Contribution (DC) plan	persons	49	56	50	
	Retirement plan enrollment rate	%	96	96	98		

Health and Safety

			2021	2022	2023	Remark
Lost time injuries	Employees	cases	1	1	5	
	Suppliers	cases	4	6	4	
	Total	cases	5	7	9	
Serious accidents	Employees	cases	0	0	0	
	Suppliers	cases	0	0	1	
	Total	cases	0	0	1	
Injury rate	Employees	%	1.70	2.45	3.06	Number of injured employees / Number of workers x 100
Lost time injury frequency rate (LTIFR)	Employees		1.03	1.05	5.23	Number of lost time injuries x 1,000,000 hours / Total hours worked
	Suppliers		3.62	6.11	3.86	
	Total		2.41	3.62	4.52	
Occupational injury	Employees		7.21	7.36	7.32	Total number of recordable injuries x 1,000,000 / Total hours worked
	Suppliers		5.43	10.19	4.82	
	Total		6.26	8.80	6.02	
Near miss cases reported	Employees	cases	685	585	711	* Lost time injuries: Injuries or illnesses that require more than 3 days of leave
	Suppliers	cases	94	89	92	
	Total	cases	779	674	803	
Near miss reporting transparency	Employees		2.21	2.09	1.76	* Total number of recordable injuries: Lost time injuries and all reported cases that required medical treatment at medical institutions
	Suppliers		0.41	0.66	0.44	
	Total		1.45	1.63	1.32	
Near miss frequency rate (NMFR)	Total for employees and suppliers		75.07	69.74	80.59	Number of near miss cases reported x 200,000 / Total hours worked
Health and safety training	Number of employees that received training	persons	486	493	492	
	Percentage of employees that received training	%	100	100	100	
	Number of suppliers that received training	persons	412	418	405	
	Total hours of health and safety training	hours	24,050	27,240	33,459	Total number of employees and direct contractor employees

Environmental and Social Performance

ASIA Cement

Social

Human Rights

			2021	2022	2023	Remark	
Human rights grievance resolution	Cyber Report	Number of cases received	cases	5	6	4	
		Number of cases resolved	cases	5	6	4	
		Resolution rate	%	100	100	100	
Human rights training	Number of employees that received human rights training		persons	486	493	503	
	Total training hours		hours	1,620	1,811	2,298	
	Percentage of employees that received human rights training		%	100	100	100	

Supply Chain

			2021	2022	2023	Remark	
Supply chain ESG assessment	Number of suppliers identified		companies	587	580	535	
	Key suppliers	Key suppliers	companies	17	21	26	
	Assessed suppliers	Assessed suppliers	companies	6	27	29	
		Assessed key suppliers	companies	1	7	7	
Assessment results	Suppliers with high risk	companies	1	2	1		
Measures taken	Suppliers with high risk that agreed on corrective action	companies	1 (Warning)	2 (Warning)	1 (Warning)		
	Suppliers with contracts terminated as a result of the assessment	companies	0	0	0		
Win-win growth	Round table meetings		times	12	12	12	
	Number of grievance and complaints received		cases	0	25	14	
	Number of grievance and complaints resolved		cases	0	25	14	

Environmental and Social Performance

ASIA Cement

Social

Community Engagement

			2021	2022	2023	Remark
Employee engagement	Number of employees involved in social contributions	persons	291	340	369	
	Employee volunteer hours	hours	1,988	1,185	1,216	
Expenditures on social contribution	Local Development Fund	KRW million	736	622	734	
	Educational programs	KRW million	130	50	55	
	Support programs for local residents	KRW million	339	867	515	
	Collaboration projects with the local government	KRW million	19	108	139	
	Donations	KRW million	20	53	208	
	Others (operational indirect costs)	KRW million	N/A	92	127	Expenses related to the operation of the Fund Management Committee (operating since 2022)
	In-kind support	KRW million	1	3	20	Provision by ASIA Cement (Jecheon and all other sites) to Habitat for Humanity Korea's Building Houses of Hope project, co-sponsored with HALLA Cement
Total social contribution expenditures		KRW million	1,245	1,795	1,798	

Business Ethics and Compliance

			2021	2022	2023	Remark	
Business ethics and compliance training	Training for employees	Number of employees that received training	persons	486	493	503	
		Percentage of employees that received training	%	100	100	100	
		Total training hours	hours	972	986	1,795	
		Training hours per employee	hours/employee	2.0	2.0	3.6	
Channels for reporting business ethics and compliance violations	Cyber Report	Number of violations reported/received	cases	0	0	0	
		Number of cases processed	cases	0	0	0	
		Measures taken (disciplinary actions)	cases	0	0	0	

Partnership projects with the government

			2021	2022	2023	Remark
Financial assistance/support received from government and related agencies	KRW million		2,151	3,998	7,632	Funding for national projects and government-supported programs

Regulatory Compliance

In 2023, ASIA Cement achieved zero violations in the areas of anti-competitive behavior, monopolistic practices, unfair trade practices, corruption and bribery, safety and health impacts of products and services, marketing activities, and customer information protection.

Environmental and Social Performance

HALLA Cement

Environmental

The scope of environmental quantitative data reporting for HALLA Cement includes all 18 domestic business sites, covering the Seoul headquarters as well as the Okgye, Gwangyang, Pohang, and Incheon plants. For certain reporting indicators where data aggregation is limited (resource usage, waste, water, air pollutants, and environmental training), the scope of reporting is the Okgye plant to ensure the most accurate and transparent reporting of the environmental impact from our business activities to stakeholders.

* The Okgye plant encompasses 100% of the total cement production of HALLA Cement, with subsidiary plants receiving cement produced at the Okgye plant for reprocessing, packaging, and sales activities.

Greenhouse Gases and Energy

			2021	2022	2023	Remark
Greenhouse gas emissions	Total GHG emissions	tCO ₂ eq	4,523,552	4,300,068	4,239,404	
	Scope 1 emissions	tCO ₂ eq	4,263,233	4,035,491	3,965,268	
	Scope 2 emissions	tCO ₂ eq	260,326	264,587	274,144	Following the calculation standards according to the Guidelines for Reporting and Certification of Emissions in the Greenhouse Gas Emissions Trading System [Ministry of Environment Notice No. 2023-221, September 18, 2023]
Energy consumption	Greenhouse gas emission intensity (per clinker production)	tCO ₂ e/tonne-cl	0.83	0.83	0.83	
	Total energy consumption	TJ	24,627	23,920	24,346	
	Fossil fuels	TJ	13,730	12,992	12,784	
	Alternative fuels (recycled resources)	TJ	5,329	5,297	5,381	
	Refined fuel oil	TJ	137	110	100	
	Electricity	TJ	5,440	5,529	5,729	
Energy intensity (per clinker production)		TJ/tonne-cl	0.0045	0.0046	0.0048	

Scope 1: Emissions from sources owned or controlled by the business (direct emissions)

Scope 2: Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the business (indirect emissions)

* The total greenhouse gas emissions and total energy consumption are the sums of truncated amounts at the site unit level, which may differ from the sum of each detailed item.

Use of Resources

			2021	2022	2023	Remark
Raw materials used	Limestone	tonnes	7,609,331	7,233,969	7,064,336	
	Shale	tonnes	102,517	50,486	12,813	
	Quartzite	tonnes	183,760	167,249	210,731	
	Iron ore	tonnes	581	108	0	
Alternative raw materials	Alternative raw materials usage	tonnes	624,730	615,976	565,792	Recycled resources
	Raw material substitution rate	%	66	71	72	Excluding limestone
Alternative fuels	Total alternative fuel usage	tonnes	278,383	254,714	258,183	Excluding waste oil derived fuel
	Waste oil derived fuel	tonnes	81,958	77,661	64,018	
	Fuel substitution rate	%	22	22	22	

Environmental and Social Performance

HALLA Cement

Environmental

Waste

		2021	2022	2023	Remark	
Waste generation	Total	tonnes	11,262	10,715	18,168	
	General waste	tonnes	3,390	2,500	12,111	Due to the transition from outsourced to in-house operation of the sand production facility at the same business site, the waste generated shifted from external to internal processing, causing a temporary increase in waste generation in 2023
	Designated waste	tonnes	7,872	8,215	6,057	
Waste disposal	General waste	Incineration	tonnes	50	133	
		Recycle	tonnes	3,340	2,367	11,907
	Designated waste	Incineration	tonnes	123	86	73
		Landfill	tonnes	4,265	4,816	4,331
Recycling of waste	Recycled waste	tonnes	6,824	5,681	13,526	
	Percentage of waste recycled	%	60.6	53.0	74.4	

Water

		2021	2022	2023	Remark	
Water withdrawal	Total	m ³	2,125,893	1,498,836	1,641,289	
	Surface water (river water)	Industrial use	m ³	1,281,012	982,941	1,015,318
		Total	m ³	841,394	512,749	623,018
	Groundwater	Industrial use	m ³	827,124	491,377	596,692
		Residential use	m ³	14,270	21,372	26,326
	Municipal water	Residential use	m ³	3,487	3,146	2,953
Water consumption	Total	m ³	2,125,893	1,498,836	1,641,289	Excluding reused water (reuse of wastewater from wheel wash facilities)
	Industrial use	m ³	2,108,136	1,474,318	1,612,010	
	Residential use	m ³	17,757	24,518	29,279	
Water discharge	Wastewater and sewage	m ³	6,054	6,317	5,883	
	Water pollutant discharge	Total organic carbon (TOC)	tonnes	0.000	0.000	0.012
		Biochemical oxygen demand (BOD)	tonnes	0.250	0.003	0.001
		Chemical oxygen demand (COD)	tonnes	0.013	0.000	0.000
		Suspended solids (SS)	tonnes	0.240	0.003	0.001

