

[Outline of 2024 Report →](#)

2024 Sustainability Report



亞洲水泥
ASIA CEMENT CORPORATION

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About The Report

Dear Readers

Asia Cement Corporation (abbreviated as ACC) has published the Corporate Social Responsibility Report annually since 2013 and renamed it the Sustainability Report in 2022. This is the 12th report of the Company. This report is based on the integration of ACC's business and the implementation of reporting principles. The content covers economic governance, social and environmental practices, and sustainability performance data, presenting the synergistic effects across the value chain. The publication date of this report is August 2025, and follows an annual reporting cycle. The next report is scheduled to be published in August 2026.

Report Preparation

This report has been externally assured by SGS Taiwan Ltd., in accordance with the AA1000 Assurance Standard (AA1000 AS) v3, achieving a Type 2 moderate level of assurance. In addition, indicators from the Global Cement and Concrete Association (GCCA) Sustainability Charter and the Sustainability Accounting Standards Board (SASB) are disclosed separately in the appendix.

The Concept Of Cover Page Design



The main visual is composed of intersecting and stacked geometric blocks forming a butterfly image, symbolizing the fusion of nature and creativity. Partial integration of leaf vein ecological elements conveys the vision of sustainability and harmony with the environment.

Scope of Report

The reporting period covered by this report is from January 1 to December 31, 2024. It discloses the sustainability management approaches and performance outcomes of Asia Cement Corporation's major operational sites. The scope of the disclosed information is detailed in the table below. Asia Cement (China) publishes a separate Environmental, Social, and Governance (ESG) Report in compliance with the Hong Kong Stock Exchange requirements. For completeness and comparability, key performance indicators from that report are consolidated in the appendix titled "Key ESG Data" of this report. Overall, the ESG disclosures in this report cover approximately 95% of the Company's consolidated revenue.

Only the financial performance section aligns with the consolidated financial statements, which have been audited by Deloitte & Touche in accordance with relevant accounting standards. Some statistical data are derived from the Company's annual report, government agencies, and publicly available information from relevant websites, presented using commonly accepted textual and numerical formats. Any exceptions are clearly noted in the main text of the report. For third-party verification information related to environmental, social, and governance (ESG) performance, please refer to the appendix section.

Region	 Cement Business	 Asia Cement  Nanhwa Cement  亞東預拌 YATUNG Ya Tung Ready-Mixed Concrete  亞力預力 Ya Li Precast Prestressed	Disclosure Location	Main body of the Sustainability Report
	 Energy Business	 Chiahui Power		
	 Steel Business	 Yuan Long Stainless Steel		
	 Transportation Business	 Fu Ming(Da) Transport		
	 Mining Information	 Asia Cement Xincheng mountain Quarry		
Note			GRI 14: Mining Sector 2024	

1. There were no significant changes in the Taiwan value chain disclosed in this report.
2. The historical data of Asia Cement's Hualien Plant has always included the Xincheng mountain Quarry within its reporting boundary. In this reporting year, key topics related to the Xincheng mountain Quarry are additionally disclosed in accordance with GRI 14: Mining Sector 2024.
3. Compared to the consolidated financial statements, the ESG information does not cover the full scope of subsidiaries. (Please refer to pages 1 to 3 of the Company's Consolidated Business Report on Affiliated Enterprises.)

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Reporting Basis

Issuing Organization	Referenced Frameworks and Standards
Global Reporting Initiative, GRI	GRI Standards 2021
	GRI 14: Mining Sector 2024
Taiwan Stock Exchange Corporation	Sustainable Development Best Practice Principles for TWSE/TPEX Listed Companies
	Rules Governing the Preparation and Filing of Sustainability Reports by TWSE Listed Companies
Financial Supervisory Commission (FSC), Taiwan	Sustainable Economic Activities Recognition Guidelines
Global Cement and Concrete Association, GCCA	Sustainability Charter
Sustainability Accounting Standards Board, SASB	Construction Materials Disclosure Standards
	Electric Utilities & Power Generators Disclosure Standards
	Road Transportation Disclosure Standards
	Iron & Steel Producers Disclosure Standards
The Financial Stability Board, FSB	Task Force on Climate-related Financial Disclosures (TCFD) Framework
International Organization for Standardization (ISO)	ISO 26000: Guidance on Social Responsibility
United Nations, UN	Sustainable Development Goals, SDGs
S&P Global	Corporate Sustainability Assessment · CSA
Morgan Stanley Capital International, MSCI	MSCI ESG Rating

Report Coordination Unit

If you have any questions or suggestions regarding this report, please feel free to contact us.

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Report Navigation

For the convenient, quick and precise reading, a quick link mode is provided to readers:

- The content and index have quick links to the respective chapter and section.
- Further details can be accessed through QR code by mobile phone scanning or clicking on e-file.



Corporate website



Corporate Sustainability Website



Asia Cement (China) ESG Report

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Words from the Chairman

Asia Cement builds more than concrete —we build purpose, people, and progress.

At the very beginning of 2025, a colleague shared some exciting news with me: Asia Cement has once again been selected for inclusion in the S&P Global Sustainability Yearbook 2025! This recognition spans 62 industries and 7,690 companies worldwide. Asia Cement not only stands as the only company in Taiwan's construction materials industry to be included, but also ranks among the top 10% of global leaders in sustainability performance within the building materials sector. This international recognition is a result of the collective efforts and dedication of every member of the Asia Cement team. However, I also reminded our colleagues that this is just the starting point. We must embrace the future with a broader, long-term perspective.

*Just as we firmly believe —
Master the Changes, Secure the Future!*

The global landscape is changing rapidly — with geopolitical tensions, climate risks, energy transitions, and the wave of AI continuing to accelerate. In facing this future, my colleagues and I firmly believe that “stability” does not mean standing still. Rather, it means forging resilience amid uncertainty and creating opportunities in times of change.

Looking back on 2024, Asia Cement upheld a spirit of “stability in transformation” and “commitment in change.” We made meaningful progress on a wide range of sustainability issues, including low-carbon transition, biodiversity, workplace well-being, and social inclusion. These achievements reflect how Asia Cement is steadily advancing with deep-rooted strength amid the global wave of sustainability.

Green Production: Our Firm Path of Action

Asia Cement is the only company in Taiwan's cement industry that has consistently achieved its Science Based Targets initiative (SBTi) reduction goals every year. In 2024, we reached our first-phase carbon reduction target for 2025 ahead of schedule. Since our base year of 2019, we have cumulatively reduced over 580,000 metric tons of CO₂. We have also set our next-phase targets, with the ultimate goal of achieving net-zero emissions by 2050.

We are also the first cement company in Taiwan to complete carbon footprint verification for our entire product portfolio. Among these, the carbon footprint of Asia Cement's low-carbon cement is the lowest among all cement products in Taiwan, demonstrating that our carbon reduction efforts extend beyond manufacturing and into our entire value chain.

Our subsidiary, Asia Eastern Ready-Mixed Concrete, also showcases strong low-carbon capabilities. It focuses on the research and application of high-performance, low-carbon concrete. Leveraging AI-driven digital systems for precise mix design, it customizes carbon-reducing concrete, and has established an ESG digital platform that offers a carbon footprint calculator and quality management app, enabling customers to monitor material-related carbon emissions in real time.

Biodiversity: A Precious Asset We Safeguard Together

In 2024, we officially published our first Taskforce on Nature-related Financial Disclosures (TNFD) Report, conducting a comprehensive assessment of the interconnections and potential impacts between our manufacturing facilities, quarry sites, and ecological park. This report serves as a holistic review of Asia Cement's long-standing nature conservation efforts and represents a concrete step toward addressing nature-related risks and opportunities. It provides in-depth analysis of the reciprocal dependencies between our business and the natural world.

In response to nature-related risks and potential opportunities, Asia Cement has developed a series of concrete action plans, including off-site ecological restoration, environmental education programs, and innovative technological applications. For instance, at the Asia Cement Ecological Park, we have been cultivating a complete habitat since 2004, successfully restoring the golden birdwing butterfly, a Class III protected species. We have also expanded ecological corridors that link green tribal communities, local schools, and neighborhoods—extending conservation beyond the park and into every corner of society.

Environmental education is another cornerstone of our long-term efforts. Asia Cement's environmental programs span across Taiwan. To date, we have reached over 190,000 participants, transforming every encounter with nature into a deeper understanding, respect, and commitment to environmental action.

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A Caring and Inclusive Workplace: The Strongest Support for Our People

At Asia Cement, we are committed to building a diverse, equitable, and inclusive work environment. We actively break gender barriers traditionally associated with the industry—women now represent 22% of our managerial positions. We also encourage internal promotions and cross-departmental learning, with annual internal promotion rates exceeding 80%.

Our care goes beyond job performance—we value the physical and mental well-being of every colleague. From regular health checkups and on-site medical staff to comprehensive group insurance, 30 days of paid sick leave, and three days of paid volunteer leave each year, we go above and beyond legal requirements to safeguard employee welfare. Additionally, we introduced special cultural leave for Indigenous seasonal ceremonies, supporting cultural heritage. In 2024, 87% of our Indigenous employees returned home to participate in these cultural rituals. We uphold our workplace with the principle of “Four Zero Tolerances”—zero tolerance for workplace violence, unlawful harassment, bribery and corruption, and occupational safety incidents. Through digital human rights training, gender equality education, and cybersecurity programs, we foster a workplace culture grounded in safety and integrity.

This commitment and practice earned Asia Cement several governance accolades in 2024, including the ISS Prime rating, a AAA rating in the Taiwan Corporate Sustainability Awards, and inclusion in the FTSE Russell Taiwan ESG Index Constituents.

Thriving Together with Our Communities: A Commitment That Never Changes

Asia Cement has long been deeply rooted in Hualien, maintaining a strong and enduring connection with the local land and people. In 2024, when Hualien faced the severe impacts of earthquakes and typhoons, we mobilized our workforce and equipment immediately to assist with emergency response. We deployed water trucks to several villages to alleviate post-disaster water shortages, supported home repair efforts, and subsidized the maintenance of water tanks for affected households. Working alongside township offices, village committees, and tribal councils, we helped distribute essential supplies. We also opened our dormitories to provide temporary shelter for displaced residents and signed a Disaster Response Mutual Aid Agreement with the Xiulin Township Office. Asia Cement became one of the first corporate partners to join the Xiulin Township Disaster Resilience Collaboration Program, helping to strengthen the community's emergency preparedness and resilience.

But our commitment goes far beyond times of disaster.

Asia Cement has long promoted diverse local engagement initiatives, including after-school programs and Indigenous language instruction to support cultural preservation. We also organize documentary film festivals and chemistry camps, bringing knowledge and inspiration into communities. We believe a company's role is not only to drive economic development but to grow side by side with the communities it calls home.

Sustainability Is a Long Journey — We Have the Determination, the Belief, and the Action

Looking ahead, Asia Cement will continue to embed sustainability at the core of our operations and extend its influence throughout every layer of our value chain. We will:

- Promote low-carbon and green products, bringing innovative momentum to the construction industry
- Strengthen biodiversity conservation initiatives, embodying the value of living in harmony with nature
- Expand workplace inclusion and supply chain influence, building world-class industrial resilience
- Deepen ESG transparency and actively engage with diverse global stakeholders

Because we believe that a company's true value lies not only in generating profit, but also in co-creating a better society and protecting the land we call home.

Asia Cement will, as always, move forward with steady steps, a forward-looking vision, and practical action—walking with the world and taking responsibility for the future.

*Let us go faster, go deeper,
and make a greater impact—
together.*

ASIA CEMENT CORPORATION

Chairman

徐旭東



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Value Chain and Progress Toward Short-, Medium-, and Long-Term Targets

Material Topics Value chain	The meaning to Asia Cement	Sustainable strategies and action plans	Goal of 2024/ Actual Results in 2024	Short-term Goal of 2025	Mid-term Goal of 2030	Long-term Goal of 2035	SDGs
 GHG emissions C	In response to climate change, Asia Cement is actively undergoing a low-carbon transformation by reducing process-related carbon emissions and developing innovative low-carbon products. The Company is committed to lowering the carbon footprint across the building lifecycle and providing a viable pathway for the industry to move toward net-zero emissions.	In alignment with the SBTi' s annual emission intensity pathway for cementitious materials (Scope 1 + Scope 2, tons CO ₂ e per ton of cementitious material)	• Targets : 0.819 • Actual : 0.797	0.807	0.657 (SBTi Net-Zero Standard)	0.482 (SBTi Net-Zero Standard)	 13.2 Integrate climate change measures into national policies, strategies and planning.
		Expand Renewable Energy Use to Achieve Low-Carbon Power	• Targets : Renewable electricity generation or procurement: 3,000 MWh • Actual : 4,623 MWh	Renewable electricity generation or procurement: 4,500 MWh	Renewable electricity generation or procurement: 5,000 MWh		
		Through carbon reduction initiatives and carbon offset measures, Asia Cement aims to achieve net-zero emissions for its headquarters and service locations by 2030, with residual emissions offset to the final 10%.	• Targets : - • Actual : -	Preparatory actions completed	Offset 10% of carbon emissions from headquarters and all service sites		 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.
		Implement Industrial Carbon Mineralization Project (Utilize slag and waste concrete to capture and mineralize flue gas CO ₂ into recycled aggregates for downstream reuse)	• Targets : 100% completion of 2024 project development schedule • Actual : 100% completion of 2024 project development schedule	Completion of interim results report	Capture 18,000 tons of CO ₂ e per year	Capture 36,000 tons of CO ₂ e per year	
		Reduce energy intensity by 1% annually (Base year: 2019; unit: MWh per ton of cementitious material)	• Targets : 1.00 • Actual : 0.99	0.99	0.93	0.88	 7.3 By 2030, double the global rate of improvement in energy efficiency.
		Waste heat power generation at the Hualien Plant accounts for over 20% of its purchased electricity.	• Targets : Over 20% • Actual : 23.3%		Over 20%		
 Low-carbon green manufacturing process / Innovative Low-Carbon Products A N Y C		Develop low-carbon products Complete carbon footprint verification for low-carbon products	• Targets : 100% coverage of products verified under ISO 14067 carbon footprint standard • Actual : 100% coverage of products verified under ISO 14067 carbon footprint standard	Annual updates of ISO 14067 carbon footprint verification			
		Promoting and selling low-carbon products	• Targets : Compared to 2023 Low-carbon cement: 50% • Actual : Low-carbon cement sales increased by 75% compared to 2023.	Low-carbon cement sales are projected to grow by 103% compared to 2024.	cement sales are projected to grow by 100% compared to 2025.	cement sales are projected to grow by 150% compared to 2030.	 11 Make cities and human settlements inclusive, safe, resilient and sustainable.

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Material Topics

Value chain

The meaning to

Asia Cement

Sustainable strategies and

action plans

Goal of 2024/

Actual Results in 2024

Short-term

Goal of 2025

Mid-term

Goal of 2030

Long-term

Goal of 2035

SDGs



Circular Economy /

Materials

A

C

SC

CM

The cement industry can utilize a wide range of alternative raw materials and fuels, making cement plants a key enabler of the circular economy.

Increase the Ratio of Alternative Raw Materials
(kg per ton of cementitious material)

• Targets : 145
• Actual : 152



159

173

185

Thermal Substitution Rate from Biomass Fuels (%)

• Targets : 2.8%
• Actual : 3.0%



4.5%

7.4%

8.3%

Thermal Substitution Rate from Non-Biomass Alternative Fuels (%)

• Targets : 3.0%
• Actual : 3.2%



3.5%

6.5%

7.3%

Reduction in Clinker-to-Cement Ratio
(Sustainable and Innovative Products)

• Targets : 90%
• Actual : 89.17%



86.2%

79.4%

58.1%



Air emissions

ALL

CM

Reduce energy consumption, carbon emissions, and pollutant discharge while increasing water recycling and waste reuse to enhance operational eco-efficiency — shaping Asia Cement’ s vision for promoting green and sustainable environmental development.

Reduce particulate emission intensity by 3% annually
(Base year: 2021; unit: g per ton of cementitious material)

• Targets : 313
• Actual : 252



302

268

251

Reduce SOx emission intensity by 2% annually
(Base year: 2021; unit: g per ton of cementitious material)

• Targets : 127
• Actual : 88



125

118

111

Reduce NOx emission intensity by 6% annually
(Base year: 2021; unit: g per ton of cementitious material)

• Targets : 1,086
• Actual : 927



1,007

808

742

Reduce mercury emissions by 1% annually
(Base year: 2021; unit: tons)

• Targets : 0.043
• Actual : 0.044



0.042

0.04

0.038

Achieve over 90% waste recycling and reuse rate

• Targets : 90%
• Actual : 98%



Over 90%

Zero generation of hazardous waste (unit: tons)

• Targets : 0
• Actual : 0



0

Reduce off-site disposal of general waste by 2.5% annually
(Base year: 2021; unit: tons)

• Targets : 58.08
• Actual : 57.59



56.51

48.66

40.82



Waste

ALL

CM

Risk and opportunity management enables Asia Cement to remain agile and competitive in a constantly changing environment. By effectively managing risks, the company can minimize losses and protect its assets; by identifying and leveraging favorable opportunities, it creates long-term value for sustainable operations.

[Risk Management Policy and Procedures](#)



• Targets : Risk and opportunity identification and corresponding mitigation measures are conducted annually in accordance with Asia Cement’s risk management policy and procedures.

• Actual : Risk Control Implementation Status.



Risk and opportunity identification and corresponding mitigation measures are conducted annually in accordance with Asia Cement’ s risk management policy and procedures.



Risk and Opportunity Management /

Climate Adaptation and Resilience

A



By 2030, achieve the sustainable management and efficient use of natural resources.

By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.



By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.



By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.



Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

Note

ALL All Site

A

Asia Cement

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Yuan Long Stainless Steel

N

Nanhwa Cement

Y

Ya Tung Ready-Mixed

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Client

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Supply Shain

CM

Community



Target achieved



Target was reached

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Short-term

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Mid-term

Goal of 2030

Long-term

Goal of 2035

SDGs



ALL

To build a sustainable foundation for Asia Cement, continued profitability is essential. Guided by the principle of profit-sharing, the company maintains a high dividend payout ratio, ensuring that earnings are effectively distributed to benefit a broad base of investors.



SC

Sustainable supply chain management ensures that procurement meets both quality and compliance standards. Asia Cement's professional teams deliver high-quality products and services to customers. The process of co-creating value with supply chain partners not only enhances customer satisfaction but also drives long-term business growth.



C

Employees are Asia Cement's most valued asset. We implement regular salary increases to retain top talent and fulfill our corporate social responsibility, striving to make Asia Cement one of Taiwan's most rewarding and fulfilling workplaces.

We are committed to enhancing our workforce's knowledge, attitudes, and skills—both at the individual and team levels—to improve productivity and work quality, strengthen employee capabilities, and contribute to the company's overall profitability.



Human Capital

Management/

Closure and

rehabilitation



Occupational

Health and Safety

ALL

SC

Employees are the company's most irreplaceable asset. Asia Cement firmly believes that only healthy employees working in a safe and secure environment can produce products that customers trust and rely on.

High Cash Dividend Yield

- Targets : **Maintain Cash Dividend Yield 4%~8%**
- Actual : **A cash dividend of NT\$2.2 per share was distributed, representing a cash dividend yield of 5.1%. **

Maintain Cash Dividend Yield 4%~8%

Conduct annual supplier assessments

- Targets : **100% of significant suppliers are assessed**
- Actual : **100% of significant suppliers were assessed, and all were classified as low-risk.**

100% of significant suppliers are assessed

High Customer Satisfaction

- Targets : **Over 95%**
- Actual : **96.8% **

Over 95%

ALL

Institutionalized Employee Compensation System

0.1%~4% of pre-tax net profit allocated

- Targets : **0.1% to 4% of pre-tax net profit**
- Actual : **1.16% **

Employee compensation accounts for 0.1% to 4% of pre-tax net profit.

ALL

Continuous improvement in employee satisfaction

- Targets : **70%**
- Actual : **77% **

Employee satisfaction in all categories exceeds 70%

ALL

Systematic Long-Term Employee Development Provide Transition Assistance Programs

- Targets : **100% Completion Rate Among Participants**
- Actual : **100% Completion Rate for Participants in the Training Program **

Continue Providing Systematic and Long-Term Career Development Training

100% Completion Rate Among Participants

ALL

Implement Human Rights Policy

SC

Prohibit Child Labor and Forced Labor

- Targets : **No child labor and no forced labor**
- Actual : **No child labor and no forced labor **

Completed 100% human rights due diligence for suppliers or subsidiaries.

Child labor and forced labor are strictly prohibited.

Implementation of ISO 45001

- Targets : **100% coverage of ISO 45001 certification**
- Actual : **100% coverage of ISO 45001 certification**

100% coverage of ISO 45001 certification

Disabling Injury Frequency Rate (FR) per million working hours

- Targets : **Employees 0.55 Contractors 1.02**
- Actual : **Employees 2.25  Contractors 0 **

Disabling Injury Severity Rate (SR) per million working hours

- Targets : **Employees 71 Contractors 12**
- Actual : **Employees 231  Contractors 0 **

Total Injury Index (FSI)

- Targets : **Employees 0.20 Contractors 0.11**
- Actual : **Employees 0.72  Contractors 0 **

Zero fatalities

- Targets : **Fatalities 0**
- Actual : **Fatalities 0 **

Fatalities 0

Zero occupational injuries

- Targets : **Occupational injuries ,0**
- Actual : **Occupational injuries ,2 **

Occupational injuries,0



Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labor-intensive sectors.



By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.



Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms.



Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, particularly women migrants, and those in precarious employment.

Notes

ALL

All Site

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Yuan Long Stainless Steel

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Community

Target achieved

Target was reached

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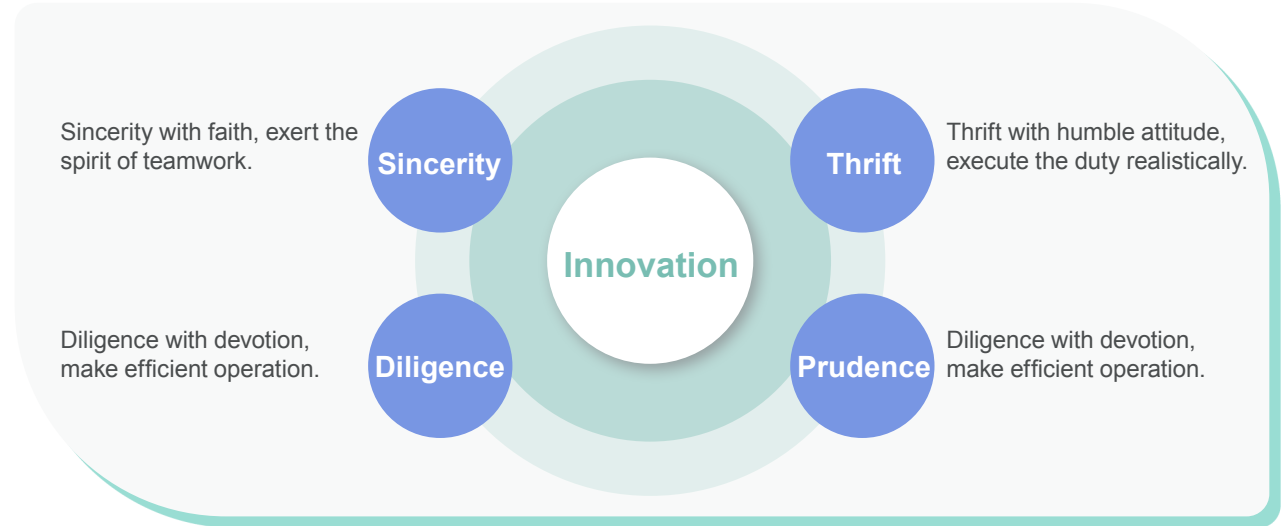
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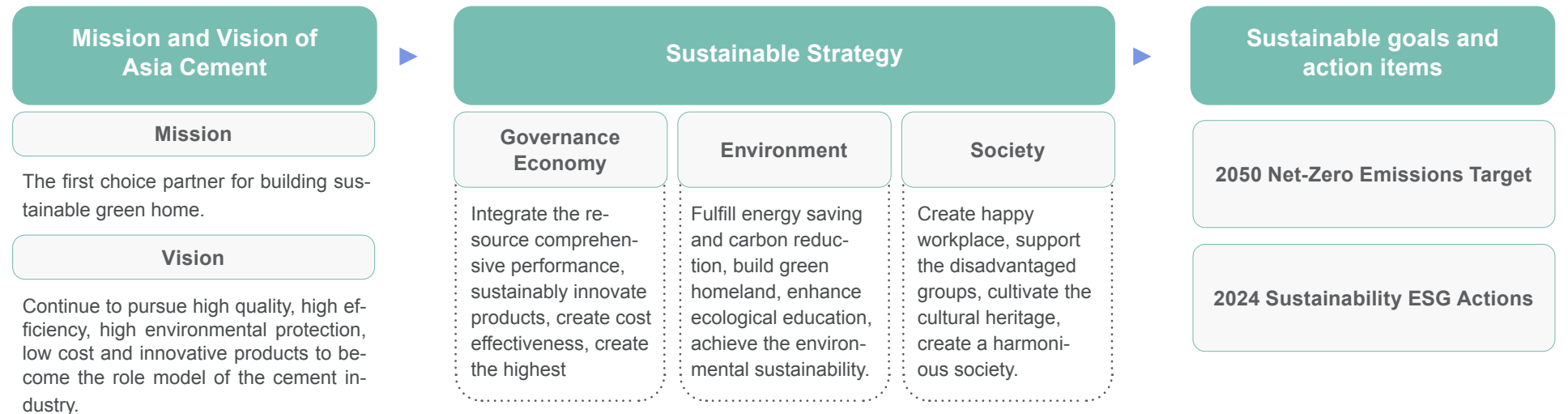
Sustainable Vision Strategy

Asia Cement's Founding Spirit

Over the years, our colleagues have consistently upheld a unique corporate spirit that defines the Far Eastern Group. Chairman Hsu encourages all employees to approach every task with thoroughness and clarity—getting to the root of every matter and persisting until it is done right. He also emphasizes the importance of enhancing service quality and pursuing efficiency in every aspect of work, enabling the continued growth and enduring success of the Far Eastern enterprises.



Misssion, Vision, Strategies and Sustainable Goals



For years Asia Cement has been pursuing a core management principle of high quality, high efficiency, high environmental standards and low cost. It has steadily become the benchmark for the cement industry. In today's fast changing global environment, we will keep ourselves flexible and agile, continue to make the adjustment, advancement and innovation with the spirit of sustainability in mining mountain restoration, smart manufacturing, circular economy, social care and environmental education, and become an important green partner for building .

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2024 Asia Cement ESG Highlights

Environmental Sustainability



Achieved SBTi-aligned science-based emission reduction targets for five consecutive years

The carbon intensity has been reduced by 9% from the base year level, exceeding the 2025 reduction goal of 8%.



Advancing net-zero goals for the headquarters and service locations by 2030.

In 2024, the headquarters achieved a 32% share of renewable energy use, reducing emissions by 42% compared to 2021.



Achieved carbon footprint verification across all product categories.

All products have successfully completed ISO 14067 verification and obtained the Carbon Footprint Label issued by the Ministry of Environment. The low-carbon masonry cement has set a new domestic record for the lowest carbon footprint among cement products.



Actively promoted low-carbon cement

In 2024, 35,092 tons of masonry cement were produced, reducing 2,020 tons of CO₂ annually; 17,291 tons of Portland limestone cement were produced, reducing 1,083 tons of CO₂ annually.



Low-carbon cement concrete

Asia Cement's subsidiary, Ya Tung Ready-Mixed Concrete, formed a joint team with Kedge Construction and successfully passed national-level structural seismic testing.



Circular reuse of alternative raw materials and fuels

Reused 541,000 tons of alternative raw materials and fuels, reducing 23,503 tons of CO₂e compared to 2023.



Carbon Capture, Utilization, and Storage (CCUS)

Engaged in research on carbon sequestration technologies utilizing industrial by-products and waste materials, and completed the installation of laboratory-scale pilot equipment in 2024.



Developed a recycling system for drying and carbon sequestration treatment of residual ready-mixed concrete materials.

Subsidiary Asia Ready-Mixed has transformed waste into reusable resources while integrating carbon capture technologies, providing a concrete solution for carbon reduction within the construction industry.



Assisted the government in the destruction of 14.6 tons of smuggled refrigerants.

Reduced refrigerant leakage, avoiding 164,000 metric tons of carbon emissions.



Continued environmental performance improvement

ISO 14001 Environmental Management System coverage reached 87%, and the waste recycling and reuse rate achieved 98%.



ISO 46001 Water Efficiency Management System Certification

Hualien Plant obtained ISO 46001 certification for Water Efficiency Management Systems.



Green Factory Label certified by the Industrial Department Administration Ministry of Economic Affairs.

Hualien Plant was awarded the Green Factory Label by Industrial Department Administration Ministry of Economic Affairs.



Green Building Label certified by the Ministry of the Interior

The Quality Control and Research Building at the Hualien Plant received the Green Building Label from the Ministry of the Interior.



A cumulative 73.1 hectares of quarry areas have been revegetated.

The revegetated area accounts for 81.13% of the mined area, while the vibration levels from blasting operations are among the lowest globally, ensuring minimal community impact.



Published the first Taskforce on Nature-related Financial Disclosures (TNFD) report

Published our first Taskforce on Nature-related Financial Disclosures (TNFD) report, further advancing our biodiversity policies and restoration initiatives.



“Asia Cement No.9,” an eco-friendly cement carrier vessel

Asia Cement, in collaboration with U-Ming Marine Transport, launched the eco-friendly cement carrier “Asia Cement No.9,” further enhancing the efficiency of product transportation.

Corporate Governance



Participated in the CDP disclosure project:

- Scored A- in the Climate Change Questionnaire
- Upgraded to A- in the Water Security Questionnaire
- Achieved A in Supplier Engagement Rating (SEA)



Ranked in the Top 6–20% in the 11th Corporate Governance Evaluation.



Continued inclusion in the FTSE Russell Taiwan ESG Index Constituents.



Received “Prime” status in the ISS ESG Corporate Rating for the first time.



Rated AAA in the 2024 Taiwan Corporate Sustainability Ratings.



Upgraded to “BBB” in MSCI ESG Ratings.



Awarded an “A” rating in the SinoPac⁺ Corporate Sustainability Evaluation.



Maintained a 66% dividend payout ratio and a 5.1% cash dividend yield.



Achieved 96.8% customer satisfaction.



All significant suppliers were assessed as low sustainability risk in the supplier risk evaluation process.

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Social Inclusion



Happy Workplace: 100% Gender Equality at Asia Cement

With a voluntary turnover rate of 6% and an employee engagement (satisfaction) score of 77%.



No Major Occupational Injuries in 2024

Implemented a comprehensive Occupational Health and Safety Management System with 100% coverage.



Asia Cement and its subsidiaries contributed a total of NT\$124 million in social engagement initiatives.

Equivalent to 1.56% of net operating profit.



Fulfilled “10+11” Indigenous Benefit Sharing Agreements

Total expenditure of NT\$13.96 million.



Provided ecological and environmental education programs

Engaging 5,746 participants and delivering 16,729 hours of learning.



Maintained the Asia Cement Ecological Park database

Offering real-time ecological videos and educational materials, with over 2.87 million webpage views.



A total of 39 butterfly habitats have been established to date.

Habitat creation initiatives have spanned six counties and cities—Taipei, Hsinchu, Tainan, Kaohsiung, Hualien, and Taitung—forming a nationwide butterfly corridor across Taiwan.



Organized Cultural Tutoring Programs for Indigenous Elementary and Junior High School Students

Continued to organize the “Inspiring Life Film Festival” to broaden students’ life experiences.



Asia Cement co-organized the “Taroko Mountain Market” together with the Boshang Tribal Council.

The two-day event generated NT\$400,000 in revenue, all of which was retained by the vendors.



Established a local emergency disaster prevention and relief network.

After the April 3rd earthquake, Asia Cement assisted in evacuating tourists from the disaster area, distributed relief supplies, provided water trucks and machinery, and offered recommendations for reconstruction of collapsed sites along with seedlings for vegetation restoration. These efforts were recognized by a letter of appreciation from the Hualien County Government. Starting from July 2024, Asia Cement formally signed an emergency mutual disaster prevention and relief support agreement with the Xiulin Township Office.



Assisted with local slope stabilization projects in Hualien.

Honor and Recognition



Selected for the S&P Global Sustainability Yearbook for two consecutive years, ranking in the top 10% of the global construction materials industry—the only cement company from Taiwan included. Asia Cement received the highest score in Occupational Health & Safety among global peers.



Awarded as one of the "Asia Top 1000 Companies" by CRIF Taiwan, achieving the highest rating among all Taiwanese cement companies.



Asia Cement's low-carbon cement solution was featured in the “Net Zero Transition Report” published by the Global Cement and Concrete Association (GCCA) at COP29,highlighting its contribution to decarbonization in the cement sector.



The company's achievements in innovation and environmental protection were once again recognized in the International Cement Review (ICR), a leading global cement industry publication.



Asia Cement was honored with the "Model Award of the Year – Innovative Services Category" at the 4th Taiwan Circular Economy Awards for its outstanding circular economy model, marking the third consecutive year of recognition.



Received the CommonWealth Magazine ESG Corporate Sustainability Awards, winning in both "Overall Performance – Traditional Industries" and "Outstanding Project – Environmental Friendliness" categories.



Ranked 19th in the Manufacturing – Large Enterprise Category of the CommonWealth Magazine Top Corporate Citizens Awards, and also received the Talent Sustainability Award.



Won two Global Corporate Sustainability Awards (GCSA).



Awarded two Taiwan Corporate Sustainability Awards (TCSA).



Received two Taiwan Sustainability Action Awards (TSAA).



Honored with the 2024 Golden Boat Award – Port Sustainability Award.



Honored with the "Health Promotion Award" at the Asia Responsible Enterprise Awards (AREA).



Asia Cement received the Silver Certification for the third time from the Taiwan Alliance for Net Zero Emissions (TANZE), while its subsidiary Asia Ready-Mix upgraded to the Bronze Certification—both achieving higher levels of recognition.



For the fourth consecutive year, awarded "HR Asia Best Companies to Work for in Asia"; in 2024, additionally received:
•HR Asia Diversity, Equity & Inclusion Award
•HR Asia Most Caring Company Award
•HR Asia Sustainable Workplace Award



For another consecutive year, Asia Cement received the Gold Award in the "Manufacturing" category of the 2024 Happy Enterprise Survey by 1111 Job Bank.



The Hualien Plant was honored as an Outstanding Voluntary GHG Reduction Facility for the 10th time, making it the most awarded cement facility in Taiwan in this category.



Continued recognition from the Workforce Development Agency, Ministry of Labor, receiving the Bronze Medal of the Talent Quality-management System (TTQS).



Awarded by the Occupational Safety and Health Administration (OSHA), Ministry of Labor as an Outstanding Enterprise in the 2024 Voluntary Disclosure of Occupational Health and Safety Indicators in Sustainability Reports.

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Material Topics and Stakeholders

Asia Cement’s material sustainability topic management follows a continuous improvement cycle. To align with international sustainability performance standards, we refer to the S&P Global Corporate Sustainability Assessment (CSA) framework and incorporate key sustainability topics relevant to the cement industry. Additionally, we integrate the five sustainability pillars from the Global Cement and Concrete Association (GCCA) Sustainability Charter. Newly identified topics are included in stakeholder surveys and sustainability impact assessments to ensure a comprehensive and forward-looking materiality process.

Organizational Context Analysis (Topic Identification)

Asia Cement’s identification of sustainability topics encompasses both internal and external factors.External sources include the UN Sustainable Development Goals (SDGs), ISO 26000, the GRI Standards and GRI 14 Mining Sector Standard, the SASB Sustainability Accounting Standards, feedback from stakeholder engagement processes, financial regulatory requirements, domestic and international ESG awards, the CDP disclosure project, the S&P Global Corporate Sustainability Assessment (CSA), and sustainability topics set forth by the Global Cement and Concrete Association (GCCA).

Internal sources include the founding spirit of Asia Cement, the company’s Sustainability Policy, Sustainability Strategy, key performance indicators (KPIs), and internal regulations and governance mechanisms.

Stakeholder Questionnaire Survey

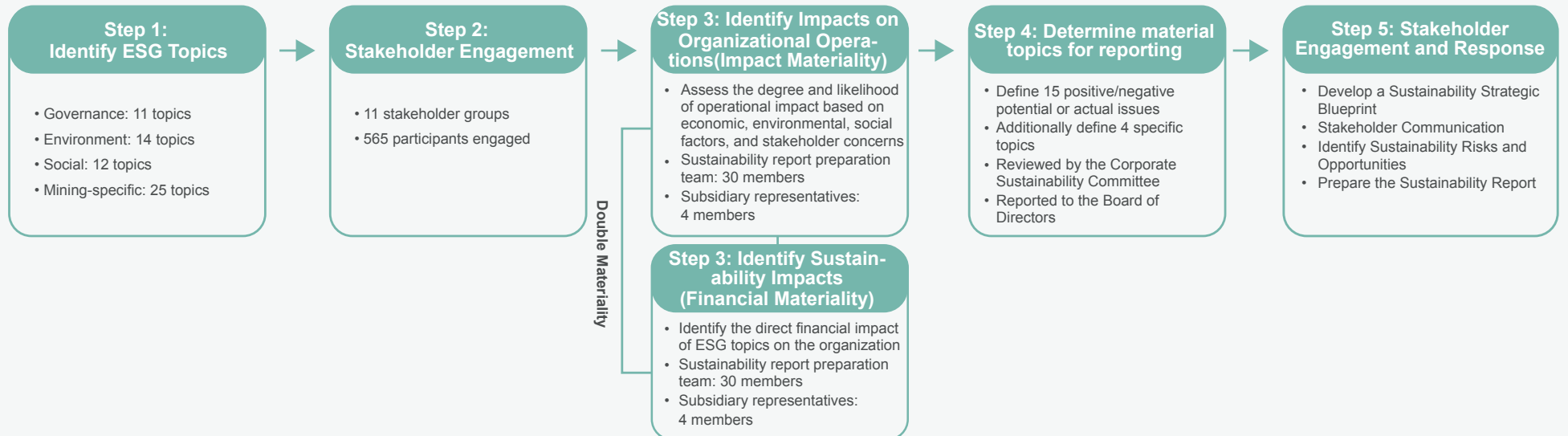
A stakeholder questionnaire was developed and distributed, resulting in a total of 565 responses, of which 453 were valid. Stakeholder weighting was incorporated to calculate the behavioral patterns and concerns of each stakeholder group. Special attention was given to the views of local Indigenous communities and environmental non-profit organizations (NPOs) during the analysis. Based on the feedback received, integrated strategic communication plans were formulated to address key concerns and enhance stakeholder engagement.

Stakeholder Identification and Evaluation

In accordance with the five key principles outlined in the AA1000 Stakeholder Engagement Standard (AA1000 SES-2015)—Dependency, Responsibility, Tension, Influence, and Diverse Perspectives—Asia Cement’s Corporate Sustainability Promotion Committee conducted stakeholder identification and assessment discussions to determine the importance of each stakeholder group to the company.Following the evaluation, the top five stakeholder groups by relevance were identified as:Employees,Investors and shareholders,Customers,Communities and local/Indigenous groups,Business partners.In addition, stakeholders residing near mining sites were included as a distinct category due to their geographic and environmental relevance.

Double Materiality Assessment and Determine material topics

In accordance with the double materiality principle of the European Sustainability Reporting Standards (ESRS), the assessment considers both:Impact materiality (external perspective): evaluating how the organization’s activities impact the world; and Financial materiality (internal perspective): evaluating how sustainability-related matters impact the organization’s financial performance. For impact materiality, each topic was assessed based on its level of impact on:the economy (e.g.,revenue),the environment,people (including human rights), and stakeholders. For financial materiality, the assessment focused on the direct financial impact that each sustainability topic may have on the organization.



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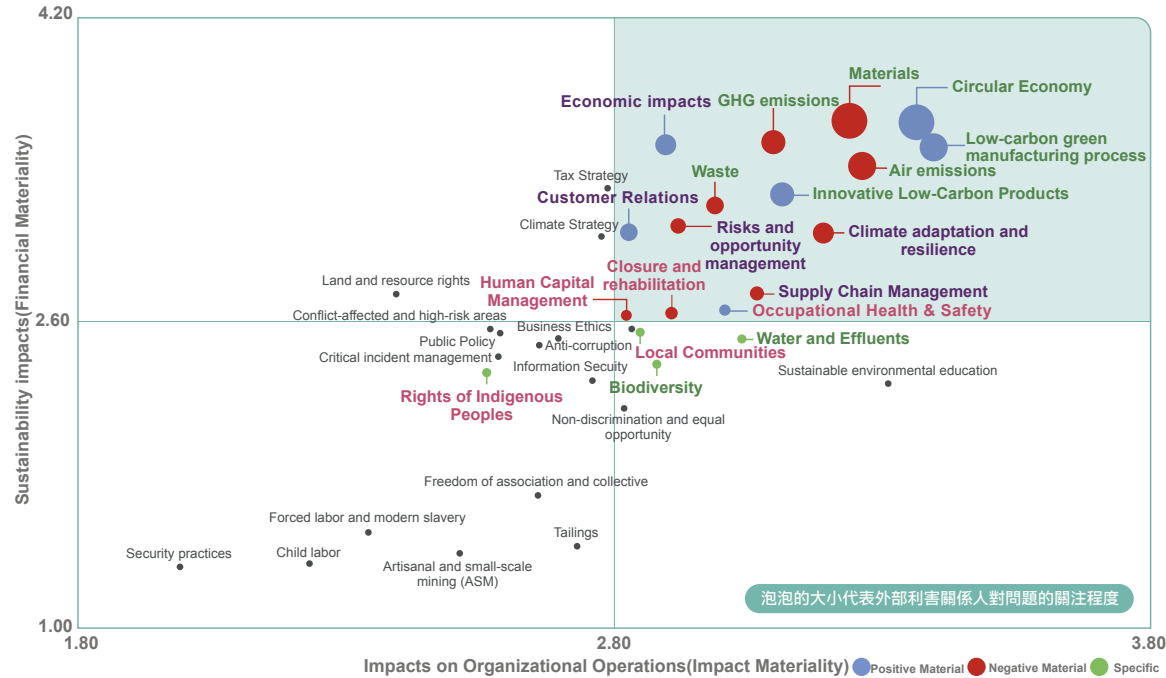
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Asia Cement determine material topics as those scoring 2.8 or higher in impact materiality and 2.6 or higher in financial materiality. Given that issues such as local communities, indigenous rights, incident management, biodiversity, and water and effluents were of high concern to stakeholders, they have been designated as Asia Cement's specific topics.

In 2024, the list of material topics was adjusted in accordance with GRI 14: Mining Sector Standards, and new topics were also evaluated. Based on the assessment and prioritization, Asia Cement identified a total of 15 material topics, including 6 positive topics and 9 negative topics.

ACC Materiality Matrix



Legal Compliance

In 2024, Asia Cement Corporation and its subsidiaries reported no major violations. However, there were 2 instances of regulatory fines involving Asia Cement and 15 involving its subsidiaries. Details regarding compliance with environmental, fair trade, and labor-related regulations can be found on pages 49, 72, and 117.

- Note
- A major violation is defined as a single penalty of NT\$1 million or more.
 - In 2023, there was 1 violation involving Asia Cement (penalty of NT\$100,000) and 6 violations involving subsidiaries (total penalties amounting to NT\$31.62 million).

Positive Material Topics

- 1 Circular Economy E
- 2 Low-carbon green manufacturing process E
- 3 Innovative Low-Carbon Products E
- 4 Economic impacts G
- 5 Customer Relations G
- 6 Occupational Health & Safety S

Negative Material Topics

- 1 Materials E
- 2 Air emissions E
- 3 GHG emissions E
- 4 Climate adaptation and resilience G
- 5 Waste E
- 6 Risks and opportunity management G

Specific Topics

- | Item | | |
|--------------------------------|---|----------------------|
| 1 Biodiversity | E | |
| 2 Water and Effluents | E | |
| 3 Local Communities | S | |
| 4 Rights of Indigenous Peoples | S | |
| | | Priority |
| | | E Environmental |
| | | S Social |
| | | G Governance economy |

Integration of Materiality Assessment and Enterprise-wide Risk Management Procedures

Under the impact assessment model of double materiality, Asia Cement incorporates the management of material sustainability topics into the company's risk management procedures. Material topics identified as having a significant impact on Asia Cement's operations through surveys are used as the basis for identifying risk sources, and corresponding risk management strategies and plans are formulated. Based on the assessment results, Asia Cement has identified emerging risk sources from highly impactful and significant material topics, such as adverse outcomes of artificial intelligence technologies and risks related to cyber espionage and cyber warfare.

Changes in Asia Cement's Material Topics for 2024 (Compared to the Previous Year)

Newly Added Topics	Innovative Low-Carbon Products, Closure and Rehabilitation, Climate Adaptation and Resilience, Customer Relations, Supply Chain Management
Topics Adjusted According to GRI 14	Energy, Emissions → Greenhouse Gas Emissions, Air Emissions Economic Performance → Economic Impacts
Consolidated Topics	Human Resource Development, Talent Attraction and Retention → Human Capital Management Climate Strategy → Climate Adaptation and Resilience
Reduced Topics	Sustainability Environmental Education, Market Position, Labor-Employment Relations, Labor/Management Relations
Specific Topics	Local Community Water Risk → Water and Effluent Sustainable Mining and Biodiversity → Biodiversity

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Verification and Review of the Completeness of Material Topics

The Corporate Sustainability Implementation Committee consolidates information related to the materiality assessment process and results, and submits it to the Chairperson for review and confirmation to ensure that all relevant topics are comprehensively covered.

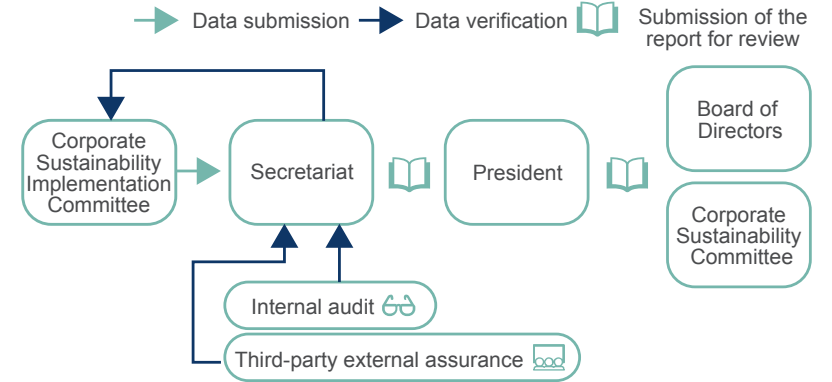
Confirmation of Material Topics and Report Preparation

Asia Cement communicates its annual sustainability achievements to internal and external stakeholders through the preparation of its Sustainability Report. The Secretariat is responsible for collecting, analyzing, consolidating, and internally auditing the data. To enhance credibility, the report undergoes third-party assurance. The internal audit was conducted on April 30, 2025, and external assurance by SGS took place on May 7–8 and May 23, 2025. For details, please refer to the Assurance Statement in the Appendix.

Board Reporting and Response

Asia Cement has established the Corporate Sustainability Committee under the Board of Directors as the core decision-making body for sustainability governance. This committee is responsible for formulating and overseeing the company’s overall sustainability direction. The Corporate Sustainability Implementation Committee, chaired by the President, is tasked with formulating and executing the company’s annual ESG plans, and regularly reports progress to both the Sustainability Committee and the Board of Directors every six months. Major sustainability issues are submitted to the Board for deliberation and confirmation to ensure effective implementation of sustainability governance.

Working groups under the Implementation Committee hold regular meetings and reporting sessions to review and evaluate the impact of each issue on the company and propose corresponding response strategies, aiming to achieve the company’s sustainability vision and goals. This sustainability report is reviewed by external assurance providers and presented to the Board for discussion and approval prior to publication.



Summary of Stakeholder Feedback

 Indigenous	You have done an excellent job in fulfilling corporate social responsibility. Keep up the great work—cheers!	 Non-Profit Organizations	Cement is a fundamental industry for both civilian life and national defense. Continuous efforts are needed to balance industrial development with environmental protection.
 Investors/Shareholders	Progress is being made continually. Keep innovating and striving for change.	 Customers	Improve product quality and competitiveness, and increase efforts in carbon reduction and R&D.
 Partners	In response to the net-zero trend, it is recommended to further promote and develop low-carbon cement, strengthen resource circulation, and reduce environmental impact.	 Suppliers	Continue ESG efforts and communication with stakeholders—very impressive!
 Industry Peers	Advanced and excellent mining practices set a benchmark for the industry. These practices should be promoted as educational material to help the public understand the close relationship between mining and daily life. Mining and the cement industry are indispensable to the modern circular economy.	 Government Agencies	Foster a positive corporate image, support local culture, benefit employees, contribute to the country and its people, and promote coexistence and mutual prosperity.
 Academic Institutions	Asia Cement's Hualien Plant currently provides substantial support and care to surrounding villages. It is recommended to continue these efforts and regularly assess the situation to address issues such as population decline, aging, and the impact of extreme weather.	 General Public	Plans must be practical, implementation must be thorough, reviews must be fair, and improvements should be made with appropriate feedback.
		 Employees	Sustainable operation that results in a win-win for both labor and management.



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The Engagement Mechanism for the Status Of Communicating with Stakeholders

Stakeholders	Concerns Topics	Significance to Asia Cement	Status of implementation in 2024	Communication Platform & Frequency	Response Section
 Employees	- Occupational Health and Safety - Human Capital Management - Labor Practices - Circular Economy - Anti-Corruption	Employees are an irreplaceable asset of the company. Only healthy employees working in a safe environment can produce reliable products. Retaining top talent and empowering employees help build Asia Cement into a happy and high-paying workplace in Taiwan.	- Held union meetings - Average 36 hours of training per employee annually - Comprehensive employee benefits and bonuses - Zero major occupational incidents in 2024 - Promoted alternative fuels and alternative raw materials for circular economy - Implemented ISO 37001 Anti-Bribery Management System	Union meetings, periodic interviews, online announcements, annual performance appraisals, labor-management meetings, monthly incident reports, OH&S committee, employee programs and ad hoc training, e-bulletin, Far Eastern Group's 'Yuan Dong Ren' magazine	1.4 Circular Resource Management 3.6 Business Integrity and Anti-Corruption 4.2 Talent Attraction and Retention 4.3 Occupational Health and Safety magazine
 Investors and Shareholders	- GHG Emissions - Waste - Economic Impacts - Innovative Low-Carbon Products - Low-Carbon Manufacturing Processes	Ensure transparent disclosure of business performance and collect feedback through consistent investor engagement, aiming to align information between investors and management.	- The Annual General Shareholders' Meeting was held on June 25, 2024. - Asia Cement regularly holds investor conferences on a quarterly basis. In 2024, the company organized 3 self-hosted investor conferences, conducted 24 one-on-one or group meetings, with a total of 216 participants. The Q2 investor conference was not held due to the quiet period related to the privatization process of Asia Cement (China). - In 2024, the management engaged in three ESG dialogue meetings with domestic and international investment institutions, and responded to multiple questionnaires from institutional investors to discuss climate change impacts and mitigation strategies. The company also actively participated in ESG-focused forums to better understand and address stakeholder concerns.	Annual AGMs and investor conferences, Investor Relations section of company website, Market Observation Post System (MOPS), feedback via phone or email, sustainability section and mine disclosure webpage	1.1 Net-Zero Strategy and Roadmap 1.3 Low-Carbon Manufacturing Value Chain 2.1 Pollution Control and Waste Reduction 3.5 Economic Performance and Tax Information
 Customers	- Innovative low-carbon products - Materials - Circular economy - Waste management - Customer relations	Customers are the foundation of corporate sustainability. Asia Cement adheres to its principles of high quality, high environmental standards, and excellent service to create long-term, high-value customer relationships. To ensure environmental sustainability, we promote greener processes and products while continuously communicating with customers to enhance satisfaction and support the co-prosperity of business and the environment.	- Achieved a customer satisfaction rate of 96.8%. - Actively promoted low-carbon cement products (Portland Limestone Cement and Masonry Cement) to help customers reduce costs while gaining environmental certifications. - Participated in the 2024 Kaohsiung International Building Materials Exhibition and the Taipei Building Show, and conducted technical exchange sessions with contractors, construction companies, and on-site craftsmen across various counties and cities. - Continued to operate under an ESG-driven sustainable model characterized by low carbon, energy efficiency, smart manufacturing, resource recycling, a happy workplace, and co-prosperity with local communities.	Annual customer satisfaction survey, quality certifications Website feedback and inspection reports Regular/occasional client visits Email/phone feedback Regular project meetings Mine site tours Sustainability website, LINE, FB, public info site	1.2 Energy & Resource Management 1.3 Low-carbon Manufacturing Value Chain 1.4 Circular Resource Management 2.1 Pollution Control & Waste Reduction 3.8 Customer Service & Information Security
 Communities/ Local Indigenous Groups	- Non-discrimination &equal opportunity - Customer relations - Business ethics - Indigenous rights - Local community	Closely tied to corporate operations, Asia Cement thrives in mutual growth with local communities.	366 projects participated by local communities with 100% coverage - Fulfilled "10+11" benefit-sharing with NT\$13.96 million; community investments by Asia Cement and subsidiaries totaled NT\$124.33 million. - Held 18 mine tours and safety briefings with 427 participants - Asia Cement Service Center processed thousands of service cases - Continued ESG operations in low-carbon, energy-saving, digital, circular, employee-friendly, and community-integrated models	Local group visits Asia Cement Service Center Community engagement events Mine site tours Sustainability website, LINE, FB, public info site	3.6 Integrity & Anti-bribery 3.8 Customer Service & Information Security 4.1 Diversity & Human Rights 5.1 Local Community Engagement
 Partners	- Occupational safety & health - Innovative low-carbon products - Low-carbon manufacturing - Circular economy - Major incident management	Asia Cement and its partners collaborate across ESG aspects to pursue the vision of corporate sustainability.	- Zero major occupational incidents in 2024 - Promoted eco-friendly cements (Portland limestone cement, masonry cement), selling 49,000 tons in 2024 - Continued ESG operations in low-carbon, energy-saving, digital, circular, employee-friendly, and community-integrated models	Sustainability website, LINE, FB, public info site	1.3 Low-carbon Manufacturing Value Chain 1.4 Circular Resource Management 2.1 Pollution Control & Waste Reduction 4.3 Occupational Health & Safety

Note The top five material topics of highest stakeholder concern are listed. In cases where topics share the same level of concern, they are ranked according to the significance of their sustainability impact.

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Stakeholders	Concerns Topics	Significance to Asia Cement	Status of implementation in 2024	Communication Platform & Frequency	Response Section
 Government Agencies	- Environmental sustainability education - GHG emissions - Biodiversity - Circular economy - Anti-corruption	As regulators and policy-makers, they guide Asia Cement's legal compliance and industrial operations.	- Disclosure of significant information in both Chinese and English. 5,746 participants engaged in face-to-face environmental education. - Fulfilled "10+11" benefit-sharing with NT\$13.96 million; community investments by Asia Cement and subsidiaries totaled NT\$124.33 million. - Conducted EIA per Environmental Impact Assessment Act Article - Achieved 5 consecutive years of SBTi targets; 9% GHG intensity reduction vs. base year. - Regularly submitted environmental, safety, and health disclosures. - No major occupational incidents in 2024.	MOPS and company website Official letters Regulatory briefings, seminars, forums Disclosure reports Eco-park and website Open mine tours ESG section of website, LINE, FB, Mine Disclosure Portal	1.1 Net-zero strategy & roadmap 1.4 Circular economy & resource management 2.3 Nature actions & biodiversity 3.6 Ethical business & anti-corruption 5.2 Environmental education
 Suppliers	- Business ethics - Anti-corruption - Innovative low-carbon products - Sustainable supply chain management - Low-carbon green processes	Strategic ESG partners in sustainable development.	- Supplier Social Responsibility Commitment Statement. 100% of critical suppliers are subject to assessment. - Sustainability risk assessments of suppliers indicate all are categorized as low-risk. - Implemented ISO 37001 Anti-Bribery Management System. - Deepened low-carbon alliances with upstream and downstream partners, actively promoting the adoption of low-carbon products in real-world applications. - Continued to operate under an ESG-driven sustainable model featuring low-carbon, energy efficiency, smart manufacturing, resource recycling, a happy workplace, and co-prosperity with local communities.	Supplier evaluations On-site audits or visits Phone/email feedback Ecome Supplier Platform Supplier surveys ESG section of website, LINE, FB updates	1.3 Low-carbon manufacturing value chain 3.6 Ethical business & anti-corruption 3.7 Sustainable supply chain
 NGOs	- Air emissions - Water & effluent - Circular economy - Biodiversity - GHG emissions	Advocate for sustainable practices by Asia Cement.	- ESG operations as above. - Environmental education with 5,746 participants. - EIA conducted in accordance with Article 5 and related laws. 5 years of SBTi goal achievement with 9% reduction.	Stakeholder meetings Open mine tours Website, LINE, FB, Mine Disclosure Portal Participation in CDP	1.1 Net-zero strategy & roadmap 1.4 Circular economy & resource management 2.1 Emissions & waste reduction 2.2 Water & effluent risk management 2.3 Nature actions & biodiversity
 Academia / Industry	- Circular economy - Low-carbon green processes - Waste - GHG emissions - Environmental education	Joint academic-industrial collaboration enhances technical innovation.	- Cement industry-academia integration. - Cross-sector cooperation to explore low-carbon transformation. - Environmental education with 5,746 participants. - ESG operations continued. 5 years of SBTi goal achievement with 9% reduction.	Seminars Academic collaboration Regular exchanges Scholarships Open mine tours Eco-park & website ESG section of website, LINE, FB, Mine Disclosure Portal	1.1 Net-zero strategy & roadmap 1.3 Low-carbon manufacturing value chain 1.4 Circular economy & resource management 2.1 Emissions & waste reduction 5.2 Environmental education
 General Public	- Business ethics - Anti-corruption - Incident management - Occupational health & safety - Biodiversity	Public interest in Asia Cement's sustainable operations.	- ISO 37001 anti-bribery management system implemented. - We continue to actively operate under an ESG sustainability model that emphasizes low carbon, energy efficiency, smart technologies, circular resource utilization, a happy workplace, and harmonious coexistence with local communities. - Zero major occupational incidents. - Environmental education with 5,746 participants. - Environmental impact assessments are conducted in accordance with Article 5 of the Environmental Impact Assessment Act and relevant regulations.	Information is periodically published through the Corporate Sustainability section of the company website, LINE, Facebook, and the Mine Information Disclosure Platform.	2.1 Emissions & waste reduction 2.3 Nature actions & biodiversity 3.6 Ethical business & anti-corruption 4.3 Occupational health & safety

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Note

The top five material topics of highest stakeholder concern are listed. In cases where topics share the same level of concern, they are ranked according to the significance of their sustainability impact.

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CHAPTER 1

Accelerating Low-Carbon Solutions



Energy Management Policy

Management of Material Topics

Asia Cement remains committed to its core sustainability philosophy that "environmental protection is embedded in Asia Cement's DNA" throughout all extraction and manufacturing processes. The company continuously strives for excellence in both operations and sustainable development, demonstrating a firm commitment to corporate social responsibility and extending this ethos to all subsidiaries.

Material Topic Categories

Circular Economy, Low-Carbon and Green Production Processes, Innovative Low-Carbon Products, Materials, GHG Emissions

Impact

The business activities of Asia Cement and its subsidiaries primarily involve product manufacturing and transportation. During operations, the use of materials and the emission of greenhouse gases may cause actual or potential negative impacts on the environment and relevant stakeholders. Asia Cement has established a comprehensive circular economy system by integrating "arterial industries" with "venous industries," transforming the traditional cradle-to-grave waste management model into a cradle-to-cradle resource regeneration approach. By continuously investing in low-carbon green production processes and developing innovative low-carbon products, the company aims to reduce the consumption of natural resources, lower greenhouse gas emissions, and generate sustainable benefits across Environmental (E), Social (S), and Governance/Economic (G) dimensions.

Actions Taken

- Asia Cement and its subsidiaries continuously implement relevant management systems and mechanisms to oversee sustainability-related topics. They take concrete actions and advocate for practices that prevent or mitigate potential negative impacts. In the event of actual negative impacts, prompt corrective measures are carried out—such as revising operational procedures, upgrading equipment, or enhancing employee training—to prevent recurrence.
- Resource efficiency is central to Asia Cement's operational strategy. The company responsibly and effectively promotes the reuse of sustainable and renewable raw materials and fuels, supports circular economy practices for waste recycling, and transforms these materials into valuable inputs for cement production, thereby creating new value within the cement industry.

Evaluation Methods

Asia Cement tracks the effectiveness of its actions through data analysis, internal and external audits under various management systems, and stakeholder feedback. The company regularly reviews the progress toward set targets to ensure continuous improvement.

- ① BS 8001:2017 Verification – Verified at the highest maturity level (Optimizing) for its circular economy operational model.
- ② Data Analytics Application – Development of various data models to enhance the efficiency and reuse of analytics, thereby improving decision-making quality.
- ③ Regular Review Meetings – Held to confirm the implementation status and report on the achievement of goals.
- ④ Management Plan Development – Establishment of management plans and key performance indicators (KPIs) for systematic monitoring.
- ⑤ Management Review Meetings – Conducted periodically by senior management to make necessary adjustments.
- ⑥ Nonconformity Review and Improvement – Regular evaluations of nonconformities followed by implementation of corrective actions.
- ⑦ Corporate Sustainability Implementation Committee – Along with its task forces, continuously tracks implementation progress and goal achievement.

Commitment

- Asia Cement is committed to establishing its Hualien Plant as a model for smart and environmentally friendly manufacturing.
- The company pledges to implement the Carbon Disclosure Project (CDP), pursue Science-Based Targets (SBT) for emissions reduction, adopt the Task Force on Climate-related Financial Disclosures (TCFD) framework, establish an internal carbon pricing mechanism, and promote net-zero carbon emissions in cement and concrete production by 2050. Additionally, Asia Cement will continue to advance circular economy initiatives to help address waste treatment challenges faced by the government and industry.

Management Systems and Mechanisms

- ① ISO 14064 for greenhouse gas verification and ISO 14067 for product carbon footprint to identify and reduce carbon-intensive hotspots.
- ② ISO 50001 Energy Management System to improve energy performance.
- ③ ISO 9001 Quality Management System to meet customer requirements.
- ④ TAF-accredited laboratory under ISO 17025 to ensure product testing quality and advance laboratory inspection capabilities.
- ⑤ Establishment of monitoring and estimation methods with site-specific plans to track energy consumption and promptly address anomalies.

Practical actions and initiatives

- ① Set and promote Science-Based Targets (SBTi) for carbon reduction.
- ② Continuously pursue greenhouse gas emissions reduction.
- ③ Consistently develop sustainable and innovative products to deliver both environmental and economic benefits.
- ④ Implement circular economy practices to reduce resource consumption and greenhouse gas emissions while creating new value in the cement sector.

Stakeholder Engagement

- According to the stakeholder engagement mechanism, regular or ad hoc communication is conducted. The outcomes are disclosed in the sustainability report, on relevant platforms, or on the corporate website.

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1.1 Net-Zero Strategy and Target Roadmap

Promoting Low-Carbon Transition in the Cement Industry

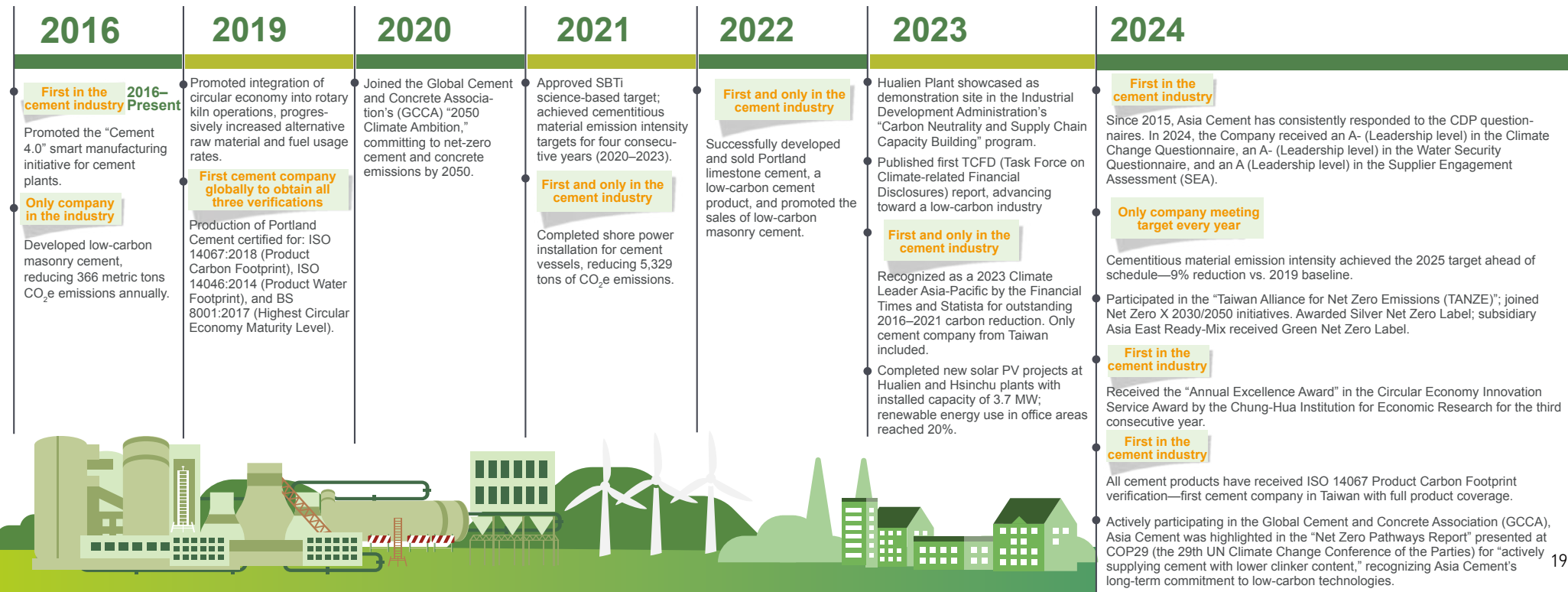
Environmental consciousness is ingrained in the DNA of every Asia Cement employee. The company has consistently committed to energy conservation, carbon reduction, and the advancement of low-carbon processes. To achieve effective energy-saving and emission-reduction outcomes, Asia Cement actively promotes the circular economy, manages energy and resource consumption, and adopts cutting-edge energy-efficient equipment and technologies, resulting in significant carbon reduction achievements over the years.

Asia Cement has achieved notable results through its dedication to energy conservation, carbon reduction, circular economy promotion, and the adoption of advanced energy-saving technologies. The company has successively launched the "Cement 4.0" smart manufacturing initiative and developed low-carbon strategies for the cement sector in response to the global net-zero trend. It has taken the lead in the industry by introducing low-carbon products such as Masonry Cement and Portland Limestone Cement, driving the sector's low-carbon transformation. By integrating circular economy principles into rotary kiln operations and continuously expanding the use of alternative raw materials and alternative fuels, Asia Cement has been recognized for its carbon reduction achievements. In 2024, it was honored for the 10th time with the "Outstanding Voluntary Carbon Reduction Enterprise" award, with cumulative carbon reductions exceeding 375,000 metric tons—equivalent to the annual carbon sequestration of 965 Daan Forest Parks.



which was granted by Industrial Development Administration for nine years the award of "Excellent company of voluntarily reducing GHG emission"

Note Awards were granted to Asia Cement's Hualien Plant based on performance in the preceding year.



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1.1.1 Net-Zero Practice and Strategic Blueprint

Advancing Net-Zero Cement and Concrete

According to the World Economic Forum’s 2025 Global Risks Report, “extreme weather events” rank as the top global risk over the next decade, with four out of the top five risks related to the environment—including extreme weather, biodiversity loss and ecosystem collapse, major shifts in Earth systems, and resource scarcity. This highlights that addressing climate risks and enhancing business resilience has become a core imperative for modern enterprises.

As a leading global cement and concrete manufacturer and a member of the Global Cement and Concrete Association (GCCA), Asia Cement joined all GCCA member companies in 2020 in committing to the “2050 Climate Ambition”, transitioning from net-zero ambition to implementation. The company pledged to reduce its carbon footprint across operational and production processes in alignment with the Paris Agreement’s global climate targets, aiming to achieve net-zero emissions in cement and concrete by 2050.

Achieving 2025 Science-Based Targets – Steadfast Progress Toward Low-Carbon Transition

Asia Cement passed the Science Based Targets initiative (SBTi) review in 2021, setting 2019 as the base year. The company committed to an 8% reduction in Scope 1 and 2 emissions intensity of cementitious materials by 2025 across its Taiwan cement operations. This milestone positioned Asia Cement as the fourth cement company globally to set validated SBTs aligned with the well-below 2°C climate scenario.

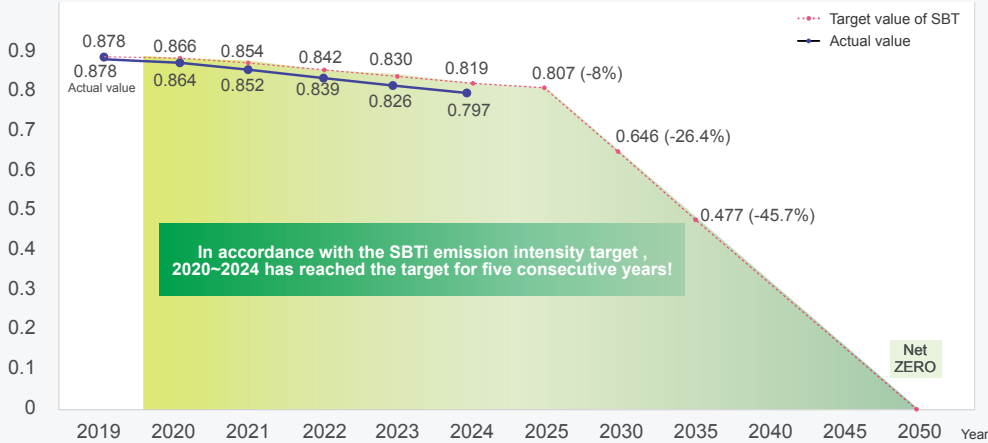
Asia Cement remains the only cement company in Taiwan to consistently achieve its SBTi targets each year, and in 2024, it met its 2025 Phase 1 carbon reduction goal ahead of schedule. Building upon this achievement, the company further referenced the SBTi Net-Zero Standard in 2024, adopting a 1.5°C pathway with 2021 as the new base year, and set a near-term target of 22.9% reduction in emissions intensity by 2030.

Additionally, Asia Cement voluntarily committed to a 43.5% reduction in emissions intensity by 2035, and to achieve net-zero carbon emissions by 2050. To meet this net-zero goal, the company will prioritize at least 90% absolute emissions reductions, with high-quality carbon offsets limited to no more than 10% for residual emissions.

Only Cement Company with Consistent Annual SBTi Target Achievement

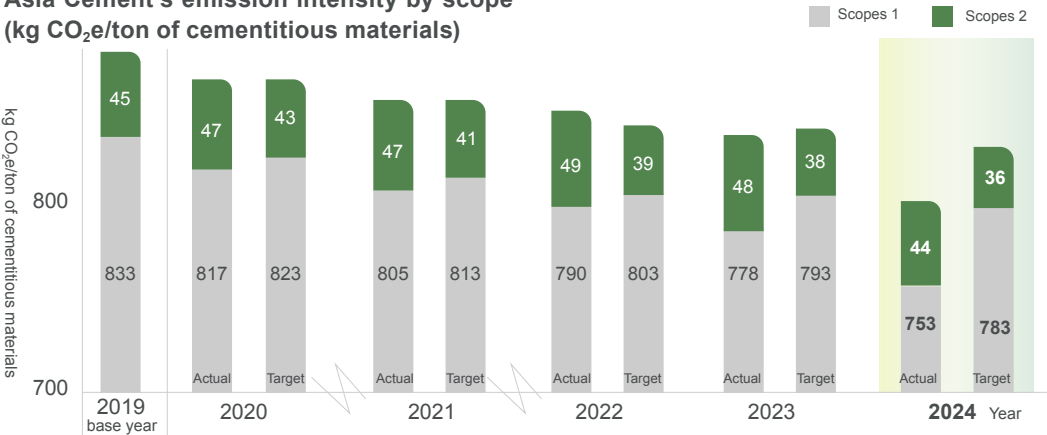


Asia Cement SBT carbon reduction path (scopes 1+2 emission intensity) (Tons of CO₂e/ton of cementitious)



In accordance with the SBTi emission intensity target , 2020~2024 has reached the target for five consecutive years!

Asia Cement’s emission intensity by scope (kg CO₂e/ton of cementitious materials)



Note Cementitious materials include clinker, gypsum, and cement grinding additives such as limestone and slag.

Actual Achievement of SBTi Reduction Target



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

SCIENCE
BASED
TARGETS

Asia Cement has achieved its Science-Based Targets initiative (SBTi) emissions reduction goal for five consecutive years. In 2024, the Scope 1 and 2 emissions intensity of cement operations was 0.797 tCO₂e/ton of cementitious product, which met and exceeded the SBTi target value of 0.819 (with Scope 1: 0.753 and Scope 2: 0.044). This represents a 9% reduction from the 2019 base year, surpassing the 2025 reduction target of 8% ahead of schedule. The cumulative absolute emissions reduction compared to the base year amounted to 587,000 tCO₂e.

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Net-Zero Strategy and Roadmap

Cement production consumes limestone, thermal energy, and electricity. Greenhouse gas emissions from the manufacturing of cement and concrete account for approximately 7% of global total emissions. Asia Cement has developed its net-zero strategy and roadmap with reference to the guidelines of the Global Cement and Concrete Association (GCCA) and the Science Based Targets initiative (SBTi), in alignment with its own decarbonization ambition.

In response to the emission characteristics of the cement industry, Asia Cement has developed phased carbon reduction strategies. In the early stage, the focus is on deploying Best Available Technologies (BAT), such as implementing circular economy practices to reduce the clinker emission factor, producing low-carbon cement by reducing the clinker-to-cement ratio, lowering direct emissions, improving energy efficiency to reduce indirect emissions, and continuing to explore and invest in innovative decarbonization technologies. In the medium term, Asia Cement aims to scale up the above-mentioned measures and develop new Supplementary Cementitious Materials (SCMs) for use in low-carbon cement products, enabling greater reductions in emissions per unit of cement. In the long term, once all carbon reduction measures have matured, the company will prioritize the deployment of Carbon Capture and Utilization (CCU) technologies to reach the final mile toward net-zero emissions. Asia Cement’s key carbon reduction measures include:

1. Integration of Circular Economy

Circular economy practices significantly reduce direct emissions from clinker production. Two main approaches contribute to emission reductions during the clinker manufacturing process:

(1) Use of Alternative Raw Materials

By substituting natural limestone with non-carbonate calcium-containing industrial by-products, such as converter slag or reduction slag, the process emissions from the decomposition of carbonates during clinker calcination can be effectively reduced.

(2) Use of Alternative Fuels

Fossil fuels are replaced with biomass or low-emission fuels—such as paper sludge, wood chips, oil sludge, solid recovered fuel (SRF), and waste plastic film—thereby lowering fuel-related emissions from high-temperature clinker production processes.

2. Production of Low-Carbon Cement

Clinker production is the most carbon-intensive step in cement manufacturing. The clinker-to-cement ratio is a key driver of total emissions. While traditional Portland cement used in Taiwan typically contains about 93% clinker, producing low-clinker cement with comparable or superior performance—such as Portland Limestone Cement, Masonry Cement, or Ternary blended cement—can substantially reduce the carbon intensity per ton of cement.

3. Improvement of Energy Efficiency

Enhancing both thermal and electrical efficiency is a direct and effective way to reduce emissions. Process and equipment upgrades reduce the heat required per ton of clinker, thus cutting fuel use and emissions. Optimizing power efficiency and increasing the use of renewable energy further reduce indirect (Scope 2) emissions.

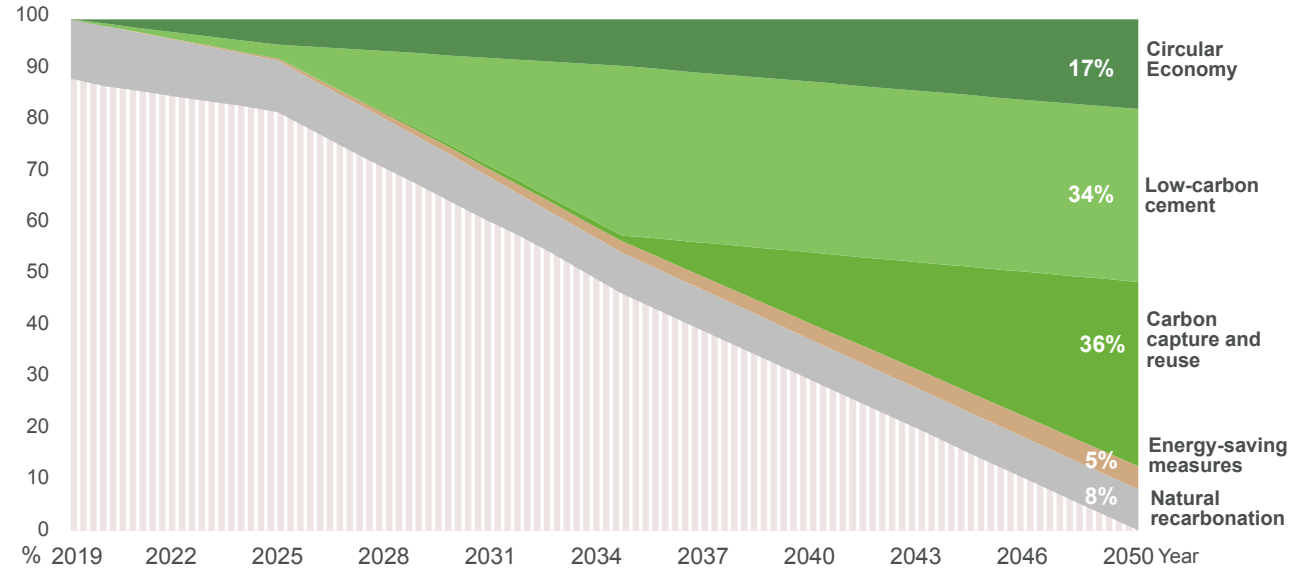
4. Carbon Capture and Utilization (CCU)

Once the above mitigation technologies are fully implemented, CCU becomes the critical “last mile” to achieve net-zero emissions. Asia Cement is actively developing recarbonation technologies that combine CO₂ with industrial by-products or waste to create negative-carbon aggregates for ready-mixed concrete. This solution simultaneously addresses three challenges: carbon emissions, waste treatment, and resource scarcity—linking the cement, concrete, and construction industries in a unified decarbonization effort.

5. Natural Recarbonation

Finally, naturally occurring recarbonation continues to play a role in carbon uptake. According to the IVL Swedish Environmental Research Institute, concrete recarbonation can offset up to 23% of CO₂ emitted during cement production annually—equivalent to approximately 8% of the cement sector’s total emissions.

Asia Cement's Net-Zero Roadmap



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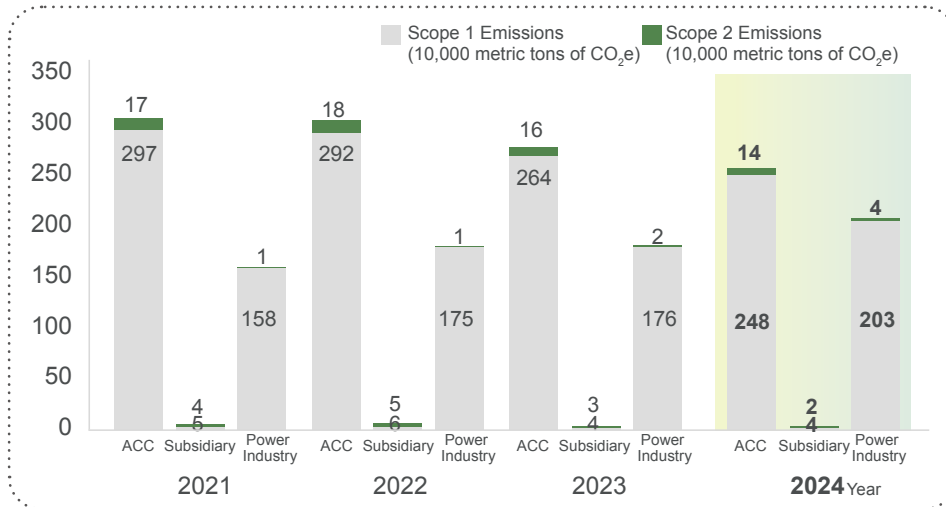
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GHG Inventory

Asia Cement conducts annual greenhouse gas (GHG) inventories, verifications, and registrations in accordance with the relevant guidelines and regulations announced by the Ministry of Environment. In 2024, the cement business reported:Scope 1 emissions: 2,481,375 metric tons of CO₂e, Scope 2 emissions (market-based): 143,911 metric tons of CO₂e.

In compliance with the Financial Supervisory Commission's "Sustainability Roadmap for TWSE- and TPEx-Listed Companies," the company has included emissions data from seven additional sales offices and storage/distribution sites in its inventory starting in 2022. These accounted for 2,426 metric tons of CO₂e in 2024 (approximately 0.09% of the company's total emissions). The individual financial report emissions totaled 2,627,712 metric tons of CO₂e.For five subsidiaries, the 2024 emissions were:Scope 1: 41,605 metric tons of CO₂e, Scope 2: 29,288 metric tons of CO₂e.



- Note
1. Asia Cement's Hualien Plant undergoes third-party verification annually. Voluntary verifications have also been conducted for the Hsinchu Plant since 2022 and for Headquarters since 2021. Among subsidiaries, Chiahui Power has undergone annual verification; Yuan Long Stainless Steel since 2021; Asia East Ready-Mix since 2020; while Asia Li Precast, Nan Hua Cement, and Fu Min (Da) Transportation initiated verifications starting 2024. Subsidiaries' 2024 verification is expected to be completed between May and September.
 2. Asia Cement set 2022 as the base year due to the expansion of inventory boundaries. Chiahui Power also adopted 2022 as the base year in alignment with the commencement of operations of its Phase II power generation units. Other locations use the first verified year as the base year.
 3. Subsidiaries' 2023 data were updated based on verified values after third-party assurance.Asia Cement and its subsidiaries primarily refer to the GHG Emission Factors announced by the Ministry of Environment and electricity emission factors published by the Energy Administration, Ministry of Economic Affairs. Electricity emission factors per kWh were:2021: 0.509 kg CO₂e, 2022: 0.495 kg CO₂e, 2023: 0.494 kg CO₂e, 2024: 0.474 kg CO₂e
 4. The emission boundary of Asia Cement in the diagram includes Headquarters, Hualien Plant, and Hsinchu Plant. From 2023 onwards, Scope 2 emissions adopt the market-based method. The 2024 location-based Scope 2 emissions totaled 143,911 metric tons of CO₂e.
 5. GHG inventory is conducted in accordance with ISO 14064-1:2018 or the GHG Protocol.Asia Cement and its subsidiaries—Yuan Long Stainless Steel, Asia East Ready-Mix, Asia Li Precast, Nan Hua Cement, and Fu Min (Da) Transportation—adopt GWP values from the IPCC Sixth Assessment Report, while Chiahui Power uses the IPCC Fifth Assessment Report.



Chiahui Power Natural Gas Power Plant: Driving Energy Transition and Low-Carbon Development

Chiahui Power, a Key Subsidiary of Asia Cement. In 2024 Chiahui Power, generated 5.77 billion kWh of electricity, accounting for approximately 2% of Taiwan's total electricity consumption—enough to supply nearly one million households. As a key private force in stabilizing domestic power supply, Chiahui Power plays a pivotal role in Taiwan's energy landscape. Compared to traditional coal-fired power generation, natural gas has a significantly lower carbon emission factor, contributing to the decarbonization of Taiwan's energy structure and aligning with the government's core energy transition strategies: reduce coal, increase gas, expand renewables, and remain nuclear-free.

In 2024, Chiahui Power's Scope 1 emissions totaled 2,029,312 metric tons CO₂e, and Scope 2 emissions were 35,951 metric tons CO₂e. When converted to greenhouse gas emissions intensity, Phase 1 and Phase 2 units recorded 0.369 and 0.336 kg CO₂/kWh, respectively—significantly lower than Taipower's 2024 reported grid average of 0.474 kg CO₂/kWh (representing 22% and 29% lower emissions). This translated to an estimated annual emission reduction of 708,611 metric tons CO₂e, with Phase 1 contributing approximately 278,674 tons and Phase 2 contributing around 429,937 tons. These figures underscore the critical role of natural gas power plants in achieving both Taiwan's 2050 Net Zero Target and a successful energy transition.

As an Independent Power Producer (IPP), all electricity generated by Chiahui Power is sold to Taipower and integrated into the national grid under centralized dispatch. Consequently, the associated emissions are attributed to end users, not the power producer.

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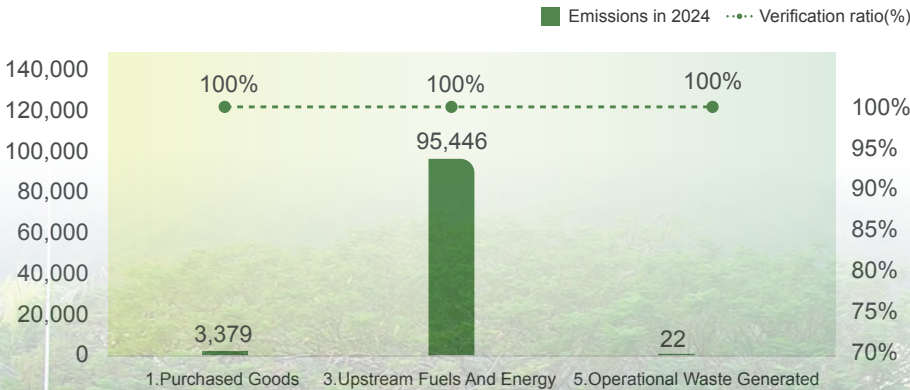
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Significant Scope 3 Emission Criteria

In 2024, the verification coverage rate for emissions in each Scope 3 category was **100%**

Our company references ISO 14064-1:2018 to establish a procedure for identifying significant indirect greenhouse gas emissions. After evaluating factors such as anticipated use,emission proportion, impact, and data quality, we have identified significant indirect emissions as purchased goods, upstream fuels and energy, and operational waste generated during operations.

Asia Cement's 2024 emissions and verification volumes for each Scope 3 category (tons of CO₂e)



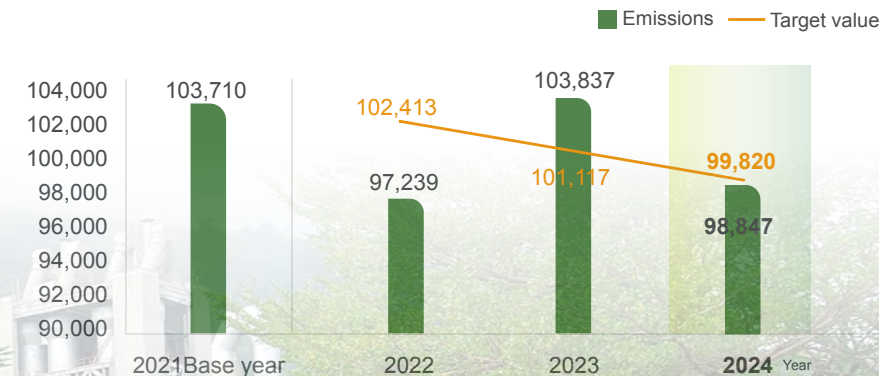
Scope 3 Emission and Reduction

In 2024, Scope 3 emissions were 98,847 tCO₂e, meeting the annual reduction target.

When setting its Science-Based Target (SBT) in 2020, Asia Cement conducted a comprehensive inventory of Scope 3 emissions. However, since Scope 3 emissions accounted for less than 40% of the company's total emissions, no Scope 3 reduction target was required under the SBTi criteria.

Nevertheless, to actively promote decarbonization across the value chain, Asia Cement voluntarily set 2021 as the base year and established a Scope 3 reduction goal of 5% by 2025 (equivalent to a 1.25% reduction per year).

Asia Cement Scope 3 Emissions and Reduction Targets (tons CO₂e)



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Energy Saving and Carbon Reduction Performance

In 2024, Asia Cement Corporation and its subsidiaries actively implemented energy-saving and carbon reduction initiatives with remarkable results. A total of 18 action plans were executed, saving 439 TJ of thermal energy. Among these, electricity savings amounted to 9.79 million kWh, equivalent to the annual electricity consumption of approximately 2,318 households. These action plans generated annual energy-saving benefits of NT\$90 million, with a total investment of NT\$740 million and an average payback period of 8.2 years.The total greenhouse gas (GHG) emission reduction from these actions reached 88,647 tons CO₂e, including 23,828 tons CO₂e from Scope 1 and 64,818 tons CO₂e from Scope 2. The total reduction is equivalent to the carbon removal capacity of 228 Daan Forest Parks.

AtAsia Cement’s Hualien Plant, improved management and operational optimization in 2024 significantly reduced coal consumption through reduced heat consumption per ton of clinker. Based on the reduction in cementitious material emission intensity per SBTi guidelines, the estimated carbon reduction for 2024 is approximately 96,000 tons CO₂e.

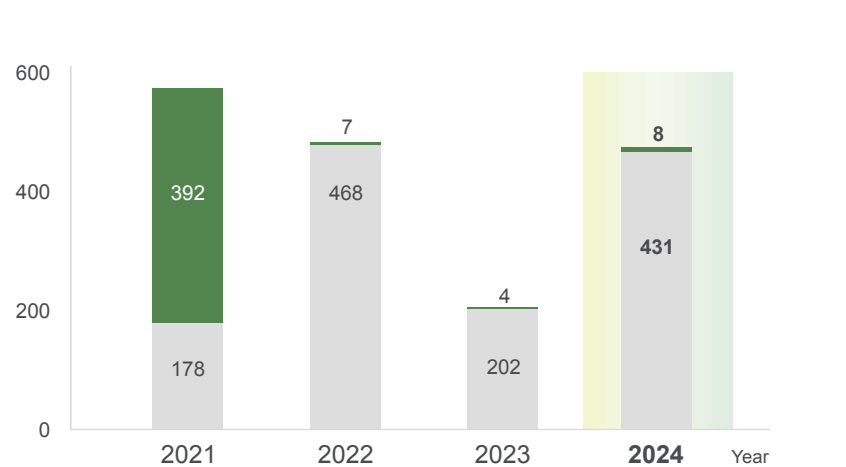
- Note
1.

According to Taipower's 2021 statistics, the average annual electricity usage per residential household is 352 kWh.
2.

Subsidiaries have implemented many major improvement projects in previous years. In 2024, only limited new projects were available, resulting in lower energy-saving and carbon-reduction benefits compared to prior years.
3.

Asia Cement's Xincheng mountain Quarry reviews energy consumption annually and plans for equipment upgrades. In 2024, improvement investments totaled NT\$3.94 million. However, as no quantified pre- and post-improvement energy-saving data was available, it was not included in the performance statistics.

Asia Cement's Energy-Saving Performance(TJ)



- Note
1. The thermal value of electricity is calculated based on the physical thermal value at the consumption end, using 860 kcal/kWh for conversion.

Clinker Alternative with Slag – Hualien Plant

Estimated Resource Savings
10,495 tons of coal, 5.38 million kWh, 263.1 TJ
GHG Reduction (tCO₂e)
62,730

Raw Material (Limestone) Alternative – Hualien Plant

Estimated Resource Savings
20,000 tons of limestone, 971 tons of coal, 22.5 TJ
GHG Reduction (tCO₂e)
13,037

Alternative Fuels – Hualien Plant

Estimated Resource Savings
4,753 tons of coal, 133.3 TJ
GHG Reduction (tCO₂e)
10,466

Solar Power (Self-Use and Grid Supply) – Hualien Plant

Estimated Resource
2.8 million kWh, 10.1 TJ,
GHG Reduction (tCO₂e)
1,329

Solar Power (Self-Use) – Yuan Long Stainless Steel

Estimated Resource
0.9 million kWh, 3.3 TJ
GHG Reduction (tCO₂e)
429

Fleet Upgrade (37 Tier-6 Trailers) – Fumin (Da) Transport

Estimated Resource
116 kiloliters of diesel, 4.2 TJ
GHG Reduction (tCO₂e)
312

LED Lighting Replacement – Nanhua Cement

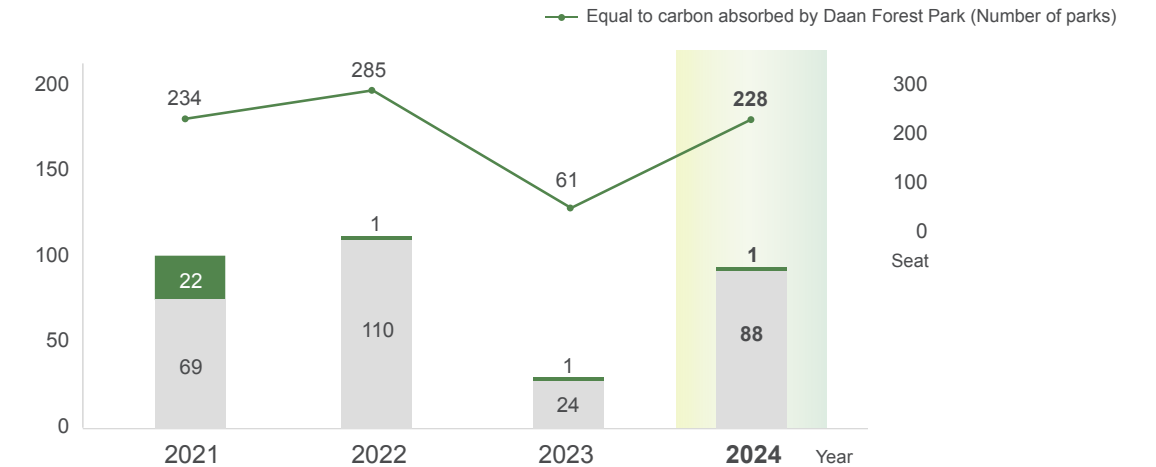
Estimated Resource
28,000 kWh, 0.1 TJ
GHG Reduction (tCO₂e)
13

- Notes
1.

Asia Cement's circular economy initiatives have been continuously promoted since 2019. The energy-saving and carbon-reduction amounts reflect improvements compared to the previous year and include the reduction of process emissions from clinker calcination.
2.

The estimated energy-saving and carbon-reduction benefits are calculated based on the annual savings in energy or material consumption before and after the implementation of each initiative (compared to 2023 levels).

Asia Cement's GHG Reduction Performance



- Notes
1.

The annual carbon sequestration capacity of one Daan Forest Park is 389 metric tons.
2.

The emission factor for electricity is determined based on the latest values specified in annual project plans:2021: 0.502, 2022: 0.495, 2023: 0.494, 2024: 0.474 (kg CO₂e/kWh).

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Carbon capture, use and store (CCUS)

Since the carbon capture and storage technology is considered as an important solution for climate changes by many people, which is still in development, Asia Cement has adopted robust and feasible carbon reduction strategies to optimize current best feasible technologies in cement industry, and simultaneously invest into the research of carbon capture technology.

Asia Cement cooperated with domestic and international academic and research institutes to develop a carbon-negative technology, a technology different from the ordinary concept of carbon capture by combining wastes and carbon dioxide to become negative material and providing to ready-mixed concrete plants to solve three problems including carbon emission reduction, waste treatment and resource shortage. Asia Cement will join with Ya Tung Ready-mixed Concrete and the related down stream industrial chain to study and evaluate the separation and reuse of waste concrete, plus invest into industrial by-products or waste recarbonation technologies to produce carbon-negative recycled aggregates or supplementary cementitious materials (SCM) and used by down stream industrial chain, to realize the integration of low carbon value industrial chain. Not only does it give innovative value to wastes, but it can also further produce concrete products with lower carbon emissions, achieving the “collaborate carbon reduction” effect across the cement-related industry chain, creating new sustainable business opportunities.

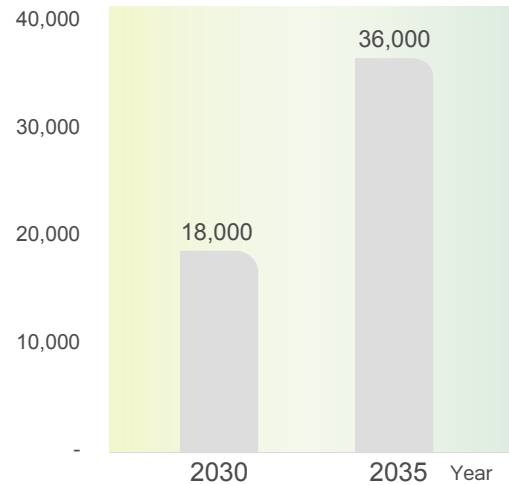
Asia Cement adopted the approach that is most beneficial to environment by properly recycling wastes into resources for reuse and producing into carbon-negative. This superior technology is a powerful driving force for completing the last mile of net-zero emission.

Project Implementation Progress

Currently, the most common commercialized carbon capture technology uses amine-based chemical solvents as absorbents. In 2023, Asia Cement launched the "High-Efficiency Carbon Sequestration Technology Project" in collaboration with domestic research institutions. This project integrates circular economy principles with carbon capture and utilization (CCU), selecting industrial by-products or waste materials rich in calcium oxide, safe, and non-hazardous, to serve as CO₂ absorbent carriers.By applying high-gravity technology, the absorption slurry is formed into thin films, significantly increasing the reaction surface area and enabling the recarbonation and sequestration of CO₂ emitted from cement plant flue gas.

Since April 2023, Asia Cement’s Hualien Plant has been planning the system. Due to the 2024 Hualien earthquake and the need for adjustments and optimization of the high-gravity carbon capture equipment, the system was completed in early 2025.Preliminary testing shows a maximum amount of carbon sequestration of up to 200 kg of CO₂ per metric ton of industrial by-products or waste. The related technology development is expected to yield phased results and a scale-up evaluation report in 2025. The project aims to capture and reuse 18,000 metric tons of CO₂ by 2030.

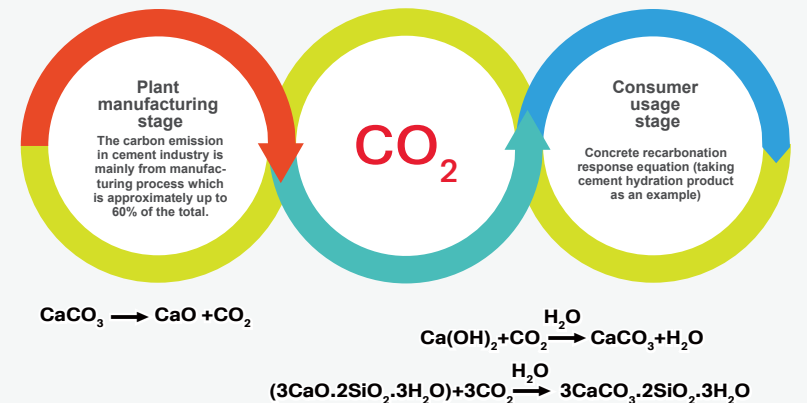
Asia Cement CCU Planning (Tons CO₂e/year)



Resources		Planning the way of application		Benefit
By-products or wastes with rich content of calcium oxide or magnesium oxide		① Used as alternative material (raw material)	▶ Reducing the extraction and use of limestone Carbon reduction in manufacturing process	
		② Used as the medium of to absorb and reuse CO ₂ (If the composition is unfavorable to be used by cement rotary kiln)	▶ Absorbing CO ₂ ▶ Becoming carbon-negative recycled aggregates or SCM	
Waste concrete	Cement paste	① Rich content of calcium oxide which can be used as the medium to absorb and reuse CO ₂	▶ Absorbing CO ₂ ▶ Becoming carbon-negative recycled aggregates or SCM	
		② The bonding strength is still maintained after processing a portion of hydraulic hardness activity which can replace cement.	▶ Replacing a portion of cement	
	Stones and sand	Recycling stones and sand for the reuse by concrete plants	▶ Reducing the extraction and use of natural aggregates and sand stones	

Cement knowledge

“Concrete re-carbonation” is a natural reaction. In theory, CO₂ released in the process of calcinating cement can be 100% absorbed through recarbonation. However, in reality only about 25% of it can be absorbed by the cement in ordinary concrete buildings due to the factors of humidity, temperature and bonding materials. Currently, the research performed by Asia Cement adopts an advanced separation technique to individually separate large and small stones, sand and cement pastes from the concrete resulted from the dismantled buildings and converting them into resources for reuse. The separated cement pastes can still maximize its ability of absorbing the residual CO₂. The material full of absorbed CO₂ can be converted into negative carbon renewable aggregates which can be used in construction work again. Furthermore, the calcium carbonate generated from absorbing CO₂ offers stable structure, it releases CO₂ through reverse reaction only above 800℃, a very stable and safe carbon-negative material.”



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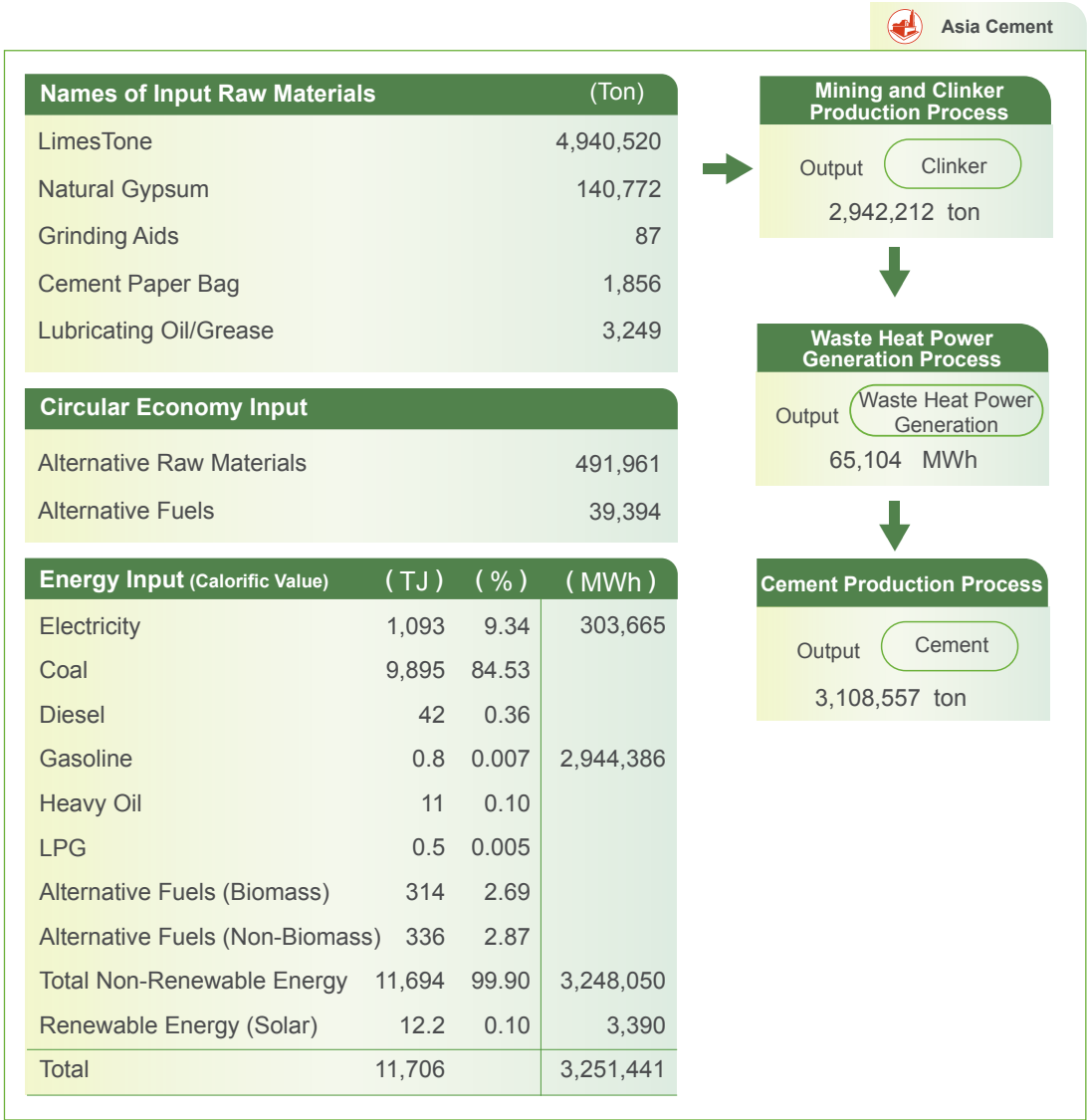
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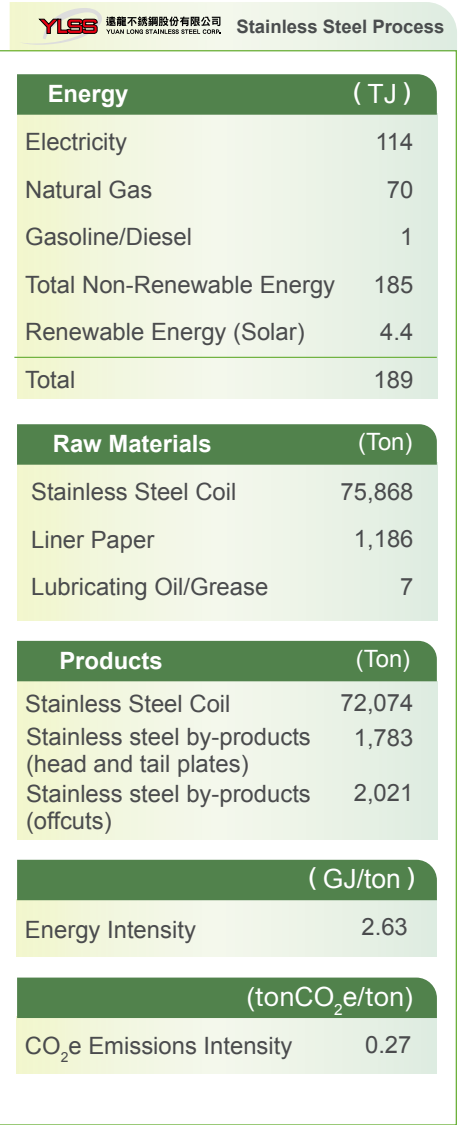
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1.2 Energy Resource Management

ACC's Energy Resources Usage Status



Subsidiaries' Material and Energy Resource Usage



Note

1.

The raw materials used for clinker production include limestone, clay, and alternative materials. The raw materials used for cement production include clinker, gypsum, and cement grinding mineral additives (e.g., limestone, slag). Cementitious materials include clinker, gypsum, and cement grinding mineral additives (limestone, slag), with a total of 3,293,480 metric tons of cementitious materials produced in 2024.

2.

Asia Cement's renewable energy (solar power) sources include self-generated electricity from the Hsinchu and Hualien Plants and green electricity purchased by the Headquarters.

3.

The sources of calorific value calculation are as follows:Electricity – physical calorific value of electricity consumed at the end-user side is 860 kcal/kWh;Diesel and gasoline – as announced by the Ministry of Environment;Coal, heavy oil, and alternative fuels – based on measured values or data provided by suppliers.

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Precast Concrete Process

Energy	(TJ)
Electricity	2
LPG/Diesel	5
Total	7

Raw Materials	(Ton)
Crushed Stone	8,273
Construction Sand	7,409
Cement Clinker	3,407
Steel	432
Lubricating Oil/Grease	1

Products	(M³)
Precast Concrete Products	8,810

	(GJ/M³)
Energy Intensity	0.83

	(tonCO ₂ e/M³)
CO ₂ e Emissions Intensity	0.069

Furnace Slag Process

Energy	(TJ)
Electricity	73
Heavy/Diesel Oil	48
Total	121

Raw Materials	(Ton)
Slag	386,277
Limestone	145,506
Desulfurized Gypsum	3,353
Lubricating Oil/Grease	7

Products	(Ton)
Furnace Slag Powder	356,8034
Limestone Powder	142,758

	(GJ/ton)
Energy Intensity	0.24

	(tonCO ₂ e/ton)
CO ₂ e Emissions Intensity	0.027

Power Generation Process

Energy	(TJ)
Natural Gas	73
Electricity	48
Total	121

Raw Materials	(Ton)
Lubricating Oil/Grease	11

Products	(MWH)
Electricity (from Natural Gas)	5,657,953
Electricity (from Solar Power)	43

	(GJ/MWH)
Energy Intensity	6.43

	(tonCO ₂ e/MWH)
CO ₂ e Emissions Intensity	0.37

Transportation Services

Energy	(TJ)
Diesel	319
Total	319

Raw Materials	(Ton)
Lubricating Oil/Grease	16

Transportation Services	(Ton)
Cargo Transportation	7,402,682

	(GJ/ton)
Energy Intensity	0.043

	(GJ/ton)
CO ₂ e Emissions Intensity	0.0035

- Note
1.

The calorific value calculations are based on the following sources: electricity is calculated using the physical calorific value at the consumption end (860 kcal/kWh); diesel and gasoline are based on the announcements of the Ministry of Environment; natural gas or LPG used by Yuan Long Stainless Steel, Chiahui Power, and Asia Li Precast are based on measured values or data provided by suppliers.
2.

Currently, the renewable energy (solar power) generated by Chiahui Power is entirely sold and not included in the calculation of consumed energy.

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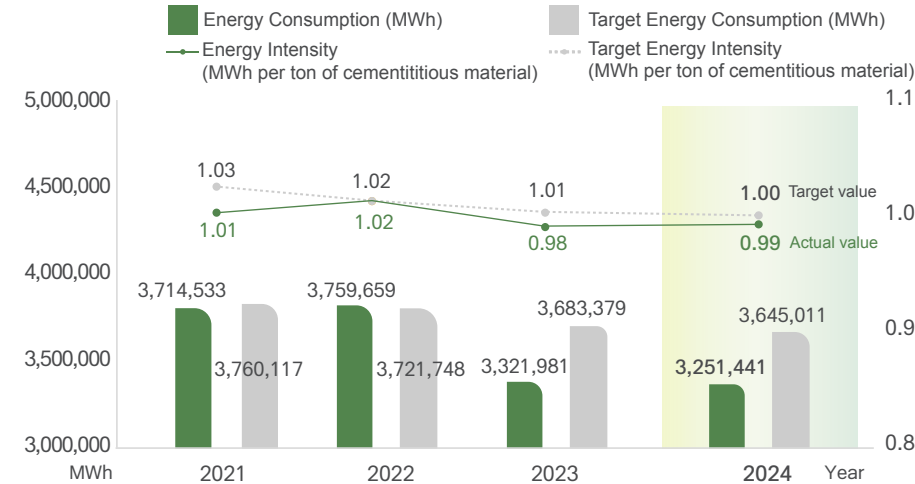
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Energy Consumption Target

Asia Cement has set its energy management target using 2019 as the base year, aiming to reduce both total energy consumption and energy intensity by 1% annually. The company continues to promote improvements in energy efficiency and low-carbon transformation. In 2024, total energy consumption reached 11,706 TJ (equivalent to 3,251,441MWh), with energy intensity reduced by 5.9% compared to the base year, achieving the annual reduction target and demonstrating the effectiveness of its energy-saving management.

Energy Consumption Performance of Asia Cement



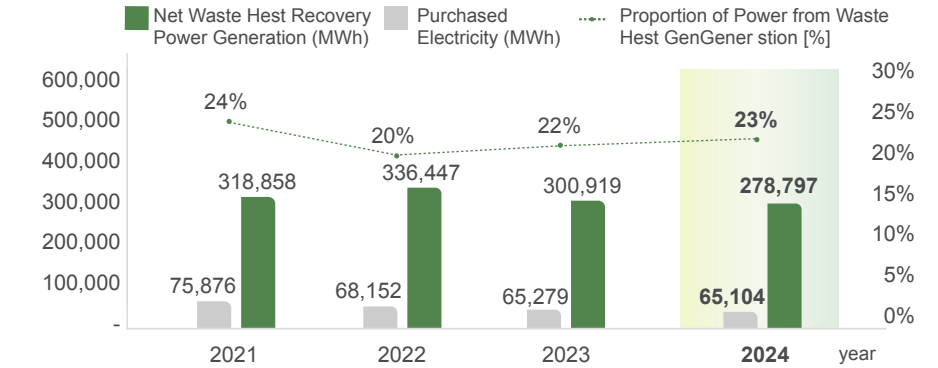
- Note 1. The energy consumption performance includes all types of energy inputs used by Asia Cement, including electricity, coal, and alternative fuels.
- Note 2. 1 TJ = 277.778 MWh.

Waste Heat Power Generation System

At Asia Cement's Hualien Plant, waste heat generated from the rotary kiln system is used to produce high-pressure steam via boilers, which then drives generators to produce electricity. In 2024, the net electricity generated from waste heat recovery reached 65,104 MWh, equivalent to the annual electricity consumption of approximately 15,000 households. The total purchased electricity at the Hualien Plant in 2024 was 278,797 MWh. Following the improvement of the #2 waste heat boiler tube system completed in 2023, the proportion of net electricity generated from waste heat to the plant's total purchased electricity increased to 23%.

- Note 1. Based on Taiwan Power Company's statistics, the annual average household electricity consumption in 2021 was 352 kWh.
- Note 2. Waste heat electricity generation refers to net electricity output (i.e., after deducting electricity used by the system).

Waste Heat Power Generation and Proportion -Hualien Plant



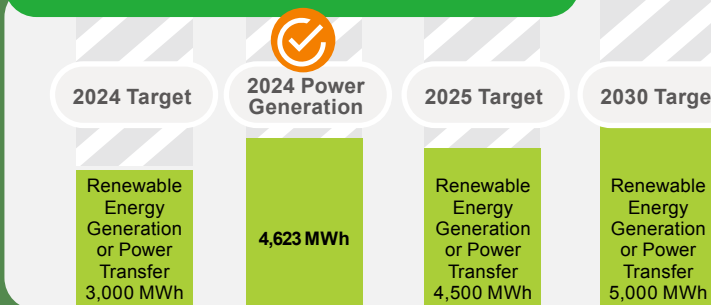
- Note 1. The 2023 report contained a typographical error. The corrected figure for purchased electricity in 2023 is 300,919 MWh, and the proportion of net electricity generated from waste heat recovery accounted for 22% of the plant's total purchased electricity.
- Note 2. The electricity consumption data here are sourced from meters installed at the plant.

Use of Clean Energy: Renewable Energy Generation and Power Transfer

Asia Cement and its subsidiaries actively support the government's green energy policies by continuously promoting the installation of solar power facilities. In the fourth quarter of 2023, self-use solar systems with a total installed capacity exceeding 3.7 MWp were successively completed. The total annual renewable energy generation, including both self-use and transferred power, reached 4.623 million kWh.

To accelerate the low-carbon transition of its electricity structure, Asia Cement has set medium- and long-term targets for renewable energy usage, aiming to expand its in-house green power generation and consumption year by year.

Generation and use of self-produced green electricity



Renewable Energy Usage Overview

Site	Installed Capacity	2024 Power Generation MWh
ACC		
Headquarters	None (Transferred Supply)	220
Hualien Plant	3.7 MW	3,171
Subsidiary		
Yuan Long Stainless Steel	766 KW	1,232

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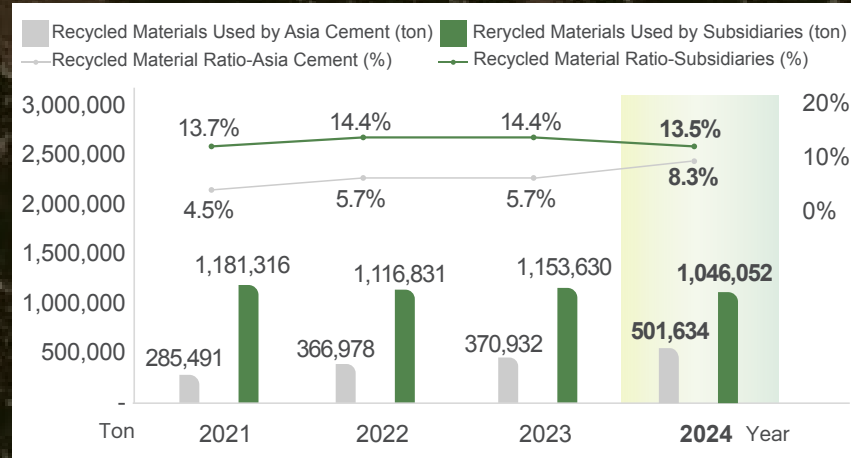
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Use of Recycled Materials

Asia Cement actively promotes a circular economy by incorporating recycled materials at its operational sites, including the Hsinchu and Hualien plants, Nanhwa Cement, and Ya Tung Ready-Mixed Concrete. At the Hualien Plant, both external recycled materials and internal waste (such as refractory bricks) are used as alternative raw materials in cement production. Other plants utilize desulfurized gypsum, slag, and fly ash as substitutes. Notably, Nanhwa Cement's slag powder grinding process uses 100% recycled granulated blast furnace slag.

Quantity and Proportion of Recycled Materials Used by Asia Cement



Note Starting from 2023, auxiliary materials have been included in the statistics. The usage of cement paper bags at Asia Cement is estimated based on the number of bags produced and the average breakage rate. At the Hualien Plant, the quantities of refractory bricks and lubricants/grease reused internally are estimated based on annual in-plant reuse volumes.

In 2024, Asia Cement used 501,634 metric tons of recycled materials

Accounting for 8.3% of all materials used

Subsidiaries used 1,046,052 metric tons of recycled materials

Representing 13.5% of their total material usage

The use of recycled materials has shown a steady year-on-year increase.

Use of Renewable Materials

Due to the characteristics of the cement industry, the use of renewable materials by Asia Cement and its subsidiaries is very limited, primarily consisting of packaging materials, totaling approximately 3,513 metric tons. The weight of non-renewable materials, excluding recycled materials, is 12,288,966 metric tons.



Reclaimed products and their packaging materials

Due to the nature of its industrial products, the only product across Asia Cement and its subsidiaries' operational sites that currently involves recyclable packaging materials is Yuan Long Stainless Steel's stainless steel coil, which is protected with liner paper during processing. Through proactive efforts to promote the recycling and reuse of liner paper, a total of 1,186 metric tons of liner paper were reclaimed in 2024—1.3 times the amount of newly used liner paper. The reclaimed liner paper accounted for 2.07% of Yuan Long's total stainless steel product output by weight.



Promoting ISO 50001 Across All Sites: Strengthening Energy Management Implementation

Since 2016, Asia Cement has actively implemented the ISO 50001 Energy Management System, driving each operational site to complete system adoption and third-party certification. To date, a total of six locations—including Asia Cement's main plants, four plants under Ya Tung Ready-Mixed Concrete, and subsidiary Yuan Long Stainless Steel—have achieved ISO 50001 third-party certification. Notably, Asia Cement's Hualien Plant and its quarry became the first cement plant and quarry in Taiwan to obtain ISO 50001 certification, demonstrating industry-leading energy management capabilities. Looking ahead, the company will continue promoting ISO 50001 implementation across all Taiwan sites to further deepen energy efficiency management.

Energy Efficiency Employee Training Program

Asia Cement continues to promote energy efficiency management by actively cultivating employee awareness and practical skills in energy conservation. Through systematic training programs, employees are empowered to apply operational methods for reducing energy use, identify potential energy inefficiencies, and develop innovative energy-saving solutions. In 2024, a total of 31 training sessions related to energy management were conducted, with 561 participants receiving training.



In 2024
A total of 31 sessions were held
With cumulative training attendance reaching 561 participants

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1.3 Low-Carbon Manufacturing Value Chain

1.3.1 Creating Sustainable Value through Low-Carbon Products

Innovating for a Low-Carbon Society

In response to climate change and the growing demand for low-carbon societal transformation, Asia Cement is actively developing innovative low-carbon materials, including low-carbon cement and low-carbon concrete, as key solutions for both climate change mitigation and adaptation. The company is gradually shifting from high-carbon products to the sale of low-carbon cement, striving to reduce carbon emissions across the building life cycle and providing a viable pathway for the industry to achieve net zero.

Establishing Promotion Targets for Low-Carbon Products

To expand the impact of low-carbon products and support Taiwan's 2050 net-zero target, Asia Cement has established short-, medium-, and long-term phased goals for promoting low-carbon products as follows:

Period	Key Initiatives	Low-Carbon Cement
Short-term (2024~2025)	Participate in green building exhibitions, seminars, and promote through sales units to enhance market awareness and customer recognition	103% growth compared to 2024
Mid-term (2026~2030)	Actively cooperate with government policies, expand vendors and customer base, and strive for adoption in public infrastructure projectsrecognition	100% growth compared to 2025
Long-term (2031~2035)	Develop low-carbon cement brands and establish a comprehensive low-carbon product service and value chain	150% growth compared to 2030

Asia Cement's Low-Carbon Cement Solution Featured at COP29

Asia Cement has been actively engaged in the Global Cement and Concrete Association (GCCA), working collectively toward the cement and concrete industry's net-zero vision. Asia Cement's low-carbon initiatives have gained international recognition and were highlighted in the Net Zero Roadmap Report published by the GCCA at the 29th Conference of the Parties (COP29) to the United Nations Framework Convention on Climate Change (UNFCCC). The report stated: "Asia Cement is actively supplying cement with lower clinker content," which not only underscores the company's continuous investment in low-carbon technologies but also demonstrates its concrete actions toward environmental sustainability.



Low-Carbon Cement R&D and Production

Since 2009, Asia Cement has proactively invested in the research and development of masonry cement and successfully achieved mass production in 2011, establishing its leadership in low-carbon cement technology. The company continues to drive product innovation by reducing the clinker content and introducing Supplementary Cementitious Materials (SCMs). In 2022, Asia Cement successfully developed Portland Limestone Cement (PLC), which can reduce carbon emissions by approximately 10% to 15% compared to conventional cement.

In addition, Asia Cement is actively developing ternary blended cement by optimizing the combination of various SCMs. This innovation enhances performance in terms of strength development, durability, permeability resistance, and corrosion resistance, meeting the construction industry's demand for high-performance materials. It also significantly improves the long-term structural stability and service life of buildings, further reducing the overall carbon footprint.

	Type	Application	Clinker Ratio in Cement	Carbon Emissions (Compared to Commercial Portland Cement)
 Asia Cement Low-Carbon Products	Portland Cement	General Purpose	92%	High
	Portland Cement	General Purpose	87%	Slightly lower
	Masonry Cement	Masonry, Bricklaying	75%	Low
	Portland Limestone Cement	General Purpose	77%	Low
	Ternary Blended Cement (Experimental stage)	General Purpose	25~50 %	Very low

Promoting Low-Carbon Products toSupport Carbon Reduction

In 2024, Asia Cement participated in a total of 79 promotional events, including the “2024 Kaohsiung International Building Materials Exhibition” and the “Taipei International Building, Construction & Decoration Exhibition.” During these events, the company introduced its low-carbon products to construction firms, developers, and potential clients.

Laboratory Testing Quality Certified by TAF

The Quality Control Laboratory of Asia Cement's Hualien Plant has passed the ISO 17025 quality management system and obtained 52 accreditations from the Taiwan Accreditation Foundation (TAF)—the highest number in Taiwan's cement industry. It is the most comprehensive and complete laboratory for cement product analysis in the country.