Environmental and Social Performance

HALLA Cement

Environmental

Air Pollutants

		2021	2022	2023	Remark	
Air pollutants emissions	NOx	tonnes	6,349	5,739	6,066	Excluding nitrous oxide (N ₂ O)
	SOx	tonnes	0.000	0.007	2.913	
	Dust	Total suspended particles (TSP)	tonnes	63	68	77
		Particulate matter (PM) 10	tonnes	94	108	42
	Dioxins/Furans	tonnes	0.000	0.008	0.000	
	VOCs	tonnes	26	15	13	
	PAHs	tonnes	0.000	0.000	0.006	
	Heavy metals (lead, mercury and cadmium)	tonnes	0.000	0.117	0.013	
	Hydrogen chloride	tonnes	0.223	0.057	0.049	

Environmental Investments

		2021	2022	2023	Remark
Investment criteria	Air	KRW million	629	2,743	41,386
	Others	KRW million	4,747	26,399	4,432
Total amount		KRW million	5,376	29,142	45,818

Eco-friendly Products and Services

		2021	2022	2023	Remark	
Sales of eco-friendly products and services	Total sales	KRW million	79,081	102,993	117,806	
	Sales of eco-certified products and services	KRW million	55,581	67,974	73,197	1) Products with Korea Good Recycled (GR) certification and Korea Eco-Label certification 2) Excludes products with only Korea Environmental Product Declaration (EPD) certification
	Sales of other eco-friendly products and services	KRW million	23,500	35,019	44,609	Products that have reduced carbon emissions, such as SEM PILE/PRO/FILL and mid-fluidity concrete
Percentage of sales from eco-friendly products and services		%	17.7	19.3	18.8	

Environmental Training

		2021	2022	2023	Remark	
Number of employees that received environmental training		persons	0	58	40	Environmental training for mid-level managers
Total training hours		hours	0	203	80	

Compliance with Environmental Regulations

In 2023, there were two violations related to waste management and two violations concerning fugitive dust. HALLA Cement promptly addressed these issues with corrective actions. Additionally, we have enhanced our management practices and raised awareness among our employees to prevent similar incidents from recurring. These steps underscore our commitment to maintaining high standards of environmental compliance.

Environmental and Social Performance

HALLA Cement

Social

The scope of social quantitative data reporting for HALLA Cement encompasses all domestic business sites, including the Seoul headquarters and the Okgye plant, except for the data on safety and social contribution, which is limited to the Okgye plant. We strive to report the environmental impact of our business activities as accurately and transparently as possible to our stakeholders.

Workforce

				2021	2022	2023	Remark
Number of employees			persons	510	499	525	
Number of employees by region	Okgye		persons	373	365	383	
	Seoul		persons	40	38	44	
	Gyeonggi and Incheon		persons	25	26	26	
	Sejong		persons	4	5	4	
	Gyeongbuk and Gyeongnam (including Ulsan)		persons	39	38	40	
	Jeonnam		persons	27	25	26	
Number of employees by employment contract	Permanent employees	Male	persons	485	438	446	
		Female	persons	20	20	21	
	Temporary employees	Male	persons	5	39	56	
		Female	persons	0	2	2	
Number of employees by employment type	Full-time employees	Male	persons	490	477	502	
		Female	persons	20	22	23	
	Part-time employees	Male	persons	0	0	0	
		Female	persons	0	0	0	
Women and minorities	Percentage of female employees		persons	3.9	4.4	4.4	
	Percentage of women in anagement positions	Executives	%	0.0	0.0	0.0	
		Senior managers	%	3.6	3.3	2.9	
		Managers	%	4.1	4.6	4.6	
	Employees with disabilities		persons(%)	13 (2.6)	12 (2.4)	12 (2.3)	
Recipients of national patriots' and veterans' benefits		persons(%)	23 (5.0)	22 (4.4)	21 (4.0)		

New Hires and Turnover

				2021	2022	2023	Remark
New hires	Entry-level		persons	42	17	26	
	Experienced		persons	3	8	7	
Turnover	Total turnover		persons(%)	30 (5.8)	25 (5.0)	9 (1.7)	
	Voluntary turnover		persons(%)	11 (2.2)	22 (4.4)	5 (1.0)	
Average years of service			years	18.5	18.6	18.8	

Environmental and Social Performance

HALLA Cement

Social

Labor Practice

			2021	2022	2023	Remark
Labor union and collective bargaining	Number of employees covered by collective agreements	persons	510	499	525	
	Percentage of employees covered by collective agreements	%	100	100	100	
Labor-management communication	Number of labor-management council meetings held	times	4	4	4	

Talent Development and Compensation

				2021	2022	2023	Remark
Training and education	Overall training and education	Total employee training hours	hours	37,241	33,333	42,234	
		Average hours of training per employee	hours/employee	73.0	66.8	80.5	
		Expenditures on training	KRW	137,854,494	266,282,940	281,970,014	
	Job-specific training	Expenditures on training per employee	hours/employee	270,303	533,633	537,086	
		Number of employees that received job-specific training	persons	257	492	232	
		Total job-specific training hours	hours	14,455	10,663	13,446	
Performance review	Percentage of employees that received regular performance reviews	Average hours of job-specific training per employee	hours/employee	56.2	21.7	58.0	
		Total	% (persons)	99.0 (505)	98.6 (492)	98.9 (519)	
		Male	% (persons)	99.0 (485)	98.5 (470)	98.8 (496)	
Compensation	Average salary of employees	Female	% (persons)	100 (20)	100 (22)	100 (23)	
		Average annual salary per employee	KRW million	85	86	92	
		Male average annual salary	KRW million	87	87	94	
		Female average annual salary	KRW million	51	54	62	
		Average salary ratio of women to men	%	58.6	62.1	66.0	

Environmental and Social Performance

HALLA Cement

Social

Work-Life Balance

				2021	2022	2023	Remark
Parental leave	Number of employees on parental leave	Male	persons	4	4	3	
		Female	persons	1	0	0	
	Return to work rates	Male	%	100	67	100	
		Female	%	100	N/A	N/A	
Retention rates after 12 months of return	Male	%	N/A	100	100		
	Female	%	100	100	N/A		
Employee benefits and welfare	Expenditures on employee benefits and welfare		KRW million	8,245	7,644	9,763	
	Expenditures on employee benefits and welfare per employee		KRW million	16	15	19	
Retirement plans	Number of employees enrolled in the retirement plan (DC pension)		persons	435	444	434	
	Retirement plan enrollment rate		%	85	89	83	

Health and Safety

				2021	2022	2023	Remark
Lost time injuries	Employees	cases	4	1	0		
	Suppliers	cases	1	0	1		
	Total	cases	5	1	1		
Serious accidents	Employees	cases	0	0	0		
	Suppliers	cases	0	0	0		
	Total	cases	0	0	0		
Injury rate	Employees	%	0.78	0.20	0.00	1) Number of injured employees / Number of workers x 100 2) Company-wide injury rate: Okgye and all sites	
	Lost time injury frequency rate (LTIFR)		%	4.19	1.01	0	Number of lost time injuries x 1,000,000 hours / Total hours worked
Total recordable injury frequency rate (TRIFR)	Employees	%	5.24	1.01	0	* Lost time injuries: Injuries or illnesses that require more than 3 days of leave	
	Suppliers	%	0.69	1.47	0.68	Total number of recordable injuries x 1,000,000 / Total hours worked	
Near miss cases reported	Employees	cases	1,201	1,172	1,322	* Total number of recordable injuries: Injuries or illnesses that require more than one day of leave, excluding first aid cases on-site.	
	Suppliers	cases	550	507	557		
Near miss reporting transparency	Total for employees and suppliers		cases	1,682	1,751	1,879	
	Total for employees and suppliers		cases	1.15	1.12	1.32	
Health and safety training	Total hours		hours	24,531	31,091	35,605	

Environmental and Social Performance

HALLA Cement

Social

Human Rights

				2021	2022	2023	Remark
Human rights grievance resolution	Yeolrinsori (employees)	Number of cases received		cases	0	0	1
		Number of cases resolved		cases	0	0	1
		Resolution rate		%	N/A	N/A	100
Human rights training	Number of employees that received human rights training		persons	510	506	527	Recalculated to include 2021 and 2022 data omitted in the previous report
	Total training hours		hours	1,530	1,518	1,581	
	Percentage of employees that received human rights training		%	100	100	100	

Supply Chain

				2021	2022	2023	Remark
Supply chain ESG assessment	Number of suppliers monitored		companies	76	71	82	
	Total suppliers in the supply chain (estimated)		companies	643	617	622	
	Suppliers assessed on their social impacts		companies	76	71	82	
Win-win growth	Round table meetings with suppliers		times	12	12	13	The round table meetings are conducted through the Supplier Health and Safety Council

Community Engagement

				2021	2022	2023	Remark
Expenditures on social contribution	Local Development Fund		KRW million	675	805	784	Including KRW 360 million in the Mutual Cooperation Fund for 2021 and 2022
	Educational programs		KRW million	30	30	30	
	Support programs for local residents		KRW million	194	293	338	
	Collaboration projects with the local government		KRW million	30	50	50	
	Baekdudaegan Mountains conservation fund		KRW million	140	150	150	
In-kind support		KRW million	18	6	46	Provision by HALLA Cement (Okgye and all other business sites) to Habitat for Humanity Korea's Building Houses of Hope project, co-sponsored with ASIA Cement	
Total social contribution expenditures		KRW million	1,087	1,334	1,398		