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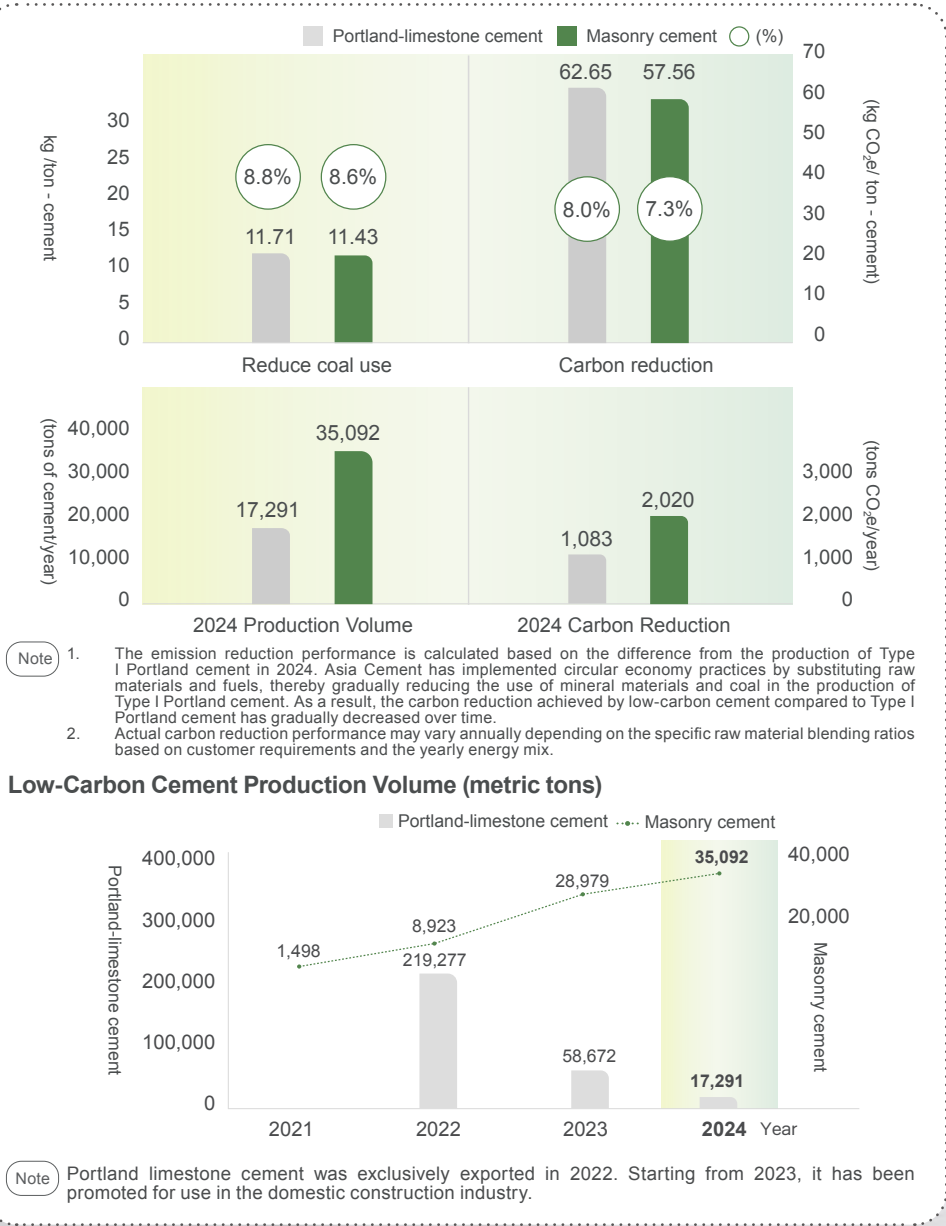
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Low-Carbon Product Sales

Driven by Asia Cement's proactive promotion, the sales of low-carbon products have shown steady growth. In 2024, sales of the company's branded low-carbon cement reached 49,378 metric tons, representing a 75% increase compared to 2023. This reflects the growing market demand for low-carbon building materials and validates the effectiveness of the company's product transformation and market communication strategies.

Looking ahead, Asia Cement will continue to strengthen its low-carbon alliance with upstream and downstream partners, including construction companies, ready-mix concrete plants, and major public infrastructure entities. The company will actively promote the adoption of low-carbon products in real-world applications to enhance market acceptance. At the same time, it will intensify engagement with policymakers, striving to lead the cement industry into a new era of high value, low carbon, and sustainability.



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Low-Carbon Concrete Reduces Embodied Carbon in Buildings

Asia Cement has integrated its subsidiary Ya Tung Ready-Mixed Concrete to develop and launch low-carbon concrete. In addition to using low-carbon cement produced by Asia Cement, the concrete formulation incorporates supplementary cementitious materials (SCMs) such as slag, fly ash, and silica fume. These additions improve the density and strength development of the concrete, achieving both enhanced performance and reduced raw material usage—effectively helping the construction industry reduce the embodied carbon of buildings.

Ya Tung Ready-Mixed Concrete offers low-carbon concrete with carbon reduction rates ranging from 20% to 50%, allowing customers to select suitable mix designs based on project requirements, including:

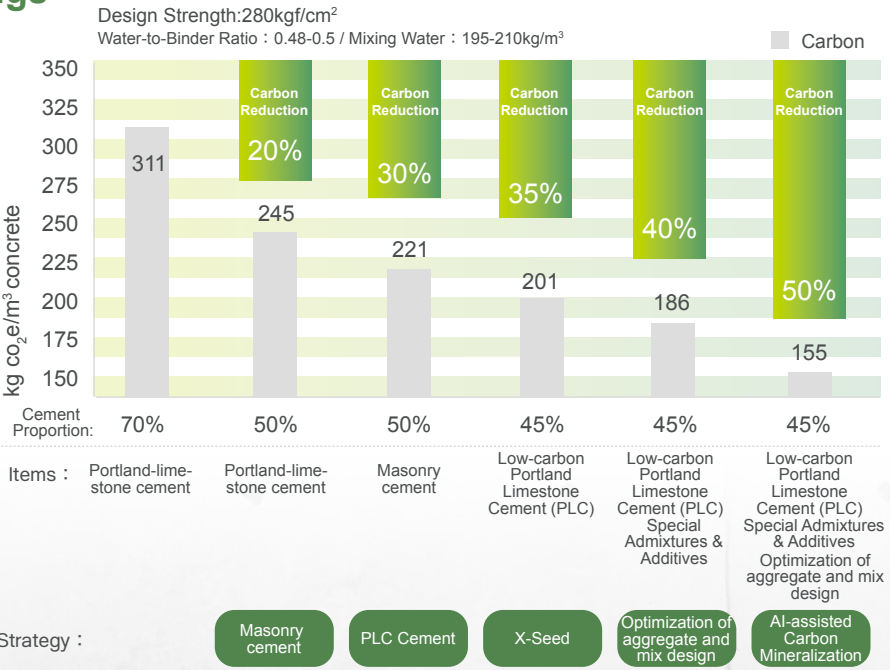
- 20% reduction: Partial cement replacement with slag and fly ash.
- 30% reduction: Use of Portland Limestone Cement (PLC).
- 35% reduction: Use of special chemical admixtures to enhance paste strength.
- 40% reduction: Optimized aggregate ratios and addition of high-fineness materials to improve stability.
- 50% reduction: Adoption of carbon mineralization and recycled water adsorption technologies, along with AI-assisted precision batching.



Comparison between Low-Carbon Cement (PLC) Concrete and Conventional Cement Concrete

Test Item	Performance of PLC Concrete Compared to Conventional Concrete
Workability, Slump, Slump Loss	Comparable or slightly better
Bleeding Rate	Comparable or slightly better
Setting Time	Shorter in PLC concrete; initial setting time reduced by 0–1.7 hours, final setting time reduced by 0–2.8 hours
Compressive Strength	Slightly higher at 3 and 7 days; comparable after 28 days
Elastic Modulus, Splitting Tensile Strength	Comparable or slightly better
Dry Shrinkage, Autogenous Shrinkage	Comparable
Sulfate Resistance	Slightly lower in PLC concrete; can be improved by adding supplementary cementitious materials (SCMs)
Chloride Ion Penetration Resistance	Comparable
Effect of Different Aggregates	Consistent performance

Source: 2024 Portland Limestone Cement Concrete Application Manual



Low-Carbon Building Material Flagship Projects

In response to the net-zero transition trend in the construction industry, Asia Cement continues to focus on the development and promotion of low-carbon building material products, aiming to enhance the overall environmental performance throughout the building lifecycle.In 2024, Asia Cement collaborated with several strategic partners to advance six flagship projects incorporating low-carbon building materials. These projects applied Asia Cement's low-carbon cement in practice, promoting green procurement and eco-friendly construction methods.Looking ahead, Asia Cement will continue to expand the application of low-carbon products in the construction sector and collaborate with more clients and architectural teams to foster the growth of a green building material supply chain, contributing to the creation of sustainable urban environments.



Kao Tucheng Factory and Office New Construction Project



Xinhai Road New Construction Project



Union Chemical & Xinhe Food Factory Building Project

2024
Low-carbon
building material
Flagship projects:
6 cases

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UHPC: The Key Material for Future Construction

Asia Cement's subsidiaries, Ya Tung Ready-Mixed Concrete and Ya Li Precast Prestressed, have been continuously investing in the research and application of Ultra-High Performance Concrete (UHPC) since 2009. Over the years, they have progressively established a comprehensive system spanning from technology validation, production facilities, and structural applications to practical engineering projects. In recent years, Ya Tung Ready-Mixed Concrete has further advanced the deployment of UHPC in architectural precast walls, specialized structures, wear-resistant pavements, and building façades, demonstrating its versatile capabilities in public works and building markets.

UHPC offers outstanding properties of high strength, high toughness, and exceptional durability, with compressive strengths typically exceeding 120 MPa and flexural strengths reaching over 25 MPa. Internationally, this material has been extensively utilized in precast bridge construction, architectural façade designs, as well as repair and retrofitting works.

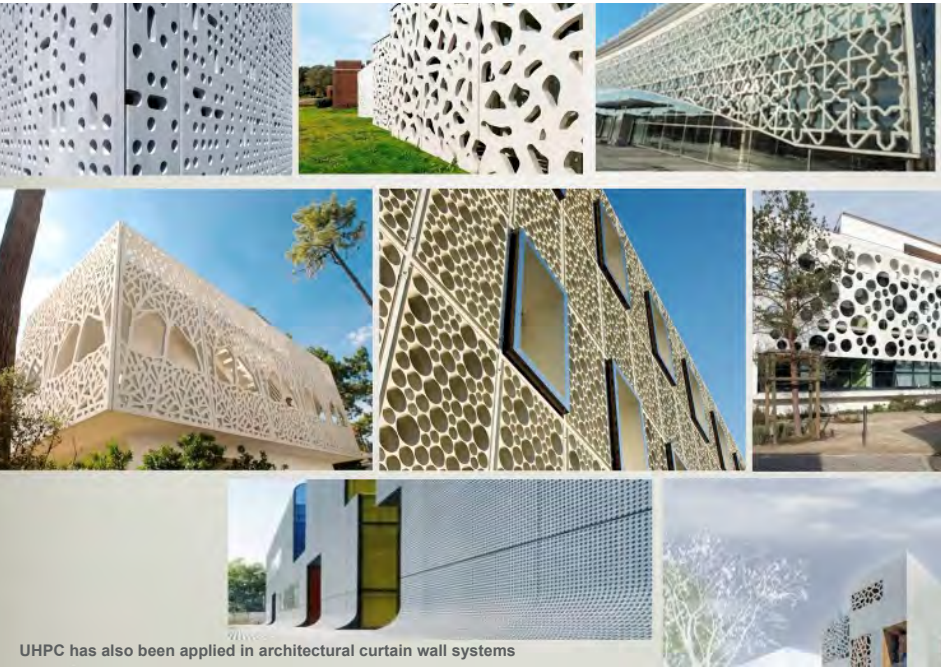
The high strength characteristics of UHPC allow for reduced cross-sectional dimensions during the design phase, lowering material consumption and thus decreasing cement demand. This directly contributes to reduced energy use and CO₂ emissions associated with material production. Moreover, UHPC's superior density and durability extend the design life to two to three times that of conventional concrete. This not only prolongs the service life of structures but also significantly reduces the carbon footprint resulting from maintenance and reconstruction activities.

Asia Cement Corporation, through its subsidiaries Ya Tung Ready-Mixed Concrete and Ya Li Precast, collaborated on in-situ casting of UHPC.



High Strength, Toughness, and Durability of UHPC

Item	UHPC	Normal Concrete	High-Strength Concrete
Compressive Strength (MPa)	170~230	20~50	60~80
Elastic Modulus (GPa)	50~60	20~30	35~40
Ultimate Compressive Strain (10 ⁻⁶)	3,000	3,000	3,000
Flexural Strength (MPa)	30~60	4~8	6~10
Ultimate Tensile Strain (110 ⁻⁶)	7,000	100~150	100~150
Poisson's ratio	0.22~0.24	0.18~0.22	0.18~0.22
Toughness Index G _F	20,000~40,000	100~150	100~150



UHPC has also been applied in architectural curtain wall systems

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Low-Carbon Limestone Concrete Passes National Structural Seismic Tests

To verify that low-carbon cement concrete can withstand Taiwan’s seismic environment, Asia Cement’s subsidiary Ya Tung Ready-Mixed Concrete partnered with Keng Ji Construction to form a robust team. From April to May 2024, they commissioned the National Center for Research on Earthquake Engineering (NCREE) through the Taiwan Architecture and Building Center (TABRC) and National Cheng Kung University to conduct seismic testing on PLC (Portland Limestone Cement) low-carbon concrete beam-column elements.

After nearly two months of rigorous testing and analysis by the NCKU research team, the concrete made with Asia Cement’s low-carbon limestone cement was proven to meet the seismic performance requirements of beam and column components as specified by Taiwan’s building code for reinforced concrete structures—while simultaneously reducing carbon emissions. Furthermore, the experiment reaffirmed that the elastic modulus of low-carbon limestone concrete aligns with the predicted values set in structural design specifications, ensuring that low-carbon concrete can confidently replace conventional cement concrete in future structural applications.The verified results will be officially published and shared with the construction industry and academic institutions in June for knowledge exchange and practical collaboration.

Dry Recycling and Carbonation Treatment System

To address the common issue of returned fresh concrete at construction sites, the Ya Tung Ready-Mixed Concrete team has developed an innovative Dry Recycling and Carbonation Treatment System, which not only solves the challenge of handling leftover concrete but also transforms waste into reusable resources. By integrating carbon capture technology, this system provides a tangible solution to help reduce carbon emissions in the construction industry.

Traditional wet-treatment methods for returned concrete are water-intensive and time-consuming. The team adopted Super Absorbent Polymers (SAP) to rapidly absorb moisture directly inside the concrete mixer truck, reducing processing time from over one hour to just 15–20 minutes, while significantly lowering water consumption. After drying, the material is classified via mobile screening equipment: larger particles (e.g., 3/6 mm aggregates) are reused in concrete production, while recycled sand is blended with natural aggregates. Testing has confirmed that incorporating 15% recycled aggregates does not significantly impact concrete quality. Future applications include lightweight, thermal insulating, and soundproof mortars.

Furthermore, the team implemented carbon mineralization technology. Calcium hydroxide generated during cement hydration actively absorbs and fixes carbon dioxide, converting it into stable calcium carbonate, thus achieving direct carbon reduction. Using the company’s patented method, the “Carbon Sink Measurement for Construction Materials,” it was demonstrated that each cubic meter of returned concrete can sequester 60–80 kg of CO₂. This enables Ya Tung Ready-Mixed Concrete low-carbon concrete to achieve an additional 18% emission reduction, on top of the existing 50% baseline, making a significant stride toward the 2050 net-zero emissions target.

Ministry of Environment’s 8+N Construction Circularity and Low-Carbon Alliance

In 2024, Ya Tung Ready-Mixed Concrete participated in the launch ceremony of the “Public-Private Partnership Circular 8+N” Alliance, organized by Ministry of Environment, and became a core member of the Construction Circularity and Low-Carbon Alliance. The alliance unites eight sector-specific resource circulation networks across various industries—including food, plastics, textiles, healthcare, construction, electronics, inorganic resources, and the circular economy industry—aiming to promote Taiwan’s resource circularity sector through public-private collaboration and shared resources, ultimately contributing to net-zero emissions and sustainable development.

Within the Construction Circularity and Low-Carbon Alliance, Ya Tung Ready-Mixed Concrete plays a key role in the building materials sector. The company is committed to providing low-carbon concrete, dry-process recycling technology for ready-mixed concrete residues, and concrete carbon capture technology to support alliance members in practical engineering applications.The alliance is led by Professor Liang-Cheng Lu of the Department of Civil Engineering at National Taiwan University. It plans to establish demonstration sites to integrate building material suppliers (including ready-mixed concrete and steel), construction companies, and recycled construction material firms, forming a comprehensive circular resource ecosystem.



Sustainable and Durable Construction Seminar



Participation in Ministry of Environment 8+N Construction Circularity and Low-Carbon Alliance



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Promoting Low-Carbon Products to Foster a Sustainable Construction Industry

To align with the global goal of net-zero emissions by 2050, producing low-carbon cement and using low-carbon concrete are both highly feasible and effective carbon reduction strategies. Asia Cement actively engages with government authorities and relevant stakeholders at the policy level to help create a favorable industrial environment for the application of low-carbon cement and concrete.

1.Enhancing Low-Carbon Cement Product Standards

In 2022, Asia Cement led the revision of Taiwan's CNS 15286 standard for hydraulic blended cement to align with international practices, incorporating "Portland limestone cement" and "ternary blended cement" into the standard. The revised standard was officially announced in August 2022, and its related commodity inspection regulations were amended and approved in January 2023.



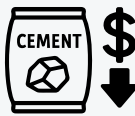
2.Promoting the Use of Low-Carbon Cement in Public Construction

Since 2023, Asia Cement, together with its subsidiary Ya Tung Ready-Mixed Concrete, has promoted the use of low-carbon products within Taiwan's construction industry. The company also advocated for revisions to the restrictions on the use of low-carbon blended cement in public construction technical specifications. These efforts have fostered a more supportive environment for the promotion of low-carbon cement, expanding its use from international markets to domestic projects and accelerating Taiwan's cement industry transition toward net-zero emissions by 2050.



3.Advocating for a Reduction in Commodity Tax on Low-Carbon Cement

In 2024, following long-term dialogue between Asia Cement, industry peers, and competent authorities, and in support of Taiwan's net-zero policy, the government reduced the commodity tax on qualified low-carbon hydraulic blended cement and masonry cement. Effective January 1, 2024, the tax was lowered from NT\$440 per metric ton to either NT\$260 or NT\$220, depending on the proportion of supplementary materials used. Asia Cement's Portland limestone cement and masonry cement meet the criteria for the NT\$220 rate. This tax incentive is expected to further accelerate the promotion and adoption of low-carbon cement.



Nanhwa Cement's Granulated Blast Furnace Slag Grinding Process Achieves 100% Use of Recycled Materials

To meet the market demand for a circular economy, Nanhua Cement, a subsidiary of the Company, utilizes unique technology to grind 100% recycled granulated blast furnace slag into CNS12549 ground granulated blast furnace slag. After undergoing downstream high-efficiency powder blending processes, the slag powder is mixed with Portland cement to produce Portland blast furnace cement with low-carbon characteristics.



Electrification of Transport Arteries: Jiangxi Ya Tung Reshapes Mine Logistics Ecosystem

Jiangxi Ya Tung, a key subsidiary of Asia Cement (China), is actively promoting the electrification of major transport arteries to reshape the mine logistics ecosystem. The company has invested 140 million NTD in a "diesel-to-electric" transition project, establishing two smart charging stations and deploying a fleet of 21 electric heavy-duty trucks. With the integration of an energy management and intelligent dispatching system, transportation energy consumption has been reduced by 38%.As of July 18, 2024, the new energy fleet officially commenced operations, achieving an estimated cost savings of approximately RMB 0.8 per ton transported compared to diesel trucks. The project is expected to reach return on investment within three years and save 857,363 liters of diesel in 2024 alone.Looking ahead, Ya Tung Cement plans to expand the electric truck fleet to 40 vehicles. This initiative is projected to reduce carbon emissions by over 8,000 metric tons and save approximately 2,800 tons of standard coal annually—reinforcing the company's commitment to low-carbon transportation and sustainable development.



Eco-Friendly Low-Carbon Cement Carrier Reduces Transport Emissions

Asia Cement, in collaboration with U-Ming Marine Transport—also part of the Far Eastern Group—jointly launched the eco-friendly low-carbon cement carrier Asia Cement No. 9. This vessel not only enhances the transport capacity of cement products but also significantly reduces carbon emissions during navigation.The ship features an X-Bow streamlined hull design to reduce water resistance. For cement loading and unloading, it is equipped with an electric control system developed in-house by Asia Cement, enhancing automation and simplifying future maintenance. The propulsion system is powered by a Wartsila 6L32 main engine that meets IMO Tier II standards and is paired with a controllable pitch propeller to improve maneuverability and propulsion efficiency.Additionally, the vessel includes a shaft generator and shore power system, reducing fuel consumption and carbon emissions while shortening unloading time—further optimizing energy efficiency.

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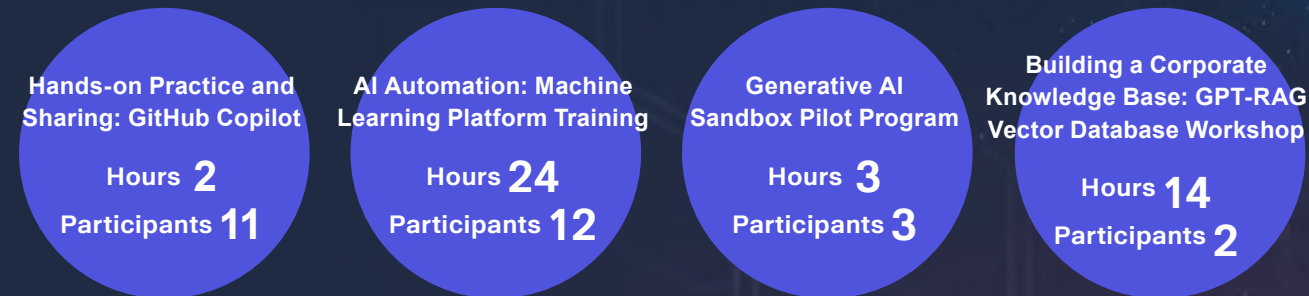
1.3.2 Smart Manufacturing and AI Digital Transformation

Asia Cement's Hualien Plant has long embraced technological independence, having pioneered the development of cement production control systems more than 30 years ago. As an industry leader, the company adopted a self-designed, self-manufactured, and self-maintained strategy for its production and waste heat power generation systems. These control systems have since been implemented across Asia Cement's storage and distribution terminals and grinding plants in Taiwan, its dedicated cement vessels, storage terminals in Guam and Singapore, as well as various production sites and affiliated companies in mainland China. This approach has cultivated a highly experienced engineering team and built a robust database of production data.

Building on this foundation, Asia Cement began an industry-academic collaboration with Yuan Ze University in 2018 to integrate artificial intelligence (AI) theory and enhance learning and deep learning algorithms. The original control systems were upgraded into the ACTEC AI Control System, under the "Cement 4.0" initiative. With the support of FarEasTone Telecommunications, a group affiliate, IT infrastructure and data analytics platforms were established and applied across various IoT applications, laying the groundwork for a smart factory.

Asia Cement continues to invest in AI-driven digital transformation by encouraging employees to acquire new knowledge and improve their skillsets. Through a combination of theoretical instruction and hands-on training, staff members deepen their understanding and practical application of generative AI technologies.

Training Program Performance



"AI for All" Industry-Academia Collaboration

In 2024, Asia Cement entered into an "AI for All" industry-academia collaboration agreement with Tamkang University. Under this partnership, Tamkang University will provide tailored AI training programs for Asia Cement and its affiliated companies, aiming to cultivate AI literacy across all employees. Through this initiative, the company seeks to empower its workforce with AI capabilities and enhance overall operational quality.



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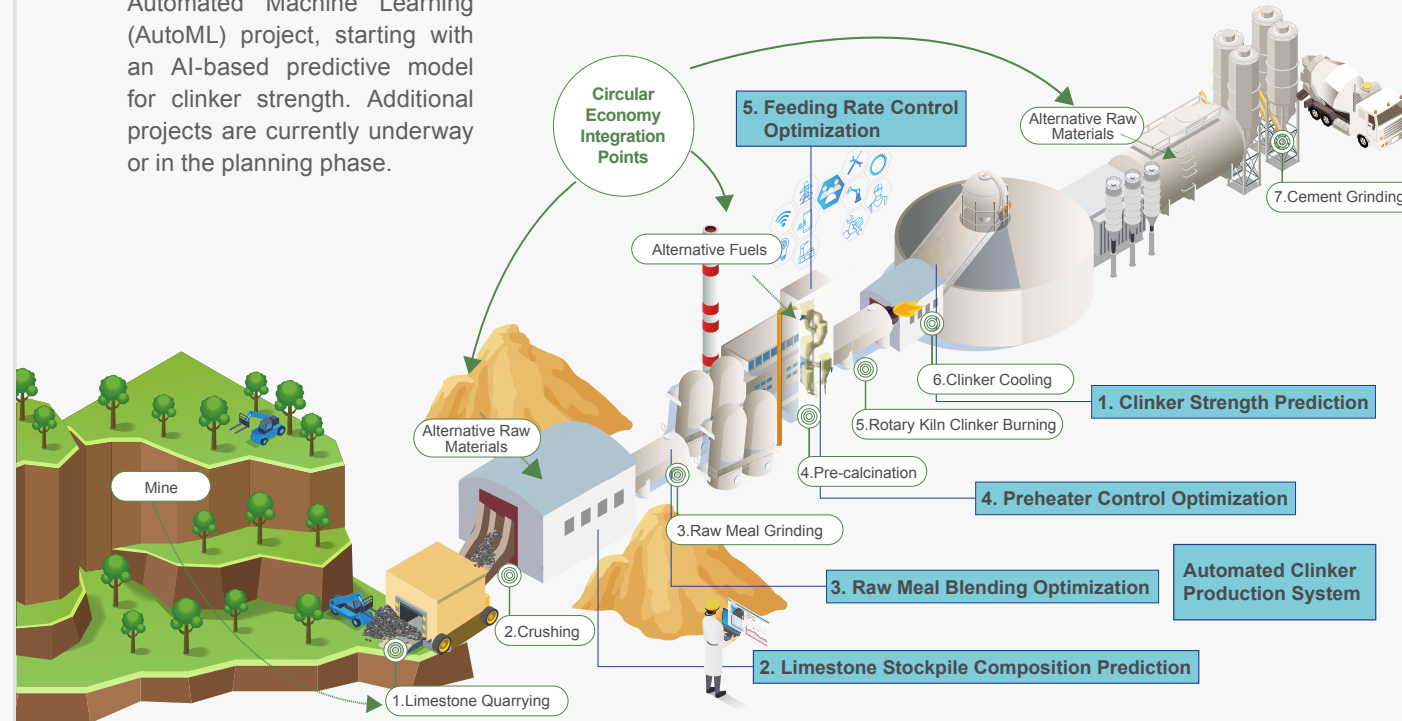
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Asia Cement Smart Production Line AutoML Project

Asia Cement launched its Automated Machine Learning (AutoML) project, starting with an AI-based predictive model for clinker strength. Additional projects are currently underway or in the planning phase.

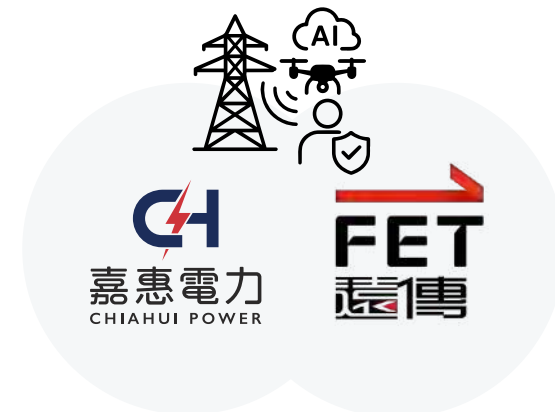


Clinker Strength AI Prediction



Clinker is the primary raw material for cement grinding and plays a crucial role in determining product quality. Excessively high or low clinker strength can negatively affect customers' mix designs. Since strength testing typically involves a 28-day delay, early and accurate prediction enables proactive alerts to avoid unnecessary increases in cement fineness for strength compensation, thereby reducing additional electricity consumption at the cement mill.

Using chemical analysis data from kiln feed and clinker, along with real-time rotary kiln operational data, the system predicts clinker strength at different ages (3, 7, and 28 days). This allows for early warnings, ensuring product quality and reducing energy consumption during grinding. As Asia Cement's Hualien Plant actively promotes circular economy practices by utilizing diverse types and sources of alternative raw materials and fuels, process parameters are still being fine-tuned. Once process equipment and alternative materials stabilize, further training using kiln firing parameters will be conducted to enhance prediction accuracy. In 2024, a small-scale proof-of-concept experiment was completed, confirming the feasibility of the system. From 2025 to 2026, the project will proceed with production and quality verification, followed by implementation of an online automated kiln control system. In the future, the system will not only predict clinker strength but also support expanded use of alternative raw materials and fuels, thereby reducing carbon emissions from cement manufacturing.



Chiahui Power Plant Introduces Automated Drone Inspection

Asia Cement's subsidiary, Chiahui Power, has partnered with Far EasTone Telecommunications—also part of the Far Eastern Group—to develop Taiwan's first fully automated drone inspection system for power towers, integrating AI technology with a private 5G network. This system is applied to the inspection of high-voltage power transmission lines and significantly enhances both the speed and accuracy of inspections while reducing the safety risks associated with manual aerial work.

Chiahui Power manages 11 power towers with a total line length of 3.3 kilometers. Traditionally, inspections required applying to Taipower for a power shutdown, and maintenance personnel had to climb and walk along the lines—an extremely time-consuming, labor-intensive, and hazardous process. The newly adopted mapping and inspection drones, equipped with dual thermal imaging and optical cameras, follow predetermined routes planned through a 3D modeling system to carry out automated photography, defect identification, and reporting tasks. The first phase of the fully automated drone system will be deployed for Towers 1 through 3, with plans for gradual expansion in the future.



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1.4 Circular Economy Resource Management

In the cement industry, the production process involves extremely high-temperature rotary kilns, which enable the recycling and reuse of waste and resource-based products by converting them into alternative raw materials and alternative fuels. This process reduces the consumption of natural raw materials and fuels, lowers greenhouse gas emissions, and creates job opportunities, thereby delivering environmental (E), social (S), and economic governance (G) sustainability benefits. As such, the cement industry plays a key role in driving the circular economy.

1.4.1 Circular Economy Benchmark

Asia Cement aligns with the United Nations Sustainable Development Goal (SDG) 12—ensuring sustainable consumption and production patterns. The company is committed to the sustainable management and efficient use of natural resources, while significantly reducing waste generation through prevention, reduction, recycling, and reuse.

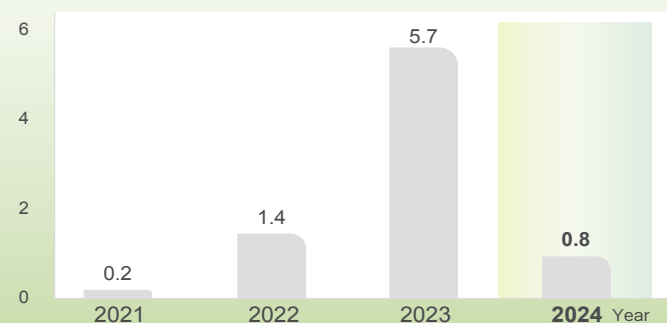
Over the years, Asia Cement has received both domestic and international recognition for its efforts and is enthusiastic about sharing its recycling experience. The company actively collaborates with industry peers to expand waste treatment capacity and promote energy and resource transformation, contributing to the vision of a sustainable and regenerative green homeland in Taiwan.



Construction of Key Resources for Circular Economy

Asia Cement actively invests in the allocation of key resources for alternative raw materials and fuels, and has established a comprehensive monitoring system for product quality and emissions. The company is committed to achieving full reuse and resource recovery of waste materials. In 2024, Asia Cement allocated a capital expenditure of NT\$79.52 million for the development of critical resources to support its circular economy strategy.

Annual Capital Investment in Circular Economy Initiatives (100 million NTD)



Future Development Plan

In response to the growing demand for diverse types and volumes of alternative raw materials and fuels, Asia Cement recognizes the challenges posed by the variability in material properties. To address these, the company plans to implement the following strategic measures:

Equipment System Optimization:

Gradually enhance the performance of existing equipment and expand the conveyance systems.

Operational Efficiency Improvement:

Increase processing capacity and system reliability.

Intelligent Upgrades:

Evaluate the addition of smart storage systems for alternative fuels.

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1.4.2 Sustainable Resource Cycling and Co-processing in Cement Manufacturing

Cement manufacturing processes possess the superior "3T" characteristics—high temperature, long residence time, and strong turbulence—making them highly effective in decomposing waste and hazardous pollutants. As such, cement kilns are regarded as a strategic cornerstone of the circular economy. Asia Cement promotes circular economy initiatives through the reuse of both waste materials and resource-derived products from waste, supporting public sectors and various industries across Taiwan in achieving efficient waste disposal and resource recovery.

Prior to using any alternative material, Asia Cement conducts rigorous risk assessments, considering environmental ecology, transportation safety, occupational health, and employee perceptions (e.g., odor discomfort). The company also continually adjusts sourcing and operational practices to ensure safety and efficiency. At the Hualien Plant, a fine crusher has been installed, and an incinerator is under design to increase the acceptance particle size and combustion efficiency of alternative fuels. Future plans include an on-site household waste treatment program, moving toward a zero-waste circular resource model.



Waste co-processing

Asia Cement's co-processing of waste in support of circular economy goals fully complies with Taiwanese legal regulations and is conducted under reuse permits. Additionally, the company follows the Global Cement and Concrete Association (GCCA) guidelines. To prevent adverse safety, operational, or environmental impacts from certain waste types, Asia Cement commits not to co-process the following materials in its cement kilns:



Radioactive waste from the nuclear industry



Electrical and electronic waste (e-waste)



Whole batteries



Corrosive wastes, including inorganic acids



Explosives and ammunition



Asbestos-containing materials



Biomedical waste



Chemical or biological weapons designated for destruction



Wastes with unknown or unpredictable composition, including unsorted municipal solid waste



Wastes with little or no mineral value to clinker production



Model	Name of resource		Major alternative energy and resources	Source of resources
Alternative raw material	BOF Slag Fines	Limestone	Steel Industry	Steel industry byproduct; processed via crushing, grinding, magnetic separation, etc.
	Mineral Fines			Desulfurization slag byproduct; processed via crushing, grinding, magnetic separation, etc.
	Reduction Slag			Waste from electric arc furnace steel production
	Quicklime	Limestone	Industrial Gas Industry	Gas industry byproduct from calcium carbide acetylene production
	Stone Powder		Stone Processing Industry	Stone processing industry waste; processed via sorting and drying
	Inorganic Sludge		Pulp and Paper Industry	Paper industry pulp sludge waste
	Water Treatment Calcium Carbonate		Tap Water Treatment Plant	Byproduct of water softening in tap water treatment plants
	Water Treatment Sludge			Sludge from water purification processes
	Coal Bottom Ash		Various Industries	Generated from <5% waste-derived fuel co-firing
	Coal Fly Ash		Various Industries	Generated from <5% waste-derived fuel co-firing
	Incineration Recycled Aggregate	Clay	Municipal Waste Incineration Plant	Incinerator bottom ash; processed via crushing, magnetic separation, screening
	Co-fired Coal Ash		Various Industries	Generated from <50% waste-derived fuel co-firing
	Waste Bricks		Steel Industry	Refractory waste from steel industry kiln maintenance
	Waste Ceramics		Steel Industry	Refractory waste from steel industry kiln maintenance
Alternative fuel	Solid Fuel	Coal	Waste Management Industry	Waste treatment industry; processed non-hazardous sludge, wood waste via magnetic separation, blending, screening
	Plastic Film RDF		Optoelectronics Industry Waste Management Industry	Optoelectronics & waste treatment industries; waste polarizing films and plastics processed via shredding, screening
	Waste Plastics		Various Industries	Industrial waste plastics
	Pulp Sludge		Pulp and Paper Industry	Sludge from paper industry wastewater treatment
	Sewage Sludge		Water Resource Center	Organic sludge from biological treatment of domestic sewage
	Waste Wood / Sawdust		Agriculture and Forestry Sector	From forestry, construction; processed wood via crushing, magnetic separation
	Solid Recovered Fuel (SRF)		Reuse and Recycling Organizations	Combustible waste from various industries, processed by reuse facilities
	Waste Wind Turbine Blades		Renewable Energy Industry	Decommissioned blades from wind power projects
Co-pro-cessing	Refrigerants	None	Customs Seizure / Customs Inspection	Seized smuggled refrigerants by customs

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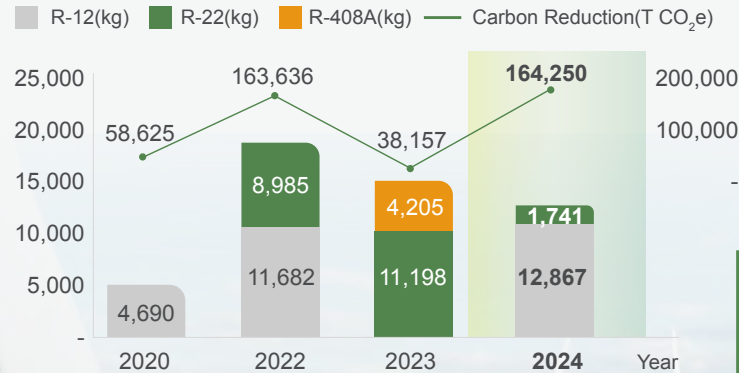
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Supporting Government in Reducing Environmental Impact

Asia Cement has supported the government in the destruction of smuggled refrigerants R-12, R-22, and R-408A, which are known to cause severe damage to the ozone layer and possess extremely high Global Warming Potential (GWP). Although these substances are banned, some unscrupulous importers still smuggle them into the country. In collaboration with the Industrial Technology Research Institute (ITRI), Asia Cement developed Taiwan's first cement kiln-based destruction technology using its three kilns. From 2020 to 2024, the company assisted the government in destroying approximately 55.3 metric tons of seized refrigerants. These refrigerants have extremely high GWP values: R-12 is 12,500 times that of CO₂, R-22 is 1,960 times, and R-408A is 3,855 times. Over the five-year period, Asia Cement prevented an estimated 425,000 metric tons of CO₂e emissions from the release of these refrigerants, while also helping avert significant ozone layer depletion.

Asia Cement's Co-processing of Refrigerants



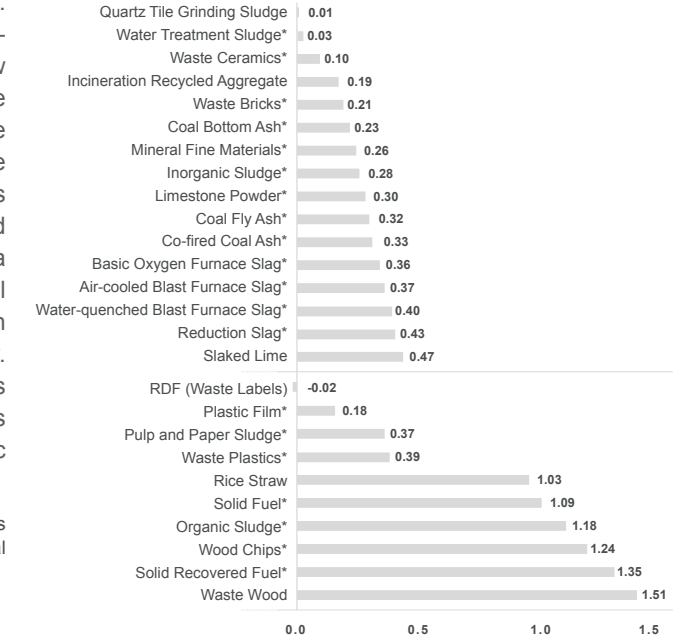
Note The carbon reduction achieved through this project is not included in Asia Cement's annual carbon reduction total.

Practical Carbon Reduction through Circular Economy

At this stage, Asia Cement's primary carbon reduction strategy focuses on circular economy practices. In practical implementation, most non-carbonate calcium oxide alternative raw materials in Taiwan originate from the steel industry. Although some of these materials have a high calcium oxide content, they also contain higher levels of iron oxide. To maintain the required chemical composition of cement, Asia Cement carefully analyzes material properties and adjusts the proportion of each alternative material accordingly. This ensures the company continues to deliver high-quality products to its customers while achieving pragmatic and effective carbon reduction.

Note The carbon reduction benefits of items marked with * are calculated based on actual measured values from 2024.

Benefit of emission reduction from circular economy (Tons CO₂e / Ton of alternative raw material and fuel)



Pioneering Circular Economy: Unlocking Value from Decommissioned Wind Turbine Blades

As global warming intensifies, Taiwan is actively expanding its renewable energy portfolio, with wind power emerging as a key focus. Wind turbine blades, with a lifespan of approximately 20 years, are made of fiberglass-reinforced plastic (FRP) to withstand high winds and corrosion. However, disposal of these decommissioned blades has posed a major challenge—most countries resort to landfilling. In response, Asia Cement, in collaboration with the Ministry of Environment's Resource Circulation Administration and the Industrial Technology Research Institute (ITRI), developed Taiwan's first "cement kiln co-processing technology for wind turbine blade waste." FRP materials from decommissioned blades contain approximately 60% non-combustible components—mainly silica (SiO₂), calcium oxide (CaO), and aluminum oxide (Al₂O₃)—which can replace limestone and clay in cement production. The remaining 40%, made of resin with calorific value, serves as an alternative to coal fuel. This innovative technology not only enables effective waste treatment but also reduces the consumption of natural minerals. From 2023 to 2024, Asia Cement successfully co-processed approximately 42 metric tons of onshore wind turbine blades, offering a sustainable solution for Taiwan's renewable energy industry.

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1.4.3 Risks, Opportunities, and Benefits

Circular Economy Risks, Opportunities, and Management Measure

Asia Cement has standardized its circular economy management procedures by establishing the “Guidelines for the Acquisition and Reuse of Alternative Raw Materials and Fuels in the Circular Economy” and “Circular Economy Management Operating Procedures”, which serve as the foundation for implementing circular economy initiatives. The company’s Circular Economy Task Force conducts systematic risk assessments to evaluate economic, environmental, and social risks and opportunities, and formulates corresponding management strategies.

ESG	Risk Item	Corresponding Management Measures	Opportunity Item	Corresponding Measures	2024 Sustainability Outcomes
 Environmental	Air pollutant emissions during production, violating regulations	Conduct tests on air pollutants to ensure compliance with regulatory standards	• Reduced demand for natural resource extraction • Reduced CO₂ emissions • Reduced water resource impact • No secondary pollution from waste reuse	• Establish management KPIs for monitoring and control • Implement ISO 14067 product carbon footprint • Implement ISO 14046 product water footprint • Set up a complete monitoring system	• Reduced approximately 290,000 tons of limestone, 38,000 tons of iron sand, 53,000 tons of coal, and 48,000 tons of gypsum, totaling 429,000 tons of natural raw materials and fuels. • Reduced 541,000 tons of landfill or incinerated waste. • Use of alternative raw materials and fuels reduced GHG emissions by approximately 218,000 tons CO₂e.
 Social	Increased occupational safety and health hazards	Implement occupational safety and health system management	• Improved customer relationships • Increased employment opportunities • Provision of waste treatment services for society	• Conduct customer satisfaction surveys and disclosure • Personnel recruitment measures • Establish cradle-to-cradle	• Created employment opportunities. • Implementation of circular economy responded to customer and investor expectations and enhanced stakeholder engagement.
 Governance & Economic	Impact of alternative materials on product quality, resulting in shipment issues	Inspect and control the quality of each batch of alternative materials to meet standards	• Reduced fuel and raw material costs • Promotion of circular economy model	• Internal economic performance statistics • Implement BS 8001 Circular Economy Standard	• Economic benefits from using alternative raw materials and fuels. • Replacing natural resources with waste reduced dependency on natural resources and enhanced economic resilience.

Optimization of Circular Economy Management

Asia Cement’s Hualien Plant has established a designated storage area for alternative fuels in accordance with regulations. Materials stored include wood chips, solid fuels, solid recovered fuels (SRF), rice straw, RDF (waste labels), RDF (paper sludge), and RDF-derived fuel (plastic film). On March 14, 2024, a fire occurred at this storage site. According to the Hualien County Fire Department's investigation, the cause was spontaneous combustion triggered by internal fermentation heat from moist wood chips, which had been densely stacked after consecutive days of rainfall. The fire was brought under control within approximately 30 minutes. Asia Cement has implemented the following measures to prevent similar incidents in the future:

①

Priority disposal of on-site alternative fuel stock; once incoming alternative fuels resume, inventory and stockpile quantities will be strictly controlled using a first-in-first-out (FIFO) approach. Additional separation zones will be established to prevent long-term dense stacking that may cause fermentation heat and spontaneous combustion due to moisture.

②

Installation of surveillance cameras covering the entire storage area and surrounding roads; thermal-based fire detection systems are also being evaluated.

③

Daily thermal imaging inspections will be conducted to detect any abnormal heat accumulation in the alternative fuel yard, with records kept and reported.

④

Construction of storage sheds and fire protection facilities to ensure safe storage; a smart storage system for alternative fuels is also planned.

⑤

In addition to existing fire hydrants, three more will be installed to enhance fire protection coverage.

ESG Sustainability Benefits of the Circular Economy

Asia Cement’s primary goal in promoting the circular economy is to integrate industrial symbiosis between upstream and downstream sectors, establish integrated circular models, reduce resource consumption, and transform waste into valuable resources. This generates a win-win-win outcome across economic, environmental, and social dimensions—ultimately contributing to the creation of a resource-circulating society.Through Asia Cement’s proactive circular economy initiatives, the company prevents the extraction and energy consumption associated with tens of thousands of tons of natural raw materials each year. Asia Cement aims to redirect misplaced resources to uses that generate greater value for the planet through its sustainable circular production model.

Note The reduction in natural raw material usage (such as limestone, iron sand, and clay) due to alternative raw materials is calculated using the loss-on-ignition element balance method, based on substitution ratios of SiO₂, Al₂O₃, Fe₂O₃, and CaO.

Emergency Support for Supplier Site Incident

In 2024, a fire broke out at the site of an alternative fuel supplier in Hualien County. Asia Cement immediately dispatched water trucks to assist with firefighting. The company also temporarily suspended the use of other types of alternative fuels at its Hualien Plant to prioritize the consumption of processed reusable products from the affected supplier. This prompt action helped the supplier resolve the issue quickly. The incident has been incorporated into Asia Cement’s supplier evaluation process as a future procurement reference.



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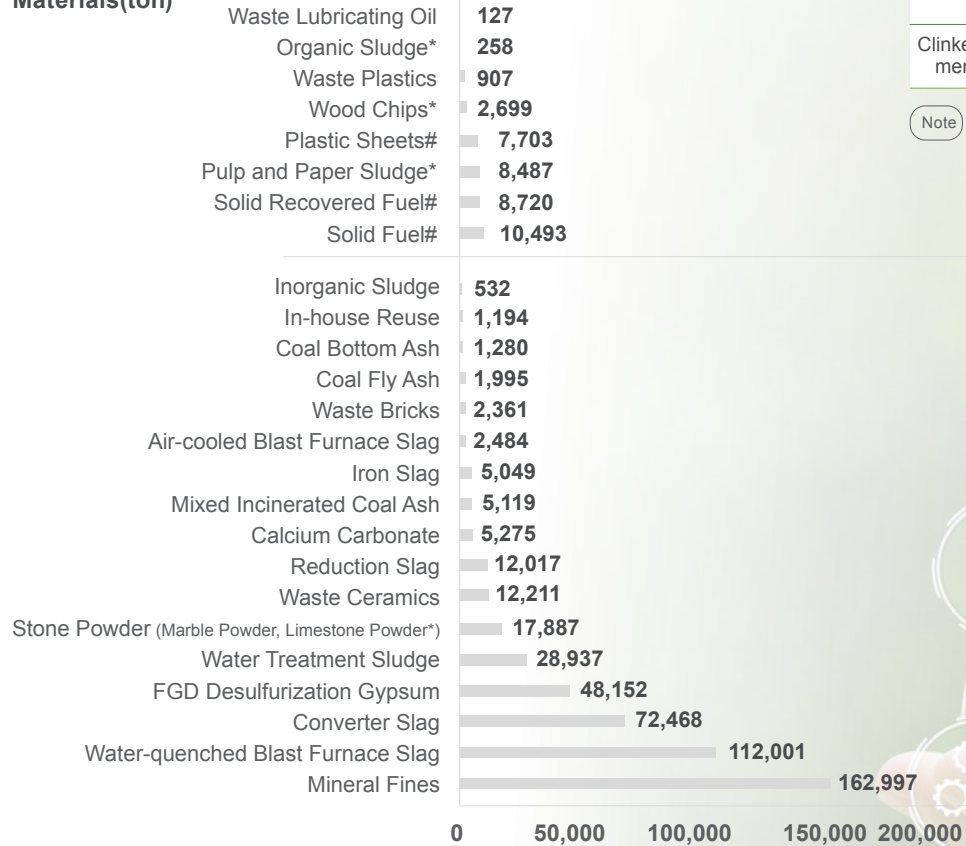
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1.4.4 ESG Benefits and Target Indicators

Circular Economy Indicators and Targets

Asia Cement has established short-, medium-, and long-term targets aligned with its circular economy development strategy, leveraging key performance indicators such as the ratio of alternative raw materials, alternative fuels, and the clinker-to-cement ratio to effectively manage circular economy performance. In 2024, all targets were exceeded, demonstrating the company's concrete progress in diversifying sources of alternative raw materials, expanding the use of alternative fuels, and gradually reducing the clinker ratio. These efforts have significantly enhanced resource utilization efficiency, laying a solid foundation for achieving medium- and long-term circular economy and low-carbon objectives, and underscoring our ongoing commitment to resource sustainability and climate action.

Asia Cement 2024 Circular Economy Alternative Fuels and Raw Materials(ton)



- Note
1.

Items marked with an asterisk(*)represent biomass-based alternative fuels.Items marked with a hash (#) represent alternative fuels partially composed of biomass, based on test results of biogenic carbon content as determined by ASTM D6866.
2.

The carbon ontent in limestone powder originates from lignin.

Indicator and Target		2024Target	2024 Performance	(2025)	(2030)	(2035)
				Short-term Goal	Mid-term Goal	Long-term Goal
Alternative raw materia	Percentage of alternative (kg/ton-cementitious materials)	145	152 ✓	159	173	185
	Volume alternative (Ton)	450,370	501,634 ✓	534,100	583,700	622,700
Alternative fuel	Percentage of heat supplied by biomass alternative fuel (%)	2.8%	3.0% ✓	4.5%	7.4%	8.3%
	Percentage of heat supplied by nonbiomass alternative fuel (%)	3.0%	3.2% ✓	3.5%	6.5%	7.3%
	Volume alternative (Ton)	37,670	39,382 ✓	49,780	78,890	89,000
Clinker-to-Ce-ment ratio	Clinker / cement	90%	89.17% ✓	86.2%	79.4%	58.1%

- Note
1.

The system boundary for alternative raw materials and clinker-to-cement (clinker ratio) calculations includes both the Hsinchu and Hualien Plants of Asia Cement;the boundary for alternative fuel usage is limited to the rotary kiln at the Hualien Plant.
2.

The substitution rate of alternative fuels is calculated as the proportion of calorific value from alternative fuels to the total calorific input.
3.

✓ Target met.

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1.5 Impact of Low-Carbon Transition

In response to global climate change risks, Asia Cement actively engages in international climate initiatives and industry actions, demonstrating its commitment to low-carbon transformation. As a member of the Global Cement and Concrete Association (GCCA) and the World Cement Association (WCA), Asia Cement collaborates with the global cement industry to promote sustainable transition and climate governance. Through participation in these international platforms, the company advocates for and promotes the following key issues:

- Establish standards for low-carbon cement and concrete products
- Develop circular economy-related policies to enhance resource efficiency and reuse
- Accelerate decarbonization pathways and technological innovation in the cement industry
- Protect and promote biodiversity by integrating land use and ecological restoration measures
- Promote industrialization and policy support for carbon capture, utilization, and storage (CCUS) technologies
- Improve energy efficiency and carbon emission accounting capabilities to ensure transparency of carbon information
- Promote public and private sector procurement policies for low-carbon products to expand market incentives and demand

CDP Carbon Disclosure Project



To meet stakeholders' expectations for transparent climate information, Asia Cement continues to participate in the CDP Carbon Disclosure Project. In 2024, the company received the following ratings:

Climate Change Questionnaire:
Maintained A- rating
(Leadership level)

Supplier Engagement Rating
(SEA): **Received A rating**

Internal Carbon Pricing

Based on its SBTi carbon reduction targets, Asia Cement has adopted an internal carbon pricing mechanism (shadow price) to incorporate carbon risks into investment decisions, climate risk management, and long-term strategies. The primary assessment areas include driving low-carbon investments and improving energy efficiency.

The internal carbon pricing for 2021–2025 is set at NT\$216 per ton CO₂e.

Revision of Cement Product CFP-PCR

Previously, the Ministry of Environment's announced Carbon Footprint Product Category Rules (CFP-PCR) applied only to Portland cement (Version 1.0, approved on July 30, 2020), excluding other low-carbon cement types with lower clinker content. This limitation hindered the promotion of low-carbon cement products in the domestic market. To address this, Asia Cement initiated a revision of the CFP-PCR in 2022, proposing to expand its scope to all cement products. After multiple drafts and revisions in 2023, the new version was approved by the Ministry of Environment in April 2024, enabling comprehensive carbon labeling of cement products and aligning with Taiwan's net-zero emission strategies.

Continued R&D Toward Net-Zero Emissions

Asia Cement continues to invest in Taiwan's net-zero emission strategy for the cement industry through strategic and technological research, covering topics such as carbon management, low-carbon materials development, and waste resource utilization. In 2024, five related papers were published:

- "Net-Zero Roadmap Planning and Strategic Analysis for the Cement Industry" – awarded by Taiwan Institute for Sustainable Energy and CTCI Education Foundation
- "Practical Discussion on Cement Kiln Co-processing of Waste Wind Turbine Blades" – included in IDB Green Technology and Engineering Practice Conference
- "Methodology Analysis for Cement Industry's 2050 Net-Zero Roadmap" – published in Industrial Pollution Prevention Journal (Issue 161), Ministry of Economic Affairs
- "Low-Carbon Cement Reduction Pathways and Impact on Concrete" – published in Volume 18, Issue 1 of Concrete Technology Journal by Taiwan Concrete Institute

- 1.1 Net-Zero Strategy and Target Roadmap
- 1.2 Energy Resource Management
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Publication in International Cement Review

Asia Cement's innovation and environmental achievements were once again featured in the International Cement Review (ICR), the most authoritative journal in the global cement industry. The published topic was 'Forest Factory: New Circular Economy and Biodiversity Restoration Project,' highlighting Asia Cement's notable progress in promoting circular economy and biodiversity.



Corporate Sustainability Experience Sharing

Asia Cement continues to actively participate in domestic and international forums, seminars, and policy advocacy platforms related to net-zero and circular economy, sharing its sustainability practices and deepening collaboration with government, industry, and academia. In 2024, the company participated in 8 events:

- "Advanced Net-Zero 2050 - Industry Collaboration Towards Net-Zero" organized by the Industrial Development Administration (IDA) of the Ministry of Economic Affairs, Taiwan Institute of Economic Research, and the Chinese National Federation of Industries.
- The 2nd Net Zero City Expo: Net-Zero Transformation Forum – "Industrial Transformation: Green Future – Taiwan Manufacturing in the Global Supply Chain."
- In collaboration with the Hualien County Government and the Environmental Protection Bureau, Asia Cement co-hosted the "Hualien Net-Zero Hertz – Hualien Net Academy," promoting a just transition and awareness on net-zero emissions.
- At the Taiwan-Denmark Bilateral Forum on the EU Carbon Border Adjustment Mechanism (CBAM), presented "Net-Zero Transition: Sustainability in Step with Cement," sharing Asia Cement's low-carbon strategy.
- Participated in the FEIAP 32nd General Assembly, 7th Convention, and 1st Youth Talent Innovation Competition organized by the Federation of Engineering Institutions of Asia and the Pacific (FEIAP) and the Chinese Institute of Engineers.
- Delivered a keynote speech at the Low-Carbon Construction Materials Workshop International Forum hosted by the Taiwan-Indonesia Science and Technology Innovation Center.
- Shared "Innovative Transformation of Ordinary Cement" at the EMBA Corporate Sustainability Forum of Soochow University School of Business.
- Acted as an industry expert and delivered a lecture on net-zero practices at I-Shou University EMBA program.



Net Zero 2030/2050

Asia Cement co-initiated the establishment of the "Taiwan Alliance for Net Zero Emissions (TAN-ZE)" and joined the Net Zero X 2030/2050 initiative, committing to short-, medium-, and long-term climate goals. By working in collaboration with various industries, the company demonstrates its strongest determination to advance sustainable development and achieve the ambitious 2050 net-zero target.

Both Asia Cement and its subsidiary Asian Ready-Mix Concrete have upgraded their Net Zero Labels. In 2024, Asia Cement received the "Net Zero Label" certification from TANZE for the third time, elevating its rating from the original Green Level to Silver Level. According to statistics, the company's total office and three major service locations reduced carbon emissions by 40.7% in 2023 compared to the 2022 base year—achieving its emissions target two years ahead of schedule.

Subsidiary Asian Ready-Mix Concrete also performed excellently, receiving the Bronze Level certification. Through energy-saving measures, optimizing vehicle dispatch, and purchasing international carbon credits, it successfully reduced carbon emissions by 10% across its offices and eight self-owned plant sites—setting a model for other companies.

Asia Cement has set a 2030 Net Zero goal for its headquarters and service locations. The plan is to reduce emissions by 10% compared to the 2022 baseline by 2030 and offset the remaining 10% through carbon credits. Going forward, Asia Cement remains committed to embedding sustainability at its core, leading a green revolution in the global construction materials industry, and creating a cleaner and better environment for future generations.

CHAPTER 2

Implementing Environmental Protection and Harmonious Coexistence with Nature

Management of Material Topics

Asia Cement has established an Environmental Policy and a Water Risk Management Policy to effectively manage environment-related risks. These policies aim to minimize environmental impacts and safeguard ecosystems and natural resources, and are applicable to all operational sites.

Material Topic Categories

Air Emissions, Waste

Specific Topic

Water and Effluents



Environmental Policy



Water Risk Management Policy

Impact

The operations of Asia Cement Corporation and its subsidiaries primarily involve product manufacturing and transportation activities, which may result in actual or potential negative impacts on the environment and related stakeholders. To ensure that economic development does not conflict with environmental protection, the company periodically and on an ad hoc basis reviews the implementation status of material topics of concern to stakeholders. Asia Cement is committed to environmental protection and continuously assesses the feasibility of improvements to minimize potential operational impacts.

Taking Action

- Asia Cement Corporation and its subsidiaries continue to implement relevant operational management systems and procedures, managing each thematic area through concrete actions and advocacy to prevent or mitigate potential negative impacts. In the event of actual adverse impacts, prompt corrective actions are taken. Measures include revising operating procedures, improving equipment, or strengthening employee training to avoid future occurrences.

Evaluation Methods

Asia Cement tracks the effectiveness of actions through data analysis, internal and external audits via management systems or procedures, and stakeholder feedback. The company also regularly reviews the achievement of established targets.

- ① Application of data analytics: Establish various data models to enhance the efficiency and reusability of data analysis and improve decision-making quality.
- ② Regular review meetings to confirm the implementation status of plans and target achievement reports.
- ③ Formulation of management plan documents and establishment of key performance indicators (KPIs) for management.
- ④ Regular management review meetings to make adjustments.
- ⑤ Periodic review and improvement of non-conformities, and implementation of corrective measures.
- ⑥ Continuous tracking of implementation and target achievement by the Corporate Sustainability Implementation Committee and its working groups.

Commitment

- To promote Asia Cement's Hualien Plant as a model of smart and environmentally friendly manufacturing.

Management Systems or Procedures

- ① ISO 14001 Environmental Management System – Internal and external audits are conducted annually to systematically control environmental impacts. The system is implemented across all operational sites, with a gradual expansion of its coverage.
- ② ISO 46001 Water Efficiency Management System – Conducts water risk assessments and improves water efficiency to reduce water consumption.
- ③ Establishment of monitoring and testing equipment and estimation methods – Emissions and pollutant discharges are assessed based on plant-specific plans, enabling real-time control and the resolution of anomalies.
- ④ All operational sites must comply with legal emission concentration and discharge limits.
- ⑤ Regular and ad hoc on-site inspections – Conducted to assess compliance with environmental regulations. If non-compliance is found, corrective actions are executed.

Practical actions and initiatives

- ① Ongoing promotion of cleaner production.

Stakeholder Engagement

- Conduct regular or ad-hoc communication and interaction based on the stakeholder engagement mechanism, and disclose relevant information in the sustainability report, on related platforms, or on the website.



Became the First Cement Company in Taiwan to Obtain Dual Government Certifications as a “Green Factory”

In terms of hardware, Asia Cement's Hualien Plant obtained the Green Building Label from the Ministry of the Interior; on the software side, it passed the Clean Production Assessment by the Ministry of Economic Affairs. As a result, the Hualien Plant became the first cement plant in Taiwan to receive dual recognition from both ministries (MOEA and MOI) as a certified “Green Factory,” establishing a comfortable, healthy, and environmentally friendly workplace.



2.1 Pollution Control and Waste Reduction

Environmental Policy and Environmental Management Systems

As of 2024, ISO 14001 certification coverage reached **87%**

To effectively manage environmental impacts and protect ecosystems and natural resources, Asia Cement has established a comprehensive environmental policy applicable to all its operational sites. The primary environmental impacts associated with its operations include air pollution, landscape disruption, and energy consumption. The company further commits to addressing broader environmental sustainability issues, such as sustainable resource use, use of alternative materials through circular economy practices, climate change mitigation and adaptation, and biodiversity and ecosystem protection. The policy applies across production, products and services, logistics and distribution, waste resource management, as well as suppliers and contractors. Environmental due diligence is conducted during mergers and acquisitions.

Asia Cement continues to implement an environmental management system to ensure regulatory compliance. Following the "Plan-Do-Check-Act" management system framework, internal and external environmental audits are conducted annually at all production sites of Asia Cement and its subsidiaries to establish a robust oversight mechanism. As of 2024, ISO 14001 certification coverage reached 87%, with plans to further expand the system's coverage to ensure continuous environmental improvement.