Environmental and Social Performance

HALLA Cement

Social

Business Ethics and Compliance

			2021	2022	2023	Remark	
Business ethics and compliance training	Training for employees	Number of employees that received training	persons	65	73	189	Training on fair trade and corporate ethics code of conduct from 2021 to 2023
		Percentage of employees that received training	%	13	15	36	
		Total training hours	hours	129	132	778	
		Training hours per employee	hours/employee	0.3	0.3	1.5	
Channels for reporting business ethics and compliance violations	Reported to the Compliance Support Team (via email)	Number of violations reported/received	cases	0	0	0	
		Number of cases processed	cases	0	0	0	
	Measures taken (disciplinary actions)	cases	0	0	0		
	Yeolrinsori (for employees)	Number of violations reported/received	cases	1	0	0	
		Number of cases processed	cases	1	0	0	
	Measures taken (disciplinary actions)	cases	1	0	0		

Product Safety and Quality

			2021	2022	2023	Remark
Customer satisfaction	Customer satisfaction survey	score	92	N/A	92	Customer satisfaction survey conducted biennially (not in 2022)

Partnership projects with the government

			2021	2022	2023	Remark
Financial assistance/support received from government and related agencies		KRW million	2,952	648	12,680	Funding for national projects and government-supported programs

Regulatory Compliance

In 2023, HALLA Cement achieved zero violations in the areas of anti-competitive behavior, monopolistic practices, unfair trade practices, corruption and bribery, safety and health impacts of products and services, marketing activities, and customer information protection.

Environmental and Social Performance

ASIA Paper MFG

Environmental

The scope of social quantitative data reporting for ASIA Paper MFG includes Sihwa factory and Sejong factory, which together cover 100% of production activities (based on production volume). We strive to report the environmental impact of our business activities as accurately and transparently as possible to our stakeholders.

Greenhouse Gases and Energy

			2021	2022	2023	Remark		
Greenhouse gas emissions	Total GHG emissions		tCO ₂ eq	502,240	480,855	455,531	1) Following the calculation standards according to the Guidelines for Reporting and Certification of Emissions in the Greenhouse Gas Emissions Trading System [Ministry of Environment Notice No. 2023-221, September 18, 2023] 2) Greenhouse gas emissions and energy consumption at the Sejong factory encompass the Asan branch 3) On November 30, 2023, the Sihwa factory initiated solar power generation as part of the Smart Eco-Factory Project	
	Scope 1 emissions		tCO ₂ eq	320,381	298,110	281,992		
	Scope 2 emissions		tCO ₂ eq	181,861	182,746	173,541		
	Greenhouse gas emission intensity (per unit of production)		tCO ₂ eq/tonnes	0.54	0.53	0.54		
	Sejong	Total GHG emissions		tCO ₂ eq	346,089	324,781		316,001
		Scope 1 emissions		tCO ₂ eq	231,548	213,134		209,673
		Scope 2 emissions		tCO ₂ eq	114,543	111,649		106,329
	Sihwa	Total GHG emissions		tCO ₂ eq	156,151	156,074		139,530
		Scope 1 emissions		tCO ₂ eq	88,833	84,977		72,319
		Scope 2 emissions		tCO ₂ eq	67,318	71,098		67,212
Total energy consumption		TJ	4,447	4,491	4,341			
Fuel		TJ	648	674	713			
Electricity		TJ	3,800	3,819	3,623			
Steam		TJ	0.02	0.03	6.31			
Sejong	Total energy consumption		TJ	2,782	2,680		2,618	
	Fuel		TJ	390	349		397	
	Electricity		TJ	2,394	2,333		2,222	
Sihwa	Total energy consumption		TJ	1,665	1,811		1,723	
	Fuel		TJ	259	325		316	
	Electricity		TJ	1,407	1,486		1,401	
Steam		TJ	0.02	0.03	6.31			
Energy intensity (per unit of production)		TJ/tonne	0.0048	0.0049	0.0051			
Renewable energy ³⁾		TJ	-	-	0.109			

Scope 1: Emissions from sources owned or controlled by the business (direct emissions)

Scope 2: Emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the business (indirect emissions)

* The total greenhouse gas emissions and total energy consumption are the sums of truncated amounts at the site unit level, which may differ from the sum of each detailed item.

Environmental and Social Performance

ASIA Paper MFG

Environmental

Use of Resources

			2021	2022	2023	Remark	
Materials used	Domestic recovered paper		tonnes	969,847	876,689	767,736	
	Domestic pulp		tonnes	5,954	6,248	6,089	
	Imported recovered paper		tonnes	109,766	86,623	93,007	
	Imported pulp		tonnes	71,658	68,657	65,365	
Total usage			tonnes	1,079,613	963,312	860,743	
Recycled input materials used	Domestic recovered paper		tonnes	969,847	876,689	767,736	
	Imported recovered paper		tonnes	109,766	86,623	93,007	
	Sejong	Total usage		tonnes	728,630	627,965	565,814
		Domestic recovered paper		tonnes	727,253	627,165	565,620
		Imported recovered paper		tonnes	1,377	800	194
	Sihwa	Total usage		tonnes	350,983	335,347	294,929
		Domestic recovered paper		tonnes	242,594	249,524	202,116
		Imported recovered paper		tonnes	108,389	85,823	92,813
Recycled materials	Overall		%	93	93	92	
	Sejong		%	92	90	90	
	Sihwa		%	97	98	98	
	Utilization rate of old corrugated containers (OCC)		%	106	97	91	Utilization rate of old corrugated containers (OCC): domestic OCC usage / production Volume (excluding exports)

Environmental and Social Performance

ASIA Paper MFG

Environmental

Waste

			2021	2022	2023	Remark	
Waste generation	Total		tonnes	112,870	115,854	122,149	
	General waste		tonnes	106,547	109,816	115,512	
	Designated waste		tonnes	6,323	6,038	6,637	
	Total		tonnes	83,703	84,739	91,123	
	Sejong	General waste		tonnes	79,243	80,740	86,368
		Designated waste		tonnes	4,460	3,999	4,754
	Sihwa	Total		tonnes	29,167	31,115	31,027
		General waste		tonnes	27,304	29,076	29,144
	Designated waste		tonnes	1,863	2,039	1,883	
	Waste disposal	General waste	Landfill	tonnes	26,707	26,912	31,250
Recycle			tonnes	15,195	22,067	22,139	
Energy conversion recycling			tonnes	64,645	60,837	62,123	
Designated waste		Landfill	tonnes	3,775	4,046	6,618	
		Recycle	tonnes	2,548	1,992	19	
Sejong		General waste	Landfill	tonnes	17,700	19,067	21,223
	Recycle		tonnes	12,984	17,472	19,820	
	Energy conversion recycling		tonnes	48,559	44,201	45,325	
	Designated waste	Landfill	tonnes	2,076	2,034	4,754	
		Recycle	tonnes	2,384	1,965	0	
	Sihwa	General waste	Landfill	tonnes	9,007	7,845	10,027
Recycle			tonnes	2,211	4,595	2,319	
Energy conversion recycling			tonnes	16,086	16,636	16,798	
Designated waste		Landfill	tonnes	1,699	2,012	1,864	
		Recycle	tonnes	164	27	19	
Recycled waste		tonnes	17,743	24,059	22,158		
Percentage of waste recycled		%	15.7	20.8	18.1		
Recycling of waste	Sejong	Recycled waste		tonnes	15,368	19,437	19,820
		Percentage of waste recycled		%	18.4	22.9	21.8
	Sihwa	Recycled waste		tonnes	2,375	4,622	2,338
		Percentage of waste recycled		%	8.1	14.9	7.5

Environmental and Social Performance

ASIA Paper MFG

Environmental

Water

		2021	2022	2023	Remark			
Water withdrawal	Total	m ³	6,271,590	6,236,501	6,220,264			
	Surface water (river water)	Total	m ³	6,224,584	6,201,315	6,186,501		
		Industrial use	m ³	6,209,126	6,186,628	6,171,346		
		Residential use	m ³	15,458	14,687	15,155		
	Groundwater	Total	m ³	47,006	35,186	33,763		
		Residential use	m ³	47,006	35,186	33,763		
	Sejong	Total	m ³	4,912,197	4,672,030	4,608,893		
		Surface water (river water)	Industrial use	m ³	4,865,191	4,636,844	4,575,130	
			Residential use	m ³	47,006	35,186	33,763	
		Groundwater	Residential use	m ³	47,006	35,186	33,763	
Sihwa	Total	m ³	1,359,393	1,564,471	1,611,371			
	Surface water (river water)	Total	m ³	1,359,393	1,564,471	1,611,371		
		Industrial use	m ³	1,343,935	1,549,784	1,596,216		
		Residential use	m ³	15,458	14,687	15,155		
Water consumption	Overall	Total	m ³	6,271,590	6,236,501	6,220,264	Excluding reused water (processing water is reused at the stage before it passes through a flow meter at the effluent discharge point)	
		Industrial use	m ³	6,209,126	6,186,628	6,171,346		
		Residential use	m ³	62,464	49,873	48,918		
	Sejong	Total	m ³	4,912,197	4,672,030	4,608,893		
		Industrial use	m ³	4,865,191	4,636,844	4,575,130		
		Residential use	m ³	47,006	35,186	33,763		
	Sihwa	Total	m ³	1,359,393	1,564,471	1,611,371		
		Industrial use	m ³	1,343,935	1,549,784	1,596,216		
		Residential use	m ³	15,458	14,687	15,155		
		Water pollutant discharge	Total organic carbon (TOC)	tonnes	-	-		80.9
Suspended solids (SS)	tonnes		-	9.8	9.6			
Sejong	Water pollutant discharge		Total organic carbon (TOC)	tonnes	-	48.7	measured from 2023	
	Suspended solids (SS)		tonnes	4.3	9.3	5.8		
Sihwa	Water pollutant discharge	Total organic carbon (TOC)	tonnes	-	29.2	32.2		
	Suspended solids (SS)	tonnes	3.7	0.5	3.8			