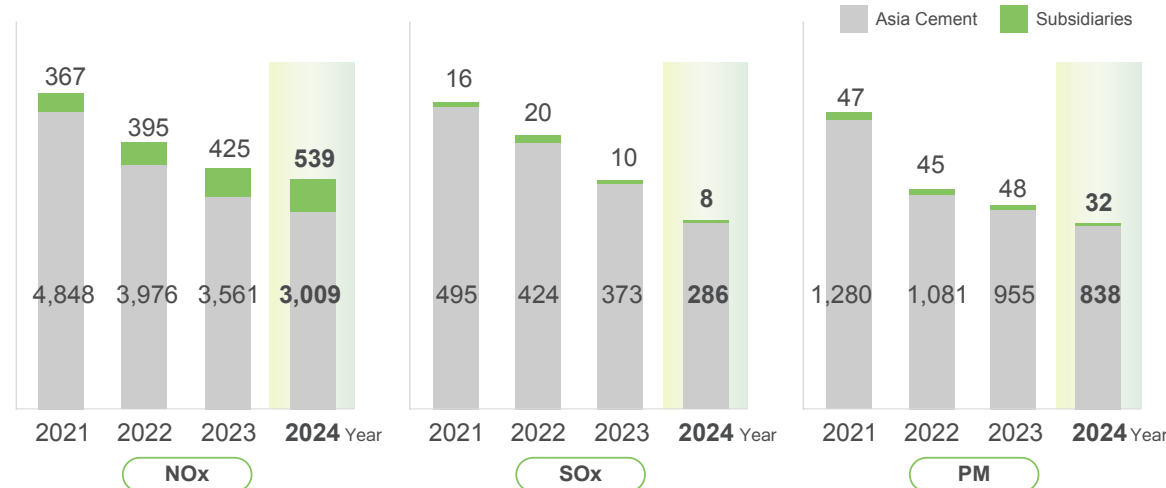
Environmental Performance Linked to Executive Variable Compensation

Asia Cement links environmental performance in pollution and waste management to executive variable compensation. If environmental performance is unsatisfactory, senior executives may face a reduction of 6% in their personal bonuses, ensuring full implementation and execution of pollution and waste management policies.

Air Pollution Emissions

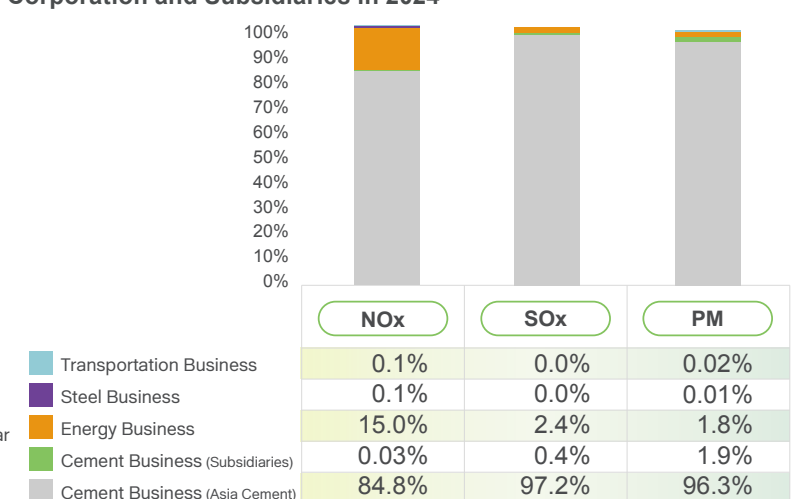
Air pollution is an inevitable byproduct of cement manufacturing, with major pollutants including particulate matter, nitrogen oxides (NOx), and sulfur oxides (SOx). Asia Cement employs high-efficiency dust collection equipment to control emissions and selects high-quality raw and fuel materials (e.g., low-sulfur coal and high-grade limestone) to minimize pollution at the source. To continuously monitor emissions, the company conducts annual pollutant measurements and submits reports to regulatory authorities. In addition, Continuous Emission Monitoring Systems (CEMS) are installed for NOx to manage real-time emission concentrations. Over the years, emission concentrations of NOx, SOx, and particulate matter at Asia Cement have consistently remained below legal limits.

Air Pollutant Emissions (ton/year)



- Note 1. Emissions from stationary pollution sources are based on periodic reports submitted to the Ministry of Environment for air pollution fees and emissions declarations.
2. Data are based on approvals granted by the Environmental Protection Bureau as of the end of March 2024.

Air Pollutant Emissions of Asia Cement Corporation and Subsidiaries in 2024



亞洲水泥

ASIA CEMENT CORPORATION

Outline of 2024 Report

→

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2024

Sustainability Report

2024 Asia Cement Air Pollutant Emission Concentration vs. Regulatory Limits

In 2024, the emission concentrations of nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter from Asia Cement were all below regulatory standards, demonstrating effective control of air pollutants in compliance with environmental regulations.

Pollutant	Regulatory Limit	Asia Cement Actual	Reduction (%)
PM(mg/m³)	30	12	59%
NOx(PPM)	300	179	40%
SOx(PPM)	100	14	86%

Air Pollutant Emission Management

Asia Cement’s air pollution and waste management is overseen by the Pollution Control Subgroup of the “Corporate Sustainability Implementation Committee,” which is responsible for tracking emission compliance for pollutants such as Particulate Matter (PM), Sulfur Oxides (SOx), and Nitrogen Oxides (NOx). The subgroup monitors and reports progress on environmental improvement plans and reduction targets quarterly, and submits progress updates to the Corporate Sustainability Committee every six months. Emission targets are established in terms of emission intensity per unit of cementitious material for PM, NOx, and SOx. Mercury (Hg) emissions are measured by total annual emissions. In accordance with current Air Pollution Control Act regulations and equipment efficiency standards, Asia Cement has planned a set of air pollution reduction measures and established feasible reduction targets

Air Pollution Emission Management Measures

Asia Cement actively manages air pollution emissions and has developed an emission reduction plan. In 2024, two major projects were completed with a total investment of NT\$1.57 billion. The main improvement measures included reducing particulate matter emission concentrations and enhancing dust collection efficiency. In 2025, Asia Cement plans to implement additional projects such as the replacement of the #2 coal mill electrostatic precipitator with a bag filter and the expansion of storage shed facilities. These efforts are expected to further reduce particulate matter emissions and improve control efficiency.

Project	Planned Schedule	Benefits	Investment Cost (NT\$1,000)
#1 RM Electrostatic Precipitator Upgrade to Bag Filter Project	Completed in 2024	Reduced particulate emissions to 3 mg/Nm³	154,360
#1 Coal Mill Main Dust Collector Jet Type Upgrade to Flap Type Project	Completed in 2024	Improved dust collection efficiency	2,215

to maintain low-level emissions and minimize environmental impact. In 2024, three air pollution reduction targets were achieved; however, the mercury emission reduction target was not met. The Hualien Plant previously operated with two parallel air pollution control systems, with a combined removal efficiency calculated as: $(1 - (1 - 95\%) \times (1 - 95\%)) = 99.75\%$. After July 2024, both original control systems were dismantled and replaced with a single, more advanced and efficient system. However, the air pollution fee reporting system automatically assigned only the standard 95% efficiency for a single unit, failing to reflect the actual improved performance of the new system. Consequently, the system-calculated air pollutant emissions were shown to increase post-replacement, which misrepresented the actual emission reduction benefit. As a result, the calculated mercury emissions based on this fixed efficiency failed to meet the target.

Reduction Targets for Air Pollutant Emissions in the Cement Business (Base Year: 2021)

✓ Achieved ✗ Not Achieved

Item	Base Year (2021)	2024 Target Achievement	Short-term Target (2025)	Mid-term Target (2030)	Long-term Target (2035)
Particulate Matter	344 g/ton of cementitious material	252 g/ton of cementitious material, 27% reduction ✓	3% annual reduction, 12% reduction in 2025	22% reduction by 2030	27% reduction by 2035
NOx	1,325 g/ton of cementitious material	927 g/ton of cementitious material, 30% reduction ✓	6% annual reduction, 24% reduction in 2025	39% reduction by 2030	44% reduction by 2035
SOx	135 g/ton of cementitious material	88 g/ton of cementitious material, 35% reduction ✓	2% annual reduction, 8% reduction in 2025	13% reduction by 2030	18% reduction by 2035
Mercury	0.044 tons/year	0.044 tons/year, 1% reduction ✗	1% annual reduction, 4% reduction in 2025	9% reduction by 2030	14% reduction by 2035

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Achievement Status of Cement Business Emission Reduction Targets

Pollutant Item		2021	2022	2023	2024	Short-term Target (2025)	Mid-term Target (2030)	Long-term Target (2035)
Particulate Matter (PM)	Emissions (tons/year) - Regulatory Limit	Regulatory Limit	≤ 1,528	≤ 1,483	≤ 1483	≤ 1,276	-	-
		Target	≤ 1,350	≤ 1,225(-3%)	≤ 1,192(-5%)	≤ 1,015	≤ 1,114(-11%)	≤ 987(-22%)
		Actual	1,258(100%)	1,061(-16%)	934(-26%)	819	-	≤ 924(-27%)
	Emission Intensity (g/ton-cementitious material)	Target	369	≤ 333(-3%)	≤ 323(-6%)	≤ 313	≤ 302(-12%)	≤ 268(-22%)
		Actual	344(100%)	289(-16%)	279(-19%)	252	-	≤ 251(-27%)
							-	-
NOx	Emissions (tons/year) - Regulatory Limit	Regulatory Limit	≤ 5,813	≤ 4,650	≤ 4650	≤ 3,986	-	-
		Target	≤ 4,850	≤ 4,578(-6%)	≤ 4,302(-11%)	≤ 3,526	≤ 3,707(-24%)	≤ 2,974(-39%)
		Actual	4,848(100%)	3,976(-18%)	3,561(-27%)	3,009	-	-
	Emission Intensity (g/ton-cementitious material)	Target	≤ 1,325	≤ 1,245(-6%)	≤ 1,166(-12%)	≤ 1,086	≤ 1,007(-24%)	≤ 808(-39%)
		Actual	1,325(100%)	1,082(-18%)	1,063(-20%)	927	-	-
							-	-
SOx	Emissions (tons/year) - Regulatory Limit	Regulatory Limit	≤ 715	≤ 572	≤ 572	≤ 572	-	-
		Target	≤ 480	≤ 488(-1%)	≤ 480(-3%)	≤ 413	≤ 458(-7%)	≤ 434(-12%)
		Actual	495(100%)	424(-14%)	373(-25%)	287	-	≤ 409(-17%)
	Emission Intensity (g/ton-cementitious material)	Target	≤ 131	≤ 133(-1%)	≤ 130(-4%)	≤ 127	≤ 125(-7%)	≤ 118(-13%)
		Actual	135(100%)	115(-15%)	111(-18%)	88	-	≤ 111(-18%)
							-	-
Mercury	Emissions (tons/year) - Regulatory Limit	Regulatory Limit	≤ 1.98	≤ 1.98	≤ 1.98	≤ 1.98	-	-
		Target	≤ 0.058	≤ 0.044(100%)	≤ 0.043(-2%)	≤ 0.043	≤ 0.042(-5%)	≤ 0.040(-9%)
		Actual	0.044(100%)	0.037(-16%)	0.032(-27%)	0.044	-	< Baseline Year -9%

- Note
1.

The regulatory emission limits are calculated based on the pollutant concentration and the annual clinker production, and actual pollutant emissions must not exceed the approved emission limits specified in the stationary pollution source operating permit.
2.

Heavy metal substances are not subject to mandatory regular testing under regulations. Mercury emissions are updated based on the emission factor of 550.4 mg per ton of clinker as defined by the Ministry of Environment.
3.

Mercury emissions are reported to meet MSCI indicator requirements and are not considered a significant emission source for Asia Cement.
4.

(-XX%) indicates the reduction percentage compared to the base year.

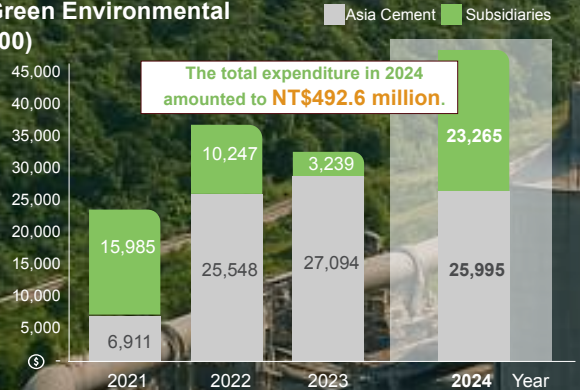
Ozone-Depleting Substances (ODS) Emissions

Most refrigerants used are R-134a and the environmentally friendly R-410a. Currently, only a small portion of ozone-depleting substance R-22 (ozone depletion potential of 0.055) is used at the Hualien Plant and Chiahui Power for chillers and building air conditioning systems. These are being gradually replaced with eco-friendly refrigerants upon equipment failure. In 2024, the estimated R-22 leakage, converted into CFC-11 equivalent, was 0.001 metric tons (based on the refrigerant leakage emission factor of 8.5% in the GHG Emission Factor Management Table).

Sustainable Environmental Expenditure

Asia Cement's expenditure on sustainable and green environmental initiatives includes costs for environmental treatment and testing, equipment maintenance or replacement, and environmental prevention and management.

Historical Sustainable Green Environmental Expenditures (NTD 10,000)



Employee Training Program on Waste Reduction

Asia Cement is committed to improving waste management performance by enhancing employee awareness and practical skills in waste reduction through targeted education and training. The training courses cover topics such as identifying sources of waste generation, methods for reduction and classification, and the development of innovative resource reuse strategies. In 2024, a total of 41 waste management-related courses were conducted, with a cumulative participation of 701 employees. This demonstrates the company's proactive efforts and long-term commitment to implementing a circular economy and promoting sustainable operations.



Waste management Related courses: 24 sessions 701 participants

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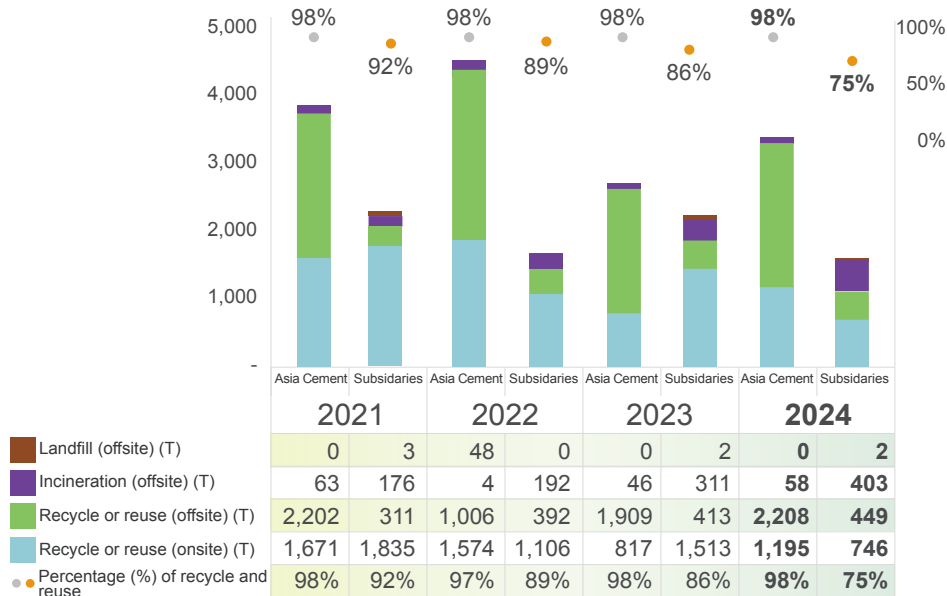
Waste Reuse and Reduction Targets

Asia Cement is dedicated to minimizing, recycling, and reusing waste. Both Asia Cement and its subsidiaries do not generate hazardous industrial waste in their processes. All waste is reused, treated, and reported in accordance with environmental regulations and the requirements of the local governments where operations are located. Final outsourced waste disposal is planned based on the relevant regulations in each facility's jurisdiction. For detailed information on raw material and fuel substitution under the circular economy, please refer to Section [1.4 Circular Economy and Resource Management](#). Impact analysis shows that the main sources of waste for Asia Cement and its subsidiaries are operational activities, such as equipment repair or replacement from manufacturing or pollution control systems, maintenance supplies, and disposal of auxiliary materials. Most of this waste can be recycled or reused.

In 2024, Asia Cement generated a total of 3,461 metric tons of waste. Of this, 1,195 metric tons were reused in-house via cement rotary kilns, 2,195 metric tons were recycled externally through approved recycling channels, and only 58 metric tons were incinerated as final disposal, with zero landfill disposal. The waste recycling and reuse rate reached 98%. In-house reuse at the Hualien Plant mainly involved the reuse of refractory bricks from kilns. Off-site reuse mainly involved recycling waste rubber and scrap metal, with volumes varying depending on annual replacement projects.

Using 2021 as the base year, Asia Cement has set targets for circular reuse and waste reduction. The Hualien Plant has installed a crusher for processing circular economy substitute materials, and is planning to implement on-site household waste reuse programs, subject to approval by the local Environmental Protection Bureau, aiming for a zero-waste future.

Waste Generation and Recycling / Reuse



Note The estimation of office municipal waste for the three entities (Asia Cement Headquarters, Fu-Min Transportation, and Ya Tung Ready-Mixed Concrete) is based on the average daily general waste generation and recycling rate per person.

✔ target met ✖ Not Achieved

	2025 target	2024 actual reuse	
Circular Use of Waste Resources	Reuse rate is 90%	98%	✔
Hazardous Waste Generation: No hazardous industrial waste is generated in the production process	0 metric tons	0 metric tons	✔
General Waste External Disposal: Absolute reduction of 2.5% per year;	2025 target is a 10% reduction.aiming for zero-waste in the future.	actual external disposal was 58 metric tons	✔

Subsidiaries' externally disposed waste (incineration, landfill) includes consumables and waste from production and pollution control equipment. In-house reuse is practiced by Asia Ready-Mix, Asia Precast, and Nan Hua Cement, mainly using recycled water from vehicle wash stations and plant cleaning as raw material. Outsourced reuse by Fu-Min Transportation includes waste tires, used oil, etc. Other subsidiaries produce waste irregularly depending on operations and outsource to licensed recyclers for reuse.



Punishment Cases Relating to Environmental Protection

Entity	2024 Violation Description	Penalty(NTD)	Corrective Measures
 Ya Tung Ready-Mixed Concrete (Tanzi Plant)	The location of the measuring equipment installed in the storage silo was not completely enclosed, causing material to disperse into the atmosphere during unloading.	NT\$100,000	1. Inspected all storage tank perforations for proper sealing and leakage; improvements completed and submitted to the Environmental Protection Bureau in October. 2. Budget allocated to install exhaust fans and dust suppression devices; enhanced real-time dust hotspot monitoring and periodic plant equipment inspections.
 Ya Tung Ready-Mixed Concrete (Linkou Plant)	The specifications of the automatic car washing equipment and surveillance system did not comply with the Management Regulations of Air Pollution Control Facilities for Fugitive Particulate Pollutants, and improvements were not completed within the deadline.	NT\$201,000	1. Automatic car wash equipment and surveillance system installed in January 2025; inspection completed by the Environmental Protection Bureau. 2. Will reinforce procurement procedures and project improvements to meet deadlines.
 Chiahui Power	On February 10, 2024, the CEMS indicated that the 1-hour average NOx emission exceeded the permitted concentration (10 ppm) for more than 2 hours.	NT\$180,000	1. Emergency shutdown and turbine endoscopic inspection revealed combustion liner #3 rupture as the cause of excess NOx emissions. 2. Combustion liner urgently airlifted from Japan and replaced on February 18; normal operations resumed February 19.
 Fu Ming(Da) Transport	Diesel truck over three years old entering Hsinchu Science Park lacked smoke emission test compliance record within the past year.	NT\$3,500	Implemented autonomous diesel vehicle management and promoted proper vehicle inspection and maintenance practices.

Note In 2023, environmental penalties were imposed on Asia Ready-Mix, Nan Hua Cement, and Yuan Long Stainless Steel, with total fines amounting to NT\$1.6018 million.

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2.2 Water Risk Assessment

In light of global climate change, changes in hydrological characteristics and the rising risk of compound disasters across regions have heightened the importance of water resource management. Asia Cement has established a Water Risk Management Policy to assess water resource risks and identify associated impacts. The company is committed to water recycling and reuse, and has set key performance indicators for water resource management to better understand water-related risks and implement adaptation strategies.

CDP Carbon Disclosure



In 2024, the company's CDP Water Security Questionnaire rating improved to **A- level** (Leadership level).



Hualien Plant obtained ISO 46001 Water Efficiency Management System certification.

2.2.1 Water Risk Assessment

Based on the Aqueduct Water Risk Atlas from the World Resources Institute, Asia Cement evaluated water stress indicators in 2024. All operational sites located in Taiwan were assessed as having low to medium water stress (10–20%).

All operation sites in 2030

The water stress risk is
“Low–Medium” (10–20%)

All operation sites in 2050

The water stress risk is
“Low–Medium” (10–20%)

Therefore, none of the sites are considered to be in high water stress regions

Estimated Water Resource Variability and Operational Impact

According to the Ministry of Science and Technology's (2017) Taiwan Climate Change Science Report – Physical Phenomena and Mechanisms, under the RCP8.5 scenario, the estimated change in average precipitation across Taiwan from 2016 to 2100 is within a median range of -5% to +5%, showing no significant increasing or decreasing trend. Hualien Plant is located in eastern Taiwan, where the rainfall change is estimated at 1% to 2% over the same period. Thus, changes in water resources are minimal and expected to have no negative impact on future operations.

Water Resource Monitoring and Management

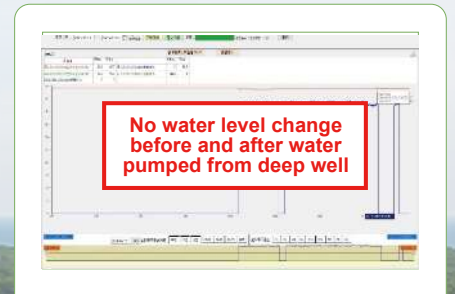
The process water at Hualien Plant mainly comes from deep well extraction and process water reuse. Real-time water level monitoring is conducted on two deep wells to observe groundwater level changes due to pumping. The groundwater levels and water intake volumes are regularly reported to the Water Resources Section of the Hualien County Government's Construction Department. In 2024, the total water intake represented 73.2% of the approved groundwater extraction quota, and there was no significant change in the water level before and after pumping.

Water level of deep well (before) pumping

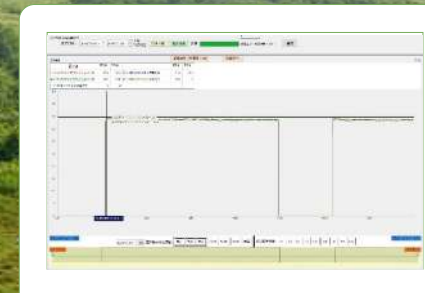


2024.04.15 #1 · Deep Water Well 48.8 meters

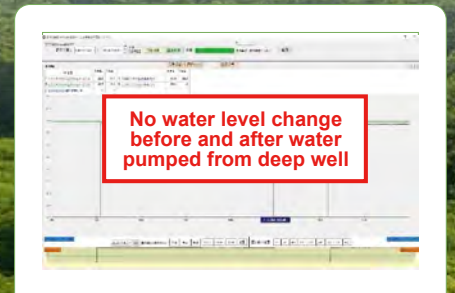
Water level of deep well (after) pumping



2024.04.15 #1 · Deep Water Well 48.8 meters



2024.11.03 #3 · Deep Water Well 39.7 meters



2024.11.03 #3 · Deep Water Well 39.7 meters

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Water Risk Management Procedure

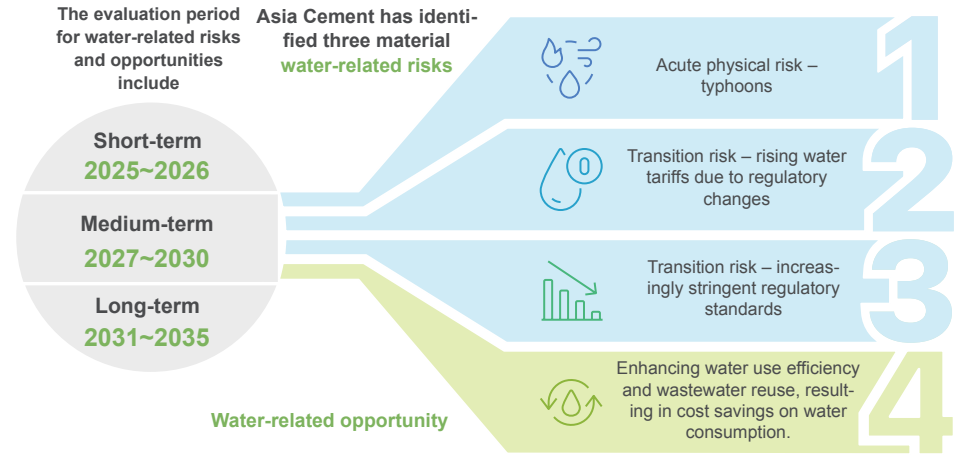
Asia Cement’s water resource risk management procedure encompasses the following steps: identification and assessment of risks and opportunities, definition of material risks and opportunities, financial impact analysis, and corresponding mitigation measures along with cost estimation.

Asia Cement recognizes that water-related strategic risks may lead to increased operating expenditures or reduced revenue. The company defines risks as having a material financial impact if the potential monetary loss exceeds NT\$1 million.

The evaluation period for water-related risks and opportunities includes:Short-term: 2025–2026,Medium-term: 2027–2030,Long-term: 2031–2035.

Asia Cement has identified three material water-related risks:Acute physical risk – typhoons、Transition risk – rising water tariffs due to regulatory changes and Transition risk – increasingly stringent regulatory standards.

Additionally, one material water-related opportunity has been assessed:Enhancing water use efficiency and wastewater reuse, resulting in cost savings on water consumption.



Assessment of Material Water-Related Risks and Opportunities: Financial Impact and Management Measures

Type of Risk/Opportunity	 Acute Physical Risk	 Regulatory Transition Risk	 Regulatory Transition Risk	 Opportunity: Efficiency
Description	Typhoons or heavy rainfall from frontal systems disrupt the Suhua Highway, leading to interruptions in the supply of production materials and factory shutdowns.	Water surcharge imposed on large water users.	Compliance with increasingly strict wastewater discharge regulations.	Enhancing water use efficiency and wastewater reuse.
Stage of Value Chain Impacted	Direct Operations	Direct Operations	Direct Operations	Direct Operations
Driver	Typhoons	Higher Water Tariffs	Stricter Regulatory Standards	Water-saving Initiatives
Potential Financial Impact	Reduced Revenue	Increased Costs	Increased Costs	Cost Reduction
Time Horizon	Short-term	Short-termMid-term	Short-termMid-term	Short-termMid-term
Estimated Financial Impact	NT\$149 million	NT\$6 millionNT\$14 million	NT\$3 millionNT\$6 million	NT\$1 millionNT\$3 million
Response Measures	inventory plans.	Implement water-saving and water reuse programs; Establish ISO 46001 water efficiency management system.	Upgrade wastewater treatment facilities and monitoring.	Promote water-saving initiatives.
Estimated Response Cost	NT\$72 million	NT\$10 millionNT\$5 million	None	NT\$1 millionNT\$3 million

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2.2.2 Regulatory Changes and Water Pricing

Regulations and Pricing Status

Asia Cement's primary water-related impacts are associated with Chiahui Power Corporation and the Hualien Plant. Chiahui Power sources its water from the municipal supply, priced at NT\$11.5 per metric ton, whereas the Hualien Plant draws groundwater under a government-approved water right, and thus incurs no water usage charge.

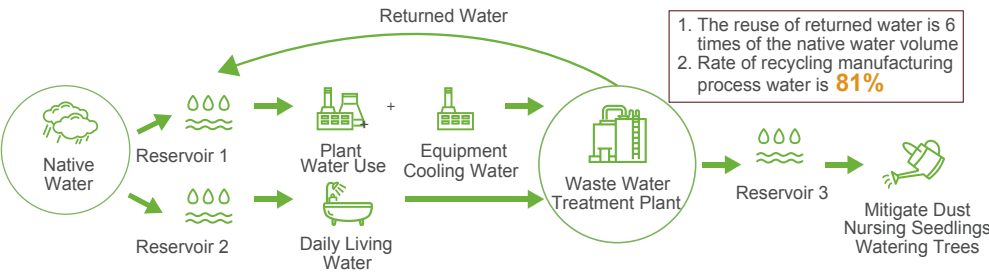
According to the "Regulations on the Levy of Water Consumption Charges" enacted under the Water Act, users with a total monthly water consumption exceeding 9,000 cubic meters during the six-month dry season are subject to water consumption charges, with rates varying by water source. Chiahui Power and the Hsinchu Plant are subject to a charge of NT\$3 per cubic meter for usage exceeding the threshold. The Hualien Plant is charged NT\$3 per cubic meter for all usage above the limit.The estimated annual increase in operating costs due to this charge in 2024 is as follows:

- Chiahui Power: approximately NT\$1.78 million
- Hsinchu Plant: approximately NT\$0.1 million
- Hualien Plant: approximately NT\$1.97 million

Chiahui Power	Hsinchu Plan	Hualien Plant
Tap water supply; Excess usage charged at 3 NTD/m³	Excess usage charged at 3 NTD/m³.	Groundwater; Usage is charged at 3 NTD/m³
2024 approximately NT\$1.78 million	2024 approximately NT\$0.1 million	2024 approximately NT\$1.97 million

Risk Management Measures for Potential Regulatory Changes in Water Resource Management

- Over the years, Asia Cement's Hualien Plant has made full use of water resources through multiple applications, including equipment and material cooling. A portion of the water is lost to evaporation, while the remaining is either collected and treated for reuse or treated to meet discharge standards before being released into the Liwu River and subsequently into the Pacific Ocean—all in compliance with relevant environmental regulations. The plant has consistently maintained a high process water recycling rate, achieving 80% in 2024, with the recycled water volume being four times the amount of water extracted, demonstrating the plant's strong commitment to effective water resource management.



- Chiahui Power's water withdrawal accounts for approximately 4% of the annual water supply from Renyitan Reservoir, and does not pose a significant impact on local water resources. All discharged water is treated to comply with regulatory standards and Environmental Impact Assessment (EIA) commitments before being released into the Yamudi drainage channel. Water use mainly supports cooling processes and boiler operations.To minimize the impact on water resources, Chiahui Power adopts a dual strategy: process improvement and reclaimed rainwater reuse. Phase II of the power generation project employs high-efficiency generating units and an air-cooled cooling system, reducing the average daily water usage during mid-load from 6,500 CMD to 310 CMD, representing a significant decrease in water intensity per unit of electricity generated.In alignment with government water restriction policies, the company continues to enhance water recycling in its processes and has developed contingency plans, including activating an RO system and converting the detention basin into a water storage tank to address potential future water stress scenarios.



Employee Training on Water Resource Efficiency Management

Asia Cement actively promotes employee participation in water efficiency management and water-saving initiatives. Through training programs, the company enhances employees' understanding and practical application of water-saving strategies. The training covers practical methods for reducing water consumption in daily operations, techniques for identifying inefficiencies, and the development of innovative water-saving solutions.

In 2024, the company conducted a total of 19 training sessions related to water resource management, reaching 293 participants, demonstrating Asia Cement's strong commitment to improving internal water management performance and efficiency.



total of 19 training
sessions related
to water resource
management
293 participants



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2.2.3 Water Use Indicators and Targets

Asia Cement’s Water Use Indicators and Targets

To enhance the effectiveness of water risk management, Asia Cement’s Hualien Plant adopted the ISO 46001:2019 Water Efficiency Management System and obtained certification in 2024. The plant has progressively installed water meters at each water use unit to monitor consumption and has been replacing aging underground pipelines with visible above-ground piping to strengthen resource management and achieve performance targets. Due to the majority of pipelines being buried underground and increasingly frequent seismic activity, many of the aging pipelines have experienced damage and leakage. In anticipation of stricter environmental regulations on fugitive particulate matter emissions from stationary sources, the plant also preemptively installed control equipment and increased water spraying to suppress dust, resulting in higher water usage and wastewater volumes. Asia Cement reviewed its approach and set the following water-related indicators and targets using 2024 as the new base year:



1.Water Efficiency Improvement

Reduce water withdrawal per unit of cementitious material by 6% by 2030 (mid-term), and by 11% by 2035 (long-term), compared to 2024.



2.Net Freshwater Consumption

Reduce net freshwater consumption by 6% by 2030 and 11% by 2035, using 2024 as the baseline.



3.Water Recycling Rate

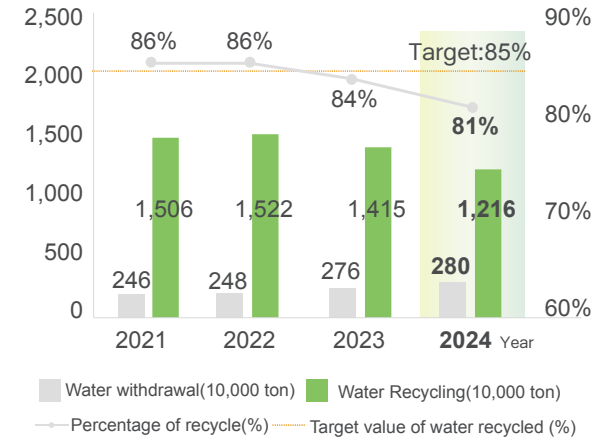
Target water recycling rate of 85% by 2025. Actual performance in 2024: 81% — target not achieved.



4.Wastewater Discharge Target

Using 2024 as the base year, wastewater discharge will be reduced by 18% by 2030 (mid-term) and by 33% by 2035 (long-term).

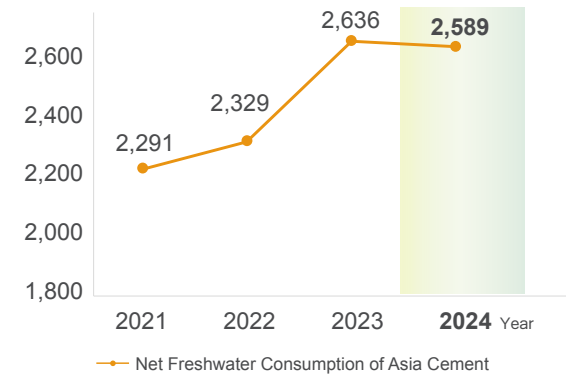
Asia Cement Water Withdrawal, Recirculation, and Recovery Ratio Performance



Water Intensity of Asia Cement (tons of water withdrawal / ton of cementitious material)

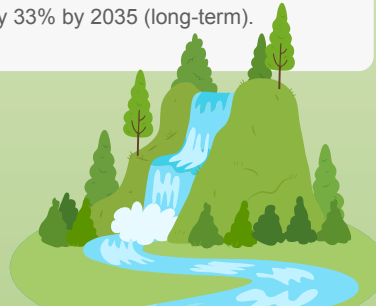
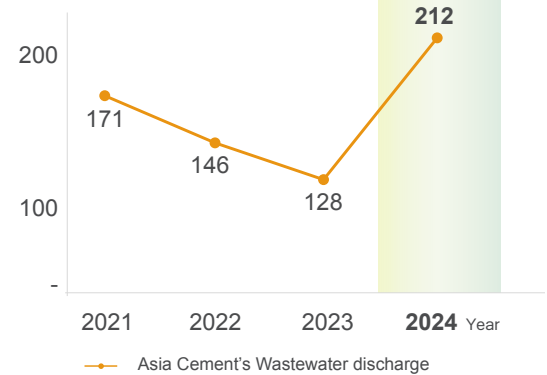


Net Freshwater Consumption of Asia Cement (ktons, ML)



Note Net freshwater consumption = total water withdrawal – total discharge (excluding discharge from municipal water supply).

Wastewater Discharge of Asia Cement (ktons, ML)



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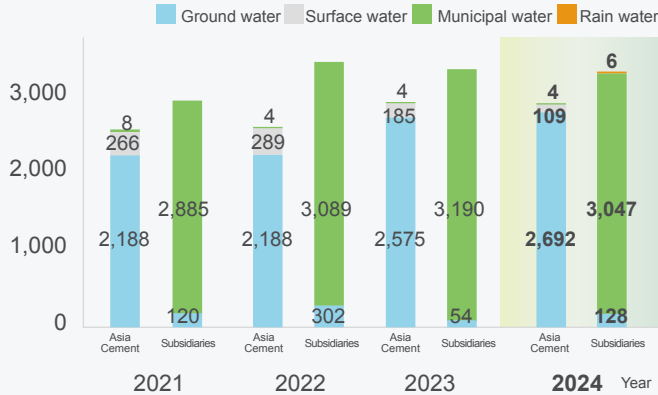
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Asia Cement Water Use Information

Asia Cement primarily withdraws groundwater across its operations, while its subsidiaries mainly rely on municipal tap water. All sources are freshwater (TDS ≤ 1,000 mg/L), and water is primarily used for machinery cooling and operational purposes.

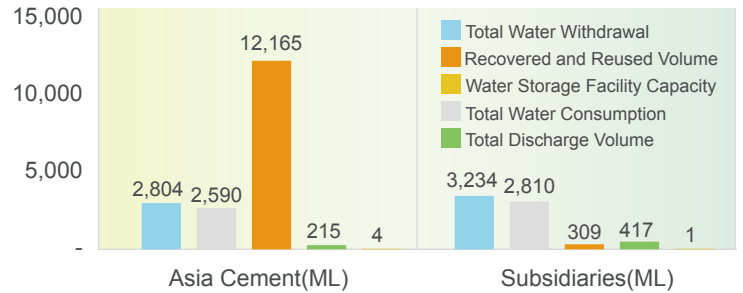
Water Withdrawal by Category (Thousand Metric Tons, ML)



- Note 1. As the Asia Cement headquarters is located in a commercial office building without an independent water meter, the annual water consumption is estimated based on Taipei City's 2023 average domestic water usage of 337 liters per person per day and the total employee working hours.
- Note 2. Since July 2021, Chiahui Power has added and operated its Phase 2 generation units, resulting in a slight increase in water consumption among subsidiaries compared to previous years.

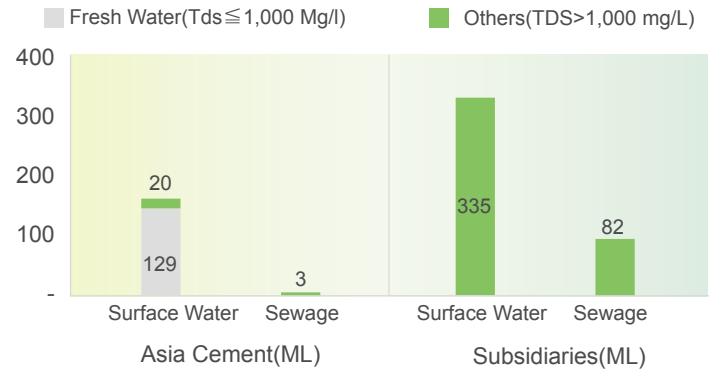
Operating Site	Water Source	Main Water Usage	Receiving Water Body	Effluent Standard
 Headquarters	Tap Water	Domestic use	Sewer system	None (domestic sewage managed by municipal system)
 Hualien Plant	Groundwater	Cooling for mechanical equipment	Stream managed by Hualien County Government (flows into Liwu River)	Article 2 - Industrial Effluent Standards (Cement Industry)
 Hsinchu Plant	Surface Water	Cooling	Stream managed by Hualien County Government (flows into Liwu River)	Article 2 - Industrial Effluent Standards (Cement Industry)
 Chiahui Power	Tap Water	Cooling, Boiler water	Puzi River	Article 2 - Industrial Effluent Standards (Cement Industry)
 Ya Tung Ready-Mixed Concrete	Tap Water, Groundwater	Mixed into products	No discharge / Sewer system	Taichung Industrial Park Discharge Standards (only Taichung plant discharges)
 Yuan Long Stainless Steel	Tap Water	Cooling tower, production process	Sewer system	Kaohsiung Linhai Industrial Zone Sewer Discharge Standards
 Yali Precast	Tap Water	Product cleaning, production	Sewer system	Article 2 - Industrial Effluent Standards (Cement Industry)
 Nanhwa Cement	Tap Water	Cooling	No discharge	No discharge
 Fumin Transportation	Tap Water	Cleaning, domestic use	Sewer system	None (domestic sewage managed by municipal system)

Water use Information in 2024 (thousand tons, ML)



- Note 1. Total water consumption = Total water withdrawal – Total discharge, and includes evaporation and transpiration.
- Note 2. The headquarters of Asia Cement and Fu-Min (Da) Transportation discharge their wastewater directly into the sewage system without individual flow meters. The discharge volume is estimated as 80% of the water withdrawal, based on the coefficient provided in "Estimation of Domestic Wastewater Volume and Pollution Load in Taiwan Area" by the Construction and Planning Agency.

Discharge Volume by Category in 2024 (thousand metric tons, ML)



- Note The effluent discharged from Asia Cement's Hualien Plant is classified as freshwater (TDS ≤ 1,000 mg/L) with a discharge volume of 192 thousand tons (ML); Chiahui Power's effluent is classified as "other water" (TDS > 1,000 mg/L) with a discharge volume of 335 thousand tons (ML). The effluent from other facilities was not tested for classification and is categorized as "other water."

Effluents Discharge Management

Asia Cement Corporation and its subsidiaries do not discharge any substances through effluents at their operational sites that could cause irreversible harm to water bodies, ecosystems, or human health. Effluent discharges are managed in compliance with applicable regulatory discharge standards.

No violations related to effluent discharges occurred in 2024.

2.3

Nature Action
and Biodiversity

Management of Material Topics

Asia Cement Corporation follows the recommendations of the Taskforce on Nature-related Financial Disclosures (TNFD). The Board of Directors has established the Corporate Sustainability Committee to oversee and supervise biodiversity-related developments. Under the General Manager, the Corporate Sustainability Implementation Committee is responsible for assessing biodiversity-related risks and opportunities, planning and executing biodiversity initiatives, and regularly reporting progress to the Corporate Sustainability Committee.

Material Topic Categories

Biodiversity



Asia Cement
Biodiversity Policy

Impacts

The extraction of minerals for the use of cement raw material is more or less causing bare areas on the surface of earth. In order to reduce the impacts of the vibration from the explosion during mining to the nearby residents and the environment, Asia Cement continues to strictly implement the monitoring of mining site safety and the ecological restoration of environment. The Company adopted an explosion control technique with the lowest vibration value worldwide, environmental friendly smart mining technology and the vegetation restoration technology which had been highly recognized by domestic and foreign institutes for years. All efforts are for the purpose of minimizing the impacts from the operation. In the future, in the event that Asia Cement will plan mining operations in other new locations, it will perform the evaluations of biodiversity and environmental impacts before exploring new locations.

Indexes and Targets

● Complying with SDGs and the goal of Taiwan Sustainability Development

15

SDG 15

ON LAND

SDGs15.1 is to ensure the protection, maintenance and enhancement of the sustainable use of terrestrial and inland freshwater ecosystems.

- The corresponding index of SDGs 15.1.1: rate of forest coverage. The area of mining site being extracted has been 100% completed with vegetation restoration. It has been decided that the vegetation restoration each year must be at least 0.85 hectare in order to build forest ecological system to form animal habitat which is beneficial to biodiversity development.
- The corresponding index of SDGs 15.1.3: The percentage of performing biodiversity maintenance and management and monitoring. Asia Cement set the impacted areas to conduct 100% biodiversity maintenance and management and monitoring.

15

SDG 15

ON LAND

SDGs15.2 is to promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forest.

- The corresponding index of SDGs 15.2.1: The progress of realizing the management of sustainable forest.management and monitoring.

gcca

Comforming to Guiding Principle of Mining Site Restoration and Biodiversity Management drafted by Global Cement and Concrete Association (GCCA).

- Corresponding to the goal of 9 sustainable mining site and biodiversity KPIs.

Goal 9

The goal of ex situ biodiversity strengthening measure index.

- Native botanical garden, widely planting diversified tree species.
- Butterfly Park, building the butterfly corridor in Taiwan, diversified butterfly species.
- Stick Insects Park, Restoration of native stick insects.

Evaluation methods

- ① Continue to monitor and analyze the relevant data of the mining mountain, confirm the current status and the report of reaching the targets.
Routinely submit information to the relevant agencies to confirm the status of current implementation.
- ② Continue to trace the status of implementation and the level of reaching the targets through Corporate Sustainability Implementation Committee and its work forces.

Engagement of the stakeholders

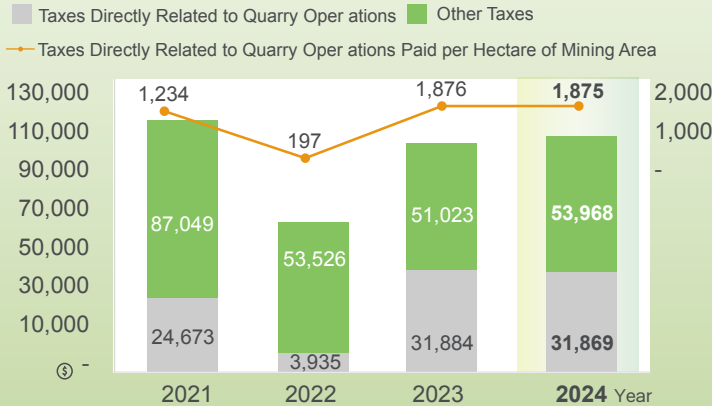
Asia Cement Service Ceneter regularly and irregularly communicates and interacts with the stakeholders based on the stakeholder engagement mechanism and discloses the information in the Service Center, the Sustainability Report, the relevant platform or the website.

💰 The costs invested into the sustainable mining mountain in 2024

- ① Asia Cement Hualien plant had paid taxes with the amount of NT\$0.86 billion in which the direct taxes (land tax, special tax for mining, mining asset royalty and the fee of mining business right) were summed up to NT\$0.31 billion.
- ② Regular monitoring and assessment of blasting vibrations and slope stability amounted to NT\$440,000.
- ③ A total of NT\$6,210,000 was invested into vegetation.

Over the past four years, Asia Cement's average quarry-related tax paid per hectare of extraction area was NT\$12.48 million, while the average monitoring, survey, and greening cost per hectare was NT\$610,000. In 2024, mineral royalties and mining rights fees paid totaled NT\$19.53 million. According to Article 63 of the Mining Act, a certain percentage of mineral royalties will be allocated as feedback funds to local governments by the competent authority.

Taxes Paid by Hualien Plant (NTD 10,000)



Note

The Hualien County Special Landscape Maintenance Tax for Mineral Extraction was levied from August 2020 to July 2021, and collection resumed in January 2023.

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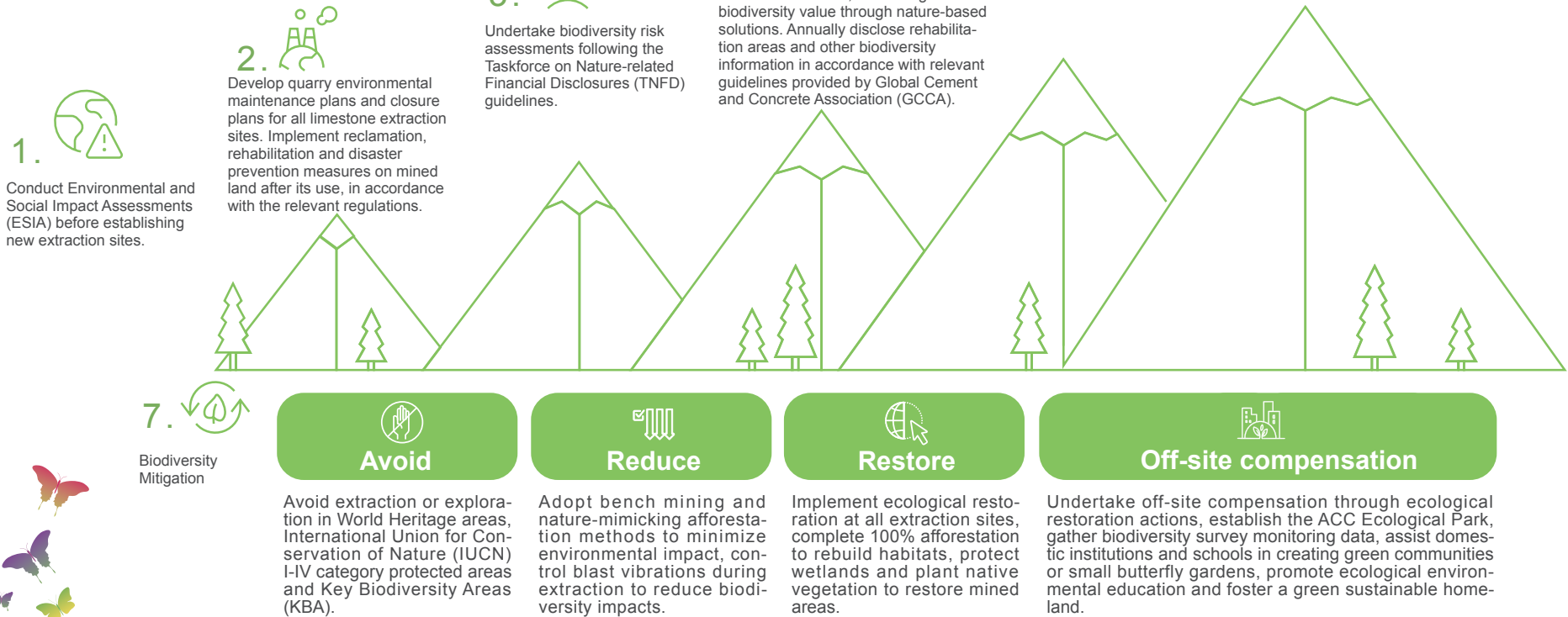
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Asia Cement Biodiversity Policy

Asia Cement's biodiversity policy aims to achieve a Net Positive Impact on biodiversity. The company adopts the principles of “Avoid,” “Reduce,” “Restore,” “Off-site compensation,” and “Monitor” within its sphere of influence. It collaborates with value chain partners to fulfill the following commitments and principles.



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2.3.1 Biodiversity Management Plan

ACC formulates a Biodiversity Management Plan (BMP) to protect and enhance biodiversity value and ecosystem services during and after mining operations. This plan includes biodiversity baseline data, field surveys to establish baselines, setting target indicators, action and implementation plans (such as sustainable mining, nature-based reforestation, habitat restoration, and land reclamation), monitoring and measurement, and executing the budget.

The biodiversity management plan in 2024 covers



Asia Cement Xincheng mountain Quarry and the surrounding Hualien Plant

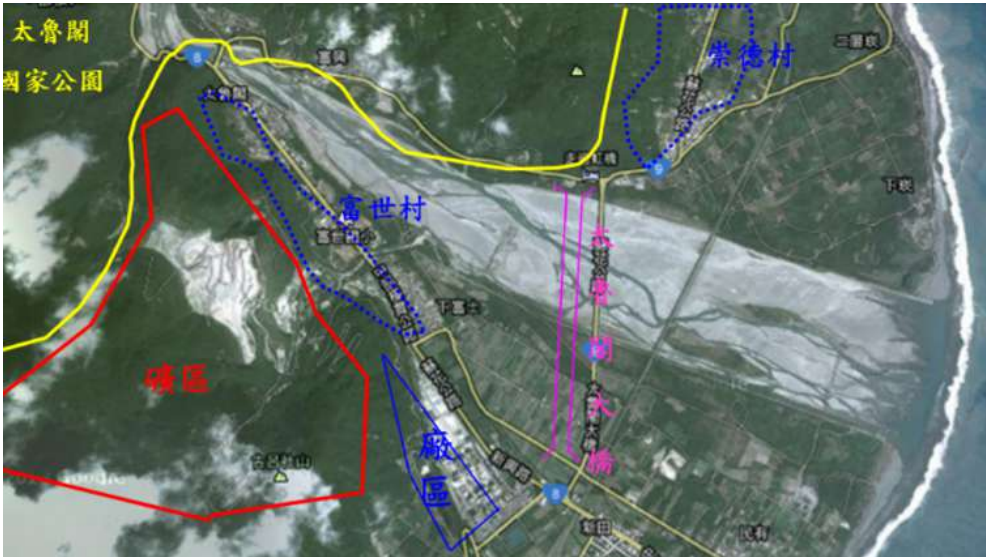


Asia Cement Ecological Park

100% coverage of operational impact points.

The background information of Asia Cement’s Mining Site

Currently, Asia Cement’s only site of operation is Xincheng mountain Quarry. The altitude at the top of Xincheng mountain which is located at the mouth of Taroko Gorge is SL1,440 meters, the starting point of stepping down mining operation at Xincheng mountain Quarry site is at the altitude of SL780 meters. The site is not within the boundary of Taroko National Park.



On-site investigation for the establishment of baseline

Since 1980, ACC has been actively engaged in vegetation restoration efforts in its mining areas, animal and plant biological investigation was conducted in the mining area, it was found that the trees were able to grow up to 4 to 8 meters height five years after planted, tree crowns were well-connected to each other, groundcover plants, shrubs and bushes were all well-bedded, a forest was formed which created the effect of shading. The trees will grow up to 10 meters height after ten years and capable of covering the exposed residual walls caused by excavation. The entire slopes in the area, after going through numerous ordeals from typhoons and earthquakes in the past years, are still very steady, the appearance of forests still very complete. It has been proved that the plant vegetation produced by this method of forestation is capable of enduring the impact from strong wind and stabling slopes, and providing the effect of disaster prevention. In the animal investigation, it was found that wild animal defecations could be found in the mined area where the plant vegetation had been restored for more than five years. It was also found by ultra-red cameras that Formosan serows, muntjacs and wild boars returned back to habitats searching for food; monkeys, flying squirrels, bamboo partridges, birds and snakes moved around forest; crested serpent eagles irregularly patrolled around mountain tops. Starting in April 2021, ACC began conducting biodiversity surveys in the restored areas of Xincheng mountain Quarry. These surveys were conducted monthly to accumulate data and monitor changes in species populations, allowing for the implementation of appropriate measures. If the number of species is stable or continues to grow, it indicates that the habitat environment is good. If the number of species has decreased after long-term observation, it is time to examine whether we have appropriate corresponding policies on environmental habitats. In 2024, 10 ecological surveys were conducted. The results showed a rich diversity of bird and butterfly species and numbers, indicating a stable state of species and numbers over the past three years. Additionally, the survey results for amphibians and mammals further strengthen the evidence that the re-vegetation efforts at the Xincheng mountain Quarry have a positive impact on species diversity and environmental diversity. From this, it can be concluded that ACC’s ecological reforestation method, which created forests with plant diversity, has successfully attracted animals and insects back to their habitats, thereby initially forming a biological chain. In addition, ACC obtained government permission in 2020 to conduct surveys, collection, documentation, and relocation conservation of the Phasmatodea in Hualien County. Every month, surveys for Phasmatodea are conducted in eastern Taiwan, recording valuable ecological information in the area. ACC will continue to conduct surveys and conservation efforts for butterflies and Phasmatodea, investing resources to gradually establish a database of native species in eastern Taiwan. Furthermore, efforts will be made to enrich local ecological education initiatives.

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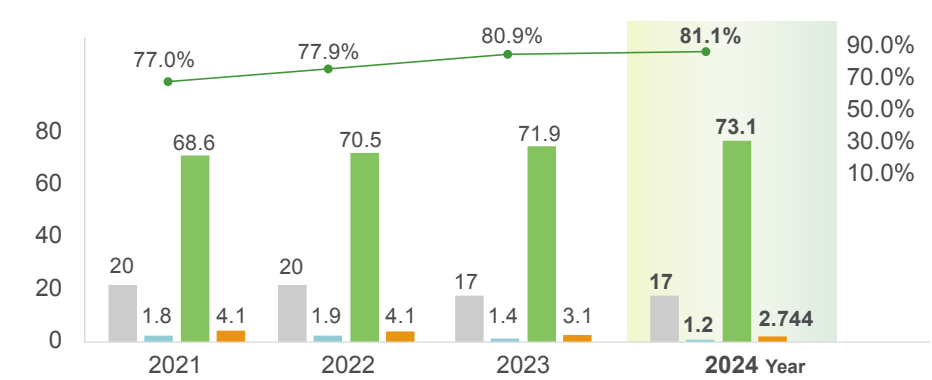


Status of mining and vegetation restoration

Asia Cement's Xincheng mountain Quarry adopts the advanced and environmentally friendly "internal descent mining method", utilizing concave terrain to provide safety buffer zones and reduce visual impact on the surrounding landscape. In 2024 , the mining volume was 3.75million tons, and reclamation and greening were achieved immediately after mining to the final wall. The greening area was adjusted according to the mining progress. About 2,744 native trees were planted in 2024, totaling 73.1 hectares of greening by the end of 2024, accounting for 81.1%.

Status of mining and vegetation restoration

■ Mining operation(hectare) ■ Cumulated greenery area (hectare) ■ Vegetation greenery(hectare)
■ Planting native trees (thousand trees) — % of greenery



Mineral enclosed transport

Since 1978, ACC's Hualien Plant has collaborated with the Japanese company Onoda Co., Ltd., to complete the first set of vertical shaft conveyor system in Taiwan's mining history. In 1989, they constructed the second set of vertical shaft conveyor systems. As the mining elevation decreased, the vertical shafts were discontinued in 2015. Instead, a closed downhill conveyor system was installed, utilizing the elevation difference for transporting ores based on the principle of energy conversion for power generation. The conveyor system's rollers are equipped with automatic lubrication and noise reduction features, effectively reducing noise during transportation and preventing dust dispersion. This approach achieved environmental protection, energy conservation, and effectively preserved the natural ecological landscape.



Transported through closed conveyor



Real-time explosion monitoring is installed in the mining area and residential houses, the parameters of explosion design are adjusted to a level where the vibration is not sensed by people.

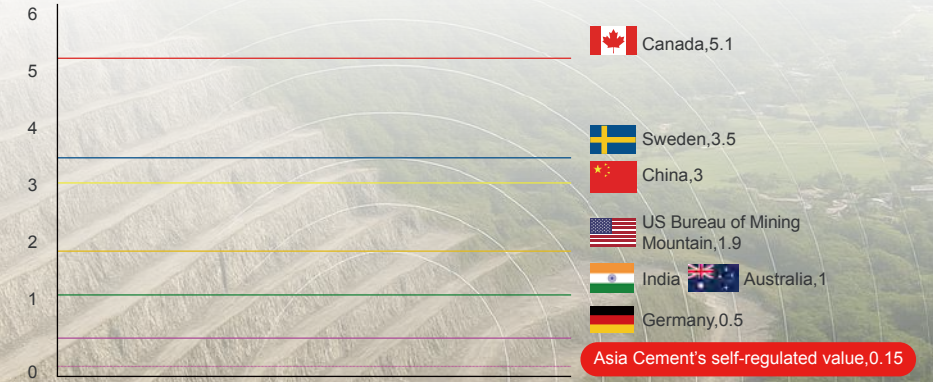


The lowest vibration value of feelingless explosion in the world

ACC pursues non-inductive blasting and collaborates with the Geo-Resources Research Center of National Cheng Kung University to develop a blasting vibration model for the Xincheng mountain Quarry. Using the principle of wave superposition, blast vibration values were simulated in advance to effectively control vibrations, achieving the lowest vibration value globally. ACC also commissioned National Cheng Kung University to conduct blast vibration monitoring. Quarterly reports were provided to the mining authority for review and shared with stakeholders such as residents, demonstrating ACC's commitment to vibration control.

Currently there is not any law in Taiwan to regulate the vibration value from explosion. Asia Cement had adopted a standard twenty years ago which was 10 times more stringent than the US standard (1.9cm/sec) to conduct a self-management. It installed vibration measurement instruments at the residential houses nearby the mining area for 24-hour realtime monitoring and set the self-regulated vibration value control level under 0.15 cm/sec. The explosion parameters were adjusted timely by the realtime measured value, and the methods of using non-electric millisecond delay detonator, segmented explosion and reducing the volume of explosives were adopted for the operation, which ensured that the explosion work did not cause any impact to the living of the tribe, reaching the goal that the residents did not feel any vibration.

Each quarry blasting operation generates multiple real-time vibration measurements to monitor blast performance. When higher-than-usual values are recorded, operational parameters are adjusted accordingly. Asia Cement analyzes thousands of blast vibration measurements annually, with most results falling below 0.1 cm/sec. In 2024, the average monitored vibration velocity was 0.052 cm/sec, which is less than one-third of the Company's self-imposed threshold of 0.15 cm/sec. All recorded values remained below the 0.15 cm/sec limit, demonstrating the Company's commitment to achieving imperceptible vibrations for local residents.



Source of data: Compiled from the test and analysis report of explosion vibration, Water Resources Agency, MOEA

In 2024, the average monitored vibration velocity was 0.052 cm/sec

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2.3.2 Biodiversity Risk Assessment

Asia Cement has conducted a systematic biodiversity risk assessment based on the LEAP approach proposed by the Taskforce on Nature-related Financial Disclosures (TNFD), aiming to understand the interconnection between business operations and natural capital, and to strengthen its capacity in managing dependencies and impacts on natural resources.

Locate

Asia Cement first identified its key operational sites—Hualien Plant, Xincheng mountain Quarry, and the Ecological Park—and analyzed their interactions with the surrounding natural environment. Using Geographic Information Systems (GIS) and external ecological databases, the Company identified whether these sites overlap with critical ecosystems, protected areas, or regions of high biodiversity value, thereby defining the scope and nature of the interface between operations and the natural world.

Evaluate

The Company evaluated its dependency on natural resources at operational sites (such as water resources and land ecosystem services) and assessed both the positive and negative impacts on biodiversity. Asia Cement adopted natural capital and ecosystem services analyses to qualitatively and quantitatively assess its dependencies and impacts, incorporating elements such as climate regulation and flood mitigation.

Assess

After identifying its dependencies and impacts, Asia Cement proceeded to identify nature-related material risks, including physical risks (e.g., habitat loss and species decline) and transition risks (e.g., stricter regulations and increasing societal expectations). It also explored opportunities arising from ecological restoration and green transformation, such as enhanced corporate reputation and emerging market opportunities. In this phase, Asia Cement identified ten nature-related risks and twelve nature-related opportunities.

Prepare

Based on the assessment results, Asia Cement formulated specific response strategies and action plans, including ecological restoration of quarry areas, establishment of Biodiversity Management Plans (BMP), implementation of offsetting measures (e.g., development of an Ecological Park), promotion of citizen science programs and community engagement, and setting Net Positive Impact targets. In accordance with TNFD recommendations, the Company also plans to disclose relevant information to primary users of financial reports and other stakeholders.