Environmental and Social Performance

ASIA Paper MFG

Environmental

Air Pollutants

		2021	2022	2023	Remark	
Air pollutants emissions	NOx	tonnes	109.4	83.9	71.0	
	SOx	tonnes	0.6	0.8	1.1	
	Total suspended particles (TSP)	tonnes	3.8	4.0	3.3	
	Sejong	NOx	tonnes	85.3	53.2	46.0
		SOx	tonnes	0.3	0.1	0.1
		Total suspended particles (TSP)	tonnes	2.6	2.6	2.3
	Sihwa	NOx	tonnes	24.1	30.7	25.0
		SOx	tonnes	0.3	0.7	1.0
		Total suspended particles (TSP)	tonnes	1.2	1.4	1.0

Environmental Investments

		2021	2022	2023	Remark	
Investment criteria	Total	KRW million	14,530	11,944	7,492	
	Waste handling cost	KRW million	6,260	6,277	5,679	
	Wastewater, air, and waste storage enhancement	KRW million	8,205	5,623	1,743	
	Consulting on Korea Emissions Trading Scheme and GHG verification	KRW million	14	14	14	
	Environmental liability insurance	KRW million	43	30	27	
	Environmental certification acquisition	KRW million	0	0	29	
	Others	KRW million	8	0	0	
	Sejong	Total	KRW million	5,919	9,278	5,980
		Waste handling cost	KRW million	4,334	4,462	4,210
		Wastewater, air, and waste storage enhancement	KRW million	1,550	4,787	1,731
Sihwa	Consulting on Korea Emissions Trading Scheme and GHG verification	KRW million	7	7	7	
	Environmental liability insurance	KRW million	20	22	18	
	Environmental certification acquisition	KRW million	0	0	14	
	Others	KRW million	8	0	0	
	Total	KRW million	8,611	2,666	1,512	
Sihwa	Waste handling cost	KRW million	1,926	1,815	1,469	
	Wastewater, air, and waste storage enhancement	KRW million	6,655	836	12	
	Consulting on Korea Emissions Trading Scheme and GHG verification	KRW million	7	7	7	
	Environmental liability insurance	KRW million	23	8	9	
	Environmental certification acquisition	KRW million	0	0	15	
	Others	KRW million	0	0	0	

Environmental and Social Performance

ASIA Paper MFG

Environmental

Eco-friendly Products and Services

		2021	2022	2023	Remark
Sales of FSC-certified products	KRW million	524,793	586,915	522,690	
Total sales	KRW million	538,730	600,418	532,898	
Percentage of sales from FSC-certified products	%	97.4	97.8	98.1	

Environmental Training

		2021	2022	2023	Remark
Number of employees that received environmental training	persons	451	193	214	
Total training hours	hours	554	83	239	
Sejong	Number of employees that received environmental training	persons	259	1	4
	Total training hours	hours	518	16	64
Sihwa	Number of employees that received environmental training	persons	192	192	210
	Total training hours	hours	36	67	175

Compliance with Environmental Regulations

In 2023, there was one violation of environmental regulations due to dioxin emissions exceeding the limit at Incineration Facility No. 1, resulting in a fine of KRW 5 million. ASIA Paper MFG promptly addressed this issue by completing maintenance on the prevention facilities and conducting remeasurements to ensure that similar violations do not recur.

Environmental and Social Performance

ASIA Paper MFG

Social

The scope of social quantitative data reporting for ASIA Paper MFG includes all domestic business sites, including Sihwa factory, Sejong factory, and the Seoul headquarters. We strive to report the environmental impact of our business activities as accurately and transparently as possible to our stakeholders.

Workforce

		2021	2022	2023	Remark	
Number of employees	persons	260	271	272		
Number of employees by region	Seoul	persons	5	5	7	
	Siheung	persons	119	125	128	
	Sejong	persons	135	140	136	
	Daegu	persons	1	1	1	
Number of employees by employment contract	Permanent employees	Male	persons	243	254	257
		Female	persons	9	10	10
	Temporary employees	Male	persons	6	6	4
		Female	persons	2	1	1
Number of employees by employment type	Full-time employees	Male	persons	249	260	261
		Female	persons	11	11	11
	Part-time employees	Male	persons	0	0	0
		Female	persons	0	0	0
Women and minorities	Percentage of female employees	%	4.2	4.1	4.0	
	Percentage of women in management positions	Executives	%	0	0	0
		Senior managers	%	2.2	2.3	2.2
	Managers	%	21.7	19.6	19.2	
Employees with disabilities	persons(%)	7 (2.7)	8 (3.0)	8 (2.9)		
Recipients of national patriots' and veterans' benefits	persons(%)	3 (1.2)	2 (0.7)	3 (1.1)		

New Hires and Turnover

		2021	2022	2023	Remark
New hires	Entry-level	persons	19	29	26
	Experienced	persons	3	6	5
Turnover	Total turnover	persons(%)	20 (7.7)	39 (14.4)	31(11.4)
	Voluntary turnover	persons(%)	9 (3.5)	20 (7.4)	13(4.8)
Average years of service	years	17.1	17.3	16.3	

Environmental and Social Performance

ASIA Paper MFG

Social

Labor Practice

			2021	2022	2023	Remark
Labor union and collective bargaining	Number of employees covered by collective agreements	persons	170	185	172	Employees who are not union members are also covered by the collective agreement, following the terms of the union's collective agreement
	Percentage of employees covered by collective agreements	%	65	68	63	
Labor-management communication	Number of labor-management council meetings held	times	4	4	4	

Talent Development and Compensation

			2021	2022	2023	Remark	
Training and education	Employee training and education	Total training hours	hours	2,870	3,302	3,858	All training and education, including Job-specific training
		Average hours of training per employee	hours/employee	11.0	12.2	14.2	
		Expenditures on training	KRW	17,802,980	33,001,296	50,119,808	
		Expenditures on training per employee	KRW/employee	68,473	121,776	184,264	
Performance review	Percentage of employees that received regular performance reviews	Total	% (persons)	86.5 (225)	83.4 (226)	84.2 (229)	
		Male	% (persons)	86.3 (215)	83.1 (216)	83.9 (219)	
		Female	% (persons)	90.9 (10)	90.9 (10)	90.9 (10)	
Compensation	Average salary of employees	Average annual salary per employee	KRW million	84	84	84	
		Male average annual salary	KRW million	86	85	84	
		Female average annual salary	KRW million	57	60	65	
		Average salary ratio of women to men	%	66.3	70.6	77.4	

Work-Life Balance

			2021	2022	2023	Remark	
Parental leave	Number of employees on parental leave	Male	persons	0	0	1	For the reporting period from 2021 to 2023, the return-to-work rate and 12-month retention rate after parental leave have been 100%
		Female	persons	1	1	0	
Employee benefits and welfare	Expenditures on employee benefits and welfare	KRW million	3,652	4,336	4,248		
	Expenditures on employee benefits and welfare per employee	KRW million	14	16	16		
Retirement plans	Number of employees enrolled	Total	persons	235	226	223	
		in a defined benefit (DB) pension	persons	194	192	184	
		in a defined contribution (DC) pension	persons	41	34	39	
	Retirement plan enrollment rate	%	90	83	82		

Environmental and Social Performance

ASIA Paper MFG

Social

Health and Safety

			2021	2022	2023	Remark	
Occupational injury	Lost time injuries	Employees	cases	12	13	6	
		Suppliers	cases	0	5	2	
		Total	cases	12	18	8	
	Serious accidents	Employees	cases	0	0	0	
		Suppliers	cases	0	0	0	
		Total	cases	0	0	0	
Injury rate	Sihwa	%	1.53	0.76	0.86	Number of injured employees / Number of workers x 100	
	Sejong	%	1.40	5.80	2.20		
Lost time injury frequency rate (LTIFR)	Sihwa		13.7	3.4	7.8	Number of lost time injuries x 1,000,000 hours / Total hours worked * Lost time injuries: Injuries or illnesses that require more than 3 days of leave	
	Sejong		25.5	38.3	13.9		
Total recordable injury frequency rate (TRIFR)	Sihwa		27.5	13.7	23.3	Total number of recordable injuries x 1,000,000 / Total hours worked * Total number of recordable injuries: Lost time injuries and all reported cases that required medical treatment.	
	Sejong		25.5	54.2	24.3		
Near miss cases reported	Employees	cases	5	8	6		
	Suppliers	cases	0	0	1		
	Total	cases	5	8	7		
Health and safety training	Total hours of employee training	hours	6,088	6,440	6,076		
	Health and safety training per employee	hours	23.4	23.8	22.3		

Hunan Rights

			2021	2022	2023	Remark
Human rights grievance resolution	Cyber Report	Number of cases received	cases	0	0	0
		Number of cases resolved	cases	0	0	0
		Resolution rate	%	N/A	N/A	N/A
Human rights training	Number of employees that received human rights training	persons	260	271	272	
	Total training hours	hours	260	271	272	
	Percentage of employees that received human rights training	%	100	100	100	

Supply Chain

			2021	2022	2023	Remark
Win-win growth	Round table meetings held with suppliers	times	12	12	12	Monthly safety meetings

Environmental and Social Performance

ASIA Paper MFG

Social

Community Engagement

			2021	2022	2023	Remark
Employee engagement	Number of employees involved in social contributions	persons	10	20	38	
	Employee volunteer hours	hours	31	139	169	
Expenditures on social contribution	Support programs for local residents	KRW million	6	6	6	Book donation to Bukang-myeon Cultural Welfare Center
	Donations	KRW million	23	13	13	
	In-kind support	KRW million	17	16	22	
	Total social contribution expenditures	KRW million	46	35	41	

Business Ethics and Compliance

			2021	2022	2023	Remark	
Business ethics and compliance training	Training for employees	Number of employees that received training	persons	260	271	272	
		Percentage of employees that received training	%	100	100	100	
		Total training hours	hours	260	271	272	
		Training hours per employee	hours/employee	1.0	1.0	1.0	
Channels for reporting business ethics and compliance violations	Cyber Report	Number of violations reported/received	cases	0	0	0	
		Number of cases processed	cases	0	0	0	
		Measures taken (disciplinary actions)	cases	0	0	0	

Regulatory Compliance

In 2023, ASIA Paper MFG achieved zero violations in the areas of anti-competitive behavior, monopolistic practices, unfair trade practices, corruption and bribery, safety and health impacts of products and services, marketing activities, and customer information protection.

06

Appendix

- 165 GRI Standards Index
- 168 SASB Index
- 169 TCFD Index
- 170 Supply Chain ESG Policy
- 171 Supplier Code of Conduct
- 172 Awards
- 172 Certifications
- 173 ESG Ratings
- 173 Membership Associations
- 174 Independent Assurance Opinion Statement

GRI Standards Index

Statement of use: ASIA has reported in accordance with the GRI Standards for the period 2023.01.01 – 2023.12.31.
 GRI 1 used: GRI 1 Foundation 2021
 Applicable GRI Sector Standards: N/A

General Disclosures

Classification	No.	Disclosure	Page	Note
1. The organization and its reporting practices	2-1	Organizational details	9-15	
	2-2	Entities included in the organization's sustainability reporting	2	
	2-3	Reporting period, frequency and contact point	2	
	2-4	Restatements of information	2	
	2-5	External assurance	174-177	
2. Activities and workers	2-6	Activities, value chain and other business relationships	9-15	
	2-7	Employees	140, 148, 159	
	2-8	Workers who are not employees	Confidential	
3. Governance	2-9	Governance structure and composition	43-46, 75-77, 103-105, 125-128	23 Business Reports (ASIA Holdings pp.256-259, ASIA Cement pp.235-238, ASIA Paper MFG pp.227-230)
	2-10	Nomination and selection of the highest governance body	43, 75, 103, 125	
	2-11	Chair of the highest governance body	43, 75, 103, 125	
	2-12	Role of the highest governance body in overseeing the management of impacts	45, 77, 104, 127	
	2-13	Delegation of responsibility for managing impacts	19, 45, 77, 104, 127	
	2-14	Role of the highest governance body in sustainability reporting	19, 45, 77, 104, 127	
	2-15	Conflicts of interest	43, 75, 104, 125	
	2-16	Communication of critical concerns	19, 45, 77, 104, 127	
	2-17	Collective knowledge of the highest governance body	44, 76, 103, 126	
	2-18	Evaluation of the performance of the highest governance body	44, 76, 105, 126	
	2-19	Remuneration policies	44, 76, 105, 126	Annual Corporate Governance Reports (ASIA Holdings 2023 Report p.24, ASIA Cement 2023 Report pp.32-33, ASIA Paper MFG pp.41-42)
2-20	Process to determine remuneration	44, 76, 105, 126	Ditto	
2-21	Annual total compensation ratio	Confidential		
4. Strategy, policies and practices	2-22	Statement on sustainable development strategy	5-7	
	2-23	Policy commitments	48, 53, 62, 67, 72, 73, 74, 80, 83, 90, 96, 100, 102, 107, 109, 116, 119, 123, 124, 131	
	2-24	Embedding policy commitments	48, 53-64, 67, 72-74, 80-81, 83-92, 96, 100-102, 107, 109-117, 119, 123, 124, 131	
	2-25	Processes to remediate negative impacts	47, 49, 65, 69, 79, 96, 106, 107, 119, 129, 131	
	2-26	Mechanisms for seeking advice and raising concerns	49, 65, 69, 80, 97, 107, 119, 131	
	2-27	Compliance with laws and regulations	139, 144, 147, 152, 158, 162	
	2-28	Membership associations	173	
5. Stakeholder engagement	2-29	Approach to stakeholder engagement	22, 23	
	2-30	Collective bargaining agreements	141, 149, 160	

GRI Standards Index

Material Topics and Topic Standards

Topic	No.	Disclosure	Page	Note
GRI 3: Material Topics 2021				
GRI 3 Disclosures on material topics	3-1	Disclosures on material topics	24, 25	
	3-2	List of material topics	24, 25	
GRI: Material Topic #1. Responding to Climate Change				
GRI 3 Material Topics	3-3	Management of material topics	28	
GRI 201: Economic Performance	201-2	Financial implications and other risks and opportunities due to climate change	30, 31	
	302-1	Energy consumption within the organization	137, 145, 154	
GRI 302: Energy	302-3	Energy intensity	137, 145, 154	
	302-4	Reduction of energy consumption	86, 110	
	305-1	Direct (Scope 1) GHG emissions	137, 145, 154	
GRI 305: Emissions	305-2	Energy indirect (Scope 2) GHG emissions	137, 145, 154	
	305-4	Direct (Scope 1) GHG emissions	137, 145, 154	
	305-5	Energy indirect (Scope 2) GHG emissions	86, 110	
		Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	138, 147, 157	
GRI: Material Topic #2. Establishing a Circular Economy System				
GRI 3 Material Topics	3-3	Management of material topics	32	
GRI 301: Materials	301-1	Materials used by weight or volume	137, 145, 154	
	301-2	Recycled input materials used	137, 145, 154	
GRI 306: Waste	306-1	Waste generation and significant waste-related impacts	59, 87, 113	
	306-2	Management of significant waste-related impacts	59, 87, 113	
	306-3	Waste generated	138, 146, 155	
	306-4	Waste diverted from disposal	138, 146, 155	
		Waste directed to disposal	138, 146, 155	
GRI: Material Topic #3. Workplace Health and Safety				
GRI 3 Material Topics	3-3	Management of material topics	38	
GRI 403: Occupational Health and Safety	403-1	Occupational health and safety management system	38	
	403-2	Hazard identification, risk assessment, and incident investigation	62, 63, 92, 116	
	403-3	Occupational health services	64, 91, 117	
	403-4	Worker participation, consultation, and communication on occupational health and safety	62, 90, 116	
	403-5	Worker training on occupational health and safety	39, 63, 117	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	64, 92, 117	
	403-8	Workers covered by an occupational health and safety management system	38	1) Workplaces applying health and safety management systems: ASIA Cement (Jecheon), HALLA Cement (Okgye) and ASIA Paper MFG (Sihwa, Sejong) 2) Each workplace completed internal audits and external certifications for 2023. * The workplaces include all employees and resident contractor personnel.
403-9	Work-related injuries	142, 151, 159		
403-10	Work-related ill health	142, 151, 159		

GRI Standards Index

GRI 200: Economic

Classification	No.	Disclosure	Page	Note
GRI 201: Economic Performance	201-3	Defined benefit plan obligations and other retirement plans	142, 150, 160	
	201-4	Financial assistance received from government	144, 152	Applies specifically to ASIA Cement and HALL Cement
GRI 205: Anti-corruption	205-2	Communication and training about anti-corruption policies and procedures	80, 107, 131, 144, 152, 162	
	205-3	Confirmed incidents of corruption and actions taken	144, 152, 162	
GRI 206: Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	152, 158, 162	

GRI 300: Environmental Performance

Classification	No.	Disclosure	Page	Note
GRI 303: Water and Effluents	303-2	Management of water discharge-related impacts	59, 88, 113	
	303-3	Water withdrawal	138, 146, 156	
	303-4	Water discharge	138, 146, 156	
	303-5	Water consumption	138, 146, 156	
GRI 304: Biodiversity	304-2	Significant impacts of activities, products, and services on biodiversity	정보 불충분 (61, 89, 115)	
	304-3	Habitats protected or restored	정보 불충분 (61, 89)	
GRI 308: Supplier Environmental Assessment	308-1	New suppliers that were screened using environmental criteria	68, 97	
	308-2	Negative environmental impacts in the supply chain and actions taken	68, 97	

GRI 400: Social Performance

Classification	No.	Disclosure	Page	Note
GRI 401 Employment	401-1	New employee hires and employee turnover	140, 148, 159	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	64, 93, 94, 118	
	401-3	Parental leave	141, 150, 160	
GRI 404 Training and Education	404-1	Average hours of training per year per employee	141, 149, 160	
	404-2	Programs for upgrading employee skills and transition assistance programs	64, 94, 95, 119	
	404-3	Percentage of employees receiving regular performance and career development reviews	141, 149, 160	
GRI 405 Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	43, 75, 103, 125, 140, 148, 159	
	405-2	Ratio of basic salary and remuneration of women to men	141, 149, 160	
GRI 406 Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	143, 151, 161	
GRI 414 Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	68	Applies specifically to ASIA Cement
	414-2	Negative social impacts in the supply chain and actions taken	68	Applies specifically to ASIA Cement
GRI 416 Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	72, 101	Applies specifically to ASIA Cement and HALL Cement
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	152, 158, 162	
GRI 418 Customer Privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	152, 158, 162	

SASB Index

Industry-specific standards for construction materials (EM-CP) and containers & packaging (RT-CP)

ASIA actively strives to enhance communication with stakeholders by disclosing information in accordance with industry-specific sustainability reporting standards developed by SASB (Sustainability Accounting Standards Board).