Asia Cement
TNFD Report

Biodiversity Exposure & Assessment



Aspects	Number of Sites	Area (hectares)
Total number and area of operational sites	5	446.23
Operational sites where biodiversity impact assessments have been conducted	5	446.23
Number and area of sites assessed as having significant impacts on biodiversity	1	399.49
Number and area of sites with biodiversity management plans among those with significant impact	1	399.49

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Material Biodiversity Risks and Opportunities Identified by Asia Cement

In accordance with the LEAP approach proposed by the Taskforce on Nature-related Financial Disclosures (TNFD), Asia Cement has identified and assessed a range of nature-related risks and opportunities. Through internal cross-departmental discussions and analyses, the company confirmed 10 material nature-related risks and 12 nature-related opportunities. These serve as the basis for forward-looking risk management and resource allocation.

For each identified risk, Asia Cement has developed specific management strategies. Correspondingly, for each opportunity, the company has planned and implemented actionable programs, demonstrating its proactive commitment and responsiveness to nature capital issues. (For details, refer to pages 72–84 of the 2023 Asia Cement TNFD Report.)

Major Risk Indicators of ACC	ACC Risk Aspect	TNFD lists categories of nature-related risks	ACC Development Opportunity Projects	ACC Risk Aspect	TNFD lists categories of nature-related risks	SBTN AR 3T Action framework
1. Difficulty in acquiring raw materials	Operational and economic risks	Technology, market	1. Establishing biodiversity conservation-related facilities	Eco-Environmental Education	Ecosystem protection, restoration and regeneration	Restore & regenerate
2. Shortage of raw coal and rising costs			2. Developing mining area ecosystem restoration and landscape conservation			
3. Increased air pollution emissions during the production process			3. Promoting environmental education and citizen scientists			
4. The impact of alternative materials on product quality and cost increase			4. Establishing biodiversity monitoring survey data and management systems	Environmental risks	Natural-related physical risks Reputation	Avoid
5. ncreased operational impacts after the amendment of the Mining Act			5. Real-time geological environment monitoring of mining areas			
6. The impact of mining area development on landscapes and the environment	Environmental Risks	Natural-related physical risks	6. Implementing water resource management	Reputation and Social Risks	Reputation	Reduce
7. Increased impact of extreme weather events			7. Promoting circular economy and resource management			
8. Impact on market value and brand value due to negative nature-related news	Reputation and Social Risks	Reputation	8. Regulating pollutants and air pollution emissions			
9. Poor community resident satisfaction			9. Develop low-carbon technologies	Risk Response and Cross-sector Collaboration	Reputational capital Capital Flow and Financing, and Market	Transform
10. Strengthened pollution control regulations, increasing operational and equipment costs	Regulatory Risks	Liability	10. Promoting amendments to relevant regulations			
			11. Enhancing resilience to extreme climate events			
			12. Cross-sector Collaboration			

Monitoring and Measuring of Biodiversity

To ensure mine safety and respond to the needs of the local community, Asia Cement has implemented rigorous slope stabilization measures at its Xincheng mountain Quarry using advanced engineering methods. The company also commissions third-party professional organizations, including certified engineers, academic institutions, and agencies recognized by the Ministry of Environment, to carry out various monitoring, investigations, and assessments. These efforts are made to guarantee the safety of the quarry and to protect the lives and property of quarry employees, contractors, and the residents of Fushi Village in Xiulin Township, Hualien County.

Asia Cement is also dedicated to revegetation and soil and water conservation within the quarry area. All works are strictly implemented in accordance with technical specifications for soil and water conservation and mining regulations. Since the commencement of operations in 1978, despite experiencing multiple strong earthquakes and typhoons, the quarry area has never suffered from landslides or debris flows. After major seismic events or heavy rainfall, Asia Cement conducts on-site inspections together with local residents to alleviate concerns.

Debris flow potential stream No. DF004 in Hualien County, originally within the Xincheng mountain Quarry area, has been transformed through excavation and remediation works carried out under the soil and water conservation plan. As a result, the stream channel no longer exists, and the area's risk level was officially downgraded from "Moderate" to "Low" in 2019.

To assess the impact of earthquakes in 2024, Asia Cement has installed rain gauges, groundwater monitoring systems, and two slope monitoring cameras. An automated monitoring platform was developed, supported by monthly drone inspections and manual site checks. In December, the company completed two phases of aerial surveys using LiDAR-equipped drones to generate DSM, DEM, and terrain variation data.

For detailed information on long-term monitoring projects at the quarry, please refer to the Asia Cement Xincheng mountain Quarry Information Disclosure Platform.



For debris flow risk details, refer to the Soil and Water Conservation and Large-Scale Landslide Prevention Information Platform by the Ministry of Agriculture



For quarry information disclosure, visit the Asia Cement Xincheng mountain Quarry Information Platform

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2.3.3 Assessment and Engagement of Biodiversity and Impact to Community

Assessment of biodiversity in newly development location

In terms of the level of engaging biodiversity and the assessment on the potential influence to the biodiversity, currently, Asia Cement’s only operational site is Xincheng mountain Quarry, its total size is 399.4946 hectares. If there is any new development base in the future, we will start developing it only after conducting and passing an environmental and social impact assessment (ESIA).



Asia Cement Service Center providing timely face-to-face communication

For the purpose of rsolving the worries of local community to the safety of Asia Cement mining mountain and fulfilling the care to local residents, Asia Cement officially established a service center near the mining mountain in June of 2018. Hence, residents are not required to go through other people for any doubts or needs, they can directly contact with Asia Cement, timely and conveniently ask any questions relating to the safety of mining mountain. The Center can provide job opportunites, emergency relief, house repairs, subsidies to weddings, funerals, festival activities and electrical bills. The specialists of Asia Cement also make arrangements to visit households, so that the residents who can not conveniently access the service center can timely communicate with and receive services from it for any needs.

Engaging and communicating with the local community nearby the mining mountain

Asia Cement always values the rights and interests of indigenous tribes and proactively communicating and engaging with local communities to strengthening the relationship with them. It has gained a lot of positive responses from the villagers:

Established the “Asia Cement Hsinchengshan Quarry Information Disclosure Website” to ensure full transparency by providing real-time public access to quarry safety updates, monitoring data, drainage system surveillance footage, and issues of concern to local villagers.



Held regular “Quarry Safety” briefings within each neighborhood of Fushi Village to directly communicate with residents about quarry safety and revegetation initiatives. In 2024, a total of 3 sessions were held with 72 participants.



Opened the quarry to public visits to enhance external communication. Local residents and the public were invited to visit the site and participate in on-site inspections to build trust. These visits covered topics such as soil and water conservation, revegetation, and safety measures. In 2024, there were 15 tour groups totaling 355 participants.



Assigned staff to regularly attend village, neighborhood, and tribal meetings, where they reported on quarry safety, disaster preparedness measures, and community benefit programs. They also responded to and followed up on villagers’ concerns.



Established the Asia Cement Service Center in Fushi Village, providing real-time information on quarry operations, electricity subsidies, housing repairs, emergency relief, community services, and 21 benefit-sharing mechanisms. The center also facilitates two-way communication with residents.



Launched official Facebook and LINE group channels (with 304 members as of 2024) to provide timely updates about the quarry and promptly address misinformation, ensuring accurate communication with the public.



Formed the Hsinchengshan Quarry Slope Monitoring Task Force, which convenes regular meetings to present geological safety monitoring results to experts and tribal representatives.

Categories of Participation in Mine Visits and Briefings	Times	People
General Public	2	34
Environmental Education Learners	13	321
Tribal Community Members	3	72
Total	18	427



2024 Earthquake Status and Tribal Engagement

On April 3, 2024, a magnitude 7.2 earthquake struck Hualien, causing severe damage across the region. After the earthquake, ACC invited Village Chief Chang from Fushih Village, Chairman of Alang Bsnan Tribe Council, representative Pai from the Hsiulin Township Office, and residents from beneath the Zhonghushih Mine to visit the Xincheng mountain Quarry for on-site inspection of the mining area, slopes, debris flow detention ponds, and external drainage systems. During the inspection, it was found that the rock walls stabilized after revegetation following mining activities were not affected by the earthquake. However, there was slope instability and vegetation damage at the boundary between the mined and unmined areas. ACC promptly used drones to inspect the slope and implemented disaster prevention measures below the slope. Due to the use of the inward mining method, the mine had wide platforms and ample buffering space, resulting in no damage to personnel or machinery. Operations resumed quickly after the earthquake. Through communication and addressing questions during the inspection, residents gained a better understanding of the safety measures in place at the mine, once again demonstrating the resilience of the mind slopes.



Tribal Representatives Participated in Long-term Slope Monitoring Expert Meetings



Post-Earthquake Disaster Prevention Meeting on Slope Rockfall in Neighborhood 10

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2.3.4 Global Model of Sustainable Mining Mountain

Domestic professional technology lineage

Asia Cement Xincheng mountain Quarry has the best explosion technique in Taiwan. For many years the Company has provided lecturers every year to Geological Survey and Mining Management Agency, MOEA, to train the explosive material control people and explosion specialists in the use, storage, delivery and safety management of explosive material, plus the professional knowledge of explosion construction design and vibration control. The Company also opened Xincheng mountain Quarry as the training site to demonstrate the safety and technique of explosion operation for the reference of the companies in the industry and the explosion specialists.

The explosion technique and the vegetation work done by Asia Cement Xincheng mountain Quarry have been highly recognized by domestic and overseas institutes. For many years it has been a mining area to demonstrate the green vegetation and safety, and being invited many times to share the professional experiences of vegetation and water/soil preservation as the reference for government agencies and companies in the industry.



Hualien County Environmental Protection Bureau conducted Environmental Soil and Water Cadet Training



Site Visit by the Consulting Engineers Association of the Republic of China



Blasting Professional Training by the Central Geological Survey



CommonWealth ESG Corporate Sustainability Award – Model Award in the Environmental Friendliness Category

Sustainable Mine Planning

Asia Cement is committed to sustainable mine planning and future land reuse. Upon completion of mining activities, approximately 20 hectares of flat land will be created for secondary land use. Asia Cement pledges to engage with the government and local Indigenous communities at least four years prior to mine closure to jointly develop a mine transition and land reuse plan, ensuring residential safety and sustainable development for the surrounding communities.

Sustainable Mining Mountain Of Model Cases At Domestic And Foreign Over The Years



International Cement Review



2024

The New Circular Economy and Biodiversity Restoration Initiative has actively promoted circular economy and biodiversity with remarkable results.

2023



Global Views Magazine

Received Global Views ESG Corporate Sustainability Award - Model Award in the Environmental Friendliness category

International Cement Review



2022

Published the third version of "Cement Plant Environmental Handbook" in which Asia Cement Hualien Plant Xincheng mountain Quarry was listed as the best model of practices in cement industry on mining site operation and eco-system.*

Mining Journal

2) Installed blast vibration 24-hour auto-monitoring and measuring instrument in the mining site since 2015 to timely adjust blast parameters through the feedback analysis of vibration value, a special blast design to maintain and control the annual average vibration value below 0.5 mm/sec to satisfy the demand of nearby residents to blast vibration. The result was published on Mining Journal "Constructing the table of vibration grades which is applicable to mining blast", Mining and Metallurgical, Issue 2, Volume 66.

Taiwan Mining Industry Journal

Set the optimized electric detonator short delay blasting to conduct blast—taking Hsinchensheng Mining Site as an example, Taiwan Mining Industry, Issue 1, Vol. 74.

2021



Hualien County government

Driving multifaceted environmental education including the topics of vegetation restoration greenery of mining mountain, water and soil conservation, net-zero carbon emission in the plant facility, circular economy, environmental products, the plants in the park, butterflies, stick insects for biodiversity and received the recognition of the Excellence Award of Hualien County Private Business Sector, the 8th National Environmental Education Award.

2020



Geological Survey and Mining Management Agency, MOEA

The Geological Survey and Mining Management Agency invited ACC Hualien Plant to sign the Memorandum of Understanding on Establishing Environmental Education Partnership.

Mining Association of Taiwan, ROC

Keynote speech "Introduction of Asia Cement Xincheng mountain Green Mining Mountain" Asia Cement Xincheng mountain Green Mining Mountain, Taiwan Mining Industry, Vol. 72, 3rd Issue, P. 3-15.

* Note M. Burbidge, T.P. Chang, J.Q. Li (2022) Quarry rehabilitation at Asia Cement's Hualien plant: harnessing nature-based solutions for biodiversity and landscape regeneration. International Cement Review, third edition, Cement Plant Environmental Handbook.

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CHAPTER 3

Robust Governance Drives Sustainable Competitiveness

Management of Material Topics

To realize corporate sustainability and promote the sustainable development of economic, social, and environmental ecosystems, Asia Cement has established its Corporate Sustainability Policy with reference to the "Corporate Social Responsibility Best Practice Principles for TWSE/TPEX Listed Companies."

Material Topics

Climate adaptation and resilience/Economic impacts/Customer Relations/Risk & Crisis Management/Supply Chain Management



Risk Management Policy and Procedures



Asia Cement Corporation Sustainability Development Policy

Impact

Asia Cement mitigates the potential negative impacts of these issues by establishing a sound corporate governance framework, comprehensive risk management, and supply chain management systems.

The Company has developed a holistic low-carbon sustainable business model, advancing low-carbon manufacturing processes and circular economy initiatives. By delivering high-quality products to its customers and consistently generating strong economic performance, Asia Cement maintains a high dividend payout ratio under a profit-sharing approach, ensuring that its earnings are distributed to benefit a wide range of investors.

Taking Action

- Excellent economic performance is achieved with sound corporate governance and robust risk and opportunity management, as well as the implementation of a circular economy and the promotion of low-carbon sustainable products.
- We are dedicated to the improvement of resource efficiency as the core of the business strategy. By effectively promoting the sustainable and renewable raw material and fuel reuse, we transform the plight of government and industrial waste disposal into effective resources for the cement production process, and create new value for the cement industry.

Practical actions and initiatives

- ① Continue to develop sustainable and innovative products to gain dual benefits for economy and environment.
- ② Integrate upstream and downstream value chains to bring about the comprehensive performance of organizational economy.
- ③ Strive for circular economy to reduce the consumption of resources and the emission of GHG.

Commitment

- ① Asia Cement implements corporate governance; with its prime and innovative products, it also continues to profit and share such profits on the condition of fulfillment of environmental sustainability and social inclusiveness, thus creating sustainable commercial value.
- ② Execute Climate Change Adaptation and Mitigation Program each year, participate Carbon Disclosure Project (CDP).
- ③ Participate Science Based Targets initiative (SBTi) for carbon reduction and drive the reduction scientifically.
- ④ Drive net-zero carbon emission from cement and concrete by 2050.
- ⑤ Implement TCFD.
- ⑥ Establish internal carbon pricing management mechanism.
- ⑦ Participate in ESG rating including DJSI and MSCI, fulfill ESG sustainable development.

Management Systems or Procedures

- ① Asia Cement ensures the implementation of corporate sustainability through a comprehensive management system. Relevant policies and frameworks are detailed in each corresponding section.
- ② The Company has adopted the ISO 27001 Information Security Management System to control and mitigate information security risks.

Evaluation Methods

- Continue to trace the status of implementation and the reach of targets through Corporate Sustainability Promotion Committee and its implementation teams.

Stakeholder Engagement

- Regularly or irregularly carry out communications and interactions in accordance with stakeholders' engagement mechanism and disclose the information in the Sustainability Report, relevant platforms or website.



Featured in S&P Global Sustainability Yearbook 2025

Asia Cement was selected as a member of S&P Global Sustainability Yearbook 2025. Not only was **ACC the only company in Taiwan's cement industry to be included in the S&P Global Sustainability Yearbook 2025**, the Company's score jumped significantly, the highest in the building materials category in Taiwan.



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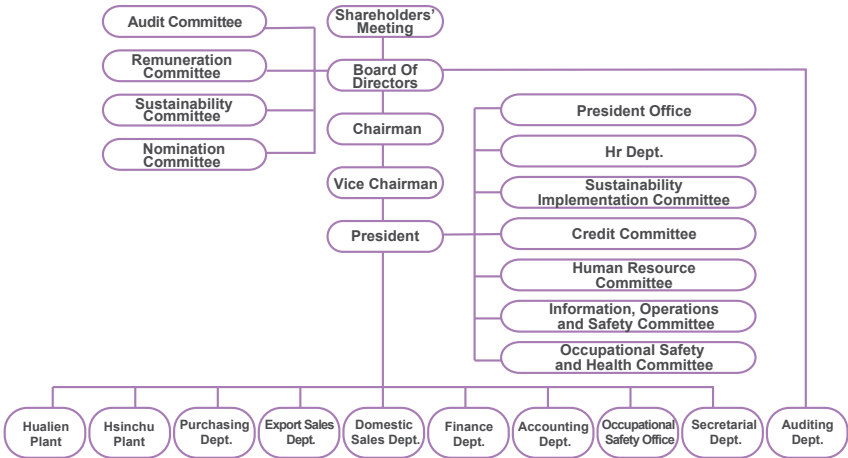
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3.1 Corporate Governance Overview

The Board of Directors is the highest governance body and the center of major business decisions at Asia Cement. According to the "Election Rules for Directors and Supervisors," the company adopts a cumulative voting system to protect shareholder rights. The Board of Directors faithfully executes business and fulfills the duty of care of a good manager, exercising its powers with a high degree of self-discipline and prudence. It guides the company's strategy, supervises the management, and is accountable to the company and its shareholders. The company's governance system and arrangements ensure that the Board of Directors exercises its powers in accordance with laws, the company's articles of association, and shareholder meeting resolutions.

The management organizational structure



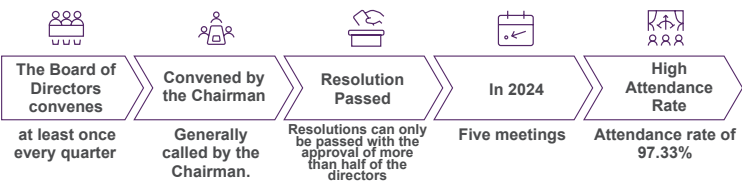
Board Composition and Operations

The Board of Directors convenes at least once every quarter, generally called by the Chairman. Unless otherwise provided by law, Board resolutions require a majority of directors to be present and the approval of more than half of those present. In 2024, the Board held a total of five meetings, with an attendance rate of 97.33%.

The Board's primary responsibilities include reviewing the company's business plans, annual and semi-annual financial reports, budgets and final accounts, appointment and dismissal of managers, approval of significant credit facilities and business matters, among others. In 2024, the Board discussed 16 related topics, such as environmental protection, occupational safety and health, overall operations, audit activities, and responses to the FSC's sustainability development roadmap.The company's Articles of Incorporation stipulate that the election of directors adopts a cumulative voting system and a candidate nomination system. In accordance with regulations, the Board pre-reviews the qualifications of candidates nominated by shareholders or the Board itself and provides the results to shareholders to elect suitable directors.The current term of the Board runs from June 23, 2023, to June 22, 2026. Asia Cement adopts a single-tier Board structure with 15 members, comprising 3 executive directors, 7 non-executive directors, and 5 independent directors, including 2 female directors. All members are over the age of 50. This diverse governance structure enhances the quality of decision-making and supervisory functions. For basic information on Board members, their professional qualifications, independence, and ESG-related training, please refer to the company's annual report.

Overall Board Diversity Competencies											
Name	Gender	Position	Age	Also Employee	Tenure (Years)	Risk Management	Operational Judgment	Business Management	Finance & Accounting	Legal & Commerce	GICS Level 1
Douglas Tong Hsu	Male	Chairman	70+	49							Materials, Consumer Discretionary, Energy, Health Care, Financials, Communication Services
Johnny Shih	Male	Non-Exec Director	70+	40							Materials, Consumer Discretionary
C.V. Chen	Male	Non-Exec Director	70+	37							-
Kun Yen Lee	Male	Exec Director	70+	19							Materials
Peter Hsu	Male	Non-Exec Director	70+	22							Materials, Communication Services
Chen Kun Chang	Male	Exec Director	70+	13							Materials
Ruey Long Chen	Male	Non-Exec Director	70+	13							Industrials, Energy
Champion Lee	Male	Non-Exec Director	70+	22							Materials
Kwan-Tao Li	Male	Non-Exec Director	70+	22							-
Doris Wu	Female	Exec Director	<60	1							Energy, Materials, Communication Services, Financials
Chi Schive	Male	Independent Director	70+	10							Financials
Gordon S. Chen	Male	Independent Director	60-69	10							Financials
Yun-Pen Chu	Male	Independent Director	60-69	4							Information Technology, Financials
Chang-Pang Chang	Male	Independent Director	70+	1							Financials
Flora Chia-I Chang	Female	Independent Director	60-69	1							-
Average board tenure				17.6							

Note Relevant professional expertise.



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Board Oversight of Sustainability Initiatives

In 2024, the Board of Directors oversaw 12 sustainability topics, covering areas such as greenhouse gas management, occupational safety and environmental management, corporate governance, risk management, ethical business practices, and sustainable development. The Board actively fulfilled its oversight responsibilities to ensure the advancement of the company’s sustainability objectives and the effective implementation of governance mechanisms.

Type	Sustainability Topic	Meeting Date(s)
Greenhouse Gas Management	In response to FSC’s “Roadmap for Sustainable Development of Listed Companies,” planned GHG inventory and verification schedule	3/5、5/9、8/8、11/8
Occupational Safety and Environmental Management	Occupational safety, health, and environmental report	3/5、5/9、8/8、11/8
Sustainability Development	Sustainability promotion and performance report	5/9
	Publication of the Sustainability Report	8/8
	Corporate sustainability targets and ESG progress for 2024	11/8
	Revision of Corporate Sustainability Policy	11/8
	Establishment of procedures for preparation and assurance of the Sustainability Report	11/8
Corporate Governance	Performance evaluation of the Board and functional committees	5/9
	ISO 37001 Anti-bribery Management System audit report	11/8
Risk Management	Implementation of risk management policies and procedures	11/8
Ethical Business	Promotion and implementation of ethical business practices	11/8

Institutionalizing the Link Between Directors’ Remuneration and Sustainability Performance

Asia Cement’s directors’ and supervisors’ remuneration is explicitly defined in the “Board Performance Evaluation Guidelines,” taking into account their level of participation in company operations and performance assessments. The remuneration of directors and managers is linked to sustainability performance. Relevant remuneration policies are disclosed in the company’s annual report. Remuneration for directors is only allocated under profitable conditions, with a cap of 2.5%. In 2024, the actual allocation rate was 1.019%.

Continuing Education for Directors

To enhance directors’ ESG expertise, Asia Cement has developed continuing education programs for directors. In 2024, the total training hours reached 271.5 hours, averaging 18.1 hours per director, significantly exceeding the requirements set by the competent authority.

Board Performance Evaluation

To enhance the effectiveness of the Board of Directors, establish performance goals, and improve operational efficiency, Asia Cement has adopted the “Board Performance Evaluation Measures.” According to these measures, the Company is required to conduct an internal performance evaluation of the Board annually, and to engage an external independent professional organization or team of scholars and experts to conduct an evaluation at least once every three years.

In 2024, the internal board performance evaluation covered the overall Board of Directors, individual board members, and functional committees. The evaluation employed a five-point scoring scale (with 5 being the highest). The scores ranged from 4.51 to 4.89, indicating performance levels from “Good” to “Excellent.”

In early 2025, the Company commissioned the Taiwan Cheng Cheng Governance Association to conduct an external evaluation of board performance. The evaluation covered the following dimensions and indicators: board professional competence, decision-making effectiveness, attention to and oversight of internal controls, and the board’s commitment to sustainable development. Assessment methods included review of relevant documentation, questionnaires, and interviews with directors. The results were:professional competencies 4.89, decision-making effectiveness 4.83, internal controls 4.84, and sustainability development 4.86. The overall score was 4.85. The next evaluation period is scheduled for 2028.

External Evaluation of Board Performance



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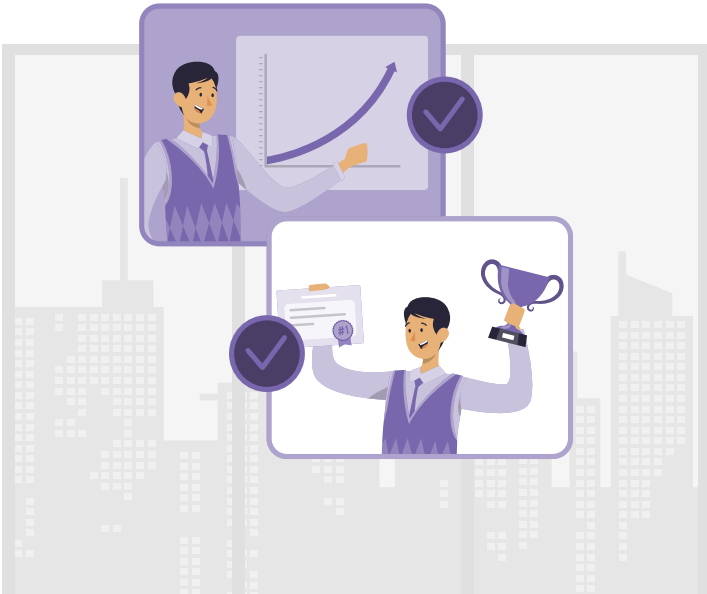
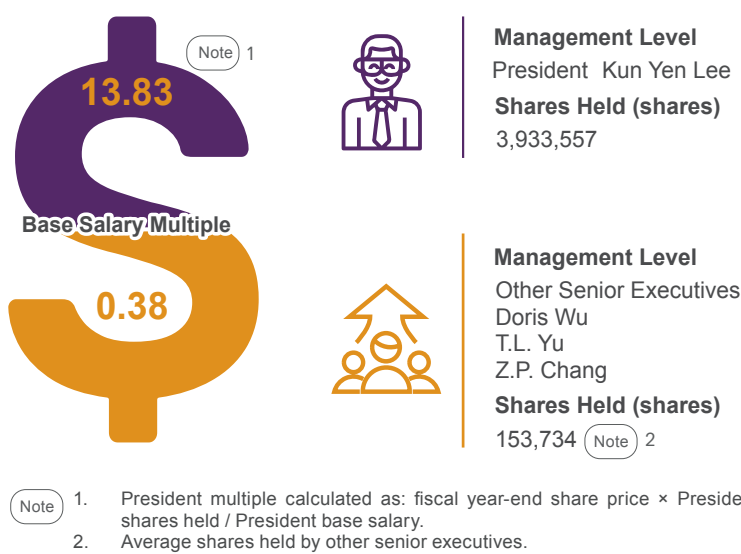
Functional Committees

To enhance its corporate governance framework and implement sustainable business operations, Asia Cement has established functional committees under the Board of Directors. These include the Audit Committee, the Compensation Committee, the Nomination Committee, and the Corporate Sustainability Committee. Committee members are appointed by the Board (except for the Audit Committee, whose members are all independent directors as required by law) to assist the Board in fulfilling its oversight responsibilities. Each committee designates a convener and holds meetings regularly. The current term for these functional committees is from 2023 to 2026. The implementation status for 2024 is as follows.

Committee	Responsibilities	Members	2024 Meeting Status
Audit Committee	Oversees the fair presentation of the company's financial statements, appointment/dismissal and independence/performance of certified public accountants, effective implementation of the company's internal controls, compliance with relevant laws and regulations, and management of existing or potential company risks.	5 members (all independent directors) Convener: Yun-Pen Chu, Independent Director	Held 5 times (quarterly) Attendance Rate96%
Compensation Committee	Executes performance evaluations and compensation policies; establishes and reviews policies, systems, standards, and structures for the performance evaluation and remuneration of directors and managers.	3 members Convener: Chi Schive, Independent Director	Held 2 times (semi-annually) Attendance Rate100%
Nomination Committee	Reviews the structure, size, and composition of the Board; identifies qualified candidates for Board membership; assesses the independence of independent directors; and makes recommendations to the Board on matters related to the appointment or reappointment of directors and succession planning.	3 members Convener: Chi Schive, Independent Director	Held 2 times (semi-annually) Attendance Rate100%
Corporate Sustainability Committee	Serves as the decision-making center for driving sustainable governance; responsible for overseeing the implementation of corporate sustainability policies, systems, or related management guidelines, and reports progress to the Board semi-annually.	5 members Convener: Gordon S. Chen, Independent Director	Held 2 times (semi-annually) Attendance Rate100%

Management Ownership

Asia Cement values corporate governance and is committed to ensuring that its operations align with the best interests of all shareholders. The President and other senior executives hold company shares, creating a strong linkage between equity ownership and the company's performance. This demonstrates their commitment to the long-term development of the company and strengthens the alignment of interests between management and shareholders.



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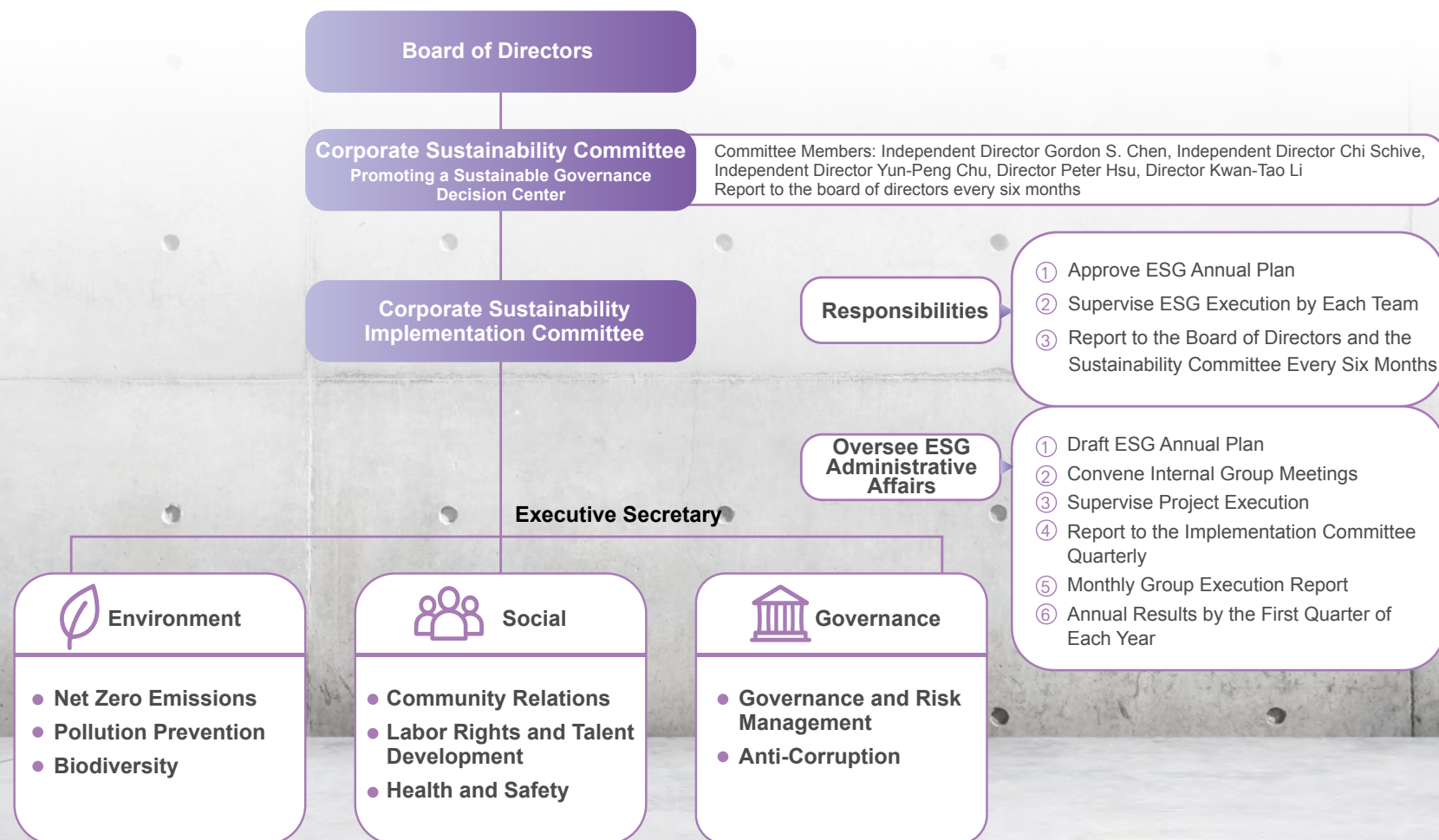
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3.2 Sustainability Governance Structure

Since 2013, the Company has published Corporate Social Responsibility (CSR) reports. In 2021, beyond establishing a Corporate Sustainability Committee under the Board, the Company also set up an internal Corporate Sustainability Implementation Committee as the dedicated unit for driving sustainability initiatives. The committee is chaired by the President and is responsible for advancing the Company's sustainability initiatives across ACC's operations in Taiwan and its subsidiaries in Mainland China.

Under the Corporate Sustainability Implementation Committee, there are eight ESG task forces covering the three dimensions of Environment (E), Social (S), and Governance (G). These task forces include: Net Zero Emissions, Pollution Prevention, Biodiversity, Health and Safety, Community Relations, Labor Rights and Talent Development, Corporate Governance, Anti-Corruption.

The ESG task forces are responsible for planning and implementing sustainability projects, and submit quarterly progress reports to the Corporate Sustainability Implementation Committee. The committee's executive secretary consolidates the Company's overall sustainability operations and performance, reporting to the Board of Directors and the Corporate Sustainability Committee, thereby ensuring that all directors and committee members have full visibility into the progress and management of sustainability topics.



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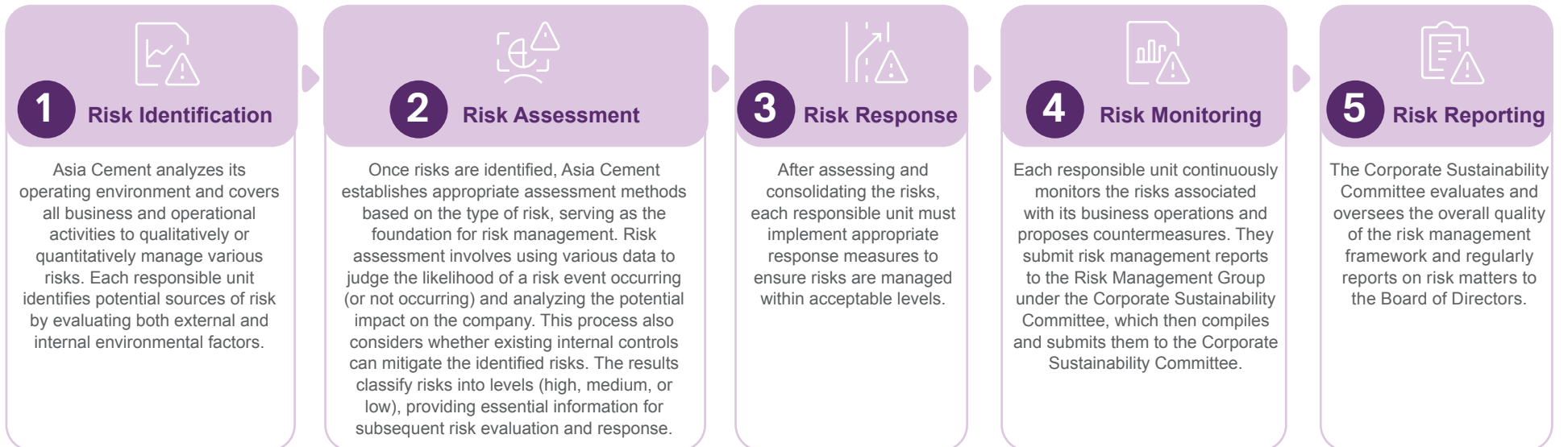
3.3 Risk Management Framework

Risk Management Framework

To implement effective enterprise risk management, Asia Cement has established the Risk Management Policies and Procedures, which were approved by the Board of Directors on November 12, 2020. These serve as guiding principles for all business units. The policy covers management objectives, the organizational structure and responsibilities of risk management, risk management processes, execution, and risk information disclosure, aiming to effectively identify, measure, monitor, and control various risks to keep them within acceptable levels.

Asia Cement carries out comprehensive risk management across the following categories: Operational Risks (including climate change and water risks), Financial Risks, Hazard Risks, Information Security Risks, Compliance Risks, and Other Risks.The Company has also built a multi-tiered risk management structure, which involves all business units, senior management, the Governance and Risk Management Group, the Board of Directors, and the Internal Audit Department. This layered approach ensures flexibility in risk control, oversight, and response, enabling the Company to effectively manage risks in a rapidly changing business environment and achieve its strategic objectives.

Risk Management Procedures



Key Responsibilities of the Risk Management Organization

Organization	Responsibilities
Board of Directors	The Board serves as the highest decision-making body for risk management and bears ultimate responsibility for Asia Cement's overall risk.
Corporate Sustainability Committee (3rd Line)	Assists the Board in fulfilling its risk management responsibilities, including reviewing Asia Cement's risk management policies and examining management reports on significant risk issues.
Governance and Risk Management Group under the Corporate Sustainability Committee (2nd Line)	Responsible for company-wide risk management matters, including integrating and coordinating cross-departmental risk management topics, promoting and communicating key risk management issues, executing and tracking the implementation of risk management resolutions entrusted by the Board or the Corporate Sustainability Committee, and providing risk management reports.
Responsible Units (1st Line)	Department heads hold risk management responsibilities,overseeing and controlling related risks within their units to ensure comprehensive and effective risk control.

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Risk identification and response measures

The risk management process includes risk identification, assessment, response, monitoring, and reporting. Risk categories cover operational, financial, hazard, information security, compliance, and climate & nature-related risks. Asia Cement conducts regular annual risk reviews. In 2024, all risk identification and assessment results were consolidated, priority risk issues were selected, and reviewed by the Corporate Sustainability Implementation Committee with the following execution content.

Risk Category	Priority Risk Issue	Risk Description	Mitigation Measures
Hazard Risks	Biological Hazard Risk	Epidemics or infectious diseases may affect employee health and safety	Maintain a health information platform, promote vaccination (COVID-19 and influenza), regularly collect and communicate prevention updates, and quickly adapt response platforms.
	Occupational Accident Risk	Improper operations may lead to injuries, impacting health & production	Strengthen safety management and self-inspections, implement training & certification, track zero-accident hours, and raise audit & prevention awareness.
Information Security Risks	Information Security Management Risk	Company data, if improperly managed, may leak or be hacked	Appoint a CISO and security team to oversee matters, continuously introduce systems & controls, and strengthen governance structures and staff accountability.
	Cyber Attack Risk	Company systems may face hacking or malicious attacks	Use Security Scorecard to monitor cyber threats, continually assess own security posture, maintaining an above-industry security level.
Operational Risks	Production Interruption Risk	Abnormalities in key systems may affect deliveries	Continually upgrade mill, preheater and circulation fans to enhance production reliability.
	Carbon Fee & GHG Emission Risk	Carbon pricing systems may increase operating costs	Establish a Net Zero Task Force, regularly review reduction progress, and achieve SBT targets ahead of schedule.
	Water Resource Risk	Poor water efficiency may hinder ESG targets	Implement ISO 46001 system, manage major water-using equipment, and improve pipelines.
Financial Risks	Interest Rate Risk	Rate fluctuations may raise financing costs	Finance department monitors central bank policies, issues fixed-rate bonds at low rates, and flexibly uses short-term notes during high rates to manage costs.
	Foreign Exchange Risk	FX changes may impact imports & export revenues	Apply natural hedging for FX income & expenses, flexibly adjust positions based on markets, balancing interest & FX to reduce risks.
Compliance Risks	Financial Regulatory Compliance Risk	Failure to file under accounting & tax laws could harm compliance & reputation	File financials & taxes on time per IFRS & authority rules; Hualien plant & subsidiaries follow internal controls & SOPs.
	Air Pollution Regulation Risk	Non-compliance with new air standards may lead to penalties or limits	Hualien plant adds SNCR equipment, upgrades three process dust collectors, and strengthens PLC & alarm systems for real-time emission control.

Risk Management Process Audit

In accordance with the “Regulations Governing Establishment of Internal Control Systems by Public Companies” issued by the Financial Supervisory Commission, Asia Cement has established an Audit Office under the Board of Directors. The audit supervisor is appointed by the Board and organizes audit teams based on business scope and the annual audit plan, which is submitted to the Board for approval. The Audit Office performs annual internal audits of the company’s risk management processes as required, continually strengthening internal controls and the risk management mechanism.

Sensitivity Analysis and Stress Testing

Asia Cement conducts sensitivity analyses and stress tests on operational risks (such as carbon fees, GHG emission risks, and water resource risks) and financial risks. Responsible units are tasked with identifying and analyzing potential threats and vulnerabilities. They regularly perform sensitivity analyses or stress tests for different risk areas, implement control measures, and continuously monitor and improve to ensure effective risk management.

In place to promote an effective risk culture

A sound risk culture helps integrate internal risk management processes, systems, and employees’ risk awareness. Asia Cement is committed to enhancing employees’ understanding and response capabilities regarding risk issues. In 2024, the company organized several key training sessions, including specialized internal courses on “ESG Risk Management and Financial Impact Disclosure” and a course for non-executive directors on “How Boards Oversee Corporate Risk Management and Crisis Handling,” systematically advancing the implementation and dissemination of risk management knowledge. More details on training and continuing education can be found in the Board of Directors and managerial training section of the Company’s annual report.



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Significant Emerging Risks

Risk CategoryTechnical



Adverse outcomes of AI technologies

Risk Description

With the widespread application of AI technologies in corporate operations, potential risks are increasingly emerging, mainly including:

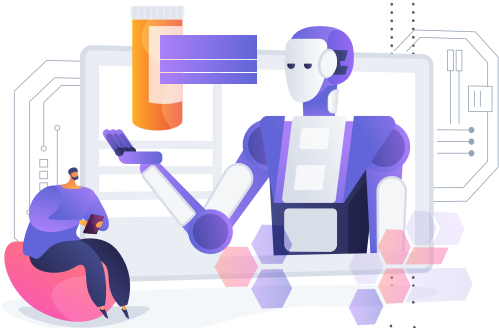
- ① Algorithm bias risk: data or model parameters used to train AI may contain hidden biases;
- ② Black-box decision risk: lack of transparency and interpretability in AI operations;
- ③ Technical control failure risk: failure of control mechanisms causing AI behavior to deviate from design expectations.

Potential Impact Analysis

- Algorithm bias risk: may lead to AI systems producing inaccurate, discriminatory, or impractical decisions, affecting company reputation and operational judgment.
- Black-box decision risk: lack of interpretability makes it difficult to trace and evaluate the decision process, hindering risk identification and quick correction, increasing compliance and social controversy risks.

Mitigating actions

- Establish an AI governance framework to ensure data privacy, algorithm fairness, and ethical standards.
- Promote AI system interpretability design to enhance decision transparency and accountability.
- Regularly train employees on AI literacy to improve organizational application and identification capabilities.
- Conduct professional risk assessments on application scenarios to select appropriate technical architectures and model scales, ensuring AI output stability and legal compliance.



Cyber espionage and warfare

Risk Description

- APIs without encryption or proper authorization controls may lead to key leaks and unauthorized access.
- Vulnerabilities in AI platforms may allow attackers to invade systems and steal information.

Potential Impact Analysis

- If keys are obtained by third parties, it could lead to misuse of corporate services, data theft, and business interruption risks.
- Attackers may access internal sensitive data, causing major information security incidents, financial losses, or a crisis of commercial trust.

Mitigating actions

- Implement HTTPS/TLS encrypted transmission to prevent man-in-the-middle attacks; store keys in secure environment variables and rotate them regularly; enforce API rate limiting to reduce brute force risks, and strengthen user authorization and authentication controls.
- Regularly conduct AI platform security audits and monitor all APIs and data channels; enhance defenses against attacks such as SQL injection; servers should be routinely updated with operating system patches and installed with security tools such as firewalls and intrusion prevention systems (IPS) like SEP to reduce overall security vulnerabilities.



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Participating Associations

In addition to operating in its core cement industry, Asia Cement actively participates in various associations and organizations in diverse ways, fostering close connections and collaboration with all sectors of society to promote sustainable development.

Entity	Association	Role
	Global Cement and Concrete Association (GCCA)	Member
	World Cement Association	Member
	Chinese National Association of Industry and Commerce	Executive Director / Member
	Chinese National Federation of Industries	Senior Advisor / Supervisor
	Taiwan Cement Manufacturers' Association	Executive Director / Executive Supervisor / Director / Member
	Taiwan Cement Union Association	Member
	Taiwan Marble and Stone Mining Association	Executive Director / Director / Member
	Chinese Institute of Mining and Metallurgical Engineers	Committee Member
	Taiwan Concrete Institute	Director / Member
	Center for Corporate Sustainability	Director / Member
	Taiwan Net Zero Emissions Association	Executive Director / Supervisor / Member
	Taiwan Carbon Capture Storage and Utilization Association	Director / Member
	Taiwan Circular Economy Association	Director / Member
	Taiwan Ready-Mixed Concrete Industry Association	Executive Director / Member
	Taiwan Concrete Institute	Chairman / Member
	Taiwan Sustainable Green Building Alliance	Director / Member
	Taiwan Construction Safety Association	Director / Member
 	ROC National Real Estate Alliance	Deputy Chief Industry Consultant
	Taiwan Steel Industry Association	Supervisor
	Taiwan Cogeneration Association	Director
	Taiwan Power Companies Association	Director

In 2024, Asia Cement paid a total of NT\$12.67 million in annual membership fees and contributed an additional NT\$1.22 million in sponsorship expenses.

Donations and Other Expenditures	NT\$10,000			
	2021	2022	2023	2024
Lobbying, interest representation or similar	0	0	0	0
Local, regional or national political campaigns / organizations / candidates	0	0	0	0
Trade associations or tax-exempt groups (e.g. think tanks)	1,019	1,249	1,194	1,267
Other (e.g. spending related to ballot measures or referendums)	114	105	99	122

In 2024, Asia Cement's largest contributions and expenditures to industry associations were primarily aimed at advancing climate strategies and achieving net-zero emissions objectives.

Association	Related Topic	2024 Contributions & Expenditures
Global Cement and Concrete Association (GCCA)	Climate Strategy	TWD 6.55 million
Taiwan Cement Manufacturers' Association	Climate Strategy	TWD 3.23 million
World Cement Association (WCA)	Net-Zero Emissions	TWD 1.27 million

Trade Associations-Climate Alignment

To fulfill the climate commitments under the Paris Agreement, Asia Cement regularly reviews its key industry associations to assess the alignment of their policy positions with the company's climate goals. This review is conducted based on sustainability principles related to climate and energy policies, and also covers engagement with organizations whose positions are not yet fully aligned. Through active participation and communication, Asia Cement leverages its corporate influence to encourage associations to strengthen their climate stance and actions. For more details, please refer to the [Asia Cement 2025 Climate Advocacy and Association Review Report](#).



Anti-Competitive Practices and Management Approach



嘉惠電力
CHIAHUI POWER



Ya Tung Ready-Mixed Concrete

Site

Anti-Competitive Behavior and Handling Status

In 2024, the scope of Asia Cement's anti-competitive issues involved Chiahui Power and Ya Tung Ready-Mixed Concrete. The company manages these matters strictly in accordance with applicable regulations, with oversight and implementation by its Legal Department.

In 2013, the Fair Trade Commission determined that Chiahui Power and eight other independent power producers violated the Fair Trade Act. After filing appeals and administrative litigation, on January 10, 2024, the Supreme Administrative Court ruled that the investigation into the concerted action agreement would continue. Regarding fines, four mediation meetings were held in 2024, and the mediation process is still ongoing.

In April 2019, the Fair Trade Commission ruled that Ya Tung Ready-Mixed Concrete and four other ready-mixed concrete companies violated the Fair Trade Act. The first-instance judgment found no concerted action and revoked the decision. The Fair Trade Commission appealed to the Supreme Administrative Court, which remanded the case. It is currently under retrial at the Taipei High Administrative Court.

In February 2023, the Fair Trade Commission ruled that Ya Tung Ready-Mixed Concrete and 17 other ready-mixed concrete companies in the Taoyuan area violated the Fair Trade Act and imposed fines. Ya Tung has filed an administrative lawsuit through relief channels, and the Taipei High Administrative Court is currently hearing the case while exploring the willingness of both parties to mediate.

(Notes) In 2023, an anti-competitive case resulted in a penalty of NT\$30 million imposed on Ya Tung Ready-Mixed Concrete.

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3.4 Climate Risks and Opportunities

Climate-Related Financial Disclosures (TCFD)

To enhance transparency in the disclosure of climate-related risks and opportunities, Asia Cement has established its climate change management framework and related disclosures in alignment with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).



Asia Cement TCFD Report

Guidance for the Building Materials Sector

Asia Cement also follows the TCFD's specific "Guidance on Building Materials," disclosing key considerations tailored to the industry, including climate change strategies as well as metrics and targets.



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3.4.1 Governance on Climate Change

The governance of Board of Directors on climate change

A Corporate Sustainability Committee was founded under Asia Cement’s Board of Directors and a Corporate Sustainability Implementation Committee was founded under President, the ESG promotion team was formed by the members from all departments to promote and implement ESG issues. ESG promotion team is required to report to Corporate Sustainability Implementation Committee quarterly and Corporate Sustainability Implementation Committee reports to Corporate Sustainability Committee the results of ESG every six months.

Corporate Sustainability Committee is required to consider climate related issues when reviewing and supervising strategies, important action plans, risk management policies, annual budget and commercial plans, and setting the operational targets of the organization, monitoring the status of implementation and supervising important capital expenditures. It also checks the status of reaching the target of Asia Cement’s net zero emission in the Board Meetings every six months.

Management level for climate change

The president, a board director, is directly in charge of the management of Corporate Sustainability Implementation Committee and requests all production units and sales units to evaluate risks and opportunities relating to climate change, specifically the longterm impact to business operations by climate change, including the assets of the Plant, manufacturing process, transport of raw materials, even the laws, regulations and the change of consumers’ preferences.

Corporate Sustainability Implementation Committee is created within Corporate Sustainability Committee and in charge of the entire risk management matters including integrating and coordinating cross-departmental common risk management issues, promoting and communicating significant risk management events, executing and tracing all resolution items of risk management assigned by the board of directors or Corporate Sustainability Committee, and submitting risk management reports.

Incentive measures for climate change

Stipulate incentive measures and KPIs for climate change, fulfill the SBT target of carbon reduction.

✔ Reached ✖ Non-Reached 🚀 Ahead Of Target

Incentive Group	Incentive Mechanism	Incentive KPIs
Top Management	Supervision of circular economy initiatives to achieve GHG reduction targets, included as part of annual performance objectives.	Annual GHG reduction volume meets the SBT scheduled ✔
Management and All Employees	Included as an item in annual performance evaluations, affecting eligibility for up to 6% of annual bonus payout.	Annual GHG reduction volume meets the SBT scheduled target ✔
	10% of cost-saving performance bonus (including circular economy benefits).	Implement circular economy initiatives to reduce GHG emissions, achieving the annual target for alternative raw/fuel use. ✔

Note The Top management level is the general manager.

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3.4.2 Strategy for Climate Change

Impact of climate change strategy

The aspects included in Asia Cement's climate change strategy are: products, supply chain, low carbon investment and operational activities.



Description of Asia Cement's Strategy Implementation

Planning for financial impact by climate change

Asia Cement's climate change strategy of financial aspect affected includes the possibility of increasing operational expenses, increasing capital expenses for low carbon technology, and rising of raw material costs.

Identify and quantify the impact of major risks in accordance with the "Risk Management Policies and Procedures" of Asia Cement. These standards define the financial risk impact as five levels of "very low, low, medium, high, and very high." "High" and "very high" impact are considered to have a substantial impact on Asia Cement. The definitions are as follows:

Very Low Low Medium

High Impact

Affecting EBITDA by 4% to 5%

"Very High" Impact

Affecting EBITDA by more than 5%



Analysis of climate change scenarios

IEA B2DS scenario – assess transition risks

Asia Cement undertook the assessment of transit risk based on the "Beyond 2°C Scenario, B2DS" proposed by International Energy Agency (IEA). The result of analyzing IEA B2DS was as follows: Asia Cement joined the initiative of Science-Based Targets for carbon reduction and set the carbon reduction target scenario by department based on IEA B2DS scenario. The first phase is by 2025, comparing to 2019, the scope 1 plus scope 2 GHG emission intensity per ton of cementitious materials will be reduced by 8%.

The influences of IEA B2DS scenario to target and strategy: On the basis of analyzing IEA B2DS scenario, Asia Cement set the target of emission reduction year-by-year. The boundary of reduction covered cementitious materials production sites (Hsinchu and Hualien Plants) and the headquarter. Asia Cement aimed at reaching the target of emission reduction as the low carbon transformation strategy. The strategy was mainly driving the circular economy of the alternative raw material and fuel, the increase of energy efficiency and the installation of renewable energy.

IEA NZE 2050 Scenario - Transformation Risk Assessment

The International Energy Agency (IEA) "Net Zero Emissions by 2050 Scenario (IEA NZE 2050)" assumes that global businesses will achieve net zero emissions by 2050, outlining a pathway with a 50% probability of limiting global warming to within 1.5°C. Asia Cement actively responds to the global net zero transition and, in its second phase, adopts the IEA NZE 2050 scenario. Referring to the SBTi Net-Zero Standard tools, Asia Cement set science-based targets using 2021 as the base year: to reduce emission intensity by 22.9% by 2030 and by 43.5% by 2035, ultimately achieving net zero carbon emissions by 2050.

SSP5-8.5 - Physical Risk Scenario Assessment - Physical Risk Assessment

Asia Cement used the "Shared Socioeconomic Pathways" (SSPs) scenarios to simulate SSP5-8.5. Asia Cement adopts the SSP5-8.5 scenario to multiply the hazard factor by the vulnerability factor to identify the risk matrix for regulatory response. The main identified risk items in the risk matrix include: Slope disasters and threats of strong winds. The major impacted items include the transportation system for secondary raw materials (clay), the raw material grinding system, and the rotary kiln system.

The SSP5-8.5 scenario analysis has implications for the goals and strategies of ACC. Based on the RCP 8.5 scenario, ACC will establish and implement disaster emergency response plans and sustainably monitor relevant climate risks.

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3.4.3 Climate Change Risk Management

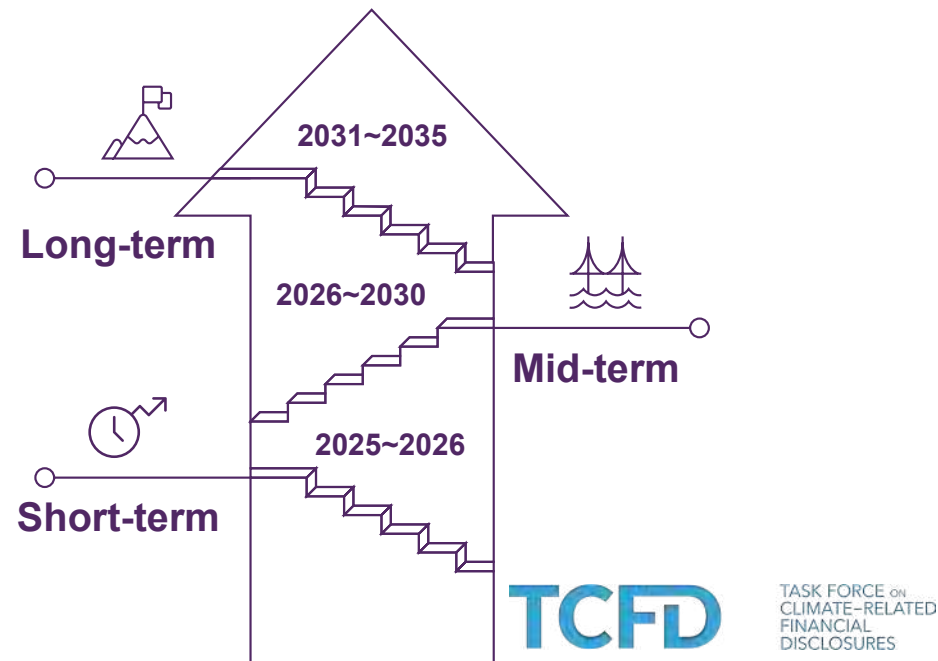
Climate change risk management process

Asia Cement's climate change risk management flow is composed of three steps: identify and assess existing risks and opportunities, define material risks and opportunities and analyze financial impacts, and response measures to material risks and opportunities and cost estimate.

1 Identify and assess existing risks and opportunities

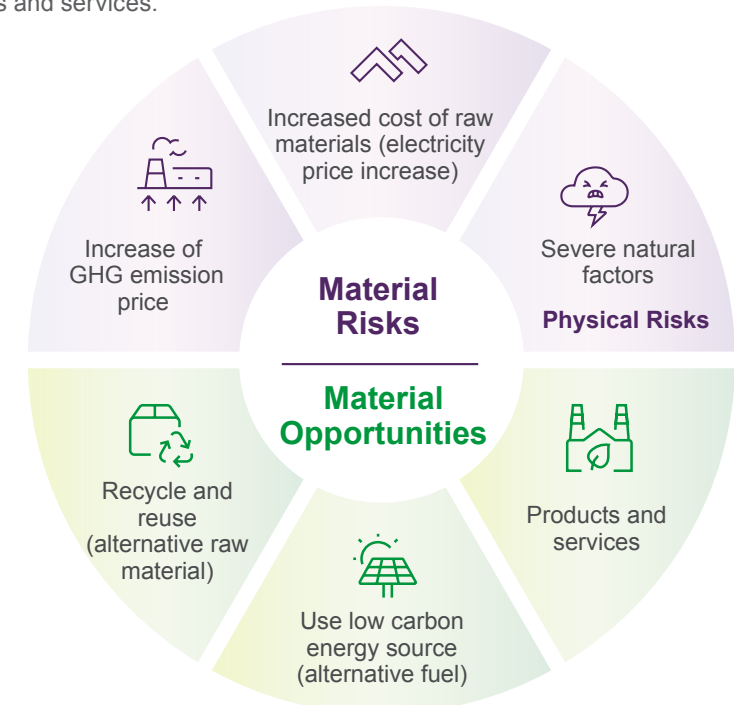
Each year the Company gives scores to the correlation, impact and occurrence period of the risk and opportunity items in accordance with the items of TCFD transition risk, physical risk and opportunity to establish a risk and opportunity assessment matrix.

The short-mid-long term occurrence periods of risk and opportunity are assessed with the definition of 2025–2026 as the short-term, 2027-2030 as the mid-term, and 2031-2035 as the long term.



Asia Cement assessed 2 material risks of its transformation: Policies and regulations that increased the pricing of GHG emissions, as well as rising costs related with materials (such as electricity price hikes). Physical risks stemming from severe natural events, such as productivity losses caused by typhoons, damage to facilities, and disruption in supply chain operations.

The three material opportunities for ACC's assessment are: Improving resource efficiency through recycling and reuse (substitution of raw materials), adopting low-carbon energy sources (substitution of fuels), and developing or adding low-carbon products and services.



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Step 2

Define material risks and opportunities and analyze financial impacts

Step 3

Response measures and cost estimate

Description of the assessment to the potential financial impacts from 3 material risks and the measures of risk management.

Risk Item	 Increase in GHG Pricing	 Rising Market Raw Material Costs (Electricity Price Increase)	 Severe Natural Factors Impacting Operations
Risk Type	Transition Risk Current Regulations	Transition Risk Technology	Physical Risk Immediate - Typhoons and Heavy Rainfall
Risk Description	According to the Climate Change Act, Scope 1 and Scope 2 carbon fees are expected to be levied in 2025.	Currently, electricity pricing cannot effectively reduce usage through price mechanisms, making it difficult to meet Taiwan's carbon reduction targets.	Operational aspect Strong typhoons and heavy rainfall cause raw materials to become sticky, coal to collapse.
Stage of Value Chain	Direct Operations	Upstream Supply Chain	Operations and Supply Chain
Risk Drivers	Carbon Pricing Mechanism	Rising Raw Material Costs (Electricity Price Increase)	Decreased Productivity and Operational Loss
Potential Financial Impact	Increased Operating Costs	Rising Material Costs	Reduced Revenue and Increased Operating Costs
Timeframe	Short Term Medium Term	Short Term Medium Term	Short Term
Financial Impact Amount	Short Term (2025~2026): NT\$ 130 million Medium Term (2027~2030): NT\$ 550 million	Short Term (2025~2026): NT\$ 220 million Medium Term (2027~2030): NT\$ 1.49 billion	Short Term (2025~2026): NT\$ 27 million
Risk Response Measures	The Company has proposed a voluntary reduction plan, implementing circular economy practices and producing low-carbon cement as part of its net zero initiatives.	Implement ISO 50001 Energy Management System to improve energy efficiency annually.	Increase raw material safety stock and renovate plant areas to cope with heavy rainfall.
Estimated Response Costs	Short Term (2025~2026): NT\$ 380 million Medium Term (2027~2030): NT\$ 50 million	Short Term (2025~2026): NT\$ 340 million Medium Term (2027~2030): NT\$ 170 million	Short Term (2025~2026): NT\$ 1.32 billion

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Description of the assessment to the potential financial impacts from 3 material opportunities and the measures of risk management.

Opportunity Item	 Recycling (Alternative raw material)	 Use of Low-Carbon Energy (Alternative fuel)	 Products and Services
Opportunity Type	Resource Efficiency	Energy Source	Developing and/or Increasing Low-Carbon Goods and Services
Opportunity Description	Asia Cement implements a circular economy by recycling industrial waste (upstream) to substitute cement raw materials.	Asia Cement implements a circular economy by recycling industrial waste (upstream) to substitute fuel.	With the market moving toward low-carbon transition, sales of the company's low-carbon cement have increased.
Stage of Value Chain	Direct Operations	Direct Operations	Operations and Downstream Customers
Opportunity Drivers	Circular Economy through Recycling and Reuse	Use of Low-Carbon Energy	Development and Expansion of Low-Emission Products
Potential Financial Impact	Increase in processing fee income	Increase in processing fee income and reduction of coal costs	Increase in revenue
Timeframe	Short TermMedium TermLong Term	Short TermMedium TermLong Term	Short TermMedium TermLong Term
Financial Impact Amount	Short Term(2025-2026): NT\$ 310 million Medium Term(2027-2030): NT\$ 930 million Long Term(2031-2035): NT\$ 1.12 billion	Short Term(2025-2026): NT\$ 660 million Medium Term(2027-2030): NT\$ 2.41 billion Long Term(2031-2035): NT\$ 3.72 billion	Short Term(2025-2026): NT\$ 3.54 billion
Opportunity Response Measures	• Construction of additional storage for alternative raw materials • Smart raw meal batching analysis system	• Installation of staged burners on preheaters No.1~3 • Improvement project for cooler No.3 • Installation of alternative fuel conveying and feeding systems • Increasing alternative fuel substitution rate in preheater No.3	• R&D and marketing of House Brand Masonry Cement, Portland Limestone Cement, and Ternary Blended Cement • Development of new supplementary cementing materials
Estimated Response Costs	The equipment for alternative raw materials has been completed; no investment cost in short, medium, and long term.	Short-term estimated fixed and variable costs for alternative fuel equipment are NT\$ 360 million.	Cumulative short to long-term R&D and promotion costs are estimated at NT\$ 20 million.