1. Sustainability Disclosure Topics & Metrics					
Topic	Metric	Category	Unit of measure	Code	Page
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions limiting regulations	Quantitative	Metric tonnes (t) CO ₂ -e, Percentage(%)	EM-CM-110a.1 RT-CP-110a.1	137, 145, 153
	Discussion of long- 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-CM-110a.2 RT-CP-110a.2	28-31
	Air emissions of the following pollutants:			EM-CM-120a.1	
Air Quality	Nox (excluding N ₂ O), SO _x , particulate matter (PM ₁₀), dioxins/furans, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs) and heavy Metals	Quantitative	Metric tonnes (t)	RT-CP-120a.1	138, 147, 157
Energy Management	Total energy consumed, percentage grid electricity, percentage alternative, percentage renewable and total self-generated energy	Quantitative	Gigajoules (GJ), Percentage (%)	EM-CM-130a.1 RT-CP-130a.1	137, 145, 153
Water Management	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Thousand cubic metres (m ³), Percentage (%)	EM-CM-140a.1 RT-CP-140a.1	138, 146, 156
	Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and Analysis	N/A	RT-CP-140a.2	59, 88, 113
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Quantitative	Number	RT-CP-140a.3	139, 147, 158
Waste Management	Amount of waste generated, percentage hazardous and percentage recycled	Quantitative	Metric tonnes (t), Percentage (%)	EM-CM-150a.1 RT-CP-150a.1	138, 146, 157
Biodiversity Impacts	Description of environmental management policies and practices for active sites	Discussion and Analysis	N/A	EM-CM-160a.1	61, 89, 115
	Terrestrial land area disturbed, percentage of impacted area restored	Quantitative	Hectares (ha), Percentage (%)	EM-CM-160a.2	61, 89
Workforce Health & Safety	1) Total recordable incident rate (TRIR) and (2) near miss frequency rate (NMFR) for (a) direct employees and (b) contract Employees	Quantitative	Rate	EM-CM-320a.1	140, 148, 159
	Number of reported cases of silicosis	Quantitative	Number	EM-CM-320a.2	파악되지 않음
Product Innovation	Percentage of products that qualify for credits in sustainable building design and construction certifications	Quantitative	Percentage (%) by annual sales revenue	EM-CM-410a.1	N/A
	Total addressable market and share of market for products that reduce energy, water or material impacts during usage or production	Quantitative	Presentation currency, Percentage (%)	EM-CM-410a.2	139, 149, 158
Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and antitrust activities	Quantitative	Presentation currency	EM-CM-520a.1	144, 152,162
Product Safety	(1) Number of recalls issued, (2) total units recalled	Quantitative	Number	RT-CP-250a.1	144, 152,162
	Discussion of process to identify and manage emerging materials and chemicals of concern	Discussion and Analysis	N/A	RT-CP-250a.2	72, 100, 123
Product Lifecycle Management	Percentage of raw materials from: (1) recycled content, (2) renewable resources, and (3) renewable and recycled content	Quantitative	Percentage (%) by weight	RT-CP-410a.1	137, 145, 154
	Revenue from products that are reusable, recyclable, or compostable	Quantitative	Presentation currency	RT-CP-410a.2	32-35
	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion and Analysis	N/A	RT-CP-410a.3	N/A

SASB Index

1. Sustainability Disclosure Topics & Metrics					
Topic	Metric	Category	Unit of measure	Code	Page
Supply Chain Management	Total wood fibre procured; percentage from certified sources	Quantitative	Metric tonnes (t), Percentage (%)	RT-CP-430a.1	158
	Total aluminium purchased; percentage from certified sources	Quantitative	Metric tonnes (t) CO ₂ -e, Percentage(%)	RT-CP-430a.2	N/A
2. Activity Metrics					
Activity Metric		Category	Unit of measure	Code	Page
Production by major product line		Quantitative	Metric tonnes (t)	EM-CM-000.A	9-15
Amount of production, by substrate		Quantitative	Metric tonnes (t)	RT-CP-000.A	Confidential
Percentage of production as: (1) paper/wood, (2) glass, (3) metal, and (4) plastic		Quantitative	Percentage (%) by revenue	RT-CP-000.B	N/A
Number of employees		Quantitative	Number	RT-CP-000.C	140, 148, 159

TCFD Index

The Task Force on Climate-related Financial Disclosures (TCFD) has developed a framework to enable companies' stakeholders to appropriately assess risks and opportunities related to climate change. ASIA actively reports its climate change response activities based on governance, strategy, risk management, and metrics and targets in accordance with TCFD recommendations through this report.

Recommendations	Recommended Disclosures	Page	Note
Governance	a) Describe the board's oversight of climate-related risks and opportunities.	19	
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	19, 29	
Strategy	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	30, 31	
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	30, 31	
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	-	
Risk Management	a) Describe the organization's processes for identifying and assessing climate-related risks.	47, 79, 106, 129	
	b) Describe the organization's processes for managing climate-related risks.	47, 79, 106, 129	
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	47, 79, 106, 129	
Metrics and Targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	30, 31	
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	137, 145, 153	
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	28	

Supply Chain ESG Policy

Aligned with our vision of creating value while prioritizing humanity and the environment, ASIA Cement has implemented a supply chain ESG policy. This policy encourages social and environmental responsibility within our supply chain. It outlines operational guidelines and partner evaluation processes to identify, mitigate, and address ESG risks. This policy applies to all ASIA Cement employees and trading partners.

A. Supply Chain Operating Guidelines

When evaluating and selecting suppliers, ASIA Cement considers compliance with our ESG management standards alongside financial stability, quality, price, supply reliability, and delivery timelines. Our Supplier Code of Conduct details compliance requirements for partners across four key ESG management areas: environment, ethics, health, and safety.

Supply Chain ESG Management Procedures

- 1) Identify risks within the supply chain and establish/review ESG management standards
- 2) Develop and implement strategies to mitigate/eliminate identified ESG risks
- 3) Conduct supply chain assessments and audits
- 4) Report and disclose audit results and relevant information

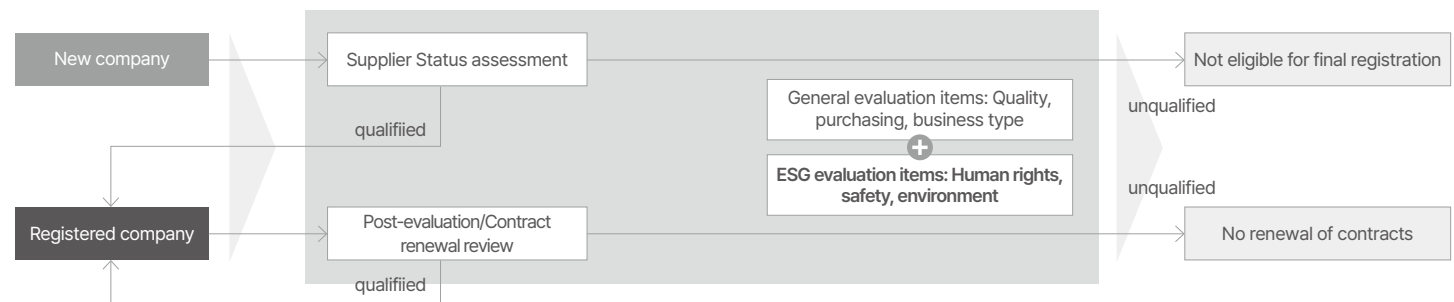
B. ESG Risks Identification

ASIA Cement identifies risk factors within its supply chain by referencing internal risk management processes and global ESG guidelines such as the UNGC, TCFD, and OECD Due Diligence Guidance for Responsible Business Conduct. Based on these identified risks, we establish and review ESG standards and conduct annual ESG risk assessments and monitoring for both new and existing partners. This ensures risk factors are addressed, and we provide recommendations to mitigate or eliminate them. ASIA Cement may request documentation or conduct audits during this process.

C. Supplier Registration and ESG Evaluation Process

- 1) Require compliance with ASIA Cement's Supplier Code of Conduct and anti-corruption and integrity laws/regulations
- 2) All partners seeking new contracts with ASIA Cement must undergo a supplier registration evaluation, including ESG criteria, as per our Purchasing Regulations. Partners identified with high ESG risks must take corrective actions. Depending on the outcomes, trading relationships may be suspended or terminated.

Partner Selection and Evaluation Process



Supplier Code of Conduct

1. Introduction

ASIA Cement is committed to creating value with consideration for both humanity and the environment. Our goal extends beyond our tasks to include our conduct, recognizing ethical and social responsibilities. ASIA Cement values these responsibilities and expects all suppliers engaged in business with us to share this commitment.

2. Human Rights

Prohibition of Forced Labor | All forms of forced labor, bonded labor, contract labor, involuntary labor, slavery, or human trafficking are prohibited. All labor and services must be voluntary, and workers must be free to terminate their employment relationship under mutually agreed-upon terms.