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3.4.4 Climate Change Indicators and Targets

The KPIs stipulated by Asia Cement for climate change included: water, energy, wastes management and GHG emission. The KPIs and targets were formulated by referring to TCFD Guide for Building Material Sector. Please refer to the details in each chapter for explanation on why the targets were not met.

Type	Indicator	Unit	Target	Actual 2024	2024 Target Achievement	Compared to base year
Energy	Total energy consumption	MWh	Reduce total energy use and intensity by 1% annually from 2019 base year	3,251,589 MWh	✓	↓ 15%
		MWh/ton cementitious material		0.99 MWh/ton cementitious material	✓	↓ 6%
Greenhouse Gas Emissions	Cementitious material emission intensity	tons CO ₂ e/ton cementitious	From 2019 base year, by 2025 reduce Scope 1+2 emissions intensity by 8% (SBT target)	0.797 tons CO ₂ e/ton cementitious	✓	↓ 9%
Alternative Materials & Fuels	Percentage of replacing raw material and fuel	kg/ton cementitious material	By 2030: 183 kg/ton cementitious; biomass thermal substitution 10.2%; non-biomass 19.3%	152 kg/ton cementitious	✓	-
		%		Biomass 3.0%	✓	-
		%		Non-biomass 3.2%	✓	-
Water	Process water recycling rate	%	Maintain above 85%	81.3%		-
Water Efficiency	Water intake per ton cementitious material	Tons water/ton cementitious	From 2024 base year, reduce by 6% by 2030 and 11% by 2035	0.852 tons water/ton cementitious		-
Water	Net freshwater consumption	Thousand tons (ML)	From 2024 base year, reduce by 6% by 2030 and 11% by 2035	2,589 thousand tons (ML)		-
Wastes	Waste recycling rate	%	Maintain annual recycling rate above 90%	98%	✓	-
Waste Heat Recovery	Waste heat power generation as % of external power	%	Hualien Plant: above 20% of external power from waste heat recovery	23%	✓	-

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3.5 Economic Performance and Tax Information

3.5.1 Economic Performance

Main Brand

Asia Cement adopts the operation principle of “high quality, high efficiency, high environmental protection and low cost”, it has shaped the brand of “Skyscraper Cement” as the image of best cement. The “Skyscraper” cement produced by Asia Cement carries the trademark of excellent products to be trusted. The products are very welcomed and used in many fields including public transportation construction, green buildings, residential houses and commercial buildings.

Product Innovation and Services

Asia Cement’s products are mainly the production and shipping of cement and clinker (87%), followed by blast furnace slag powder (13%). The cement packages are available in both bulk and bagged, they can be shipped either by ocean freight or land transport.

Asia Cement integrates the industry's value chain towards a low-carbon transition. Not only does it produce the industry's first low-carbon cement, but its subsidiary, Asia Eastern ReadyMix, also develops various high-performance and low-carbon concretes. These efforts provide strong support for the nation's infrastructure development, including projects such as social housing, public works, bridges, and airport transit systems.

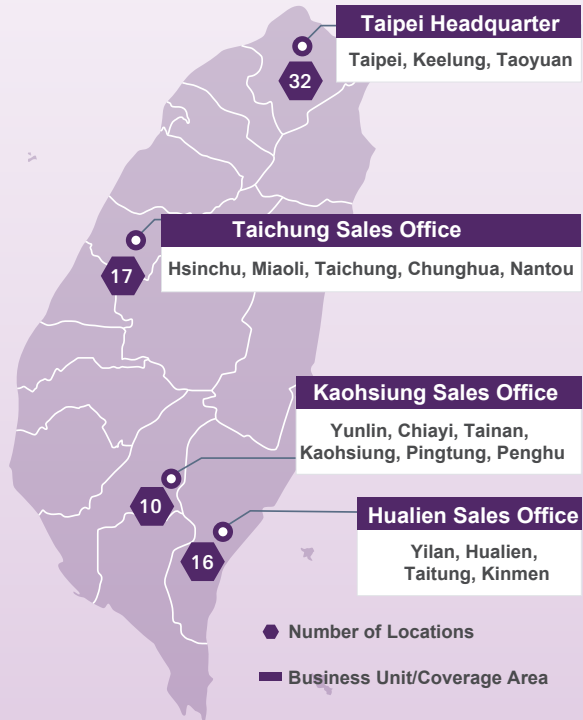
In 2024, Ya Tung Ready-Mixed Concrete’s high-performance concrete was adopted for the landmark building "Taipei Twin Towers." Its superior characteristics include a compressive strength of 12,000 psi. This high-performance concrete features high strength, excellent workability, high density, and temperature control, which can extend the lifespan of buildings and reduce embodied carbon emissions, supporting Taiwan's journey towards net-zero sustainability.

Sales Offices and Distributors

Asia Cement operates four sales offices strategically located to provide comprehensive services, covering all regions across Taiwan.

Types of customers

Including distributors, general customers, affiliates, wholesale customers, and customers purchasing clinker and ground granulated blast furnace slag.



Company name	Asia Cement Corporation
Employees	1,773 employees in Taiwan (464 at Asia Cement, 1,309 at subsidiaries)
Paid-in Capital	NT\$35,465,628,810
Established/Listed Date	March 21, 1957 / 1962 (Stock Code: 1102)
Main Products and Services	Various types of “Skyscraper” cement products and clinker
Chairman /President	Douglas Tong Hsu/ Kun-Yen Lee
Head Office Address	30-31F, No. 207, Sec. 2, Dunhua S. Rd., Da’an Dist., Taipei City
Major Operating Locations	Taiwan and China
Production Lines and Capacity	Hsinchu Plant: 1 million tons of clinker, 1.05 million tons of cement per year. Hualien Plant: 4.02 million tons of clinker, 4.35 million tons of cement per year. Asia Cement China: 25 million tons of clinker, 35.1 million tons of cement per year.
Net Sales	Self-produced cement and clinker sales volume: Asia Cement global 27.249 million tons; Asia Cement Taiwan 3.182 million tons. Sales value: Asia Cement global NT\$337.40 billion; Asia Cement Taiwan NT\$93.68 billion.
Service Markets	Domestic sales cover Taiwan, Penghu, Kinmen, Matsu and mainland China, exports to Guam and niche surrounding markets.
Storage & Distribution Stations	Four locations in Taiwan: Keelung, Taichung, Kaohsiung, Hualien.
Sales Network	Four sale offices in Taiwan: Taipei, Taichung, Kaohsiung, Hualien Dealers in Taiwan: 75
Consolidated Financial Entities	Refer to Section VIII “Related Party Information” of Asia Cement’s annual report.
Countries/Regions	Taiwan, China, Singapore, Hong Kong, Vietnam.

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Consolidated Financial Performance (2021–2024)

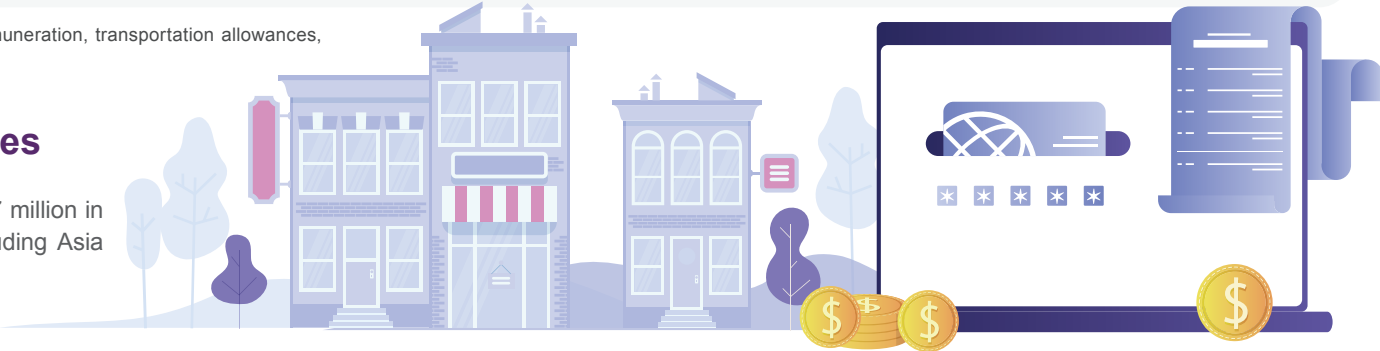
Unit: NT\$ million

Type	Item	2021	2022	2023	2024
Financial Performance	Operating Revenue	89,655	90,341	80,183	76,297
	Gross Profit	21,181	11,755	10,437	11,107
	Operating Income	17,686	8,571	7,460	7,964
	Non-operating Income & Expenses	4,248	6,626	6,476	8,041
	Profit Before Tax	21,934	15,197	13,936	16,005
	Net Income	17,528	12,597	11,084	12,653
	EPS (NT\$)	4.70	3.63	3.28	3.86
	Total Assets	317,056	324,243	336,727	331,827
	Total Liabilities	136,783	140,010	144,863	126,976
	Total Equity	180,273	184,233	191,864	204,852
Distributed Economic Value	Operating Costs	68,474	78,585	69,746	65,190
	Dividends	11,933	12,055	8,156	7,448
	Income Tax	4,406	2,600	2,852	3,352
	Employee Salaries & Benefits (Note)	5,172	5,052	4,977	4,654

(Note) Employee salaries and benefits include directors' remuneration, transportation allowances, and education and training expenses.

Government Financial Subsidies

In 2024, Asia Cement Corporation received NT\$17 million in government subsidies, while its subsidiaries (including Asia Cement China) received NT\$42 million.



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Financial Performance
(Based on Consolidated Financial Statements)

In 2024, Asia Cement Corporation's consolidated net income attributable to the parent company increased by 18% year-over-year. Although Asia Cement China was impacted by sluggish cement demand in Mainland China, resulting in an industry-wide decline in profitability, the cement and ready-mix concrete businesses in Taiwan benefited from steady demand driven by the housing market and the expansion of the technology sector, achieving stable profit growth. In addition, equity investments in Far Eastern New Century and U-Ming Marine Transport continued to provide solid contributions to the Company's profitability. Looking ahead, China's fiscal expansion and accelerated issuance of special-purpose bonds to support infrastructure, along with local government debt restructuring, are expected to improve the overall economy and industry environment. The fundamentals across Asia Cement's various business segments remain solid and operations stable.

Dividend Distribution Policy

In 2024, following approval by the Board of Directors, Asia Cement Corporation plans to distribute a cash dividend of NT\$2.2 per share. Based on the average share price in 2024, this represents a cash dividend yield of 5.1%. Asia Cement's dividend yield has consistently remained within the 4% to 8% range, and through a stable dividend policy, the Company continues to create value for its investors.

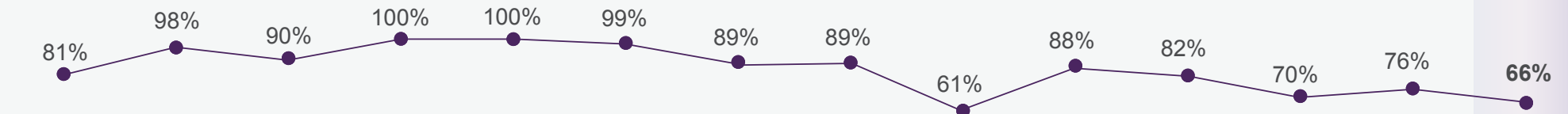


Financial
Information

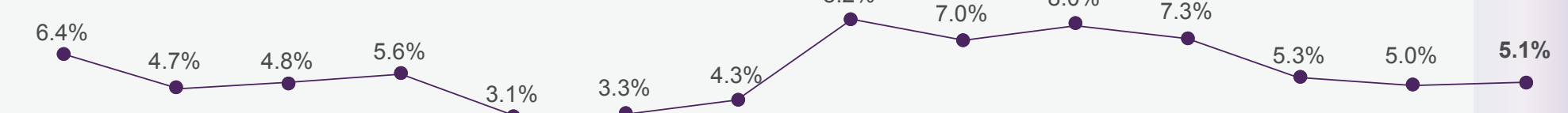


Investor
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Dividend Payout Ratio (%)

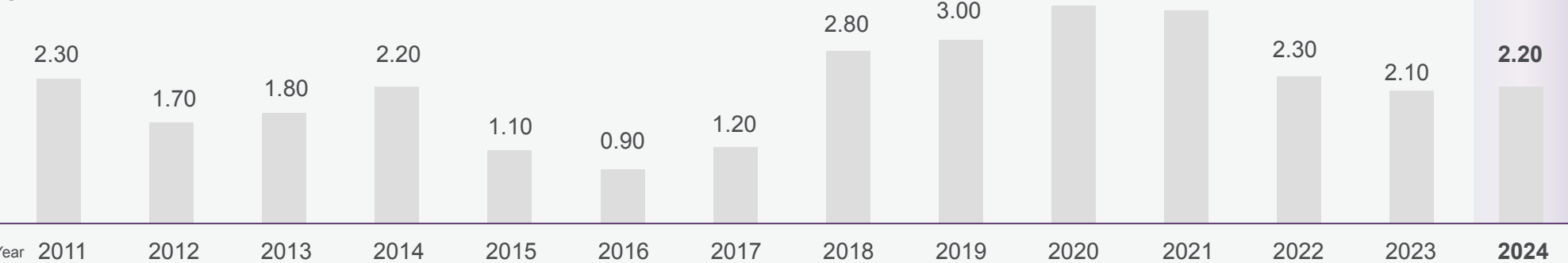


Dividend Yield (%)



NT\$/share

(\$ Cash Dividend per Share (NT\$/share)



- (Note)
1. The payout ratio is calculated based on the distributable earnings of the respective year, excluding the impact of gains from investment property revaluation.
 2. Cash dividend yield = cash dividend per share / average share price for the fiscal year.

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Asia Cement Tax Policy

All of Asia Cement’s operating sites comply with the tax regulations of their respective jurisdictions. Transactions among related parties are conducted in accordance with the arm’s length principle to comply with transfer pricing guidelines. Tax information in the financial statements is disclosed in line with relevant regulations and standards, enhancing the transparency of tax-related information.



Tax Policy



Asia Cement Tax and Effective Tax Rate Reporting

Unit: NT\$ million

Item	Region	2021	2022	2023	2024
Operating Revenue	Mainland China	51,153	42,476	32,820	26,602
	Taiwan	35,337	44,459	44,498	47,175
	Other Regions	3,165	3,406	2,865	2,520
Operating Income	Mainland China	12,124	2,504	1,568	(203)
	Taiwan	5,537	5,933	5,800	8,057
	Other Regions	26	134	92	109
Income Tax	Mainland China	3,228	1,168	1,612	1,433
	Taiwan	1,154	1,407	1,206	1,865
	Other Regions	24	25	34	54
Income Tax Paid	Mainland China	3,996	2,554	1,150	996
	Taiwan	1,062	1,164	1,398	1,746
	Other Regions	1	1	1	16
Profit Before Tax		21,934	15,197	13,936	16,005
Effective Tax Rate (Income Tax / Profit Before Tax)		20.09%	17.11%	20.46%	20.94%
Cash Tax Rate (Income Tax Paid / Profit Before Tax)		23.06%	24.47%	18.29%	17.23%

(Note) Other regions primarily refer to Singapore.

3.6 Ethical Business Practices and Anti-Bribery

Integrity Management and Anti-Bribery System

Corporate Vision

“Integrity” serves as the highest guiding principle for business development.

Scope of Application

Applies to all company personnel, suppliers, contractors, and business partners. Asia Cement adopts a zero-tolerance policy toward corruption, strictly prohibiting bribery, facilitation payments, fraud, extortion, collusion, and money laundering; offering or accepting gifts, loans, fees, rewards, or other benefits; as well as acts of corruption, influence peddling, abuse of power, illicit enrichment, concealment, and obstruction of justice.

Management System

- ①

The Board of Directors approved the "Anti-Corruption Policy", incorporating the ISO 37001 Anti-Bribery Management System to ensure effectiveness and continuous improvement, adopting a zero-tolerance approach.
- ②

The "Principles for Ethical Management of Asia Cement Corporation" require personnel not to directly or indirectly offer, promise, solicit, or accept improper benefits.
- ③

The “Codes of Ethical Conduct of Asia Cement Corporation” governs conflicts of interest.
- ④

The "Procedures for Ethical Management and Guidelines for Conduct" prohibit improper benefits, unfair competition, insider trading, and enforce confidentiality.
- ⑤

The "Employee Work Rules" specify codes of conduct with department heads responsible for education and guidance.

Bribery Risk and Due Diligence

- ①

Annual risk assessments identify risks based on business processes.
- ②

The Bribery Risk Assessment and Due Diligence Procedures stipulate assessments once a year for high risk, once every two years for medium risk, and once every three years for low risk.

Communication and Training on Integrity and Anti-Corruption

- ①

At least two anti-corruption training sessions annually, two hours per employee, three hours for internal auditors.
- ②

New suppliers and contractors fill out a risk assessment form and receive anti-corruption training.
- ③

All new employees are trained on the Code of Ethical Conduct, Code of Integrity, and Anti-Bribery Management Policy.
- ④

All directors, employees, and subsidiary employees sign a Declaration of Compliance with the Anti-Bribery Policy.

Anti-Corruption Management Objectives

 Establish anti-corruption culture Two trainings per year, 98% completion rate, covering Asia Cement and Taiwan subsidiaries.	 Zero bribery incidents Zero bribery incidents	 Protect whistleblowers Zero retaliation cases.	 Strictly penalize unethical conduct 100% processed per authority and disciplinary procedures.
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Routine Anti-Bribery Audits

In accordance with ISO 37001, internal audits cover all business areas once per year.

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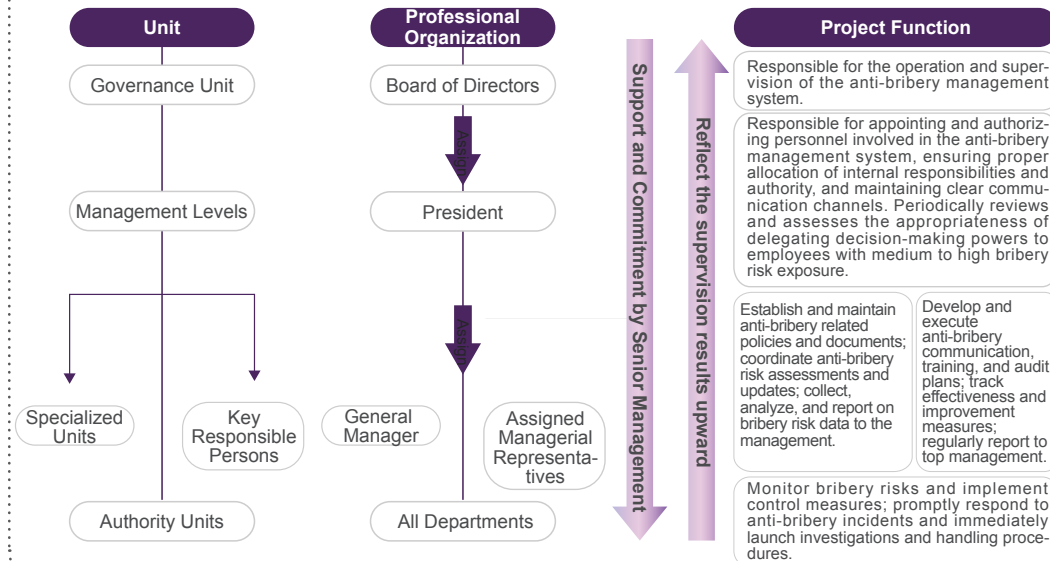
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Ethical Corporate Management and Anti-Corruption

To implement the anti-bribery policy, all personnel of the Company are strictly prohibited from directly or indirectly offering, accepting, promising, or soliciting any improper benefits to secure transactions or for the benefit of themselves or others in the course of business. Through education and training, employees' awareness of anti-corruption and anti-bribery is reinforced to ensure that all operations are grounded in integrity, avoid business risks, enhance corporate positive value, and achieve the goal of sustainable operations.

Anti-corruption Organization and Personnel Structure



Establishment of an Ongoing Internal Control Monitoring System

All 44 audit projects approved by the Board for 2024 have been completed

The Company has established an internal audit unit under the Board of Directors that operates independently and reports regularly to the Board. This unit assists management in reviewing and evaluating the effectiveness of the internal control system to reasonably ensure the achievement of internal control objectives. In addition, the Company has developed an electronic database for the internal control system, which is accessible to all employees for reference and compliance, thereby ensuring the continuity and consistency of internal control implementation.

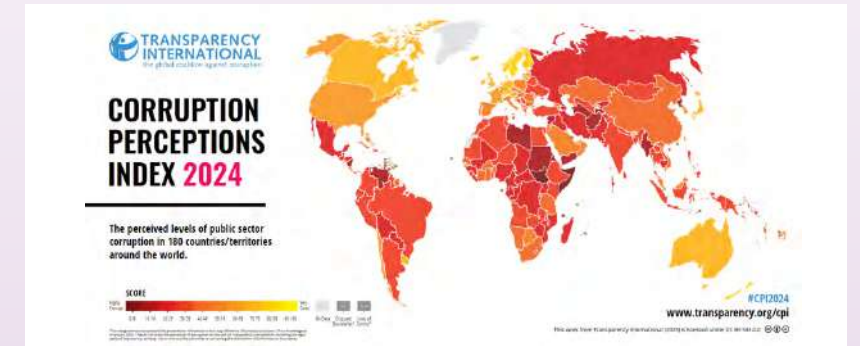
The audit unit formulates an annual risk-based audit plan based on the business characteristics and potential risks of each department, covering four main areas: corporate governance, regulatory compliance, operational management, and subsidiary supervision. All 44 audit projects approved by the Board for 2024 have been completed. Through recommendations and subsequent follow-ups, the Company continues to enhance the effectiveness of the internal control system.

Regular Audits of Ethical Standards

To ensure the effectiveness of anti-corruption management, the Company has established the "Internal Audit Procedures for Anti-Bribery" in accordance with the ISO 37001 management system requirements, stipulating that an internal audit is conducted annually covering all business areas. Following the PDCA management principles of "Plan and Establish, Implement and Operate, Monitor and Review, Maintain and Improve," the Company continuously sustains and improves system effectiveness. Asia Cement obtained ISO 37001 Anti-corruption Management System certification in 2023, with the next certification scheduled for 2026.

Anti-corruption risk assessment and due diligence

To effectively identify bribery risk scenarios and risks faced during business operations, Asia Cement and its subsidiaries have conducted an inventory of their operating sites. None are located in the lowest 20 countries ranked on Transparency International's Corruption Perception Index (CPI) for 2024.



Each year, the Company convenes all units to carry out risk assessments, identifying risks based on the nature and characteristics of each business process. This process takes into consideration employee authorization and decision-making levels, locations and departments, business activities and complexity, business models, and business partners. Through this assessment, 177 risk scenarios and 31 significant internal and external issues were identified. Evaluations are performed based on the likelihood, impact, and effectiveness of control measures. In 2024, the Company completed 100% of its bribery risk assessments, with all risks falling within acceptable levels, and achieved 100% completion of improvement measures.

The Company has established the Anti-corruption Assessment and Due Diligence Procedures which cover all business areas and business partners, including employees, suppliers, customers, and special types of transactions. The results of these assessments are reported to the Anti-Bribery Management Review Committee, the Corporate Sustainability Committee, and the Board of Directors. Considering that the integrity of business partners may change over time, the Company conducts regular re-assessments: once a year for high-risk, once every two years for medium-risk, and once every three years for low-risk partners.

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2024 Anti-corruption Risks and Due Diligence Investigation Findings

Target Group	Assessment Process	Results	Improvement Measures
Employees	Assessed 167 employees, including 23 with approval authority.	Low risk	Maintain current management system, with gradual improvement.
Suppliers	Conducted risk assessments and due diligence on 230 suppliers with transactions exceeding NT\$1 million.	Low risk	Maintain current management system, with gradual improvement.
Customers	Conducted risk assessments and due diligence on all 153 customers.	Medium risk 2	Provided training, improvements completed.
		Low risk 151	Maintain current system and gradually improve.
Special Transactions	2 cases.	Low risk	Maintain current management system, with gradual improvement.

Ethical Corporate Management and Anti-corruption Performance

From 2023 to 2024, there were no incidents of corruption or bribery, nor any cases of conflicts of interest, money laundering, insider trading, or other violations. The Company achieved 100% completion of its anti-bribery management objectives. 	In 2024, one whistleblowing case was received; however, it was not accepted for investigation as the whistleblower failed to provide specific evidence. The case was reported to the Audit Committee in accordance with the Company’s “Procedures for Reporting and Investigation of Unethical Conduct.” 	All 15 directors of Asia Cement and all 1,872 employees in Taiwan have signed the “Declaration of Compliance with the Anti-Bribery Policy,” achieving a 100% signing rate. 
In 2024, Asia Cement and its subsidiaries completed 100% of anti-bribery communication and training activities, totaling 2,162 training hours, with 100% coverage, 100% completion, and 100% passing rates. 	All new employees completed integrity management and anti-bribery briefings, achieving a 100% implementation rate. 	Before engaging in transactions, all new suppliers and contractors received anti-corruption briefings, and 100% of key risk suppliers and contractors completed anti-corruption training. 

Communication and Training on Integrity Management and Anti-Corruption

The Company conducts two anti-corruption training sessions each year, with at least two hours of training for each employee and three hours for internal auditors specializing in bribery prevention, to enhance company-wide anti-corruption awareness. The training targets include members of the Board of Directors, all employees, subsidiary employees, suppliers, and contractors. Content covers the Company’s Code of Ethical Conduct,Principles for Ethical Management, whistleblowing channels, disciplinary measures, and comprehensively addresses issues related to bribery, breaches of integrity, violations of law, or breaches of fiduciary duties. New employees are also informed about the "Code of Ethical Conduct," "Principles for Ethical Management," and "Anti-Corruption Policy" to ensure understanding of their contents and individual obligations, thereby reinforcing corporate ethical values.

Board Oversight of Unethical Conduct

The Company encourages employees and external parties to make good-faith reports of suspected or actual illegal, unethical, dishonest, or bribery-related conduct, or reasonable suspicions of exploiting weaknesses in the anti-bribery management system. It has established the "Measures for Reporting of and Investigating Unethical Conduct," designating the Secretarial Dept. and Audit Office as whistleblowing channels. The Audit Committee and the head of the Audit Office are responsible for investigating whistleblowing cases. The Audit Office, which reports directly to the Board, oversees the “reporting and investigation of unethical conduct” process to ensure independence and objectivity in investigations.

The Company accepts both identified and anonymous reports, and is committed to maintaining the confidentiality of the whistleblower’s identity and the contents of the report. It ensures that whistleblowers will not be subject to improper treatment as a result of making a report. Independent whistleblowing channels, including a dedicated email inbox, hotline, and reporting form for unethical conduct, are published on the Company’s website and intranet.

- @ Reporting Email : speak-up@acc.com.tw
- ☎ Reporting Hotline : 02-2733-8000#8195
- 🌐 Reporting Webpage : <https://www.acc.com.tw/contact-us/contact-unethical>

Item	2023	2024
Number of Reports Received	2	1
Reports Accepted	1	-
Investigations Completed	1	-

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3.7 Sustainable Supply Chain Management

Supplier Code of Conduct

Far Eastern Group observes the founding spirit of “sincerity, diligence, thrift, prudence and innovation” as the highest guideline of operation and development. It is the foundation of the operation, management, production, environmental protection and social care. The principles of working on everything are to be solid, no hiding, no false, instant correction, and continuously improving, in order to fulfill the corporate social responsibility. We expect that suppliers keep the same spirit as ours, respect the social and ethical standards during the services, understand and observe laws, actively respond to the environmental protection and the social issues, bravely bear the responsibility and consistently improve and advance.

Asia Cement’s code of conduct for suppliers includes: environmental standards, child labor, human rights, work conditions (work-hour), remuneration, occupational health and safety, business ethics and sustainable purchase.

Supplier Management and Screening

To ensure that suppliers uphold the principles of sustainable development across environmental, social, and economic dimensions, fulfill their corporate social responsibilities, and continue to improve and advance, Asia Cement has established supplier management policies tailored to local regulations and production requirements at each operating site. Since November 2016, the Company has promoted the signing of the Supplier Corporate Social Responsibility Commitment Letter with partnering suppliers, using it as one of the screening criteria, which includes evaluating suppliers’ environmental (E) and social (S) indicators. As of 2024, a total of 378 suppliers have signed the commitment letter, including 352 domestic suppliers and 26 overseas suppliers.



Supplier Code of Conduct and Corporate Social Responsibility Commitment Statement

Labor and Human Right

- ① Voluntary employment
- ② Prohibition of child labor
- ③ Wages and benefits
- ④ Working hours and rest
- ⑤ Freedom of association and collective bargaining
- ⑥ No harassment, abuse, or punitive practices
- ⑦ Respect and non-discrimination
- ⑧ Protection of female employees

Ethical Standards

- ① Sincere business operations
- ② Transparency, disclosure, and cooperation
- ③ Intellectual property and information confidentiality
- ④ Identity protected petition channel
- ⑤ Privacy
- ⑥ Transferring contract without consent
- ⑦ Compliance with import and export regulations
- ⑧ Avoidance of conflicts of interest

Environment

- ① Environmental permits and reporting
- ② Pollution prevention and resource conservation
- ③ Hazardous substances
- ④ Wastewater, non-hazardous solid waste, and noise
- ⑤ Waste gas emission
- ⑥ Product and service restrictions
- ⑦ Energy, resource consumption, and greenhouse gas emissions

Health and Safety

- ① Occupational safety
- ② Work-related injury and occupational diseases
- ③ Emergency response measures
- ④ Medical services and first aid
- ⑤ Industrial hygiene
- ⑥ Physically demanding work
- ⑦ Machine safeguarding
- ⑧ Public health and accommodation
- ⑨ Health and safety information

KPIs for Supplier Screening

Asia Cement’s significant suppliers is defined as the one who supply critical and irreplaceable. They were classified as Tier-1 and non Tier-1 according to “direct supply” or “trading company”.Identify as follows.

2024 Type of Supplier		
Tier-1 suppliers	Significant suppliers in Tier-1	Significant suppliers in non Tier-1
Total number 233	56	16
Total number of significant suppliers 72 (Tier-1 and non Tier-1)		
% of total spend on significant suppliers in Tier-1 59.31%		

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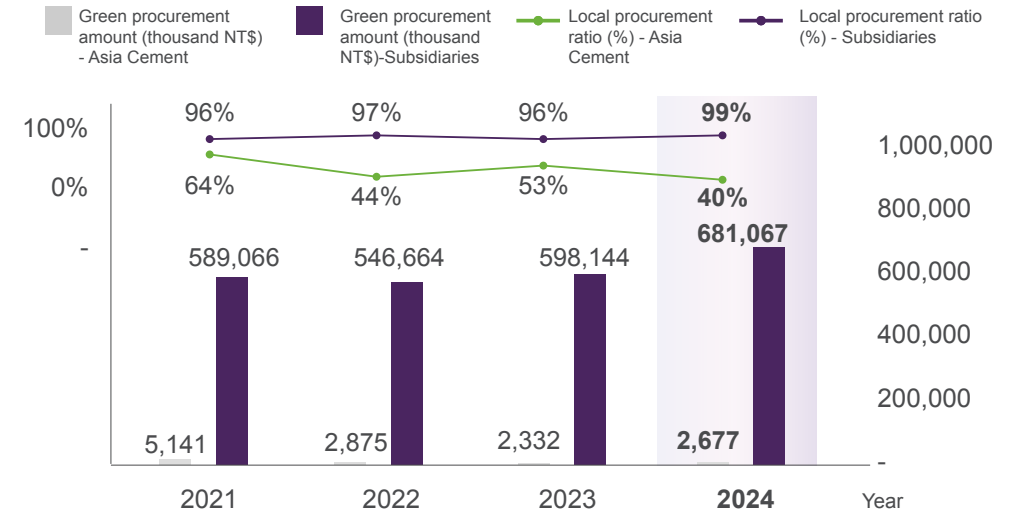
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Local procurement policy

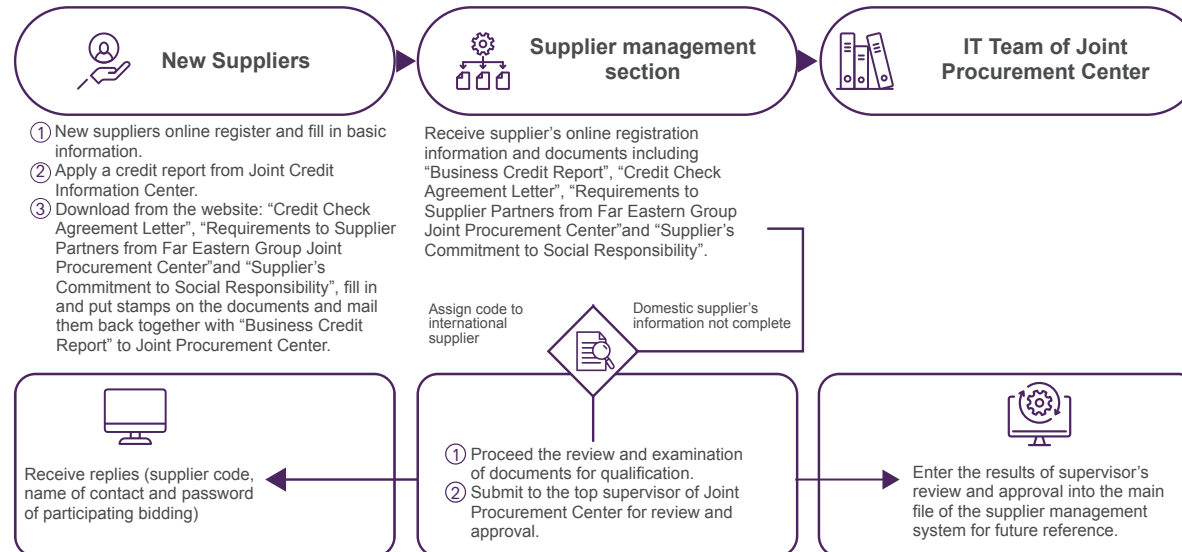
Asia Cement has established procurement guidelines to support local suppliers and communities, aiming to bolster local development. Despite the nature of its industry, where process equipment and primary raw materials are sourced predominantly from overseas, in recent years the Company strives for developing these items in Taiwan as the alternative equipment or parts, and utilizing circular economy wastes generated from various industrial companies in Taiwan as the alternative raw material and fuel, such as gypsum from power plants, coal ash from power plants or industrial furnaces, mineral silica material and slime from steel mills, renewable particles from incinerators as alternative raw material, and waste lubricating oil, RDF solid fuel as alternative fuel. By doing so, the Company can not only purchase items locally, but also provide some contributions to environmental protection.



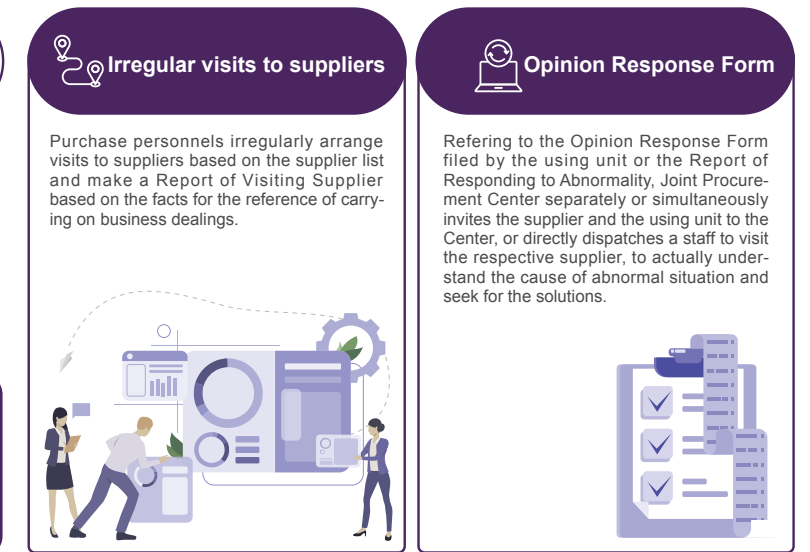
Asia Cement's local and green procurement



Process for Qualifying New Suppliers as Approved Vendors



Approved Supplier Management Process



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Supplier risk assessment

Asia Cement stipulated a “Supplier Selection Principles and Management Measures”. A purchase is listed as a critical purchase case if it meets the following conditions, and while selecting a supplier the risk assessment shall be performed and supported by Supplier Assessment Record to prove the appropriateness of the selected supplier:

A.	B.	C.	D.	E.
Implement the core or important functional business of the Company.	The amount of purchase is relatively high to the supplier.	The supplier may access to personal information or confidential information of the Company.	The operation or service of the supplier may directly or indirectly influence customers.	The business implemented by the supplier is involved with the compliance to laws or regulations.

Supplier assessment form

In 2024, all suppliers were assessed to be in the low-risk category.

Asia Cement conducts annual supplier evaluations based on three key dimensions, which serve as the basis for determining whether to continue engagement with the suppliers. Critical suppliers are required to achieve a minimum score of 4 out of 5.

Quality Control – Pricing – Compliance	Process (Capability) – Capacity – Relationship	Cooperation – After-Sales – Reputation	Engineering Safety and Health
① Consistency in delivery timelines, progress, and service frequency ② Design capabilities ③ Variation and cost control ④ Green, environmental protection, and social responsibility	① Process or implementation capabilities ② Quality policies and work specifications ③ Speed in scaling up/down production or service capacity ④ Willingness and sincerity in communication ⑤ Capability for continuous improvement	① Quick response and correction of defects ② Adaptability to ad-hoc tasks and cooperation ③ After-sales service	① Compliance with engineering specifications and company procedures ② Control over construction progress ③ Employee training and certifications ④ On-site environment inspection and management ⑤ Use and application of protective equipment ⑥ Compliance of labor conditions and environment with regulations



The score of a critical supplier be

Over 4

KPIs for Supplier Assessment and/or Development

Asia Cement conducts evaluations and development programs for critical suppliers. Through mechanisms such as the signing of the Supplier Code of Conduct, on-site visits, or document reviews, the Company ensures that partnerships with key suppliers achieve best practices in environmental, social, and corporate governance, meeting supply chain management objectives.

2024 Coverage and progress of the company's supplier assessment program

Supplier Assessment	2024
Total number of suppliers assessed via desk assessments/on-site assessments	72
% of unique significant suppliers assessed	100
Number of suppliers assessed with substantial actual/potential negative impacts	0
% of suppliers with substantial actual/potential negative impacts with agreed corrective action/improvement plan	0
Number of suppliers with substantial actual/potential negative impacts that were terminated	0

Environmental Sustainability Management for Suppliers and Contractors

The company has established the “Contractor Selection and Evaluation Management Procedure” at its major manufacturing sites to strengthen environmental sustainability assessment mechanisms. New contractors are subject to environmental management audits to promote the supply chain's collective progress toward environmental sustainability goals. The procedure introduces a new evaluation criterion on Environmental Pollution Prevention, which includes:

Environmental Compliance
Contractors are required to have no major environmental violations or penalties within the past year.

Pollution
Evaluate emission reduction measures and the effectiveness of actual improvements.

Carbon Management
Quantify carbon reduction performance and encourage the implementation of carbon reduction measures

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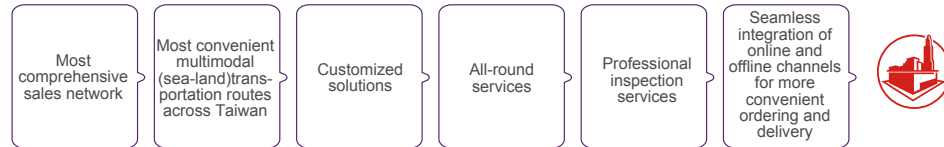
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3.8 Customer Service and Information Security

High quality customer service

Asia Cement has built a professional service team, The diversified services.



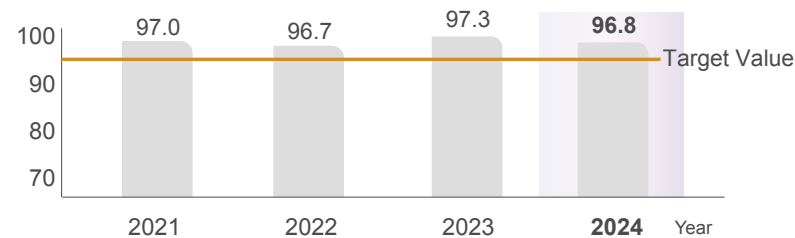
Customer Complaint Handling Mechanism

To protect customer rights, the Company established the “Complaint Handling Procedures” in 2007, requiring relevant departments to register and file a case within 24 hours of receiving a complaint and to initiate the complaint handling process. The process is jointly managed by sales units, regional sales offices, and technical personnel from manufacturing plants, leveraging multiple communication channels—including customer visits, the official website platform, telephone, and email—to promptly respond to customer needs.In 2024, there were 2 customer complaints, all of which were resolved, achieving a 100% closure rate.

Customer Satisfaction

To ensure close engagement with customers, Asia Cement conducts annual satisfaction surveys and data analyses covering four key sales indicators: service attitude, professional knowledge, transaction process, and delivery schedule. In 2024, the customer satisfaction survey achieved a total of 80 samples collected and returned, yielding a 100% response rate. The survey results showed a customer satisfaction score of 96.8, exceeding the target of 95.Asia Cement remains committed to continually improving products and services, with the goal of delivering even higher levels of customer satisfaction and quality.

Enhancing Service Dimensions to Improve Customer Satisfaction



Asia Cement Complaint Handling Procedures

Process Stage	Steps	Responsible Unit
Complaint Registration	Case is registered and filed within 24 hours.	Sales Unit
Case Segmentation	Sales unit performs preliminary assessment and handles the case, recording the complaint.	Sales Unit
Preliminary Handling	a. If related to order placement, delivery, transportation, or insufficient bag weight, handled directly by regional sales offices.	Regional Sales Offices
	b. If related to quality issues, reported by regional sales offices to the headquarters sales department.	Regional Sales Offices,Head-quarters Sales Department
	b.1 Arrange for plant technical personnel to visit the customer site to understand the abnormal situation and, if needed, collect samples for laboratory analysis.	Plant Technical Personnel
	b.2 Analyze root cause and formulate improvement plans.	Plant Technical Personnel
Final Handling	b.3 After resolving the abnormal situation, prepare a Customer Service Work Report.	Plant Technical Personnel
	Upon receiving the handling results, record the Quality Complaint Appraisal Report and submit to the sales supervisor for review.	Sales Unit
Result Feedback	Domestic or international sales department supervisors make the final decision and respond to the customer.	Domestic/International Sales Department Supervisors



Complaint Handling Procedures

Service Dimension

Improvement Measures

Enhancing Professional Competence

- Organize at least three internal training courses annually to strengthen sales staff expertise on the physico-chemical reactions of low-carbon concrete, the latest government carbon reduction policies, and the current status and targets of cement and construction industry carbon emissions.

Strengthening Service Quality

- Active visits: at least 10 promotional trips per week to meet customers face-to-face and understand their needs.
- Proactive information sharing: provide insights on market trends, government industry policies, and carbon reduction updates, offering value-added services beyond products.
- Assist customers in leveraging digital platforms to enhance transaction security and efficiency.

Optimizing Storage and Transportation Management

- Implement storage monitoring systems to track inventory levels in real time, preventing shortages or unexpected stockouts to ensure stable product supply to customers.
- Enhance synergy by collaborating with affiliated companies (U-Ming Marine Transport, Fumin Transport) to flexibly allocate transportation resources, accelerate delivery times, and reduce delays.

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Information Security Risk Management

In accordance with the amended “Regulations Governing Establishment of Internal Control Systems by Public Companies” issued by the Financial Supervisory Commission, the Company appointed a Chief Information Security Officer and designated information security personnel in 2023, complying with the “Information Security Control Guidelines for Listed and OTC Companies” published by the Taiwan Stock Exchange. To address information security and risk issues, Asia Cement established an Information Operations and Security Committee, chaired by the President and reporting to the Board of Directors. This committee is responsible for quarterly reviews of internal information application systems, office automation, network information, and information security protection measures, thereby providing tools for operations, management, and decision-making to reduce information security and efficiency management risks.

The Company has also formulated relevant policies:“Computerized Information System Processing Operations”, which governs the management of IT data throughout its creation, use, and retention stages. “Employee Guidelines for Use of IT Equipment and Software,” which defines the information security practices that employees must follow in business operations.

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Specific Management Measures:In 2024, Asia Cement conducted 19 inspection activities, including:External and internal information security audits (once each) 、Information system internal control self-assessment (once) 、Quarterly checks on SAP sensitive access permissions and segregation of duties conflicts and Monthly checks on SAP super-user sensitive transactions.

Information security infrastructure is integrated into the Far Eastern Group’s network architecture, aligning with the Group’s software and hardware protection strategies, with deployments such as WAF, IDP, firewalls, email protection, and endpoint protection. An annual “Disaster Recovery Drill” is conducted to ensure system recoverability. The Company also registered with TWCERT/CC (Taiwan Computer Emergency Response Team/Coordination Center) to receive real-time threat intelligence and defense information, enabling immediate action against cyber attacks and effectively protecting its information systems and data security.In parallel, all employees undergo general cybersecurity awareness training, promoting guidelines on computer equipment, email, internet, and mobile device usage to strengthen employees’ awareness of information security.

In compliance with Articles 8 and 9 of the Regulations Governing Establishment of Internal Control Systems by Public Companies, Asia Cement has established the “Personal Data Protection Management Procedures” and “Computerized Information System Processing Operations.” Additionally, the “Information Security Audit Procedures” have been included in the Company’s 2024 audit plan, all of which have been approved by the Board of Directors. Through this information security risk framework and policy, the Company safeguards customer trust in

In 2024, Asia Cement did not experience any incidents involving breaches of customer privacy data.

Since 2009

Asia Cement’s main production facilities have maintained certification under the ISO 27001:2013 Information Security Management System (ISMS) since 2009

2024

Successfully transitioning to ISO 27001:2022 certification in December 2024, with continued stable operation of the system.

2022~2023

In addition, subsidiary Ya Tung Ready-Mixed Concrete’s Xizhi Plant implemented its information security system in 2022 and achieved certification in 2023.



Asia Cement
Information
Security Policy



Asia Cement
Hualien Plant
information security
policies

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CHAPTER 4

Fostering a Diverse, Inclusive, and Healthy Workplace

Management of Material Topics

Asia Cement fosters a diverse, inclusive, and healthy workplace, provides compensation and benefits that exceed legal requirements, promotes talent development and career growth, and supports employees' physical and mental well-being to realize sustainable value.

Material Topics

Closure and rehabilitation · Human Capital Management

Impact

Employees are the most valuable assets of the company! Asia Cement implements a market-competitive compensation system that meets or exceeds regulatory requirements, aiming to prevent potential negative impacts. The company is committed to fostering a diverse and inclusive workplace environment, supporting employees in enhancing the skills necessary for their roles, and building a friendly work atmosphere that promotes a strong organizational culture. We hope to provide a quality platform where employees can fully utilize their talents and grow together with the company—this is also the solid foundation of Asia Cement's sustainable operations.

In the event of significant operational changes (such as employee relocations or overseas assignments) that impact employee rights, Asia Cement complies with legal requirements and even adopts standards beyond statutory demands. For instance, the company provides advance notice of at least three months for domestic relocations and six months for international assignments to employees and their representatives.

Commitment and Management Systems or Procedures

- ① Establish a competitive compensation system along with comprehensive employee benefits and retirement plans.
- ② Develop a talent development quality management system.
- ③ Implement a robust performance evaluation and promotion system.
- ④ Provide a complete training framework and transition assistance programs to support employee growth.
- ⑤ Achieve 100% gender equality at Asia Cement.
- ⑥ Pay a minimum living wage that meets the basic needs of employees and their families.
- ⑦ Avoid or minimize overtime and excessive working hours.
- ⑧ Comply with statutory maximum working hours, ensuring total weekly hours including overtime do not exceed 60 hours.
- ⑨ Ensure equal pay for equal work for men and women.
- ⑩ Pay wages during annual leave, ensuring employees are entitled to paid vacation days each year.
- ⑪ Adhere to legally required minimum consultation or notice periods prior to large-scale layoffs.



In 2024, honored with the "HR Asia Best Companies to Work for in Asia," "CommonWealth Talent Sustainability Award," and "Happiness Enterprise Award"

Asia Cement continues to elevate its comprehensive care for employees, earning recognition from the professional HR publication HR ASIA for four consecutive years. In addition to receiving the top honor — Best Companies to Work for in Asia, the company also achieved new milestones by winning awards for Diversity, Equity & Inclusion (DEI), Workplace Sustainability, and Employer Branding & Care. Furthermore, Asia Cement received the CommonWealth Magazine Talent Sustainability Award, as well as the Gold Award in the Manufacturing Category in the 2024 Happiness Enterprise survey conducted by 1111 Job Bank.

Asia Cement embraces DEI (Diversity, Equity, Inclusion) as a core value of its corporate culture and talent management. The company actively fosters a workplace environment that respects diverse backgrounds, ensuring fair treatment in recruitment, compensation, and promotion processes. In addition, Asia Cement has introduced diverse and inclusive leave policies, employee assistance and communication channels, and retirement support programs that extend care beyond current employees to retirees and their families — even involving external stakeholders. Through these efforts, we aim to advance together with society on the path of sustainable development, building a better future hand in hand.

A long-term and comprehensive talent development program is key to enabling our employees to maintain a competitive edge in the market. Asia Cement organizes systematic training programs each year tailored to various job categories, alongside lectures and seminars targeting both professional and managerial competencies. These initiatives help employees adapt to a changing environment and broaden their capacity for innovation.

Asia Cement has also established a holistic benefits system that goes beyond regulatory requirements. This includes complimentary health screenings, an Employee Assistance Program (EAP), an employee stock ownership trust, and a dedicated Employee Welfare Committee. We further offer scholarships for employees' children and sponsor diverse employee club activities, enabling staff to achieve work-life balance and fostering team cohesion in a healthy workplace environment.

Taking Action

- ① Successor training programs for business talent and managerial staff.
- ② Accelerated development programs to cultivate the next generation of talent.
- ③ Career transition and reskilling support programs for employees.

Stakeholder Engagement

- ① Communication and engagement with stakeholders are conducted on a regular or ad-hoc basis in accordance with our stakeholder engagement mechanism. Relevant information is disclosed through the sustainability report, related platforms, or the company website.
- ② The company is operating normally and has no plans for layoffs or workforce reductions within the next year.
- ③ Labor relations are smooth, with effective communication between labor and management. The company faces no strike risks.

Evaluation Methods

- The Corporate Sustainability Implementation Committee and its task forces continuously monitor implementation status and the achievement of targets.



4.1 Diversity, Inclusion, and Human Rights Protection

Asia Cement Human Rights Policy

To protect and uphold the fundamental human rights of employees and to foster a workplace with dignity, Asia Cement strictly complies with local laws and regulations where it operates. The Company also adheres to and supports the International Bill of Human Rights, the Universal Declaration of Human Rights, the United Nations Global Compact, the International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the International Labour Organization Declaration on Fundamental Principles and Rights at Work, and the spirit of the United Nations Guiding Principles on Business and Human Rights (UNGPs). Based on these, the Company has established and implemented related human rights policies.

The Corporate Sustainability Committee and management are responsible for overseeing and implementing the human rights policy, as well as ensuring investigations into any acts violating human rights principles. Asia Cement conducts human rights due diligence to identify and prevent risks to people within its operations and value chain. It also regularly communicates and reviews the integration of human rights topics into the Company's management systems to strengthen awareness and enhance respect for human rights. For Asia Cement's human rights commitments and management plans, please refer to the [Asia Cement Human Rights Policy](#).

OECD Due Diligence Guidelines



Human Rights Due Diligence

In 2025, Asia Cement published its Human Rights Due Diligence Report as one of the key approaches to advancing sustainable management and ensuring that its business operations comply with international human rights standards. The Company conducts due diligence at least once every three years to identify significant human rights issues, evaluate management performance on these issues, develop improvement plans, and publicly disclose the due diligence reports.

In recent years, there has been growing global attention on corporate responsibility for human rights, particularly regarding supply chain management, labor rights, community impacts, and diversity and inclusion. International regulations and market expectations have become increasingly stringent. By implementing human rights due diligence, Asia Cement not only mitigates operational risks but also enhances its brand reputation and ensures transparency and sustainable development across the value chain.

Asia Cement references the AA 1000 Stakeholder Engagement Standard (AA1000 SES) across five dimensions—Dependency, Responsibility, Tension, Influence, and Diverse Perspectives—through assessments conducted by the Corporate Sustainability Implementation Committee to identify stakeholder groups most relevant to the Company. After internal discussions and evaluating the impacts of operations and value chains on human rights, the determined stakeholder groups for human rights due diligence include: employees, Tier 1 suppliers and contractors, local community residents and indigenous peoples, and customers. For more details, please refer to the [Asia Cement Human Rights Due Diligence Report](#).

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Human rights due diligence result

The risk identification and assessment process was conducted by referencing the international standard ISO 31010 Risk Assessment Techniques (matrix method) as the primary analytical tool. It also took into consideration the recommendations on risk identification and prioritization from the OECD Due Diligence Guidance for Responsible Business Conduct. This approach uses the likelihood of occurrence and the severity of impact as the basis for prioritizing and responding to issues identified in this human rights due diligence. Issues with higher likelihood and more severe impacts are given priority for response and action. By combining these methodologies, the risk assessment process is ensured to be systematic, transparent, and consistent, serving as a foundation for subsequent risk responses and decision-making.

The human rights due diligence assigned corresponding levels to the likelihood and severity of identified issues, developing a risk matrix. The human rights risk assessment results for this year categorized risks into five levels, ranked from highest to lowest: critical risk, high risk, significant risk, medium risk, and minor risk.

Based on this due diligence analysis, Asia Cement has identified critical risks as priority issues for response and management. The critical risk topics for each stakeholder group are as follows:



Employees

- Occupational safety and health
- Anti-bullying and harassment.



Tier 1 suppliers and contractors

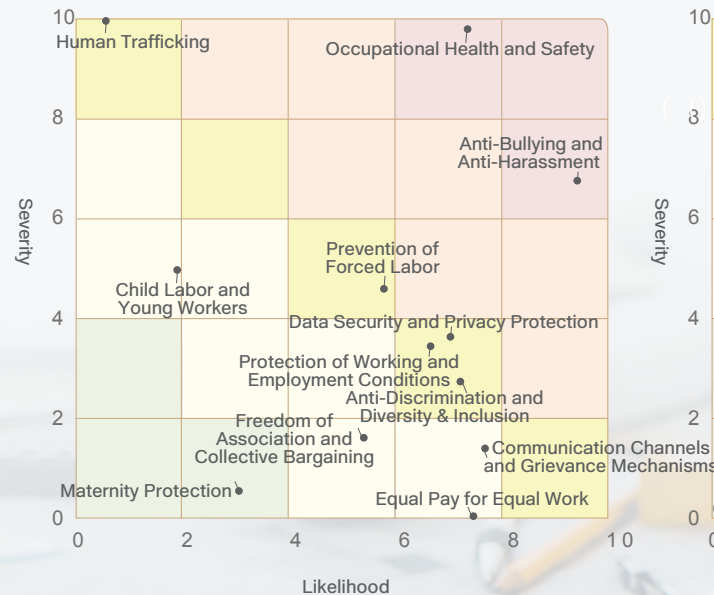
- Occupational safety and health



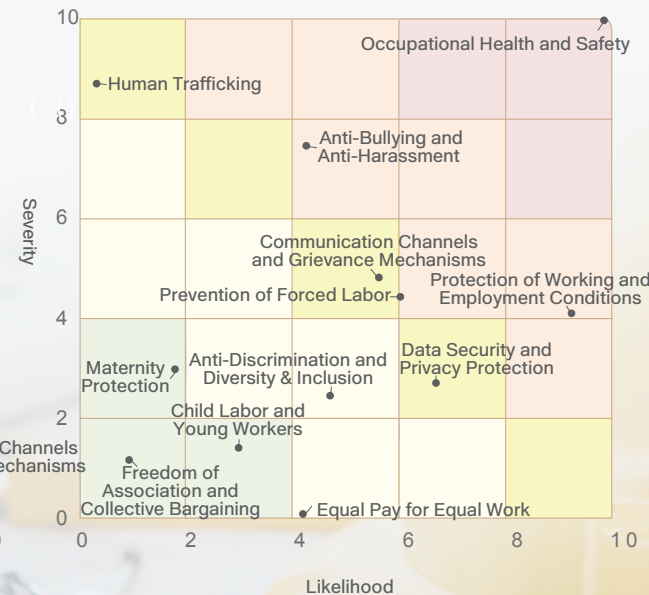
Customers

- Occupational safety and health

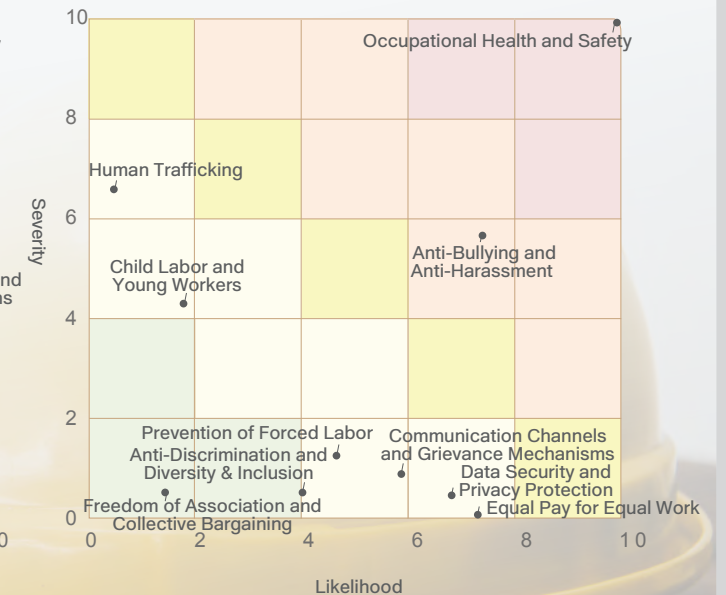
Employee Human Rights Risk Matrix



Human Rights Risk Matrix for Tier-1 Suppliers and Contractors



Customer Human Rights Risk Matrix



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Employees	Mitigation and Preventive Measures	Number of Sites with Mitigation Plans	Remediation actions taken
 Occupational Safety and Health ALL	Failure to provide a safe, healthy, and secure work environment, absence of designated OSH officers or departments, lack of regular OSH training, or absence of health consultations for employees and suppliers.	- Corporate Sustainability Committee at the Board level develops medium- and long-term health and safety strategies. - Established “<u>Occupational Safety and Health Policy</u>.” - Implemented ISO 45001 OSH Management System, certified by a third party, established OSH organizations and personnel, provided safe machinery and ensured worker health and safety. - Pursuant to OSH plans, zero workplace accidents targets, annual management reviews to evaluate performance and confirm targets.	- Established employee grievance channel: hr@acc.com.tw. - Noise control: administrative controls, protective equipment, engineering improvements, reduced exposure; ear protection required above 85 dB. - Level 3+ special health checks trigger health tracking and on-site physician consultations at Hualien Plant to evaluate hearing protection plans and propose improvements.
 Anti-Bullying and Harassment ALL	Any form of abuse, corporal punishment, oppression, insults, threats, or harassment (including sexual or gender-related) or use of technological means, authority, coercion, or intimidation for sexual remarks or demands.	“<u>Human Rights Policy</u>” includes commitments to anti-discrimination and anti-harassment. - Conducts human rights training, promotes “labor rights” and “gender equality in the workplace” through videos, made publicly available. Established grievance channels for stakeholders.	Established employee grievance channel and sexual harassment prevention email: hr@acc.com.tw.
Tier 1 suppliers and contractors			
 Occupational Safety and Health ALL	Failure to provide a safe, healthy, and secure working environment; lack of designated OSH officers or departments; no regular OSH training or health consultation for employees and suppliers, affecting awareness of health and safety.	- Require suppliers and contractors to sign and comply with the “<u>Supplier Corporate Social Responsibility Commitment Letter</u>,” which includes commitments related to occupational safety, injury reduction, and prevention of occupational diseases. - Contractors are required to sign the “Occupational Safety and Health Commitment Letter” before commencing work. - Established the “<u>Occupational Safety and Health Policy</u>.” - Provide on-site education and training for contractors to assist with safety awareness and capacity building. - Implement a contractor OSH performance improvement program.	- Supplier grievance hotline: (02) 27338000 #6029, #8594 - Supplier grievance email: ecome@feg.com.tw - In-plant noise prevention focuses on management control, use of protective equipment, engineering improvements; exposure time is limited, and hearing protection is mandatory when noise exceeds 85 dB.
Customers			
 Occupational Safety and Health ALL	Failure to provide a safe, healthy, and secure work environment; absence of designated OSH officers or departments to manage related mechanisms; no regular OSH training or health consultations for employees and suppliers to raise awareness of health and safety.	The “<u>Human Rights Policy</u>” includes commitments on occupational safety and health.	Established a customer grievance channel through the <u>Complaint Handling Procedures</u>.

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Effectiveness Monitoring and Follow-up

To track the implementation of due diligence, Asia Cement conducts annual inspections and reviews of the effectiveness of mitigation and preventive measures through the Corporate Sustainability Implementation Committee, with results reported to the Corporate Sustainability Committee.