Working Hours | Daily and weekly working hours must not exceed local legal limits. Standard weekly working hours should not exceed 48 hours, and total weekly working hours (including overtime) should not exceed 60 hours, except in emergencies. Employees must have at least one day off per week.

Compensation | Compensation for regular and overtime work must be fair and meet or exceed the minimum legal wage or industry standards. Suppliers must pay wages that meet basic needs. Unauthorized and punitive deductions are prohibited. All additional benefits mandated by national regulations must be provided.

Prohibition of Child Labor | A minor is defined as a person under the age of 18, and an adolescent as someone between the ages of 15 and 18. ASIA Cement prohibits the use of child labor in any aspect of its operations.

Treatment of Employees | All employees must be treated equally without discrimination. Unacceptable treatment, including mental abuse and sexual harassment, is never tolerated.

3. Environment

Pollution Prevention and Resource Management | Waste, emissions, and resource consumption (such as energy and water) should be minimized. Suppliers should continuously monitor their activities and improve them by altering production, maintenance, and facility processes, or by reusing and recycling materials.

Environmental Permits and Disclosure Requirements | Suppliers must obtain, document, and maintain all necessary environmental permits, approvals, registrations, and licenses for their operations. They must also comply with all disclosure and reporting requirements.

Hazardous Substances | Substances posing environmental risks must be identified and managed to ensure safe handling, transport, storage, use, reuse, or recycling.

Wastewater and Solid Waste | All wastewater and solid waste from operations, industrial processes, and sanitary facilities must be identified, managed, and treated as required before discharge or disposal. Proper documentation and evidence of legal handling and disposal must be maintained when using third-party waste management services.

Air Emissions | Volatile organic chemicals, aerosols, corrosives, particulates, ozone-depleting chemicals, and combustion byproducts must be identified, monitored, controlled, and treated before release into the atmosphere.

4. Ethical Management

Anti-Corruption and Legal Compliance Programs | Suppliers' top management must establish clear standards and implement measures to prohibit all forms of bribery, corruption, illicit enrichment, and embezzlement. Suppliers must not offer, promise, give, or accept gifts, money, entertainment, or services intended to improperly influence business relationships or that threaten the professional independence of business partners. Suppliers must implement a comprehensive compliance program or conduct ongoing monitoring of business activities, including regular reviews and updates on legal compliance and anti-corruption measures. Suppliers must establish clear regulations for the provision and acceptance of gifts and provide regular training for employees on ethical business practices.

Disclosure of Information | Information regarding the supplier's business activities, structure, financial situation, and performance must be disclosed in accordance with relevant regulations and industry best practices. Forgery or false statements about situations or practices within the supply chain are strictly prohibited.

Conduct Toward Competitors | Suppliers must respect fair competition and comply with laws that uphold and promote competitive practices, particularly antitrust laws and regulations.

5. Health and Safety

Compliance with Safety Regulations | ASIA Cement and its partners comply with industrial safety and health laws. Potential safety risks should be managed through appropriate processes, workplace design, safety regulations, and continuous safety training based on our safety and health provisions. Suitable personal protective equipment must be provided to workers.

Safety and Health Regulations |

- 1) I assess and control risks before starting work.
- 2) I perform tasks with adequate qualifications and competency.
- 3) I never modify or remove safety devices, or use them for purposes other than intended, and always wear required personal protective equipment.
- 4) I do not work under the influence of alcohol or drugs.
- 5) I report all accidents.

Preparation and Response to Emergencies | Risks and emergencies must be identified and assessed. Their impact should be minimized through emergency measures, plans, and response procedures. Incidents should allow for corrective actions through tracking, reporting, and further investigation.

Sanitary Facilities, Hygiene, and Working Environment | Workers should be provided with clean sanitary facilities, drinking water, and hygienic cooking and dining facilities. Dormitories provided by suppliers must be maintained clean and safe.

Awards

	Awards	Awarded on
ASIA Cement	Hong Jin Bae, office director, awarded the Minister's Award for quality management contribution by the Ministry of Trade, Industry and Energy.	2023.06.08
	Gold award in the 49th National Quality Circle Contest hosted by the Korean Standards Association (7 consecutive years)	2023.11.22
HALLA Cement	Special award from the Korea Occupational Safety and Health Agency (KOSHA) in the Presentation Contest for safety and health education institutions' best practices.	2023.07.03
	Encouragement award in the '2023 Safety and Health Video Contest'.	2023.07.11
	The Seoul office of HALLA Cement received a commendation from Hasang Rehabilitation Center.	2023.11.29
	Awarded as a top-performing company in the '2023 Large and Small Enterprises Mutual Cooperation Project for Safety and Health.'	2024.02.29
ASIA Paper MFG	Lee Kyung Taek, the director of the Sejong factory, received recognition from the Sejong Mayor for contributions to the local community and sports development in Sejong.	2023.10.03
	Praised for contributions to fire prevention by the Fire Commissioner on Firefighters' Day	2023.11.09
	Received the Presidential Commendation for exemplary tax obligations.	2024.03.04

Certifications

	Certifications	Certification Dates
ASIA Cement	KOSHA-MS Safety and Health Management System	2022.05.17 ~ 2025.05.16
	ISO 14001 Environmental Management System	2022.12.18 ~ 2025.12.17
	ISO 9001 Quality Management System	2022.11.18 ~ 2025.11.17
	Environmental Product Declaration Certification for Portland cement	Certified on 2023.02.28
	Low-Carbon Product Certification of Environmental Product Declaration for 5 types of ready-mix concrete	Certified on 2023.4.28
	Environmental Product Declaration Certification for 9 types of ready-mix concrete	2022.10.31 ~ 2025.10.30
	Low-Carbon Product Certification of Environmental Product Declaration for 5 types of dry mortar	Varies by product
	Environmental Product Declaration Certification for 7 types of dry mortar	2021.08.27 ~ 2024.08.26
	Eco-Label Certification for blast furnace slag cement and fly ash cement	2021.10.17 ~ 2024.10.16
	Carbon Neutral Core Technology development supported by the Ministry of Trade, Industry and Energy (waste synthetic resin fuel substitution and blended cement)	Project initiated on 2023.07.01
HALLA Cement	KOSHA-MS Safety and Health Management System	2023.10.21 ~ 2026.10.20
	ISO 45001 Occupational health and safety management systems	2023.08.08 ~ 2026.08.07
	KOSHA Recognition Certificate for the Safety Experience Education Center	Certified on 2019.08.23
	ISO 14001 Environmental Management System	2023.12.06 ~ 2026.12.05
	ISO 9001 Quality Management System	2023.12.06 ~ 2026.12.05
	Environmental Product Declaration Certification for Portland cement	Varies by product
	Good Recycled (GR) certification for slag cement	Varies by product
Eco-Label Certification for slag cement and specialty cement	Varies by product	
ASIA Paper MFG	KOSHA-MS Safety and Health Management System	2021.09.16 ~ 2024.09.15
	ISO 14001 Environmental Management System	2023.08.04 ~ 2026.08.03
	ISO 9001 Quality Management System	2021.07.09 ~ 2024.07.08
	FSC® Chain of Custody (COC) Certification	2022.03.19 ~ 2027.03.19
	Sedex Members Ethical Trade Audit (SMETA)	Verified on 2022.05.27

ESG Ratings

Korea Institute of Corporate Governance and Sustainability (KCGS) ESG Ratings

ASIA Holdings

Area	2023	2022	2021
Overall	A	B+	B+
Environmental	B+	B	B
Social	B+	B+	B+
Governance	A	B+	B+

ASIA Cement

Area	2023	2022	2021
Overall	B+	C	B+
Environmental	B+	B	B+
Social	A	B+	B+
Governance	B	C	B

ASIA Paper MFG

Area	2023	2022	2021
Overall	C	C	B
Environmental	B	C	C
Social	B+	B+	B+
Governance	D	D	B

Membership Associations

	Associations		
ASIA Cement	Korean Standards Association	Korea Industrial Safety Association	Korea Cement Association
	Korea Productivity Center	Korea Recycled Construction Resources Institute	Korea Fire Safety Association
	Federation of Korean Industries	Korea Ready Mixed Concrete Industry Association	Korea Chamber of Commerce and Industry
	Architectural Institute of Korea	Korea Radiological Association	Korea Society of Waste Management
	Korea Chemicals Management Association	Korea Aggregates Association	Korea Construction Living Environment Testing Institute
	International Management Institute	Korea Mining Association	Korea Concrete Institute
	Korea Cement Association	Korean Society of Construction Engineering	Korea Sustainable Development Council
	Korea Construction Technology Exchange Association	Korea Conformity Laboratories	Korea Aggregates Association
HALLA Cement	Korea Mining Association	Korea International Trade Association	Korea Fire Safety Association
	Korea Concrete Society	Korean Standards Association	Korea Environmental Engineers Association
	Gangneung Chamber of Commerce and Industry	Gangwon Cement Industry Environment Council	Occupational Safety and Health Council in Gangwon Cement Sector
ASIA Paper MFG	Korea Industrial Safety Association	Donghae Port Logistics Association	Wild Korea Organization
	Korea Paper Association	Korea Technical Association of the Pulp and Paper Industry	Korea Mech. Const. Contractors Association
	Korea Paper Industry Cooperative	Korea Listed Companies Association	Korea Electric Engineers Association
	Korea Enterprises Federation	Korea International Trade Association	Korea Industrial Safety Association
	Chungbuk Enterprises Federation	Korea Paper Resource Association	Ansan Siheung Environmental Engineers Incorporated Association
	Shiheung Chamber of Commerce and Industry	Korea Fire Safety Institute	Korea Environmental Conservation Association Chungbuk branch
	Korean Standards Association (Sihwa)	Korean Standards Association (Sejong)	

Independent Assurance Opinion



INDEPENDENT ASSURANCE OPINION STATEMENT

To: The Stakeholders of ASIA Holdings, ASIA Cement, HALLA Cement and ASIA Paper MFG

Overview

The British Standards Institution (hereinafter referred to as the "Assurer") was requested to verify the ASIA SUSTAINABILITY REPORT 2024 (hereinafter referred to as the "Integrated Report of ASIA Holdings, ASIA Cement, HALLA Cement and ASIA Paper MFG"). The Assurer is independent to ASIA and has no major operational financial interest other than the assurance of the Report. This assurance opinion statement is intended to provide information related to the assurance of the ASIA's report relating to the environment, social and governance (ESG) to the relevant stakeholders and may not be used for any other purpose. This assurance opinion statement is prepared based on the information presented by the ASIA. The verification does not extend beyond such information and is solely based on it. In performing such verification, the Assurer has assumed that all such information is complete and accurate.

ASIA has responsible for managing the relevant information contained within the scope of assurance, operating the relevant internal control procedures, and for all information and claims contained in the Report. Any queries that may arise by virtue of this independent assurance opinion statement or matters relating to it should be addressed to ASIA only.

The Assurer is responsible for providing ASIA's management team with an independent assurance opinion containing professional opinions derived by applying the assurance methodology to the scope specified, and to provide the information to all stakeholders of ASIA. The Assurer will not, in providing this Independent assurance opinion statement, accept or assume responsibility (legal or otherwise) or accept liability for or in connection with any other purpose for which it may be used, or to any person or party by whom the Independent assurance opinion statement may be read.

Scope

The scope of engagement agreed upon with ASIA includes the following:

- Report contents during the period from January 1st to December 31st 2023 included in the Report, some data of 2024 are included.
- Major assertion included in the Report, such as sustainability management policies and strategies, goals, projects, and performance, and the Report contents related to material issues determined as a result of materiality assessment.
- Appropriateness and consistency of processes and systems for data collection, analysis and review.
- Confirmation of the Report's compliance with the AA1000 AccountAbility Four Principles and, where applicable, the reliability of the sustainability performance information contained within the Report, based on the type of sustainability assurance performed in accordance with AA1000 AS (Assurance Standard) v3(2020).

The following contents were not included in the scope of assurance.

- Financial information in Appendix.
- Index items related to other international standards and initiatives other than the GRI.
- Other related additional information such as the website, business annual report.

Independent Assurance Opinion



Assurance Level and Type

The assurance level and type are as follows;

Moderate level based on AA1000 AS (Assurance Standard) v3(2020) and Type 1 (confirmation to the four principles as described in the AA1000 Accountability Principle 2018)

Description and sources of disclosures covered

Based on the scope and methodology of assurance applied, the Assurer reviewed the following disclosures based on the sampling of information and data provided by ASIA.

[Universal Standards]

2-1 to 2-5 (The organization and its reporting practices), 2-6 to 2-8 (Activities and workers), 2-9 to 2-21 (Governance), 2-22 to 2-28 (Strategy, policies and practices), 2-29 to 2-30 (Stakeholder engagement), 3-1 to 3-3 (Material Topics Disclosures)

[Topic Standards]

Economic sector: Economic Performance 201-2~4, Anti-corruption 205-2~3, Anti-competitive Behavior 206-1

Environment sector: Materials 301-1 ~2, Energy 302-1, 302-3 ~4, Water and Effluents 303-2 ~5, Biodiversity 304-2 ~3, Emissions 305-1~2, 305-4~5, 305-7, Waste 306-1~5, Supplier Environmental Assessment 308-1~2,

Social sector: Employment 401-1~3, Occupational Health and Safety 403-1~5, 403-7~10, Training and Education 404-1~3, Diversity and Equal Opportunity 405-1~2, Non-discrimination 406-1, Supplier Social Assessment 414-1~2, Customer Health and Safety 416-1~2, Customer Privacy 418-1

Methodology

As a part of its independent assurance, the Assurer has used the methodology developed for relevant evidence collection in order to comply with the verification criteria and to reduce errors in reporting. The Assurer has performed the following activities;

- Validation of the materiality assessment and internal analytical process for determining assurance priorities, and a top-level review of issues that may be raised by external stakeholders in the context of sustainability.
- Discussion with managers and representatives on stakeholder engagement.
- Review of the supporting evidence related to the material issues through interviews with senior managers in the responsible departments.
- Review of the system for sustainability management strategy process and implementation.
- Review of the materiality issue analysis process and prioritization and verifying the results.
- Verification of data generation, collection and reporting for each performance index and document review of relevant systems, policies, and procedures.
- An assessment of ASIA's reporting and management processes against the principles of Inclusivity, Materiality, Responsiveness and Impact as described in the AA1000 AccountAbility Principles Standard (2018).
- Visit of the HQ of ASIA to confirm the data collection processes, record management practices.

Limitations and approach used to mitigate limitations

The Assurer performed limited verification for a limited period based on the data provided by ASIA. It implies that the Assurer is therefore subject to limitations relating to inherent risks that may exist without the identification of material errors. The Assurer does not provide assurance on possible future impacts that cannot be predicted or verified during the verification process and any additional aspects related thereto.

Competency and Independence

British Standards Institution (BSI) is a leading global standards and assessment body founded in 1901. BSI is an independent professional institution that specializes in quality, health, safety, social and environmental management with over 120 years history in providing independent assurance services globally. No member of the assurance team has a business relationship with ASIA. The Assurer has conducted this verification independently, and there has been no conflict of interest. All assurers who participated in the assurance have qualifications as an AA1000AS assurer, have a lot of assurance experience, and have in-depth understanding of the BSI Group's assurance standard methodology.

Independent Assurance Opinion



Opinion Statement

The assurance was conducted by a team of sustainability report assurers in accordance with the AA1000 Assurance Standard v3. The Assurer planned and performed the verification and collected sufficient evidence to explain ASIA's approach to the AA1000 Assurance Standard and to provide confidence in its self-declaration of compliance with the GRI Standards. On the basis of our methodology and the activities described above, it is our opinion that the information and data included in the Report are accurate and reliable and the Assurer cannot point out any substantial aspects of material with mistake or misstatement. We believe that the economic, social and environment performance indicators are accurate and are supported by robust internal control processes.

Conclusions

The Report is prepared in accordance with the GRI Standards. (Reporting in accordance with the GRI standards). A detailed review against the AA1000 AccountAbility Principles of Inclusivity, Materiality, Responsiveness and Impact and the GRI Standards is set out as below.

Inclusivity: Stakeholder Engagement and Opinion

In order to actively respond to stakeholders' social concerns about the environment, society, and governance, ASIA defines key stakeholders that have an important influence on corporate management activities as customers, executives, employees, shareholders/investors, governments/ local governments, partners, and communities. In order to collect opinions on the positive and negative impacts of corporate activities, ASIA actively collects opinions from stakeholders based on communication channels by stakeholders and reflects them in business activities such as strategy establishment and implementation.

Materiality: Identification and reporting of material sustainability topics

ASIA established strategies related to sustainability management, established processes to derive reporting issues, and, The impact of sustainability issues on corporate management activities through the financial impact and environmental and social impact evaluation results for each issue by applying the materiality evaluation method, In addition, ASIA want to move to a company that considers the impact on the environment and society together, considers humans and the environment, and creates win-win values, A total of 20 ESG issues that ASIA determined needed to respond to were selected, and three key issues such as responding to climate change, establishing a circular economy system, and workplace health and safety were selected in consideration of the priorities according to their importance, and the process is disclosed in the report.

Responsiveness: Responding to material sustainability topics and related impacts

ASIA has established a management process for key reporting issues related to important sustainability topics and related impacts. In order to reflect the expectations of stakeholders and to transparently disclose to stakeholders the overall results of sustainable management activities in the economic, social and environmental sectors and respond appropriately, policies, task performance, activities, and response performance, including improvement measures, are disclosed through reports on key reporting issues

Impact: Impact of an organization's activities and material sustainability topics on the organization and stakeholders

ASIA has established a process to identify and evaluate the impact on organizations and stakeholders related to key reporting issues. The results of the analysis of impact, risk, and opportunity factors on key reporting issues are used to make decisions to establish response strategies for each issue, and the process is disclosed through reports.

Independent Assurance Opinion



Recommendations and Opportunity for improvement

The Assurer provides the following observations to the extent that they do not affect the assurance opinion; Based on ASIA's ESG management organization & management system, discovering and discussing various ESG agendas by the ESG management council involving affiliates and relevant departments in each area, and continuing to operate activities to implement ESG management through collaboration and work coordination among departments can help advance the sustainability management system

GRI-reporting

ASIA has self-declared compliance with GRI Standards. Based on the data and information provided by ASIA, the Assurer confirmed that the Report is prepared in accordance with the GRI Standards, and confirmed there are no errors in the disclosures related to the Universal Standards and Topic Standards Indicators. No sector standard is applied.

Issue Date: 14/06/2024

For and on behalf of BSI (Brithish Standards Institution):

BSI representative

검증팀장 **Jong Ho Lee,**
Lead Assurer

대표이사 **Seonghwan Lim,**
Managing Director of BSI Korea

BSI Group Korea Limited: 29, Insa-dong 5-gil, Jongno-gu, Seoul, South Korea
Hold Statement Number: SRA XXXXXX





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