In 2024, the Company received one human rights-related complaint (involving sexual harassment). Upon receipt, the case was immediately processed in accordance with internal procedures, initiating an investigation and promptly implementing workplace separation and protection measures to safeguard the rights of the complainant. After a preliminary investigation by the task force, the case was submitted to the complaint review committee, which confirmed the validity of the complaint. Consequently, personnel actions were taken in accordance with relevant regulations, and both the complainant and the respondent were formally notified. The case has been closed.

To prevent similar incidents from occurring in the future, the Company has implemented the following corrective and preventive measures:

- ① Adjusted the work environment and arrangements of the relevant personnel to prevent recurrence.
- ② Strengthened human rights and sexual harassment prevention training for all employees and managerial levels to enhance workplace respect and sensitivity.

Asia Cement Human Rights Targets

In 2024, Asia Cement established its human rights targets and conducted courses related to human rights topics.

100% of the targets were achieved in 2024.

Target 1:
Achieve a human rights training completion rate of 95%

Actual completion rate was 100%

Target 2:
Achieve a human rights training assessment and passing rate of

Actual passing rate was 100%

Communication and Grievance Mechanisms

To protect the human rights of employees and value chain partners from infringement or adverse impacts, Asia Cement has established comprehensive communication and grievance channels. This ensures that employees and value chain partners have the right to file complaints, reports, or grievances concerning potential human rights violations. The Company provides remedies for any acts that infringe upon human rights or cause adverse impacts and takes necessary corrective measures in company policies and internal procedures.

Asia Cement, under the premise of safeguarding personal privacy, will regularly disclose the number, nature, and outcomes of complaints, reports, or grievances. Channels for raising complaints, reports, or grievances include:

- Employee Grievance Email: hr@acc.com.tw
- Sexual Harassment Prevention Email: hr@acc.com.tw
- Community Communication Platform: <http://quarry.acchl.com.tw/ContactUS>
- Supplier Hotline: (02)27338000 #6029, #8594
- Supplier Email: ecome@feg.com.tw
- Whistleblower Email: speak-up@acc.com.tw
- Whistleblower Hotline: 02-2733-8000 #8195



Human Rights Training

Asia Cement places great emphasis on human rights protection and workplace equality. In 2024, the Company promoted company-wide human rights education and training by utilizing expert course videos from the Ministry of Labor to advocate “labor rights” and “gender equality in employment.” The training materials were made publicly available for all employees to access online. Additionally, specialized training sessions were conducted for managerial personnel to deepen their professional understanding of human rights and gender equality issues, strengthen their ability to identify potential risks, communicate effectively, and manage these issues. This helps build an internal safeguard mechanism for early reporting, incident response, and system improvement, ensuring timely intervention and proper handling, thereby enhancing managers’ capacity to control human rights risks and fulfilling the Company’s commitment to human rights and social responsibility.



Gender Equality in Employment Training

Organized into five chapters, covering topics such as the prohibition of gender discrimination, prevention of sexual harassment, relief and grievance procedures, and the implementation of measures to promote workplace equality.



Labor Rights Training

Organized into four chapters, covering topics such as what labor rights are, the development and introduction of labor rights, key regulations on labor rights protection in Taiwan, and a comprehensive overview of labor rights safeguards.

Security Practices

In 2024, Asia Cement conducted human rights training specifically for security personnel, totaling 55 participants with a cumulative 70 training hours.

Achieving a 100% participation rate among security staff.



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4.2 Talent Attraction and Retention

To actively retain highly engaged and outstanding talent, enable employees to showcase their best performance, realize their potential, and recognize and respect their achievements, Asia Cement integrates communication channels with diverse and innovative guidance approaches. The Company continuously encourages all employees to uphold core values through multiple channels, such as meetings, speeches, and internal publications, to communicate the Company’s vision, core values, and business philosophy with management and employees. This strengthens the corporate culture and enhances the mutual commitment between the Company and its employees. Through this, every Asia Cement employee understands their importance and that every role is meaningful, thereby increasing employees’ sense of well-being.

4.2.1 High-Quality Workforce Composition

Employee Structure: Local recruitment rate exceeds 95%

Due to the nature of the cement industry, Asia Cement’s workforce primarily consists of male plant operations personnel. To meet the demands of diversity, inclusion, and sustainable development, Asia Cement upholds the philosophy of sustainable management and actively promotes local hiring policies at each operating site, achieving 100% local employment. Subsidiaries also have 93.6% of their employees recruited locally.

Asia Cement is committed to creating a stable and cohesive work environment by offering competitive compensation, benefits, and career development systems, resulting in a consistently low overall employee turnover rate. During the reporting period (2024) and between reporting years (2023 and 2024), the difference in total employee numbers did not exceed 15%, indicating no significant fluctuation.

The age distribution of employees at Asia Cement and its subsidiaries is as follows:Under 30 years old: 120 employees (7%), 30 to under 50 years old: 996 employees (56%), 50 years and older: 657 employees (37%).

Site	Category	Male		Female		Total	
		Number of people	Percentage of the total types (%)	Number of people	Percentage of the total types (%)	Number of people	Percentage of the total types (%)
Asia Cement	Supervisor	45	78%	13	22%	58	13%
	Administration	12	39%	20	61%	33	7%
	Sales	57	98%	1	2%	58	13%
	Plant affairs	289	92%	26	8%	315	68%
	Total	404	87%	60	13%	464	100%
Subsidiaries	Supervisor	85	83%	17	17%	102	8%
	Administration	89	53%	79	47%	168	13%
	Sales	52	75%	17	25%	69	5%
	Plant affairs	912	94%	58	6%	970	74%
	Total	1,138	87%	171	13%	1,309	100%

Note Supervisors are the ones above grade 12.

Site	Employ the disadvantage		Employ indigenous people		Employ foreigners	
	Number of people	Ratio	Number of people	Ratio	Number of people	Ratio
Asia Cement	3	0.6%	115	24.8%	0	0.0%
Subsidiaries	11	0.8%	55	4.2%	84	6.4%

- Note
- Due to the resignation of an employee with disabilities resulting in under-quota employment, Asia Cement paid the differential contribution to the Employment Fund for Persons with Disabilities in accordance with the People with Disabilities Rights Protection Act. Among the employed, one employee with a severe or above disability is calculated as two persons for quota purposes. In February 2025, the Company successfully hired an additional employee with disabilities.
 - The nationalities of foreign employees hired by subsidiaries are Vietnam, Thailand, and the Philippines.

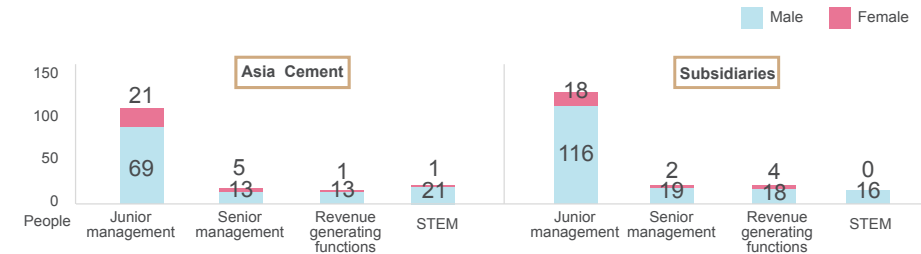
Number of Employees

Site	Total number of employees			Classified By Gender And Employment Contract						
	All employees			Permanent			Temporary			Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
 HQ of Asia Cement	99	33	132	99	33	132	0	0	0	132
 Hsinchu Plant	28	1	29	28	1	29	0	0	0	29
 Hualien Plant	277	26	303	277	26	303	0	0	0	303
 Ya Tung Ready-Mixed Concrete	397	76	473	395	75	470	2	1	3	473
 Yuan Long Stainless Steel	206	27	233	205	27	232	0	0	0	233
 Ya Li Precast	48	9	57	48	9	57	0	0	0	57
 Nanhwa Cement	17	2	19	17	2	19	0	0	0	19
 ChiaHui Power	81	11	92	81	11	92	0	0	0	92
 Fu Ming (Da) Transport	389	46	435	389	46	435	0	0	0	435
Total	1,542	231	1,773	1,539	230	1,769	2	1	3	1,773

- Note
- The year-end number of employees represents the total number of employees in service on the last day of the reporting year, excluding those on unpaid leave.
 - In 2024, among Asia Cement and its subsidiaries, only Yuan Long Stainless Steel employed one male part-time worker as a non-guaranteed working hours employee.
 - Ya Tung Ready-Mixed’s dispatched operational staff at delivery plants are excluded from calculations of headcount, hiring rate, turnover rate, parental leave, compensation change, average training hours, and occupational injuries.

Among Asia Cement’s employees, women hold:23% of first-level (junior) management positions,28% of senior management positions,7% of revenue-generating roles (sales functions), and5% of STEM positions.

Management Positions at Asia Cement (Number of Personnel)



- Note
- Senior management refers to manager level and above.
 - STEM positions refer to managers in science, technology, engineering, and mathematics fields.

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New Hires and Employee Turnover

The cost for Asia Cement to recruit one new employee is NT\$1,712. In 2024, the voluntary turnover rate was 6% for Asia Cement and 16% for its subsidiaries. Asia Cement's internal promotion rate for managerial positions in 2024 was 91%. The Company has established an internal transfer mechanism to help employees adjust career plans, improve work efficiency, and optimize talent deployment.

(Note) Internal promotion rate (Grade 12 and above) = number of internal promotions / (number of promotions during the year + total number of new hires in the year)

New Employee

Site	Category	All employees			Male		Female		Total New employees	
		Male	Famale	Total	People	New rate(%)	People	New rate(%)	People	New rate(%)
Asia Cement	Below 30	37	11	48	12	32%	4	36%	16	33%
	30~50	220	28	248	19	9%	3	11%	22	9%
	Above 50	147	21	168	1	1%	0	0%	1	1%
	Total	404	60	464	32	8%	7	12%	39	8%
Subsidiaries	Below 30	57	15	72	38	67%	10	67%	48	67%
	30~50	644	104	748	166	26%	24	23%	190	25%
	Above 50	437	52	489	38	9%	7	13%	45	9%
	Total	1,138	171	1,309	242	21%	41	24%	283	22%

- (Note)
1. The range 30–50 does not include the boundary values.
 2. The turnover rate is calculated as the number of employees who left divided by the total number in that category, and the hiring rate is calculated as the number of new hires divided by the total number in that category; the total number in that category refers to the year-end headcount for each category.

Site	People	Turnover Situation								New employees Situation	
		Retired (A)		Voluntary Turnover (B)		Non-voluntary Turnover(C)		Total Turnover (A+B+C)			
		People	(%)	People	(%)	People	(%)	People	(%)		
Asia Cement	464	20	4%	26	6%	0	0%	46	10%	39	8%
Subsidiaries	1,309	19	1%	182	14%	11	1%	212	16%	282	22%

Not Employee Workers

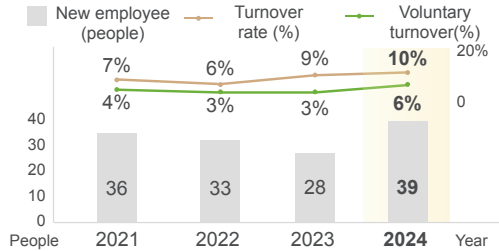
Asia Cement monitors the number of not employees. The most common types are non-fixed-term contract contractors, such as those engaged for overhauls, equipment replacement, maintenance, or rectification projects. A smaller portion is under fixed-term contracts for work such as security and cleaning services. Subsidiaries also include on-site drivers and dispatch plant personnel.In 2024, Asia Cement estimates approximately 547 not employees (FTE/year), while subsidiaries accounted for approximately 590 not employees (FTE/year).Given that the work content of these not employees varies by project, there were significant fluctuations in their numbers during the reporting period (2024) and between reporting years (2023 and 2024).

(Note) The number of not employees was calculated by converting total accumulated working hours into full-time equivalents (FTEs), based on 250 working days per year and 8 hours per day in 2024. For on-site drivers, estimates were based on transport capacity (average 700 m³ per driver per month).

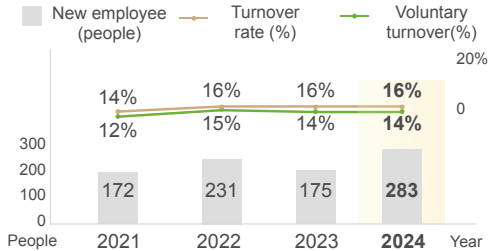
Employee Turnover

Site	Category	Male		Female		All employees turnover	
		People	Turnover rate(%)	People	Turnover rate(%)	People	Turnover rate(%)
Asia Cement	Below 30	2	5%	4	36%	6	13%
	30~50	15	7%	2	7%	17	7%
	Above 50	21	14%	2	10%	23	14%
	Total	38	9%	8	13%	46	10%
Subsidiaries	Below 30	14	25%	1	7%	15	21%
	30~50	123	19%	24	23%	147	20%
	Above 50	45	10%	5	10%	50	10%
	Total	182	16%	30	18%	212	16%

Asia Cement's New employee hires and employee turnover in the past years



Subsidiaries's New employee hires and employee turnover in the past years



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Asia Cement Employee Satisfaction Survey Coverage: 100%

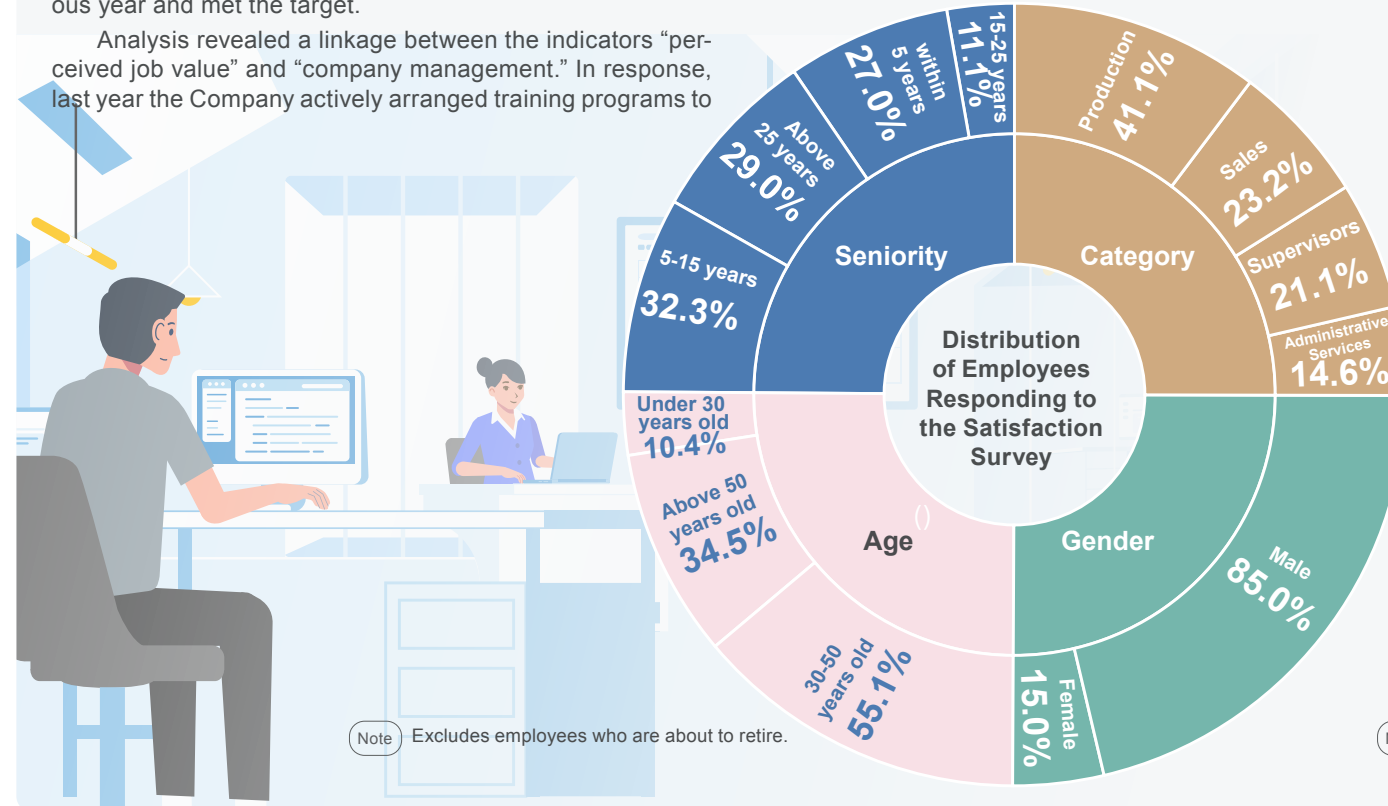
Employee satisfaction serves as a composite indicator reflecting employee loyalty, cohesion, and sense of belonging. In 2025, Asia Cement conducted an employee satisfaction survey covering all employees at the head office, Hualien Plant, and Hsinchu Plant. A total of 464 questionnaires were distributed through the system, with 443 responses received, representing a 96% coverage rate, encompassing employees of all genders, seniority, age groups, and job categories.

The target was set for over 70% of employees to report feeling satisfied, and overall, 77% of employees expressed satisfaction with the Company. In a breakdown by category, “team operations” and “work environment and safety” ranked highest, while “the work itself” (meaning satisfaction and sense of accomplishment derived from the work) and “company management” were the lowest scoring dimensions. However, both showed slight improvements over the previous year and met the target.

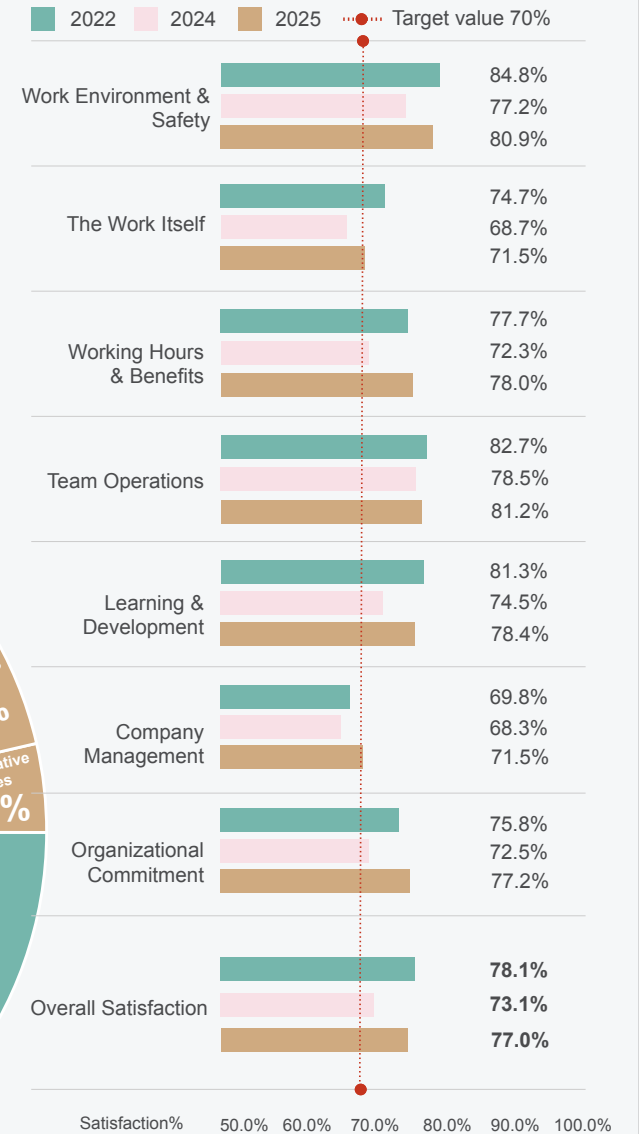
Analysis revealed a linkage between the indicators “perceived job value” and “company management.” In response, last year the Company actively arranged training programs to

strengthen supervisors’ abilities in motivating subordinates, team leadership, and communication. It also reviewed the current reward, promotion, and performance appraisal systems. By enhancing communication between supervisors and employees and implementing sound and fair human resource management measures, the Company has partially improved employees’ recognition and sense of value in their work.

This year, Asia Cement will continue using the PDCA management cycle to drive continuous improvement, reinforcing two-way communication and positive support between supervisors and subordinates at every stage, aiming to further increase employees’ identification with their job value and the effectiveness of management.



Asia Cement Employee Satisfaction(%)



Note: The percentage represents the proportion of employees who selected “satisfied” or above (including “very satisfied”).

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Institutionalized Compensation: Employees Sharing in Business Success

In 2024, Asia Cement allocated **1.164% of its pre tax earnings for employee compensation.**

Regarding employee compensation mechanisms, Asia Cement has stipulated in its Articles of Incorporation that if the Company generates profit for the year, 0.1% to 4.0% of pre-tax earnings shall be allocated as employee compensation. For subsidiaries, the allocation ratio ranges between 1% and 5% of pre-tax earnings. This ensures that all Asia Cement employees share in the Company's business achievements.

Employee Benefits Items	2021	2022	2023	2024
Short-term Employee Benefits				
Salary Expenses	580	576	561	584
Directors' Remuneration	163	132	132	144
Labor and Health Insurance Expenses	44	45	45	42
Other Employee Expenses	22	21	27	27
Subtotal (＄)	809	774	765	797
Post-employment Benefits				
Defined Contribution Plans	14	15	15	15
Defined Benefit Plans	(13)	(13)	(35)	(37)
Subtotal	1	2	(20)	(22)
Total Employee Benefits Expenses (＄)	810	776	745	775

Note Extracted from Asia Cement's standalone financial statements, p.58. (Unit: NT\$ million)

Employee Equity Program – Employee Stock Ownership Trust (Participation Rate: 60.1%)

To attract and retain talent while safeguarding employees' retirement well-being, Asia Cement launched its Employee Stock Ownership Trust in 1998, enabling monthly purchases of the Company's own shares. Under this program, contribution amounts are set according to management and employee job grades, with the Company matching 30%, purchasing the Company's shares on a regular basis for long-term holding so employees can share in the Company's operational success.

As of December 2024, there were 279 eligible employees with a participation eligibility rate of 60.1%, and 275 employees actually enrolled, representing 59.3% of Asia Cement's employees.

Note The statistics for long-term incentive ESOT participants do not include the five senior management members.

100% of Employees Covered by Variable Pay and Long-Term Incentive Schemes

All of Asia Cement's full-time employees (100%) are entitled to performance-based variable compensation and employee benefits. Asia Cement links its incentive compensation schemes to Company operating profitability (financial indicators), coal consumption in production (energy indicators), and individual performance, creating a motivating rewards structure.

Incentive Item	Description	Linked Indicators / Basis	Employees Covered (%)
 Year-End Special Bonu	Granted annually based on the operating profit margin of the core business, in accordance with the collective agreement signed with the labor union, realizing the shared achievements of labor and management.	Financial indicator (operating profit)	100%
 Festival Bonuses	Granted during the Lunar New Year, Dragon Boat Festival, and Mid-Autumn Festival, based on manufacturing department performance.	Production performance indicators	100%
 Efficiency Performance Bonus	Integrated with sustainability targets, such as reducing coal consumption, saving electricity and fuel, and promoting circular economy outcomes, tied to individual/team energy-saving performance, and granted annually.	Energy efficiency and circular economy indicators	100%
 Employee Compensation	Allocated based on the Company's Articles of Incorporation: 70% distributed according to work and team performance, and 30% based on individual performance (e.g., carbon reduction, quality, behavioral competencies), granted annually.	Work and team performance, individual performance indicators	100%

Performance Management Cycle:100% of Employees Evaluated

Asia Cement has established a comprehensive performance management system. By cascading organizational functions, management processes, and measurement indicators into departmental and positional performance objectives, supervisors can accurately set targets, monitor subordinates' work in daily management, and employ a continuous Plan-Check-Review (PDCA) management cycle to track and assess performance outcomes. This drives the achievement of overall corporate performance goals while fostering individual employee growth.

Every December, Asia Cement conducts performance appraisals for 100% of its employees, reviewing work performance objectives and competencies. Individual KPIs account for 50% of the evaluation, while behavioral competencies make up the remaining 50%. Based on these appraisal results, adjustments are made to salaries, bonuses, and promotions, thereby motivating employees to actively engage in their work, achieving a win-win outcome of both personal compensation growth and enhanced company performance.

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Pay Linked to Sustainability

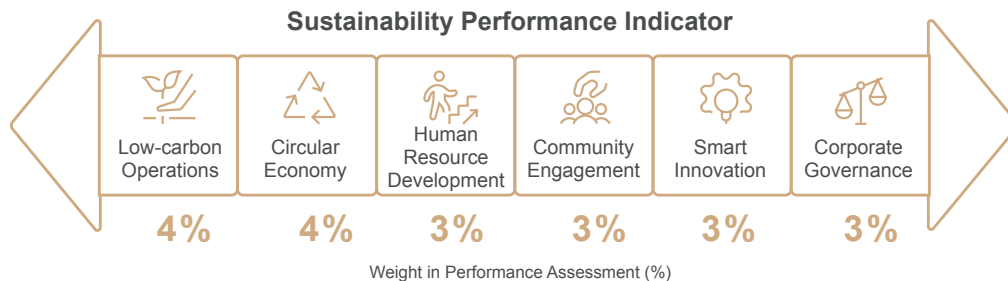
To fulfill its vision of sustainable corporate operations, Asia Cement has published its “Sustainability Strategy Blueprint,” which comprehensively covers the three pillars of Environmental (E), Social (S), and Governance (G), and has established medium- and long-term sustainability targets to deeply integrate its core business with sustainable values.

Key performance indicators (KPIs) related to ESG are explicitly incorporated into the annual remuneration system of the President and senior management, with assessment outcomes directly impacting variable compensation and bonus proportions. Supervisors at all levels are required to set 2 to 3 sustainability indicators according to their respective responsibilities, which are included in their annual performance evaluations:

President	ESG indicators account for 20% of the annual assessment
Senior Management	ESG indicators account for approximately 10% to 15% , depending on their roles.

By institutionalizing the linkage between ESG performance and the compensation system, the Company reinforces a top-down sustainability culture, thereby fulfilling its commitments to corporate governance and sustainability responsibilities.

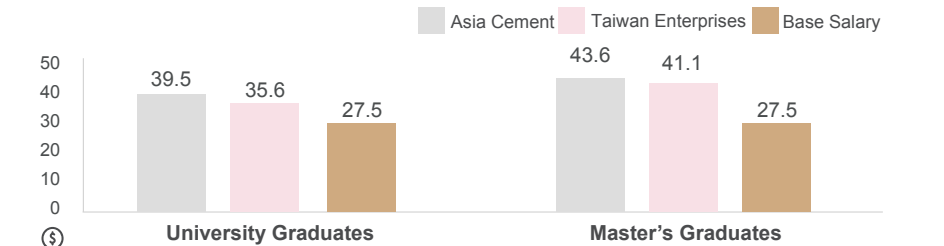
Aspect	ESG Indicator Categories (Set Flexibly Based on Responsibilities)
 Environmental	Plant carbon emissions, alternative raw material/fuel usage rate (circular economy), water resource use efficiency
 Social	Retention rate of key employees, days with zero occupational accidents, community engagement and shared prosperity
 Governance	Zero compliance violations reported, effectiveness of functional committee operations, corporate governance enhancement measures



Compensation Levels

Asia Cement has established work regulations in accordance with the Labor Standards Act. In addition to offering competitive salaries by benchmarking against industry standards, certain provisions and benefits exceed those stipulated by the Act. In terms of bonuses, the Company provides:Festival bonuses to encourage increased clinker production,Attendance bonuses to encourage consistent attendance,Cost-saving performance bonuses to incentivize efficiency, andMid-year special bonuses linked to operating profit. When there is a surplus, employee profit sharing is distributed in accordance with Company policies. All these are specified either in the collective agreement or the Company’s Articles of Incorporation.

Asia Cement Salary Competitiveness (NT\$ Thousand)



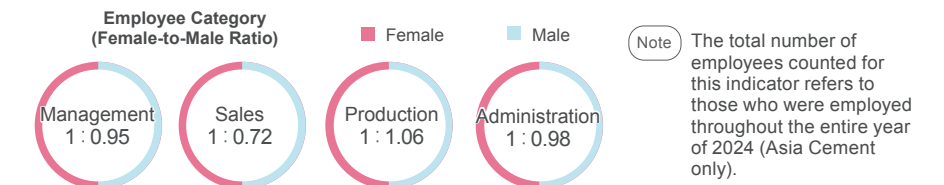
- Note
- The salary figures for Asia Cement represent the average fixed monthly salary for newly hired employees under the age of 27 in each educational level for the year 2024. As there were no newly hired employees with a master's degree meeting these criteria in 2024 and 2023, the figure is based on 2022 data.
 - The entry-level salary data for Taiwan enterprises is sourced from the 2024 Salary Survey Report by Pro-Rating Management Consulting.

Gender Equality

Asia Cement’s senior management compensation structure is the same as that applied to all employees. Salary standards are determined with reference to market conditions, the Company’s financial situation, and organizational structure. There is no difference in pay based on gender or ethnicity. For newly hired employees of the same position and grade, the female-to-male basic salary ratio is 1:1. Furthermore, 100% of Asia Cement’s senior management are local residents.

- Note
- “Local” is defined as Taiwan. Senior management refers to employees at grade 11 and above.

Ratio of Basic Salary and Remuneration of Women to Men by Employee Category



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Salary for full-time employees who are not in supervisory Percentage of Annual Total Remuneration positions

According to the Taiwan Stock Exchange's new Corporate Governance Roadmap, listed companies in Taiwan are required to disclose the number of full-time employees not in managerial positions, along with their average and median salaries.

In 2024, Asia Cement had 464 full-time employees not in managerial positions, with an average salary of NT\$1,132,000 and a median salary of NT\$988,000. These statistics are calculated in accordance with Taiwan Stock Exchange guidelines, excluding managers and personnel exempted by applicable exclusions. Salaries for employees who have worked for less than one year are weighted by days employed, and employee compensation is calculated on an accrual basis.

Year	2021	2022	2023	2024	Difference 2023~2024
Number of Employees	449	457	444	464	20
Average Salary (NT\$)	1,110,000	1,056,000	1,083,000	1,132,000	49,000
Median Salary (NT\$)	1,003,000	930,000	941,000	988,000	47,000

Ratio of Annual Total Compensation

The ratio of the annual total compensation of the highest-paid individual at Asia Cement and its subsidiaries to the median annual total compensation of all other employees (excluding the highest-paid individual) ranged from 0.96 to 11.63 : 1.

In 2024, the ratio of the percentage increase in annual total compensation for the highest-paid individual compared to the median percentage increase in annual total compensation for all other employees (excluding the highest-paid individual) ranged from 0.96 to 8.17 : 1.

- Note
- "N" indicates that there was no increase.
 - Compensation change ratio = A / B
A: Change rate of the highest-paid individual [(current year compensation - previous year compensation) / previous year compensation]
B: Median change rate of all other employees [(current year compensation - previous year compensation) / previous year compensation]
 - The calculation is based on employees with complete two-year compensation data, excluding employees who joined or left the Company during the period.

Operating Entity	Annual total compensation ratio	Percentage increase in annual total compensation ratio
 Asia Cement	11.63 : 1	NA
 Ya Tung Ready-Mixed Concrete	7.17 : 1	1.32 : 1
 Yuan Long Stainless Steel	0.96 : 1	NA
 Ya Li Precast	4.15 : 1	0.96 : 1
 Nanhwa Cement	2.37 : 1	1.04 : 1
 ChiaHui Power	4.25 : 1	8.17 : 1
 Fu Ming (Da) Transport	6.67 : 1	NA

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Non-Compensation Benefits & Life Support — 100% Coverage

Item	Measures by Asia Cement Beyond Legal Requirements
 Paid (Full-Pay) Sick Leave	Employees are entitled to 30 days of fully paid sick leave.
 Health Checkups	The Company provides health checkups once every two years, exceeding statutory requirements, including ECG, abdominal ultrasound, and cancer screening. Senior employees are offered advanced health screening programs.
 Group Insurance	Fully Company-funded insurance for employees, covering term life, accident, hospitalization, and cancer. The annual group insurance expense is approximately NT\$2.1 million. ultrasound, and cancer screening.
 Travel Insurance	Overseas business trip insurance, including accident and overseas medical coverage.
 Travel Subsidy	Under the “Employee Self-Travel Subsidy Program,” each employee receives NT\$12,000 per year to encourage personal travel for well-being and work-life balance.
 Emergency Assistance	A special program provides loans of NT\$100,000 to NT\$300,000 to support employees in emergencies. In 2024, two employees utilized this program.
 Living Subsidies	Annual subsidies include birthday, three major festivals (Lunar New Year, Dragon Boat Festival, Mid-Autumn Festival), Labor Day vouchers, wedding and childbirth gifts, and condolence payments.



Family-Friendly Workplace Environment

Asia Cement supports employees’ family care needs through a childcare support program that includes childbirth incentives and agreements with daycare centers to facilitate childcare arrangements for employees. Additionally, a friendly workplace is fostered by providing nursing (breastfeeding) rooms. Employees can also apply for flexible working hours and remote work arrangements as needed. To address school transportation needs for employees’ children in urban areas, the Company provides shuttle services to and from school.

Annual leave system

Asia Cement provides annual leave days according to Labor Standards Act. The employees responsible for manufacturing and warehousing are working on three shifts, if there are needs in the production and the annual leave days cannot be totally taken, the remaining annual leaves not being taken can be converted into wages.

Paid Volunteer Leave: 3 days per year for all employees

At Asia Cement, we encourage and support employees' participation in social welfare activities. Employees have the opportunity to participate in volunteer services or charitable activities during their work hours. We have adopted the "Procedures for Colleagues to Participate in Volunteer Work" to help employees make contributions to volunteer services if they wish to do so, striking a balance between work and life. Whether participating in company-sponsored charitable activities or government-endorsed social welfare charitable activities, employees are entitled to 3 days of paid volunteer leave per year. We hope that this special leave form will help create a warmer society with employees and spread love to every corner of Taiwan.



Diversity, Equality, and Inclusion (DEI)

Asia Cement values diversity, equity and inclusion (DEI). We insist on not leaving out any of our employees, and regard the families of employees as part of our big ACC family. We have teamed up with Kindred Plus Philanthropic Foundation of Taipei in the "ESG Benefit Project for Senior Citizens". The Project aims to enrich the lives of parents of the employees and employees who are about to retire or have already retired. The Project includes regular visits by dedicated personnel. Senior life planners with a background in counseling are invited to provide counseling services related to health, diet to asset planning. At the same time, appropriate agencies are matched to ensure that every elderly person enjoys the most attentive care. Besides extending its care from the workplace to the family, ACC also provides comprehensive care for elderly relatives and employees who are about to retire or have already retired through a series of initiatives. This is a fulfillment of corporate social responsibility and a journey full of humanity and thoughtfulness.

Retirees Hired as Consultants to Pass on Their Experience

At ACC, retirees are regarded as an important asset. Therefore, we voluntarily recruit senior employees who have retired, hoping to transform professionalism into the Company's core competitiveness by passing on their knowledge, technology, and experience. Through cross-generational work and interaction, we have formed a model of collaboration between the young and the old to promote the diversity and inclusion of employees and create a friendly workplace. A total of 1 employees were rehired in 2024.

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Guaranteed Parental Leave

For the need of baby nursing, the employee can apply for retaining the position without pay before the child is three years old, the longest period can be up to two years. At the end of the period, the Company provides the related training courses to ensure that the employee is able to understand current work status in order to smoothly return back to the position.

Site	Year Item	2024		Total
		Male	Female	
Asia Cement	Total number of employees that were entitled to parental leave in 2024	25	3	28
	Total number of employees that took parental leave in 2024	3	1	4
	Total number of employees that returned to work in 2024 after parental leave ended	2	1	3
	Total number of employees that applied for reinstatement in 2024	1	1	2
	Return to work rate	50%	100%	67%
	Total number of employees that took parental leave in 2023	2	2	4
	Number of employees who were still employed 12 months after returning to work in 2023	1	1	2
	Retention rate after returning from parental leave	50%	50%	50%
Subsidiaries	Total number of employees that were entitled to parental leave in 2024	20	7	27
	Total number of employees that took parental leave in 2024	5	4	9
	Total number of employees that returned to work in 2024 after parental leave ended	5	0	5
	Total number of employees that applied for reinstatement in 2024	5	0	5
	Return to work rate	100%	-	100%
	Total number of employees that took parental leave in 2023	3	2	5
	Number of employees who were still employed 12 months after returning to work in 2023	2	2	4
	Retention rate after returning from parental leave	67%	100%	80%

- Note
1.

The number of employees eligible to apply for parental leave is calculated based on those who took maternity or paternity leave between 2022 and 2024 and were still employed at the end of 2024.
2.

Reinstatement rate = (Number of employees actually reinstated after parental leave in 2024 / Number of employees due to be reinstated after parental leave in 2024) × 100%
3.

Retention rate = (Number of employees still employed 12 months after returning from parental leave in 2023 / Number of employees who returned from parental leave in 2022) × 100%

Labor Practices Programs

Asia Cement upholds core values of respecting human rights and safeguarding employee well-being, actively advancing its labor practices programs to foster a safe, healthy, and equitable workplace. The company ensures that all employees receive wages that meet or exceed local living cost estimates and industry benchmarks, rigorously monitors working hours and overtime to guarantee proper compensation in compliance with regulations. Asia Cement regularly engages in dialogue with unions and labor-management meetings to discuss working conditions and address employee concerns. Each year, the company reviews its gender pay structure to uphold equal pay for equal work across all genders. Beyond statutory requirements, Asia Cement extends social protection coverage to employees outside of public works projects and fully ensures paid annual leave entitlements. In response to industrial transitions and climate change challenges, the company continues to provide skills training and reskilling programs to help its workforce adapt and mitigate transitional impacts. Through these comprehensive initiatives, Asia Cement demonstrates its commitment to employee rights, strengthening organizational resilience and jointly creating long-term sustainable value.

Employee Health Promotion and Management

Labor Health Examinations and Management

Asia Cement provides regular free health examinations that exceed regulatory requirements, introducing on-site services by occupational health physicians and nurses (even subsidiaries with fewer than 50 employees have implemented this). The company also organizes first aid training courses and offers group health and accident insurance to safeguard employee health. In compliance with the Occupational Safety and Health Act and the Labor Health Protection Rules, new employees submit physical examination forms to ensure appropriate job placement. Existing employees receive regular general health checks, and employees engaged in special health-hazardous operations undergo special health examinations. Based on examination reports, employees are managed by risk levels, and job duties are adjusted appropriately according to their health conditions.

Employee Health Promotion Activities

Each unit plans activities to promote health, such as body weight control (weight loss) programs, health seminars, sports clubs, mental health workshops, and employee assistance program psychological counseling, enabling employees to maintain energetic physical and mental health. From June to August 2024, Asia Cement organized a three-month “Keep Moving, Stay Healthy” health promotion campaign. Activities included smart health challenges, the Asia Cement Health Sustainability Award, and health education. For the Health Sustainability Award, employees who walked more than 6,000 steps per day could qualify for prize draws based on the number of days achieved. A total of 153 employees participated in the weight management initiative, reaching a participation rate of 36.69%.

Maternal Health Protection for Female laborers

The “Operational procedure of maternal health protection for female laborers” was formulated in accordance with Occupational Safety and Health Act and a chart of “the evaluation of the hazards to maternal health and the arrangement of adaptive work” was provided to the laborers of this category to fill. The chart was sent to the medical personnel for evaluating and arranging suitable work in order to protect female and maternal laborers.

Protection of abnormal workhour, humanfactors engineering and workplace violence

Occupational Safety and Health Act stipulated “the procedure of preventing the diseases caused by workload” and “the procedure of preventing musculoskeletal diseases”, risk evaluation and survey of needs were conducted via scale measurements, database was installed for making comparisons and the laborers risky at work were handled properly. In addition, the seminars relating to the prevention of workplace violence were held to avoid illegal infringements in workplaces.

Flexible working hours

To help employees balance work and personal life, Asia Cement provides a flexible working hour system, allowing employees to start work flexibly between 08:00 and 09:00 and finish between 17:00 and 18:00. This enhances work arrangement flexibility, assists employees in meeting family and personal needs, and improves overall job satisfaction and efficiency.

Health Promotion and Management for Not Employee Workers

Asia Cement extends health promotion and management to non-employee workers (contractors), which includes ergonomic hazard prevention plans, prevention plans for unlawful infringements during duty execution, and prevention of overwork hazards.

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4.2.2 Human resource development

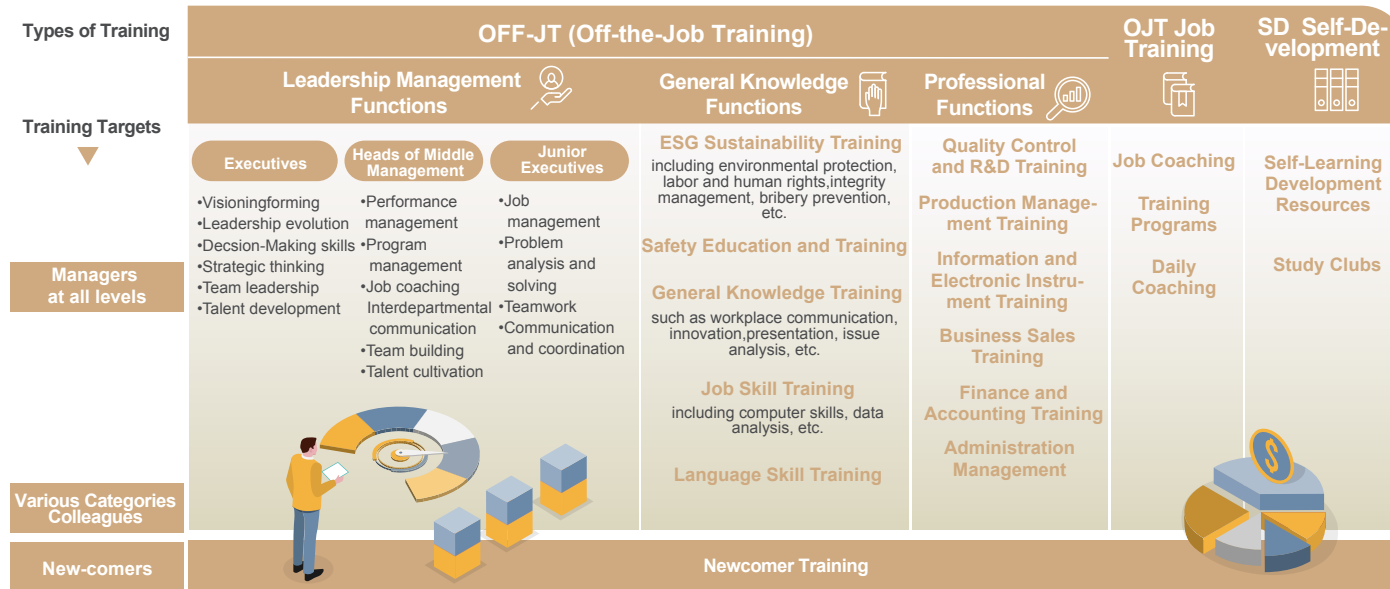
Asia Cement firmly believes that employees are the most important assets of the company. In addition to hiring superior talents through the market competitive remuneration system, it also created a happy workplace environment and planned a comprehensive cultivation program to allow employees developing and shining in the workplace.

Focusing on the job functions required in different departments and ranks of job positions each year, Asia Cement provides sufficient opportunities of learning and training to supervisors and employees by way of referring to the company's development strategy and offering various courses. The Company can not only reach the goal of employment after training, but also link with employees' career development. The series training courses include trainings of new employees, common core job-functions, the professionally/ job-functions, the operation and management, digital transformation and ESG sustainable development.

Talent development quality management system

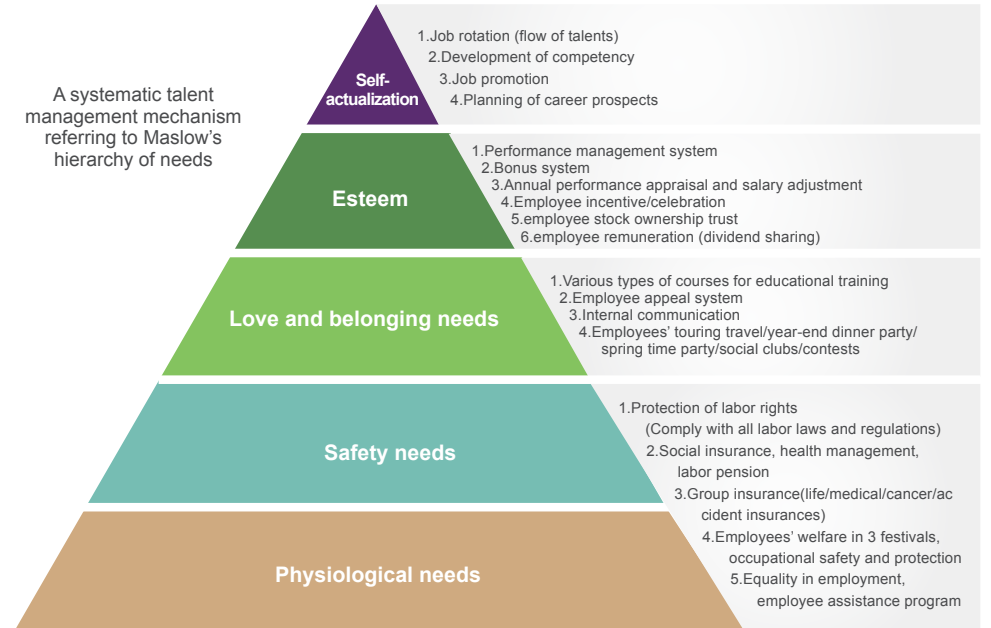
To enhance talent development, Asia Cement participates in the Workforce Development Agency's TTQS (Talent Quality-management System) enterprise version evaluation by Taiwan's Ministry of Labor. The company has maintained excellent performance, achieving the Bronze Award again in 2024. Asia Cement will continue to advance these efforts to strive for further improvement.

Sustainable Asia Cement's Talent Training



Note This applies to 100% of the company's employees.

Asia Cement overall human resource program



Creating a healthy workplace and obtaining the national

Asia Cement was recognized by the Health Promotion Administration with the "Badge of Accredited Healthy Workplace", signifying that Asia Cement's long-term commitment to promoting a smoke-free environment and create a healthy workplace has yielded excellent results!



In addition to providing a regular health checkup, Asia Cement also provides clubs with subsidies for the hiring of professional coaches, so that employees can maintain the good habit of weekly exercise under guidance. When it comes to meals for our employees, we put emphasis on the importance of balanced nutrition and a wide array of dishes; we also try to use a lesser amount of oil and salt so that everybody can have a healthy diet without any risks to their health. Furthermore, we organize lectures on first aid knowledge, so that colleagues can understand the importance of protecting themselves and aiding others through hands-on practice.

Although the pandemic management has been incorporated into routine management, Asia Cement transformed its existing platform into a health information and education platform for ongoing education and promotion on a variety of health information; it is now a communication mechanism for the sustainable development of workers' health. Also, by combining the on-site health services, we can now provide workers with consultation and counseling, enabling them to stay healthy.

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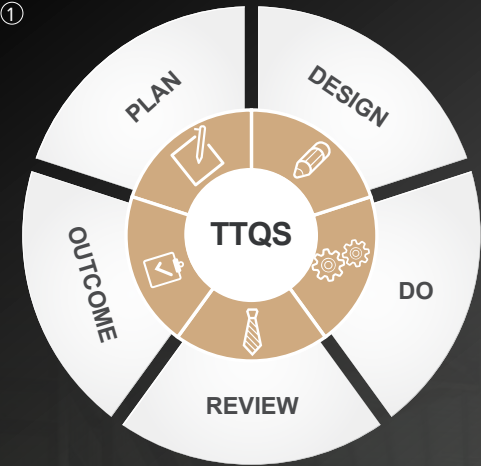
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Training policy and hours

Asia Cement's Training Policy



Utilizing TTQS as the benchmark for the quality of the training, combining the strategies of company vision and goal and adopting the concept of talents being the foundation of an enterprise to create a training system for diversified development.

- ② Improving the required knowledge, attitude and skill of the employees for reaching the collective and individual goals of work in order to fulfill the needs of enterprise development and organizational manpower planning, and to enhance the production efficiency and quality, hence, to increase the profitability and brand image, to satisfy the needs of customers and to fulfill CSR, ultimately, to reach the goal of sustainable operation.
- ③ In responding to environmental variation, providing enriched and diversified learning resources in line with the trend of industrial development, forming the culture of continuous learning in the workplace.

Chairman had repeatedly stated the importance of talent development and the direction of critical developments for the organization in various public assemblies. In order to fully convey the training development commitment and information from the top management, all of the talks from Chairman were disclosed in Far Eastern Magazine for the inquiry of all employees.

The trainings in Asia Cement are mainly held by the Company itself, some of the employees are arranged to attend the open-training class held in the Group, or to attend the professional courses held by external training institutes. The multiple self-inspired training resources are also provided such as study group, learning clubs or online learning platform, to offer employees the chance of autonomous learning.

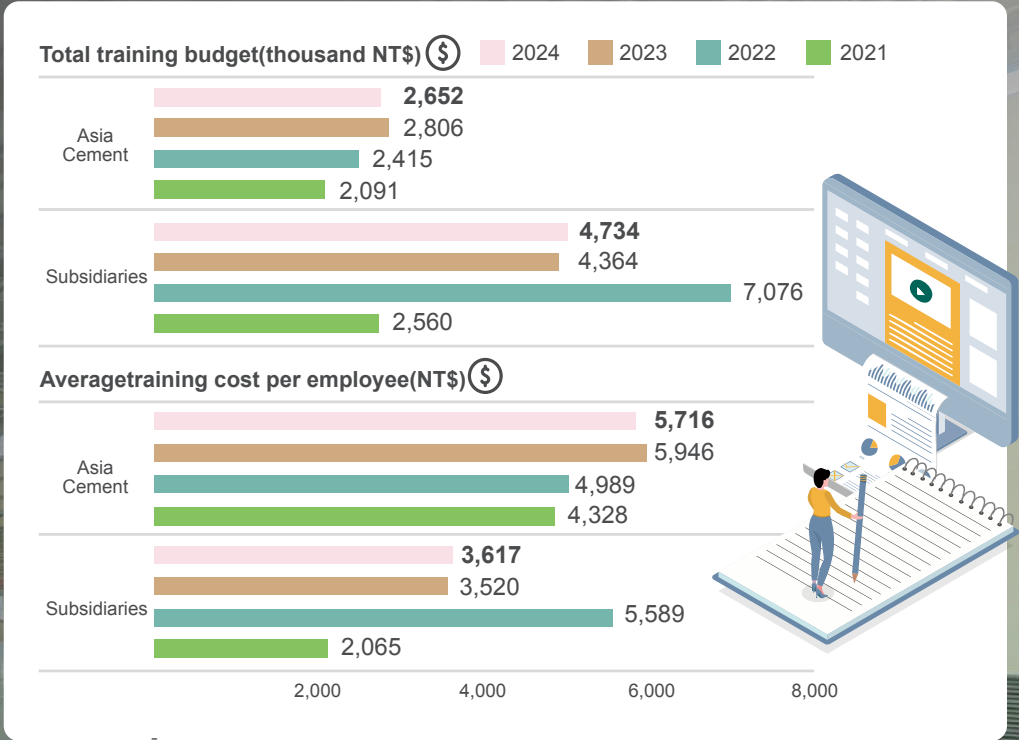
Average Annual Total Training Hours per Employee

In 2024, employees at Asia Cement completed an average of 36 hours of training per person, with an average investment of NTD 5,716 per employee dedicated to training and development. Due to the specialized nature of quarry operations, employees across various categories received an average of 39 hours of training per year.

Site/average hours of training	Supervisor		Administration		Sales		Plant affairs		average hours
	Male	Female	Male	Female	Male	Female	Male	Female	
Asia Cement	37	32	34	33	26	34	38	39	36
Subsidiaries	24	7	17	13	11	1	65	7	9
Hsinchengshan Quarry	65	-	24	-	-	-	38	-	39

Note Calculation formula: Total training hours of the category / Number of employees in the category
 "-" indicates there are no employees of that gender in the category.

Asia Cement's Employee Training Expenditure



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Number of People Trained on Important Issues

Operating entity/ number of trainees	Anti- corruption	Human rights	Information security	Risk management
Asia Cement	947	1,392	261	2,600
Subsidiaries	235	205	514	954

Degree / Credit Programs and Professional Certification & Retraining

To cultivate talent for the company’s future development, all Asia Cement employees are eligible to apply for the master’s degree and credit courses jointly organized by the Far Eastern Group and Yuan Ze University under the Far Eastern Corporate University. The credit courses include subjects such as leadership, data analysis, and political-economic culture. To encourage employees to continuously enhance their professional competencies, in 2024, there were a total of 217 instances of employees obtaining professional certifications and undergoing retraining, primarily in on-site operations, specialized skills, or occupational health and safety qualifications.

Industry-Academia Collaboration Programs & Scholarships

To nurture future talent and enhance students’ practical industry experience, Asia Cement collaborates with Yuan Ze University and Asia Eastern University of Science and Technology to design practical semester and summer internship programs each year. These initiatives implement the educational philosophy of industry-academia collaboration and provide internship scholarships to participating students. Upon graduation, these students are also given priority when applying for relevant company positions.

Transition Assistance Programs

Beyond offering training to improve employees’ competencies, Asia Cement also provides a variety of assistance during work transitions and career shifts to reinforce employees’ career confidence and enhance work quality. The assistance program is structured in the following phases:



Employment support services include:

- Occupational aptitude tests to analyze and clarify career directions;
- Career counseling through Hsinchu Lifeline EAP consultations;
- Resume review services offering personalized feedback;
- Employment market insights and trend analysis;
- Introduction to government employment transition resources (subsidies, vocational training, etc.);
- Seminars on mid-career transition mindset adjustment, proper workplace ethics, and attitude;
- Seminars on retirement life planning.

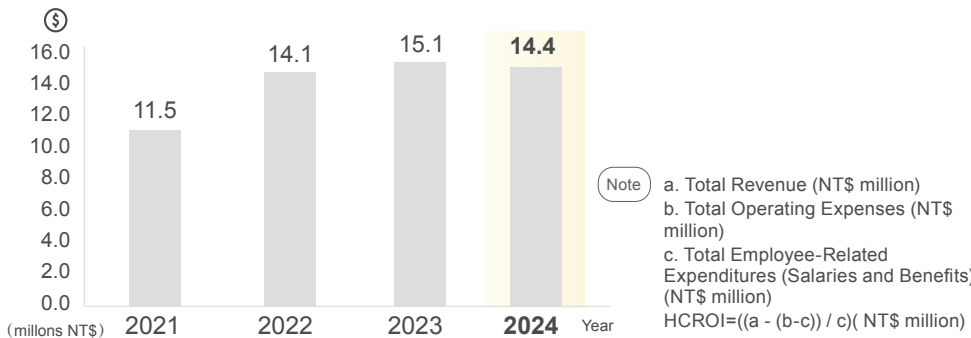
Employee Assistance Programs (EAPs) – Enhancing Work-Life Balance

Asia Cement collaborates with the Hsinchu Lifeline Association – Employee Assistance Service Center, where professional social workers and psychologists provide employees with comprehensive consultation services on career, family, parenting, interpersonal relationships, and more. In the event of disasters or major incidents, the center proactively offers group support sessions or distributes supportive materials to employees. The company also posts various mental health education and care materials on its electronic bulletin board and periodically organizes mental health seminars to enhance employees’ psychological well-being. Each employee is entitled to five hours of free professional consultation with psychologists annually.

Human Capital Return on Investment(HCROI)

Asia Cement Corporation’s Human Capital Return on Investment (HCROI) has remained competitive over the years, reaching NT\$14.4 million in 2024.

Asia Cement’s return on investment in human capital (millions NT\$)



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Employee Development Program — Low-Carbon Cement Business Elite Training Project

This project was designed to enhance the sales team's expertise and practical capabilities in low-carbon building materials and cement businesses. The program encompassed multiple seminars, digital courses, workshops, and presentations of learning outcomes, comprehensively driving the commercial application and innovative development of low-carbon products.

The training focused on enabling participants to develop a profound understanding of low-carbon building materials, carbon management, and circular economy, while engaging in practical exercises on sales strategy thinking and techniques. This empowered them to return to their respective markets and propose effective customer solutions, elevate product value, and respond to the company's carbon reduction initiatives—truly putting Asia Cement's strategy of achieving both environmental protection and economic growth into practice. Highlights included:A keynote by Taiwan's Green Building pioneer, Professor Hsien-Te Lin, on the global development of net-zero buildings and future low-carbon building opportunities in Taiwan;Insights from ready-mix concrete experts on applications of low-carbon circular materials, emphasizing how the cement industry achieves carbon reduction through circular economy practices;Internal experts sharing global cement industry decarbonization technologies and future trends, along with in-depth discussions on low-carbon cement production standards and environmental benefits.

This was complemented by scenario-based strategic sales courses and digital modules that strengthened the sales team's capabilities and practical applications. The team also learned to use advanced ChatGPT tools to boost innovation and efficiency, culminating in presentations of their achievements. At the year-end summary meeting, participants shared learning outcomes and exchanged practical experiences.

The training engaged a total of 100 participants over 362 hours, achieving an average satisfaction score exceeding 4.5 out of 5. The program further strengthened participants' practical skills through two workshops centered on sales strategies, immersing them in the three major phases of strategic selling—rapport building, guiding, and closing. This was integrated with professional knowledge of low-carbon cement, with hands-on practice in translating expertise into effective sales techniques. Additionally, to prepare participants for real-world business scenarios, digital courses paired with workshops were used to reinforce application skills in the sales process. Action plan tracking involved managers and coaches providing feedback on how the knowledge was applied on the job, ensuring learning was sustained and deepened to effectively enhance sales competitiveness. In 2024, despite broader environmental challenges, the sales team's performance exceeded both volume and value targets.



Total of 100
participants

Over
362 hours

Score
exceeding
4.5



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Employee Development Program — “Smart Innovation for the Future: AI and Digital Transformation Learning Program”

This training program was designed to comprehensively enhance employees’ understanding and application capabilities of generative AI and digital technologies. It emphasized not only theoretical knowledge but also hands-on practice, enabling participants to quickly apply AI and digital tools to their daily work, achieve business goals, and spark innovation.

The program included: A company-wide seminar introducing generative AI. Exploring artificial intelligence (AI) and its wide-ranging applications across various industries. Participants learned prompting techniques to effectively guide AI in generating the desired information, making ChatGPT a powerful assistant for enhancing work productivity. Practical workshops on using generative AI to boost efficiency and smart applications: These workshops helped employees practice how to integrate ChatGPT and AI technologies into their daily work, comprehensively improving efficiency and innovation. Through group exercises, participants used ChatGPT for work integration and innovation, enabling them to flexibly apply AI to solve workplace challenges, increase productivity, and stimulate innovative thinking. Nearly 40 elective digital courses on AI and digital skills: This series of courses offered employees the opportunity to autonomously select learning topics based on current work needs or future career development, allowing them to create personalized learning paths.

This training initiative engaged a total of 907 participants, with 2,030 training hours, and achieved an average satisfaction score exceeding 4.5 out of 5. Participants were required to demonstrate practical applications during the courses to ensure effective learning outcomes in both knowledge and operational skills. Through practical workshops, group collaboration, and elective digital courses, employees applied ChatGPT and other AI tools for tasks such as data cleaning, analysis, and formula generation, significantly improving the processing efficiency of daily work.



Total of 907
participants

2,030
training
hours

Score
exceeding
4.5



4.3 Occupational Health and Safety



Management of Material Topics

Asia Cement embeds occupational safety and health management, strengthens risk control and employee participation, and continuously improves equipment and the work environment to build a healthy, safe workplace and advance sustainable development.

Material Topic Categories

Occupational Safety and Health



Occupational
Safety and
Health policy

Impact

Asia Cement has always believed that only healthy employees working in a safe environment can produce safe products that are trusted by customers. The Company treats safety and health of workers as the top indicator when evaluating the performance in the hope of providing safe and healthy work environment with high quality.

Scope of Application

- Including 100% of Asia Cement employees and contractors.

Taking Actions

Asia Cement endeavours to manage and enhance the health of employees by complying with laws and regulations, introducing comprehensive management system, performing overall risk assessment, and establishing management system and criterion. It aggressively demands for essential safety and endlessly improving work environment and mechanical facility in order to ensure a safe and worry-free condition. For the purpose of reaching zero disaster and zero occupational disease, so the employees are healthy and able to happily work, Asia Cement has adopted the vision of creating an organizational culture of safety and health, the goal of building a zero-disaster work environment and protecting the safety and health of workers.

- ① The project of enhancing safety awareness and the training of occupational health and safety
- ② Conducting ordinary routine health check and the health check for the workers involving in hazardous work that jeopardizes the health.
- ③ Conducting a training by combining knowledge and skills based on the occupational competency, learning and preventing hazards.

Integrating Value Chain Operations with ISO 45001 Certification

Employees are the company's most important assets. Asia Cement sees it as an unshirkable responsibility to create a zero-accident workplace where employees can work healthily and happily. Going beyond regulatory requirements, Asia Cement leverages its scale to assist all plants and subsidiaries in fully implementing occupational safety and health management systems. The company also conducts regular on-site training tours to support subsidiaries and contractors in enhancing safety awareness, reducing occupational accident rates, advancing disaster prevention and mitigation, and fostering a corporate safety culture. In 2024, the coverage rate of occupational safety and health management systems across Asia Cement and its subsidiaries in Taiwan reached 100%.

OSH Management Level

The Corporate Sustainability Committee manages occupational safety and sustainability issues. The Corporate Sustainability Implementation Committee has been formed under the Corporate Sustainability Committee, with the President serving as the chairperson. We have also set up an ESG and OSH Team to centrally manage the occupational health, safety and health performance of ACC and its subsidiaries.

Method of evaluating effectiveness

- ① Each year implementing management and performance assessment, confirming the results of moving toward the targets.
- ② Through the Corporate Sustainability Implementation Committee and its promotion team, the implementation status and target achievement level are continuously tracked, and OSH performance is listed as a factor in the remuneration for the executives.

Mechanism of appeal

Suspected cases of occupational disease or incidents where employees suffer physical or mental harm may be reported to the occupational safety and health management unit.

Stakeholder Engagement

File petition to Occupational Safety and Health department for suspected occupational disease, physical or mental infringement.



AREA Asia Responsible Enterprise Awards – “Health Promotion”

Asia Cement's well-established occupational safety and health organization and systems earned the company the AREA Asia Responsible Enterprise Award for the sixth time, receiving the 2024 “Health Promotion Award.” Asia Cement has always regarded the safety and health of its employees as a key performance indicator. Looking ahead, the company will continue to allocate resources to raise the level of occupational safety management and advance health and hygiene-related programs, ensuring that every employee works in a safe and friendly environment and enabling the company to contribute even more to society.



Recognized as an Outstanding Enterprise in the Voluntary Disclosure Evaluation of Occupational Health and Safety Indicators in Sustainability Reports

Asia Cement transparently discloses the implementation of various occupational health and safety indicators in its sustainability report every year. The company was recognized by the Occupational Safety and Health Administration (OSHA) as an “Outstanding Enterprise in the Voluntary Disclosure Evaluation of Occupational Health and Safety Indicators in Corporate Sustainability Reports,” marking the second consecutive year Asia Cement has received this distinction. Asia Cement is committed to continuously fostering a zero-accident workplace where employees can work healthily and happily, integrating upstream and downstream operations across its value chain, safeguarding fundamental labor rights, and enhancing overall corporate competitiveness.



Occupational Health & Safety Governance and Strategy



① Highest governance structure for occupational safety management: Board of Directors (Corporate Sustainability Committee)

Asia Cement's occupational safety management framework places the Board of Directors as the highest governance body, with the board-level Corporate Sustainability Committee responsible for formulating medium- and long-term development strategies and targets.



② Centralized Management of Occupational Health & Safety

Health and Safety Unit: Corporate Sustainability Implementation Committee (composed of executives).Health & Safety strategy and performance is managed by the President



③ Linking occupational safety performance to variable remuneration of senior executives

Asia Cement links occupational safety performance to the variable remuneration of senior executives. If occupational safety performance falls short, it will deduct 6% of the individual bonus of senior executives to ensure comprehensive implementation and execution of occupational safety management.

Composition of “Occupational Safety and Health Committee” at operating sites

Business Unit	Chairman	Total number of members	Labor representatives	Ratio of labor representatives
 Asia Cement Headquarter	President	12	6	50%
 Hualien Plants	Plant Manager	15	7	47%
 Ya Tung Ready-Mixed Concrete	President	12	5	42%
 Yuan Long Stainless Steel	President	19	14	74%

Note

1.

In accordance with Article 10 of the Occupational Safety and Health Management Regulations issued by the Ministry of Labor, companies such as Chiahui Power, Ya Li Precast Prestressed, Fu Ming(Da) Transport, and Nanhwa Cement do not meet the minimum number of employees required by the regulation to establish an Occupational Safety and Health Committee, and therefore have not set up such committees.

2.

Although Fu Ming(Da) Transport employs more than 100 people in total, each of its distributed sites has fewer than 100 employees. Hence, by law, it is not required to establish an Occupational Safety and Health Committee.

3.

Asia Cement has established Occupational Safety and Health Committees and occupational safety and health management units at all its operating sites. Each plant and subsidiary has set up such committees and units in accordance with legal requirements. The Occupational Safety and Health Committee is chaired by the highest level of management, with members including department heads, experts, and more than one-third worker representatives. Meetings are convened at least once every quarter to provide recommendations on occupational safety and health policies, and to review, coordinate, and advise on related matters.

4.

For entities that do not meet the threshold to establish an Occupational Safety and Health Committee, “Labor-Management Meetings” are organized in accordance with government regulations, and labor representatives are elected. These meetings are held every three months to facilitate employee participation, consultation, and communication, alongside irregular occupational safety training sessions. Participation, consultation, and communication for other non-employee workers are carried out through contract agreements and irregular occupational safety training.

100% Coverage of Occupational Safety and Health Managemen Systems Across Asia Cement’s Industry Chain

Asia Cement places great emphasis on occupational safety and health. Each site actively implements occupational safety and health management systems, with sites employing fewer than 200 people independently planning and establishing ISO 45001:2018 systems. All subsidiaries have completed third-party certification. Asia Cement and its subsidiaries have all obtained certification for their occupational safety and health management systems under ISO 45001:2018, with Asia Cement’s Hualien Plant additionally certified under CNS 45001:2018.

Occupational Safety and Health Management System Table

Operating Site	Internal Audit		Internal Audit %	External Audits		External Audit %	
	Employees	Non-employees		Employees	Non-employees	Employees	Non-employees
 Asia Cement Headquarter Note 2	132	0	100%	132	0	100%	-
 Hualien Plant Note 1,3	303	136	100%	303	136	100%	100%
 Hsinchu Plant	29	45	100%	29	45	100%	100%
 Ya Tung Ready-Mixed Concrete Note 1,4	473	332	100%	461	319	97%	96%
 Yuan Long Stainless Steel Note 1	233	7	100%	233	7	100%	57%
 Ya Li Precast	57	21	100%	57	21	100%	100%
 Nanhwa Cement	19	15	100%	19	15	100%	100%
 Chiahui Power	92	33	100%	92	0	100%	0%
 Fu Ming (Da) Transport Note 1	435	0	100%	338	0	78%	-

- Note
1.

According to Article 12-2 of the Occupational Safety and Health Management Regulations: business entities classified as Type 1 with more than 200 employees, and Type 2 with more than 500 employees, are required to establish occupational safety and health management systems appropriate to their operations.
2.

Not employees refer to workers whose work and/or workplaces are controlled by the organization, including those who are under the direction and supervision of the workplace supervisor without an employment relationship, as well as contractors.
3.

The calculation of the number of not employees is based on the number of dispatched workers or joint operation personnel, while other non-regular workers are calculated using the annual average.
4.

Among the 13 plants of Ya Tung Ready-Mixed Concrete, one operating plant is a leased facility without full control rights, and therefore external audits have not been conducted there.
5.

For Chiahui Power, not employees are excluded from external audits due to differing organizational affiliations and applicable regulations; external audits are limited to employees directly employed by Chiahui Power, excluding 33 not employees (such as cleaning staff, security, and maintenance support under contracts). As for Fuda Kaohsiung, it is currently relocating and constructing a new facility, and has not yet obtained an occupancy permit, making it impossible to apply for address verification; hence it is temporarily excluded.

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Incorporating Safety and Health Provisions into Collective Bargaining Agreements

Articles 27 to 29 of the collective bargaining agreements at the Hualien Plant and Hsinchu Plant include provisions on safety and health, accounting for 8.8% of the total 34 articles in these agreements.

Occupational Safety Management Strategies

Plan Management and Performance Evaluation

In line with the Occupational Safety and Health Management Plan, regular and irregular audits of implementation effectiveness are conducted across all units. Performance evaluations, covering both proactive and reactive indicators, are carried out quarterly and reported to the Occupational Safety and Health Committee. Each manufacturing plant's occupational safety and health management performance has been rated at the safety level.

Occupational Safety and Health Education and Training

Asia Cement has a comprehensive occupational safety and health management team that conducts regular and project-based on-the-job training. In addition to minimizing its own risks, the company also provides mobile education and training sessions to support and train subsidiaries and contractors, enhancing their safety awareness and reducing the incidence of occupational accidents.

OHS Training Times Operating Site	Employees	Not Employees	Total
Asia Cement	2,435	1,436	3,871
Subsidiaries	4,930	329	5,259
Total	7,365	1,765	9,130

Vertical Integration to Strengthen Contractor Management — Joint Commitment to Fulfilling Safety and Health Responsibilities

100% Signing Coverage of “Occupational Safety and Health Commitment Letters”

39 contractors signed in 2024

Since 2008, Asia Cement has established a contractor safety management system and incorporated contractor management procedures into its internal management system. Before commencing work, contractors are required to sign an “Occupational Safety and Health Commitment Letter.” In 2024, contractors signing these agreements included 32 at the Hualien Plant and 7 at the Hsinchu Plant, achieving a coverage rate of 100%.

Asia Cement has also set up joint coordination organizations that regard contractors as part of Asia Cement, with the aim of achieving zero accidents. In addition to on-site audits and focused guidance, Asia Cement provides related education and training to improve their safety and health performance. The company has implemented an occupational safety education and testing system, requiring new contractors to pass a mobile assessment after training before they can enter the plant for operations, ensuring contractor safety management is effectively enforced.

Site	Category	Examples of Occupational Safety and Health Training Conducted
Asia Cement	New Employees	• General OSH training for new employees
	Certified Employees	• OSH training for operators of fixed cranes over 3 tons • OSH training for OSH management personnel
	Occupational Safety Unit Employees	• Process safety assessment training for hazardous workplaces • Training on roles and performance awareness
	Level 4 Hearing Management Employees	• Hearing and respiratory protection training
Subsidiaries	On-the-Job Employees and Contractors	• General OSH training • Training on entanglement hazards and prevention of unlawful workplace harassment
	New Employees	• Orientation training for new employees
	Relevant Employees	• Training on the use of protective equipment and drills • Emergency response procedures (notification, accident handling, evacuation drills) • Traffic safety education
	Contractors	• General OSH training

Innovative Smart Safety Management

In recent years, Asia Cement has actively adopted smart safety management measures, establishing a biometric access control system for contractor personnel, an access control system for specific construction areas, and an on-site inspection location tracking system. The platform provides dedicated access or real-time push notification functions for contractors, occupational safety units, Hualien Plant employees, and department supervisors, enhancing intelligent and real-time management of occupational safety.

Asia Cement continues to optimize smart safety functions to improve plant operational efficiency. Through the use of LINE groups, the company has created a tool for real-time communication and control, which also allows contractors to individually report issues or provide feedback. When contractor violations occur, occupational safety personnel take photos and issue citations via the system; if the cited party promptly corrects the violation, no fines are imposed. In practice, contractors who have been cited actively make improvements. This app-based approach has streamlined processes and improved communication efficiency.



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Taiwan Cement Association Safety Partnership Program

To enhance the effectiveness of occupational safety and health management in the cement industry, the Occupational Safety and Health Administration (OSHA) conducts on-site guidance at cement plants. This involves diagnosing the implementation and regulatory compliance of occupational safety management systems, 5S management, performance recognition, and safety culture, with the aim of identifying management blind spots and deficiencies. The goal is to drive improvements across business units, strengthen system management efficiency, build a corporate safety culture, promote disaster prevention and mitigation, and ultimately achieve zero accidents.

The Safety Partnership Program was launched in April 2019. Its second phase was implemented from April 2021 to March 2023, with the objective of deepening the effectiveness of safety and health management and fostering a corporate safety culture. The third phase, running from April 2023 to March 2025, aims to integrate sustainable corporate development and build a healthy and safe workplace.

In 2024, Asia Cement continues to build on the results achieved in the first and second phases of the Safety Partnership Program, aligning with corporate sustainability to create a healthy workplace, safeguard the cement industry's health-related human capital, and further enhance the occupational safety and health management effectiveness across cement industry business units. The program aspires to ensure that all workers in the industry can work safely, healthily, and happily. All member plants uphold the goal of zero accidents, cultivate safety habits, and establish a culture of safety and health within their organizations.

✓ We continue to progress towards the goal of "zero incident", and make continuous improvement to create a safe and healthy workplace.

✓ Implement sustainable corporate development and give ESG a prevailing presence at the workplace in terms of health and safety.

✓ We will further integrate existing achievements to form a "safety culture" for the cement industry.



Asia Cement Shares Implementation Results

Nationwide Cement Industry Workplace Safety and Health Week Series

A public letter was issued by the Chairman to peers across the industry, aiming to promote disaster prevention and mitigation within the sector and to safeguard the safety and health of workers in the cement industry. In addition, a "Safety Commitment Declaration" event was held on October 16, 2024, at the Hualien Labor Recreation Center. Witnessed by Director Cao of OSHA's Northern Safety Center, the event was led by the Secretary General, who guided all occupational safety personnel (including contractor representatives) in making a formal pledge to fulfill corporate social responsibility, implement occupational safety and health management, and prevent the occurrence of occupational accidents.



Safety Partnership Activities

An expert team organized by the Northern Safety Center and the Taiwan Cement Association conducted on-site guidance at each cement plant, with all units having completed the necessary improvements.

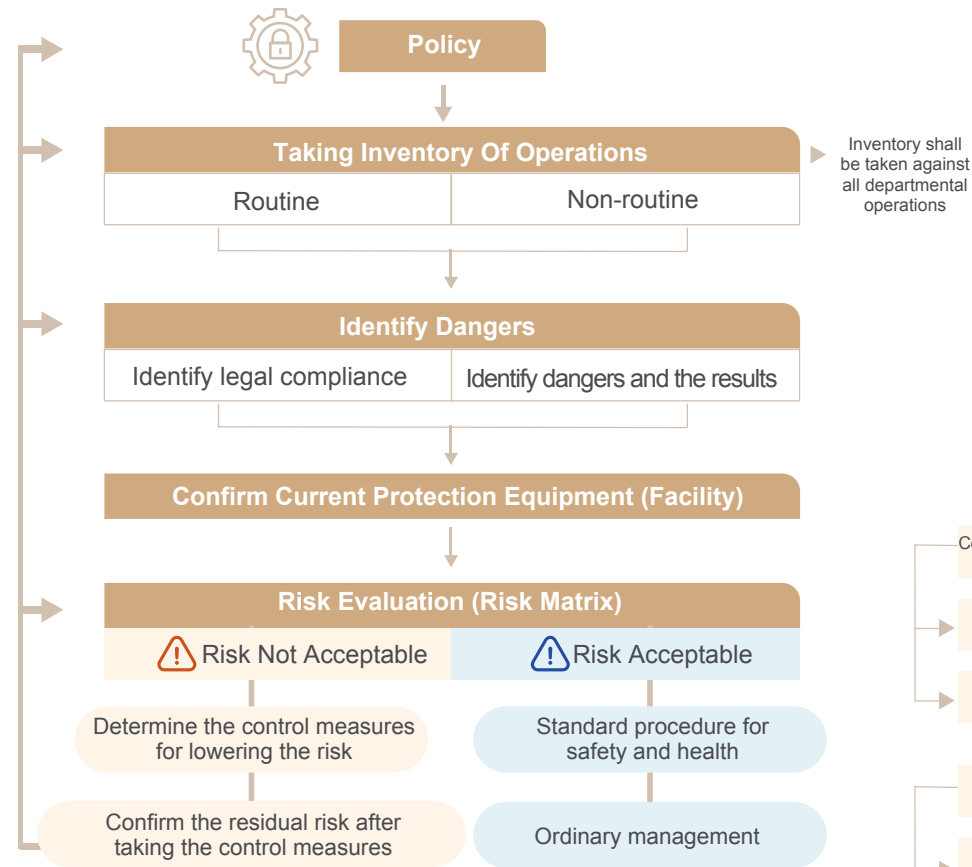


Hazard Identification, Risk Assessment, and Incident Investigation Process

Asia Cement implements its Occupational Safety and Health Management Plan by setting short-, medium-, and long-term targets and advancing execution measures to prevent and mitigate significant occupational safety and health negative impacts directly related to its operations.

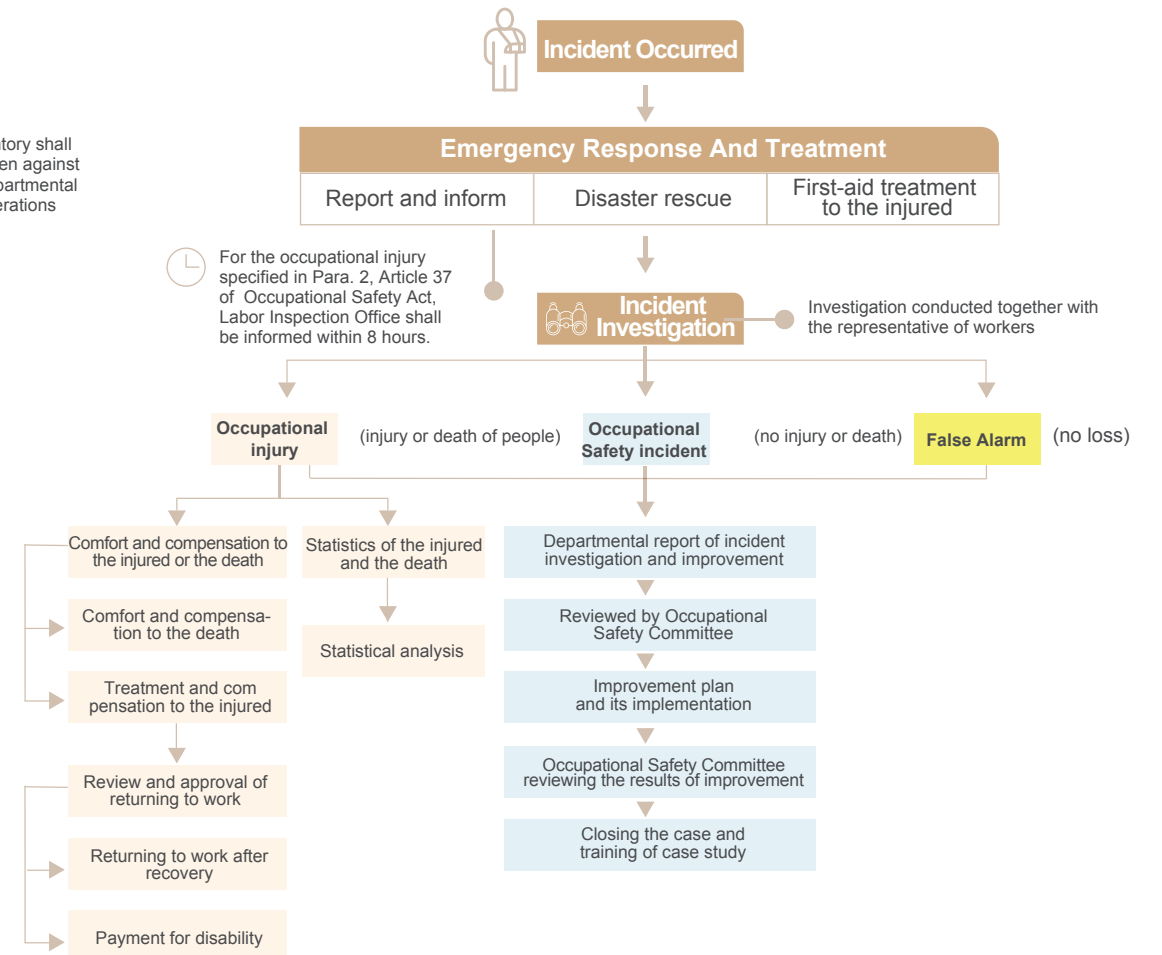
Stop-Work Authority for Imminent Danger

When a worker identifies an imminent danger, the worker may—without affecting others—proactively withdraw to a safe location and immediately report to the supervisor; this action will not result in any adverse action.



Near-Miss Investigation

Asia Cement has established a safety and health rewards and penalties procedure. All employees and contractors are encouraged to report near-miss incidents. Upon verification by the Occupational Safety Unit and approval by the Plant Manager, bonuses are awarded based on the potential severity of the avoided hazard, with an additional 30% of the bonus granted to the department to which the worker belongs, to help prevent future incidents.



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Health Management for Work Involving Hazardous Exposures

At Asia Cement, each plant conducts risk assessments for environments with specific health hazards such as noise, dust, and ionizing radiation, in order to establish relevant occupational safety and health operating standards. In accordance with regulations, workplace environment monitoring programs are developed, with regular outsourced workplace environment monitoring and employee health examinations conducted. Occupational physicians are engaged to perform on-site observations of the work environment, providing safety and health evaluations and recommendations for improvements.

In 2024, special noise health examination results identified 16 employees at the Hualien Plant and 1 at Ya Li Precast Prestressed requiring level 4 management. Based on individual exposure conditions at their workplaces, personalized hearing health protection programs are being implemented. Current noise prevention measures at the plants mainly follow principles of management controls, use of personal protective equipment (PPE), and engineering improvements, as detailed below:



① Reducing exposure time: According to the 2024 environmental monitoring report, no personal noise dosimetry readings exceeded 90 dB; workers exposed to levels over 85 dB are required to wear protective equipment.



② Monthly checks on PPE usage: Each month, inspections are conducted to ensure workers are properly wearing protective equipment. Special health examinations are arranged annually, with annual training sessions on hearing protection. Employees classified as level 3 or higher in special health examination results are scheduled for follow-up health checks and consultations with on-site physicians at the Hualien Plant. Physicians review employment tenure and historical hearing test results to evaluate the effectiveness of individual hearing protection plans and recommend improvements.



③ Equipment inspections and repairs: If worn equipment, unusual noises, deteriorated protective installations, or abnormal vibrations are identified as causes of noise, maintenance orders are issued to contract out necessary repairs. This ensures continuous improvements to the on-site environment and reduces worker exposure.



Statistics Table on Health Management for Work Involving Specific Health Hazards

Operating Site	Harzard Type	Health Management Classification				Improvement Measures
		Level 1	Level 2	Level 3	Level 4	
 Headquarter (Terminals)	Dust	24	16	0	0	Enhance equipment maintenance and upgrades to strengthen dust collection, reduce dust dispersion, provide ongoing training, and enforce PPE use
	Noise	23	0	0	16	Implement individual hearing protection programs; strengthen PPE use and arrange occupational physician evaluations for job reassignment if needed
 Hualien Plant	Dust	76	5	0	0	Classify and control dust areas; implement respiratory protection programs
	Ionizing Radiation	7	5	0	0	Personal dose monitoring
	Mercury	2	1	0	0	Personal dose monitoring
 Hsinchu Plant	Dust	18	3	0	0	Classify and control dust areas; implement respiratory protection programs
	Ionizing Radiation	2	1	0	0	Personal dose monitoring
	Mercury Compounds	2	0	0	0	Personal dose monitoring
	Manganese Compounds	2	0	0	0	Personal dose monitoring
 Yuan Long Stainless Steel	Noise	39	19	0	0	Improve workplace noise environment; enforce PPE use
	Ionizing Radiation	24	13	0	0	Health management
 Nanhwa Cement	Dust	9	1	0	0	Health tracking examinations
 Ya Li Precast	Noise	0	4	6	1	Improve workplace noise environment; enforce PPE use
	Dust	0	7	4	0	Enforce PPE use

Note

1. Asia Cement's subsidiaries, including Ya Tung Ready-Mixed Concrete, Chiahui Power, and Fu Ming(Da) Transport, do not engage in work involving specific health hazards and therefore have no personnel subject to health management classification for such operations.
2. Mercury operations in the laboratory at Asia Cement's Hualien Plant involve only small quantities.
3. The determination of health management classification may vary among health examination institutions. Each operating site conducts employee health management and reporting in accordance with regulatory requirements.
4. The personnel numbers in this table do not include not employees. (According to Article 51 of the Occupational Safety and Health Act, physical examinations and health examinations for not employees are not the responsibility of the business entity.)

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Statistics of total hours worked

Total hours worked by the employees and non-employees of Asia Cement and its subsidiaries:

Site/Hours		Employees	Non-employee
 Asia Cement		886,015	1,093,999
 Ya Tung Ready-mixed		953,064	89,305
 Yuan Long Stainless Steel		437,657	14,784
 Ya Li Precast		110,400	31,708
 Nanhwa Cement		42,568	23,280
 ChiaHui Power		179,672	59,600
 Fu Min (Da) Transport		841,456	-

- Note
1.

Not employees refer to workers whose work and/or workplaces are controlled by the organization. This includes individuals who are under the direction and supervision of the workplace supervisor without an employment relationship, as well as contractors.
2.

Data sources for the employee category: Asia Cement, Yuan Long Stainless Steel, Ya Li Precast Prestressed, and Chiahui Power use occupational accident monthly reports; Nanhwa Cement uses access card records; Ya Tung Ready-Mixed Concrete and Fu Ming(Da) Transport use calculations based on the number of personnel and attendance days.
3.

Data sources for the not employee category:Asia Cement Hualien Plant uses contractor employee data management system access card records; Asia Cement Hsinchu Plant uses contractor statistical reports; Yuan Long Stainless Steel and Chiahui Power calculate based on fixed outsourced services and contractor headcounts with entry days; Nanhwa Cement uses access card records and person-time calculations; Ya Li Precast Prestressed uses occupational accident monthly reports.Ya Tung Ready-Mixed Concrete calculates using the number of fixed outsourced service personnel and entry days. Additionally, since in-plant drivers (including temporary external vehicles) are not under the company's direction or supervision during transportation, their total man-hours and occupational injuries are not included in the not employee statistics.

Occupational Diseases, Overload Prevention, and Ergonomic Hazards

In 2024, there were no cases legally identified as occupational diseases at Asia Cement or its subsidiaries. Asia Cement's preventive measures against pneumoconiosis include dust area zoning management and implementation of a respiratory protection program.

To protect the health and well-being of both employees and not employees, and to prevent related injuries and illnesses triggered by overload and ergonomic hazards, Asia Cement has established and implemented prevention programs for abnormal workload and ergonomic hazards, in accordance with guidelines from the Occupational Safety and Health Administration. These programs include audits and monitoring.In 2024, a musculoskeletal disorder survey identified one suspected case of related hazards at Asia Cement, for which individualized health consultations and guidance were provided, with regular follow-ups to track effectiveness. At subsidiaries, the survey found three suspected musculoskeletal cases at Chiahui Power, where occupational physicians and nurses have conducted health consultations, provided guidance, and continue to monitor progress. One individual identified as high risk (illness triggered by abnormal workload) has been arranged for interviews with occupational health nurses and physicians, with recommendations and measures implemented, and is currently under ongoing follow-up management by occupational health staff.

Statistics of occupational injury

In 2024, recordable or severe occupational injury incidents involving employees at Asia Cement and its subsidiaries occurred at Asia Cement Hualien Plant, Ya Tung Ready-Mixed Concrete, Yuan Long Stainless Steel, and Fu Ming(Da) Transport. No recordable occupational injuries occurred at other sites, and there were no fatalities resulting from occupational injuries. Across all operating sites, there were also no occupational injuries or fatalities involving not employees.

Site/Type	Recordable Occupational Injury		Severe Occupational Injury ^{Note2}		Type of Occupational Injury	Corrective Prevention Measure
	Cases	% ^{Note1}	Cases	% ^{Note1}		
 ACC Hualien Plant Employee	2	3.47	0	0	Crushing, entanglement	Crushing: change work methods; provide high-cut safety boots; strengthen training to raise safety awareness. Entanglement: install position sensors on screw conveyor inspection covers to automatically notify supervisors and OSH unit; revise work standards; enhance training.
 Ya Tung Ready-mixed Concrete Employee	2	2.09	0	0	Falls	Training / equipment improvement.
 Yuan Long Stainless Steel Employee	3	6.85	0	0	Falls, pinching	Establish and strictly implement safety enhancement plan for production department.
 Fu-Ming(Da) Transport Employee	7	8.31	0	0	Falls, exposure to hazardous substances, object rupture, traffic accidents, pinching/entanglement	Review safety operating standards; upgrade buzzer alarms for better warnings. Enhance safety awareness among supervisors and workers, strengthen training and safety promotion. Increase on-site BSV (Behavioral Safety Visit) observations.

- Note
1.

Occupational injury rate = (Number of injuries ÷ Total man-hours) × 1,000,000 (figures are truncated after the third decimal place).
2.

Definition of severe occupational injury: recovery takes more than six months to return to pre-injury status.
3.

Recordable occupational injury statistics include disabling injuries (with lost days of one day or more), all of which are cases that must be reported within 8 hours in accordance with the law.

 Labor Act Penalties

Site	Description of Legal Violations in 2024	Fine Amount	Corrective Measures
 Hualien Plant	When cleaning, lubricating, inspecting, repairing, or adjusting machinery, equipment, and related parts that may pose a risk to workers, the employer did not stop the operation and feeding of the machinery, nor implement locking or tagging measures to prevent others from starting or misfeeding the equipment, and failed to install safety equipment to prevent falling objects from harming workers	100,000	Changed work methods and installed sensors for improvement, details as shown in the previous table.
 Hualien Plant	Passageways, floors, stairs, ramps, work platforms, or other places workers step on were not kept in a safe condition to prevent falls, slips, stepping injuries, or rolling off, and necessary preventive measures were not taken.	100,000	
 Yuan Long Stainless Steel	For machinery that may pose a hazard upon startup, no designated supervisor was assigned to direct operations, resulting in worker injury.	6,000	Improved the working environment and strengthened training, details as shown in the previous table.
 Yuan Long Stainless Steel	The anti-slip insulated base of the stepladder used by on-site personnel was damaged, leading to injury during operation.	6,000	

- Note
- In 2023, there was one case at Asia Cement fined NT\$100,000 and one case at Fu Ming(Da) Transport fined NT\$20,000 under the Occupational Safety and Health Act.

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Proactive Implementation of OSH Management

We are committed to building a zero-accident workplace while ensuring that our workers are working in a healthy environment. To maintain the occupational health and safety of our workers, ACC continues to invest in financial and human resources to implement OSH management and reduce the incidence of occupational accidents.

Safety Management Item	2021	2022	2023	2024
Investment in Occupational Health and Safety (NT\$10,000)	216	794	920	272
Number of Inspections on Contractors by Plants (times)	500	772	662	1,332
Number of Penalties on Contractor Violations by Plants (cases) (including fines, work stoppages, training or others)	437	661	392	701
Number of Near-Miss Incidents (times)	43	15	27	32

Note In 2024, the Hualien Plant increased the frequency of inspections after assessing risks associated with earthquakes and large-scale projects.

Goal of Proactively Improving Health and Safety Performance

Asia Cement has established occupational safety and health indicator targets, aiming to reduce these indicators by 20% by 2025, using the 2022–2024 average as the baseline. In 2024, three of Asia Cement’s occupational safety and health indicators met their targets.

Asia Cement OSH Indicator Targets	Type	Industry Avg 2022-2024	Asia Cement Avg 2019-2021	Asia Cement 2024	Met Target	2025 Target
Lost-Time Injury Frequency Rate (FR) per million hours	Employees	2.59	0.69	2.25		0.55
	Contractors		1.27	0	☑	1.02
Lost-Time Injury Severity Rate (SR) per million hours	Employees	666	89	231		71
	Contractors		15	0	☑	12
Total Injury Index (FSI)	Employees	1.31	0.25	0.72		0.20
	Contractors		0.14	0	☑	0.11

Asia Cement OSH Indicators	Type	2021	2022	2023	2024
Number of fatality (persons)	Employees	0	0	0	0
	Contractor	0	0	0	0
	Third-parties	0	0	0	0
Rate of fatality per 10,000 people (%)	Employees	0	0	0	0
	Contractor	0	0	0	0
Number of days lost (day)	Employees	0	0	0	0
	Contractor	0	0	0	0
Number of lost time injury (times)	Employees	0	0	1	1
	Contractor	0	0	0	0
Number of lost Time Injury Frequency Rate (LTIFR)	Employees	0	0	1.09	2.25
	Contractor	0	0	0	0
Number of lost time injury (persons)	Employees	0	0	1	1
	Contractor	0	0	0	0
Disabling Frequency Rate of per 1 million work-hour (FR)	Employees	0	0	1.09	2.25
	Contractor	0	0	0	0
Disabling Severity Rate of per 1 million work-hour (SR)	Employees	0	0	2	231
	Contractor	0	0	0	0
Lost Time Incident Rate	Employees	0	0	0.21	0.22
	Contractor	0	0	0	0
Total Recordable Injury Rate	Employees	0	0	0.21	0.22
	Contractor	0	0	0	0

Note Lost Time Injury Frequency Rate (LTIFR): The number of lost time injured that occurred per 1 million man-hour worked (3 decimal places or less are not counted).
Disabling Injury Frequency Rate (FR): The ratio of actual disabling injuries per million-man hours worked (only down to three digits after decimal point).
Lost Time Incident Rate (number of people with lost time injuries x 200,000)/total number of hours worked (within three decimal places).
Total Recordable Injury Rate : Number of accidents x 200,000/total number of hours worked (within three decimal places).
Disabling Injury Severity Rate (SR): The total number of days lost per million-man hours worked due to injury (only down to decimal point).
Frequency-Severity Indicator FSI= $\sqrt{(FR \times SR) \times 1000}$
The industry average is sourced from the data released by the Occupational Safety and Health Administration of the Ministry of Labor.

CHAPTER 5

Social Engagement Promotes Positive Community Development

Management of Material Topics

Asia Cement addresses local needs, safeguards Indigenous rights and supports vulnerable groups, and—through tribal consultation and benefit-sharing—fosters inclusion and shared prosperity.

Material Topics

Local Communities/Rights of Indigenous Peoples

5.1 Local Community Caring

Fostering local community prosperity and sustainability

Actual and Potential Impacts

Economy

Our business activities may have a positive impact on the economy of local communities, such as providing employment opportunities and driving local economic growth.

Environment

Our production and operations may cause negative impacts on the local environment, such as air pollution, water use and waste disposal. We are committed to reducing our environmental footprint and protecting local ecosystems.

People (including their human rights)

Our activities may affect the human rights of local communities, such as labor rights and the quality of life of local residents. We are committed to complying with all applicable labor regulations and human rights standards and ensuring that our activities do not pose negative impact on local communities.

Risk and Impact Management

- Asia Cement has established dedicated units at its key operational sites to identify and manage potential environmental, social, and economic risks and adverse impacts on neighboring communities. Upon identifying any potential risks, we proactively implement remedial and preventive measures.

Identified Vulnerable Groups

- Asia Cement has established dedicated units at its key operational sites to identify and manage potential environmental, social, and economic risks and adverse impacts on neighboring communities. Upon identifying any potential risks, we proactively implement remedial and preventive measures.

Identified Vulnerable Groups

- In communities adjacent to operating locations, we pay special attention to disadvantaged groups such as indigenous peoples, the poor, women, and children. We prioritize their basic rights and special needs and provide them with the necessary support and protection.

Taking Actions

- We have implemented a series of actions to prevent or mitigate potential negative impacts, including conducting risk assessments, reviewing the supply chain and adopting environmental management measures. For negative impacts that have already occurred, we will provide remedies and work with local communities to resolve the issues. At the same time, we are also committed to promoting the positive development of local communities and supporting the focus areas of indigenous peoples education and community infrastructure development.

Tracking of Action Effectiveness

- We will monitor the effectiveness of the actions we undertake, including establishing processes to evaluate targets, objectives, and indicators, and regularly review and adjust our action plans. We will draw lessons learned from practice and integrate these insights into our operational policies and procedures.

Target

Allocate at least 1% of annual revenue each year to support local community development.

Engagement with Stakeholders

- We collaborate with local communities and stakeholders to ensure that our actions align with their expectations and needs. We engage in regular dialogue and communication with local communities and stakeholders to explain the impacts and effectiveness of our actions on the local communities.

For community groups of different ethnicities, ages, or residential areas, we adopt culturally sensitive communication approaches. For example, we conduct traditional ceremonies with Indigenous tribes and respect their decision-making processes, establishing trusting and inclusive partnerships through the “10+11 benefit-sharing mechanism for Indigenous peoples.”



5.1.1 Positive Development of Local Communities

Community Impact and Risk Identification

The first step in cement production is the extraction of raw materials from the earth, which inevitably impacts the surrounding natural and social environment. As a globally positioned cement company, Asia Cement is committed to creating positive social impacts and generating added value for the communities where it operates. In addition, to avoid potential or actual adverse impacts on local communities resulting from our operations, Asia Cement and its subsidiaries conduct community impact assessments at the outset of plant construction in accordance with local regulatory requirements. The assessment results cover aspects such as air and water emissions, potential traffic impacts within and beyond the site, as well as the socio-economic impacts of job creation throughout the supply chain.

Stakeholder Identification and Communication

ACC cares about community development and hopes to become partners with local communities and grow together. ACC is committed to maintaining good relations with stakeholders. We actively engage in dialogue with local communities to gain an in-depth understanding of important issues in community development. ACC considers local community residents and indigenous peoples affected by its operations as important stakeholders. ACC has established a comprehensive stakeholder communication mechanism, which includes stakeholder identification, community impact assessment and management, community risk assessment and management, community engagement plan (CEP), monitoring and evaluation, and community communication, to manage communication with stakeholders of ACC and its subsidiaries.



Community engagement plan

Community relations management involves partnerships between the company and community leaders and stakeholders. Asia Cement collaborates with stakeholders to jointly design and implement Community Engagement Plans (CEPs), with plant employees playing a key role in community consultation and communication meetings. Together, they develop tailored CEPs to address the specific needs and expectations of stakeholders.

Community Engagement Plans (CEPs) include:



Local community development planning:

Collaborating with local governments and communities to promote infrastructure construction and improvements in public services.



Sponsorship of local charitable foundations or groups:

Supporting public welfare projects of local non-profit organizations to enhance community well-being.



Local community development services:

Providing education, skills training, and employment opportunities to improve the quality of life of community residents.

100% implementation of community communication and grievance channels

Asia Cement is committed to establishing long-term, transparent, and responsive communication mechanisms with community stakeholders in the areas where it operates. Dedicated units and grievance channels are set up based on the characteristics of each site to ensure that community voices are effectively heard and addressed.

Corporate-level grievance and communication platform

Asia Cement has established a “Community Communication and Grievance Contact” on its corporate website as a unified information platform, providing community residents with a convenient channel for communication. This platform accepts feedback and grievances from communities near operational sites, which are categorized, responded to, and tracked by dedicated units. Issues are assigned to relevant departments based on their nature to ensure that each community concern receives an appropriate response.



Communication mechanisms at key operational sites

• Hualien Xincheng mountain Quarry – Asia Cement Service Center

A dedicated Asia Cement Service Center has been established as the primary contact point for community communication and grievances, handling resident applications and petitions. Annual community surveys are conducted to gather residents' feedback, which is then used to adjust operational strategies and community support measures.

• Chiahui Power – Electricity Development Assistance Fund Management Committee

The “Electricity Development Assistance Fund Management Committee” was formed to hold regular meetings with community representatives. These meetings discuss community needs and suggestions, formulate and implement corresponding response measures, and ensure alignment between operations and community development.

In 2024, the coverage rate of Community Engagement Plans (CEPs) at our key operational sites was 100%.

Operational Site	Stakeholders	Dedicated Unit	Communication & Grievance Channels	Community Engagement Plan
Xincheng mountain Quarry	Bosi'an Indigenous Tribe in Xiulin Township, Hualien; Community Development Associations; Community Residents; Government Agencies; Civic Groups; Schools; Non-Profit Organizations	Asia Cement Service Center	1. Contact window of the Asia Cement Service Center 2. Indigenous tribal meetings 3. Surveys 4. Open quarry visits 5. Visits to local groups 6. Corporate sustainability section on company website, LINE, FB, Quarry Info Disclosure Website	Total of 366 case including Indigenous FPIC benefit-sharing projects.
Chiahui Power	Minxiong Township, Chiayi: Community Development Associations; Community Residents; Government Agencies; Civic Groups; Schools	Chiahui Power Co., Ltd. Project-based Electricity Development Assistance Fund Management Committee	1. Regular community liaison meetings 2. Project contact window 3. Online communication groups	Total of 272 cases.



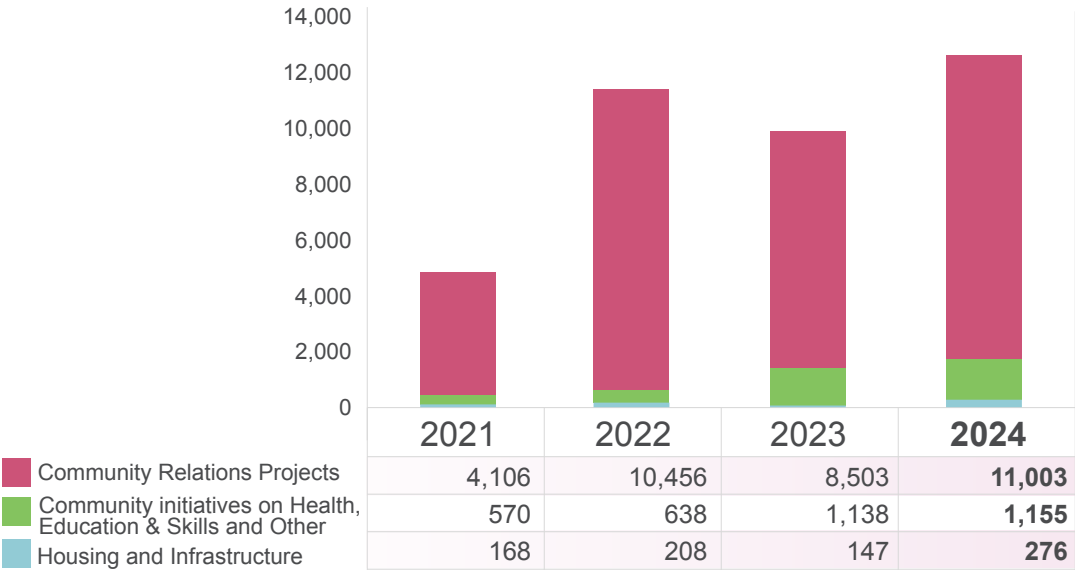
Resources Invested in Community Development

Asia Cement regards community engagement as an integral part of its corporate sustainability.The Company promotes initiatives across Housing and infrastructure, Community initiatives on Health, Education & Skills and Other, and community relations projects, growing together with communities to achieve shared prosperity.

Community relations projects include supporting disadvantaged groups, advancing social welfare, organizing community cultural activities, enhancing environmental management awareness, promoting the preservation of Indigenous cultures, and undertaking other initiatives that help create social impact and value — demonstrating the Company's concrete commitment to corporate social responsibility.

Asia Cement spares no effort in giving back to the communities where it operates, actively advancing community engagement and local care at each of its operational sites. The Company has established community liaison offices and collaboration platforms at key operational sites to promote community communication and development affairs, and actively participates in local services and charitable activities. In 2024, Asia Cement and its subsidiaries invested a total of NT\$124.33 million in community development resources, accounting for 1.56% of the Company's operating profit, thereby fulfilling its sustainability commitment to sharing achievements with the community through tangible actions.

2024 Community Relations Expendihure (NTD 10,000)



Note

- The disclosed statistics on resources invested in community development include subsidiaries within the consolidated financial statements. Asia Cement (China) has been included in the statistics since 2022.
- Due to a reduced statistical boundary for Asia Cement (China), the 2023 figures remain the same after adjustment.

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Housing and Infrastructure

Streetlight adoption project with Xiulin Township Office, disaster prevention programs



Community initiatives on Health, Education & Skills and Other

Tamkang Chemistry Camp, Life Education Documentary Film Festival



Community Relations Projects

Mobile supermarket, volunteer services



Taroko Mountain Market: Sustainable Initiatives for Cultural Revitalization and Enhancing Community Resilience

Asia Cement and the Bosi'an Indigenous Tribe in Xiulin Township, Hualien County jointly organized the "Taroko Mountain Market," integrating cultural preservation, community economy, and post-disaster reconstruction to demonstrate sustainable collaboration between the Company and Indigenous communities. In the face of earthquakes and typhoon impacts, the resilient tribe transformed their culture into economic momentum by selling cultural and creative products, local agricultural specialties, and offering handicraft experiences through the market, thereby promoting local revitalization.

Asia Cement leveraged the resources of the Far Eastern Group, with Far Eastern SOGO providing the venue free of charge, to bring tribal products and culture into the city, thereby amplifying social impact. Beyond promoting traditional crafts and ethnic cultures, the market also incorporated geological safety education and community renaming awareness, strengthening sustainability education and cultural identity.

All proceeds belonged to the tribal vendors, achieving fair trade and community self-reliance. The event was supported by local governments and the Council of Indigenous Peoples, embodying resilient community building and cultural prosperity through cross-sector collaboration.



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Providing Employment Opportunities for Indigenous Peoples

Asia Cement regards Indigenous peoples as important stakeholders and provides employment opportunities to support stable Indigenous employment. Statistics show that 96% of employees at the Asia Cement Hualien Plant are residents of Hualien, with Indigenous employees accounting for 37% of the plant’s total workforce in 2024 (47% among contractor employees).

Asia Cement maintains open internal promotion channels and practices ethnic equality. Currently, the highest-ranking Indigenous employee serves as Deputy Plant Manager, the third highest position within the plant.

- Note
1. Asia Cement has established a contractor employee data management system to oversee occupational safety and health for all workers at sites under Asia Cement’s control. The number of Indigenous contractor employees is compiled based on this system. The contractor figures reflect the actual number of individuals who worked at the site in 2024.
 2. Senior executives are defined as employees at level 11 or above.

No incidents involving violations of Indigenous rights occurred in 2024.

Type of Personnel	Total	Local Residents		Indigenous People	
		Number	%	Number	%
Employees	303	291	96%	111	37%
Contractors	1,363	1018	75%	627	46%
Total	1,666	1,309	79%	738	44%

Completion of Consultation and Consent in Accordance With the FPIC Principle

ACC conducts environmental and social impact assessments for new mining sites, involving 100% of the affected areas. The Company manages mining areas responsibly and considers the indigenous communities surrounding the mining sites as important stakeholders. Following the principles of Free, Prior, Informed Consent (FPIC), we engage in consultation processes with nearby indigenous tribes. During the period, several briefing and communication meetings were held, with a total number of nearly 2,500 participants. After fully listening to the opinions of stakeholders, we proposed the "10+11" benefit-sharing

mechanism, covering support and benefits for indigenous people from birth, education, marriage, childbirth, work, to elderly care stages. In 2022, a consultation and consent voting meeting was held, and ACC received an 83% approval rate to continue its operations in the local areas. By the end of 2024, a total of approximately NTD13.96 million was invested. The related expenses were discussed with community representatives and the Company to continuously implement the benefit-sharing mechanism.

LIVE

Asia Cement Provides Social Support in Hualien Following the 0403 Earthquake

After the 0403 earthquake, Asia Cement assisted with evacuating tourists from affected areas, supported the distribution of relief supplies, provided water trucks and equipment, and helped assess landslide sites and post-disaster reconstruction needs. The Company also supplied seedlings for vegetation restoration, earning a certificate of appreciation from the Hualien County Government for its efforts in the “0403 Hualien Earthquake Disaster Prevention and Relief Work.” Subsequently, when typhoons caused roadside slope collapses in Xiulin Township, the township office requested Asia Cement’s assistance. The Company stabilized the slopes and restored vegetation using a soil-bag stacking method, for which it received recognition from the Xiulin Township Office of Hualien County for its “Slope Restoration Works.” In July 2024, Asia Cement formally signed a Disaster Prevention and Emergency Mutual Support Agreement with the Xiulin Township Office to strengthen future collaboration.



Assisted in distributing relief supplies



Subsidies for water tank replacement and repairs, and assistance with slope restoration works



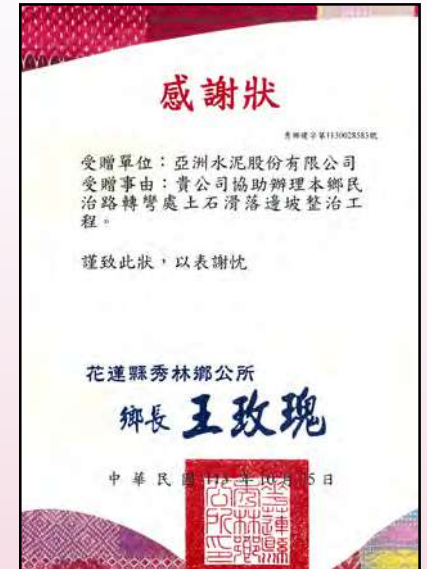
Immediately dispatched vehicles to assist tourists in escaping danger



Ya Tung Ready-Mixed Concrete assisted the Directorate General of Highways in repairing the temporary Qingshui Bridge access road.



Asia Cement launched a mobile water truck service to address residents’ water supply disruptions after the earthquake.



Implementation Status of the “10+11” Benefit-Sharing Mechanisms for Indigenous Peoples

Item			Benefit-Sharing Mechanism	Implementation Status
Original 10 Benefit-Sharing Mechanisms	1		Electricity subsidies	Total of 438 households.
	2		Housing repairs and quality guarantees	- Asia Cement makes periodic donations of cement and refractory brick materials to support community environmental improvements. - Donated cement and firebricks; 19 houses repaired in 2024.
	3		After-school tutoring classes	- Asia Cement makes periodic donations of cement and refractory brick materials to support community environmental improvements. - Sponsored 3 after-school tutoring sites in 2024.
	4		Emergency assistance	Through the Asia Cement Service Center and the Hualien Asia Cement Bodhi Charity Association, visits are conducted to provide assistance and relief.Visited 100 households, assisted 102 villagers, completed 102 emergency relief cases in 2024.
	5		Provision of mountain spring water to Zhongfushi community	Provided water tank & 2km pipes; benefiting 54 households.
	6		Provision of saplings for greening	- The mine nursery provides seedlings free of charge for educational purposes, afforestation, and community engagement, generating benefits that extend to key surrounding stakeholders. - Provision of saplings for greening Provided 66 saplings in 2024 for tribes, communities, schools.
	7		Pre- and post-typhoon debris removal	3 times debris cleaning before/after typhoons.
	8		Provision of disinfectants and joint epidemic prevention	Disinfectants and alcohol provided free to tribes.
	9		Sponsorship of education, sports, church, cultural heritage and festivals	- Supported festivals, sports events, dance teams winning national awards. - By sponsoring tribal sports events, Asia Cement supports the development of athletic talents within indigenous communities and fosters unity and cohesion through sports. - Asia Cement has been a long-term sponsor of the Indigenous Dance Club at Xiulin Junior High School, which has twice won top honors in national competitions.
	10		Active participation and mutual understanding	Two-way communication via service center with tribes.

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Item	Benefit-Sharing Mechanism		Implementation Status
11		Consistent electricity subsidies -	Merged with item 1 statistics.
12		Elderly birthday gifts, marriage and childbirth grants, funeral condolence payments, holiday gift vouchers -	• 391 elderly birthday gifts, 22 marriage, 18 funerals, 18 childbirth grants, 3 festival vouchers for 698, 700, 721 households.
13		Student scholarships -	• 258 students (elementary to university) received NT\$1,000~5,000.
14		School transportation -	• 34 students benefited.
15		Metal roof house repairs For properties with registered building ownership certificates and measurement survey results, repair services are provided for metal sheet house leaks.	• 1 metal roof house repaired.
16		Addition of annual attendance bonuses The contract for administrative, clerical, and general affairs environmental services at the Hualien Plant Service Center was amended to include an annual attendance bonus.	• Attendance bonus added for contractors at service center.
17		Internships and summer work opportunities Work at Asia Cement's Hualien Plant involves professional fields such as electrical engineering, information technology, chemical engineering, mechanical engineering, civil engineering, earth sciences, and ecological horticulture. Moving forward, the Company will regularly accept summer work applications from tribal college students. Eligible students in related fields may apply through their universities, and upon qualification review, can be offered factory internships.	• 2 indigenous students took summer internships.
18		Enhanced employment counseling The Asia Cement Service Center publicly lists job openings at the Hualien Plant and its contractors. Tribal members may submit résumés indicating their work experience, certifications, specialties, and desired positions. Those who pass the screening and interviews will be provided employment opportunities.	• 20 people: 8 employed, 6 no openings, 6 declined interviews.
19		Resolve rockfall issue at 10th Neighborhood The rockfall slope at the 10th Neighborhood is located within mining land. With current mining techniques, the hill within the mining area can be re-excavated, and slope stabilization will be handled similarly to the Central Cross-Island Highway approach. Asia Cement will submit a restoration plan application to the competent authorities and begin construction upon approval.	• Plan submitted post-0403 quake; coordinating with authorities respecting tribal wishes.
20		Recycling tap water at Shang-fushi (10th Neighborhood) Implementation of the recycled tap water system at Shangfushi (10th Neighborhood) will commence after securing land for the water tank and obtaining route consent agreements for pipelines to each household.	• Pending agreements on water tower site and pipelines.
21		Local revitalization: markets, cultural crafts, etc. -	• Held Taroko Market since 2022, moved to Taipei SOGO in 2023 & 2024; proceeds fully belong to tribal vendors.

5.1.2 Support for the Education of Indigenous Peoples

Promote Tribal Education

Asia Cement highly values the education for indigenous students, since 2015, it continues supporting the establishment of after-school tutoring classes to provide a safe learning environment for students after school. The teachers of the tutoring classes help children to keep up with the progress of the study at school and offer talent and skill lectures or small scale group games to them. They also prepare some light meals to well-care students after school, hence, the burden of parents can be reduced.

In 2024, Asia Cement sponsored a total of five after-school tutoring centers, benefiting 375 students across 10 schools, including kindergartens, elementary schools, and junior high schools. Asia Cement aims to provide children in remote areas with safe and comfortable places to continue learning and growing.

Fushi Village After-School Tutoring Classes (3 sites)

Since 2017, Asia Cement has collaborated with the Fushi Community Development Association, Guardian Saba Association, and Menghou’ ai Cultural Education Industrial Development Association in Fushi Village, Xiulin Township to establish three after-school tutoring centers. These centers create a warm learning space for tribal children after school while easing the burdens on single-parent and grandparent-headed families. Teachers patiently help students with homework and questions, stabilizing their learning pace and nurturing their willingness and confidence to learn.



Xiulin Village Little Sun Learning Center

The Little Sun Learning Center in Xiulin Village was initiated by Teacher Xu Ling, who mobilized volunteers to provide after-school tutoring for children from under-privileged families. Deeply moved by this effort, Asia Cement began sponsoring the center’ s operations in 2018 and helped renovate classrooms and provide meals, enabling children to grow and bravely pursue their dreams in a stable learning environment.



Bratan Student After-School Tutoring

Since 2020, the Bratan English Cultural Promotion Association has been running after-school tutoring programs in the Bratan Tribe of Xiulin Township and launched additional winter break tutoring classes in 2023. Teachers accompany students in completing their homework and provide timely guidance to solidify their learning foundations, reducing educational pressures on parents and giving tribal families extra support and peace of mind.



Promoting indigenous language heritage, fun learning through singing and dancing

Since 2023, ACC has been offering Taroko language classes in their tutoring program. These classes, held twice a week, are taught by certified Taroko language teachers using the Taroko language exclusively. Through immersive learning experiences, children in the tribe can easily learn conversational Taroko. ACC hopes that by starting from an early age and working together with more enthusiasts, they can not only help preserve the Taroko language but also allow children to appreciate the unique cultural heritage it represents.



From Tribe to Stage: Safeguarding the Cultural Heritage of the Truku People

The Indigenous Dance Club at Xiulin Junior High School has been active for over four years, quietly supported by Asia Cement throughout this journey. The students have grown from initially shy and reserved to now performing confidently on stage, not only achieving outstanding results in national competitions but also being invited to perform at the Far Eastern Group’s Lunar New Year gatherings, where they shared the pride and vitality of their tribe through dance, moving the entire audience. For Asia Cement, this support stems from a simple aspiration — to help ensure that the music, dance, and way of life of the Truku people are passed down through generations, allowing more people to witness the beauty of Indigenous cultures.



Inspiring Life Film Festival: Accompanying Children to See a Broader World

Asia Cement, in collaboration with the renowned documentary production team “Spore Sac Cinema,” has organized the “Inspiring Life Film Festival,” now in its fifth year. In 2024, two films were screened: *Voices of Whales*, which guided children to feel the rhythm and call of the ocean through the messages conveyed by whales and dolphins; and *In Neipu, That Yi Year*, which documented the true journey of the drum and bugle corps at Pingtung Neipu Agricultural and Industrial High School as they pursued their dreams with unwavering determination. Through the power of film, children learn to listen, reflect, and empathize, gaining new perspectives on life and envisioning a different future.



Hosting Chemistry Camps to Ignite Students' Passion for Learning

Asia Cement, in collaboration with the Science Education Center of Tamkang University, organized the “Fun with Chemistry” program primarily for elementary and junior high schools near the Hualien Plant. The program combined stories about minerals essential to the cement industry, chemistry knowledge, and the history of building material development. The Tamkang team also brought unique experimental courses aimed at promoting the popularization and innovation of chemistry education, paving the way for students to pursue their scientific dreams.



5.1.3 Community Infrastructure Construction

Serving the Local Community for a Comprehensive Improvement

- Asia Cement's Hualien Plant adopted the No. 2617 windbreak protection forest in Shunan Village, Xincheng Township, Hualien, covering over 43 hectares, and assisted with beach cleanups along the southern shore of the Shunan Fishery, approximately 1 km long and 20 m wide.
- Based on forecasts from the Central Weather Bureau or actual weather conditions, Asia Cement's Hualien Plant inspects and clears drainage facilities in tribal areas; after typhoons, large loaders are dispatched as needed to remove fallen trees and restore smooth traffic flow.
- Asia Cement's Hualien Plant assists in maintaining the landscape along a section of Hualien County Route 5, approximately 1 km.
- Since 2003, Asia Cement's Hsinchu Plant has participated in Hsinchu County's corporate road adoption program, working with the Hsinchu County Government and Hengshan Township Office to maintain the cleanliness of Provincial Highway 3, contributing to the creation of the scenic Romantic Route 3.
- Ya Tung Ready-Mixed Concrete values environmental conservation and has organized seven mountain cleanup and environmental protection activities.



Post-Storm Assistance in Recovery Efforts



"One-Day Volunteer" Corporate Partnership Program



Ya Tung Ready-Mixed Concrete Mountain Cleanup on the Paomagudao Trail



Industry-Academia Collaboration in the Cement Industry Value Chain

Asia Cement and its subsidiary Ya Tung Ready-Mixed Concrete have long welcomed academic groups to visit and learn about industry processes and technological practices. They also donate cement, coarse sand, and concrete for student experiments in classrooms, giving back to campuses and society through knowledge transfer.

- Ya Tung Ready-Mixed Concrete organizes visits for nearby schools to its plants to help students adapt early to the workplace and plan their career paths, explaining the latest concrete technologies. In 2024, six schools and a total of 357 students participated. The company also provided concrete materials for school experiments, enhancing the quality of talent in the construction industry through industry-academia exchanges.
- Asia Cement's Hualien Plant and Xincheng mountain Quarry are open to applications for visits from industry and academia. Topics include quarry geology, natural resources and the environment, materials and resources engineering, as well as understanding the company's communication, benefit-sharing, and FPIC implementation processes with tribal communities. In 2024, there were a total of 26 visits with 502 participants.



Certificate of Appreciation from the Ministry of Economic Affairs Geological Survey and Mining Management Center for the "2024 Geo-Resources and Disaster Prevention Living Circle" Series of Activities



Exchange Visit of the Indigenous Law Program of National Dong Hwa University and the University of Waikato, New Zealand



Visit by Faculty and Students from the Department of Geosciences, National Taiwan University



Geoscience Visit by the College of Science, National Taiwan Normal University and Students from Kwansai Gakuin University, Japan



Visit by Faculty and Students from Feng Chia University to Ya Tung Ready-Mixed Concrete

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Supporting Local Construction of Healthcare and Educational Infrastructure

Guided by the philosophy of “taking from society and giving back to society,” Far Eastern Group and Asia Cement founder Mr. Hsu Yu-Shiang integrated group resources to establish philanthropic enterprises. Asia Cement also contributes resources to support education, culture, the arts, healthcare, and technology, giving back to society through initiatives such as the Hsu Yu-Shiang Memorial Foundation, Hsu Yuan-Chi Memorial Foundation, Hsu Yuan-Chi Medical Foundation, Yuan Ze University, Asia Eastern University of Science and Technology, and Far Eastern Memorial Hospital.



Smart Transformation and Sustainable Healthcare Practices



The Hsu Yuan-Chi Medical Foundation is dedicated to promoting medical research and social services, and established Far Eastern Memorial Hospital — the first modern hospital in New Taipei City. Far Eastern Memorial Hospital actively integrates healthcare and technology, advancing the development of a comprehensive smart hospital that encompasses patient services, clinical care, and logistics management. By incorporating artificial intelligence (AI), big data analytics, and digitalized processes, the hospital enhances medical quality and operational efficiency, while also strengthening patient safety and healthcare experiences. In 2024, Far Eastern Memorial Hospital was honored with 24 major awards, including the “Top Medical Center Institution” under the 25th National Healthcare Quality Awards and the “Smart Hospital Full Organization Certification,” demonstrating its outstanding achievements in improving medical quality and driving digital transformation.



Fostering Green Talent to Strengthen Momentum for Sustainable Transformation



In the face of global challenges related to sustainable transformation and net-zero emissions, businesses increasingly require talent with ESG and green energy expertise. To support companies in developing core sustainability competencies, Asia Cement’s affiliate, Yuan Ze University, collaborated with the Taoyuan-Hsinchu-Miaoli Regional Branch of the Workforce Development Agency, Ministry of Labor, to establish the “ESG Sustainability and Green Energy Technology Talent Development Hub.” This initiative is dedicated to cultivating green-collar professionals with practical skills in carbon reduction, sustainability management, and green innovation.

Through this collaboration, Yuan Ze University further advances the integration of higher education and industry, deepens its social responsibility, and demonstrates tangible contributions to promoting Quality Education (SDG 4) and Decent Work and Economic Growth (SDG 8), injecting long-term momentum into Taiwan’s sustainable talent development.

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5.2 Eco-environmental Education

Impact

Asia Cement aggressively built a green sustainable homeland, it utilized the unique mining mountain vegetation greenery technique in Hualien Plant to carry out ex situ conservation and constructed an “Asia Cement Ecological Park”, the first environmental ecoclassroom in cement industry, with the intention of spreading the awareness of sustainability and the power of actions, contributing its effort to sustainable

Commitments

Providing free ecological park and network platform environmental eco-education and presentations to allow the seeds of sustainability spreading for deep plowing and germination.

Driving multifaceted environmental education through the Plant, mining site and eco-park, aiming at different types of people to formulate teaching and management programs, providing free and rich experiencing of sustainable environment education to visitors and users of social media audio and video platforms, and carrying out the planning of management and teaching quality improvement by way of visitors’ interacions and feedback.

Taking Actions

- ① Asia Cement’s Ecological Park has established three main zones — a butterfly habitat area, a stick insect area, and a leisure forest — providing a high-quality environmental education venue suitable for all groups and ages.
- ② The park offers visiting participants supplementary educational resources such as butterfly hats and butterfly identification cards.
- ③ The Ecological Park’s official website features databases on butterflies, stick insects, and plants, available at any time for public learning and reference.
- ④ Continuously promotes the “Ecological Environmental Education Rooting Program” in schools.
- ⑤ Since 2021, Asia Cement has advanced a citizen scientist training program, which continued in 2024. Training targets include employees, their families, tribal community residents, and any interested individuals, nurturing them to become seeds for ecological education outreach.
- ⑥ Starting in 2021, the park has progressively uploaded live ecological videos and explanations to social media platforms, allowing people to experience the wonder and charm of nature even during periods of pandemic precautions.

Evaluation method

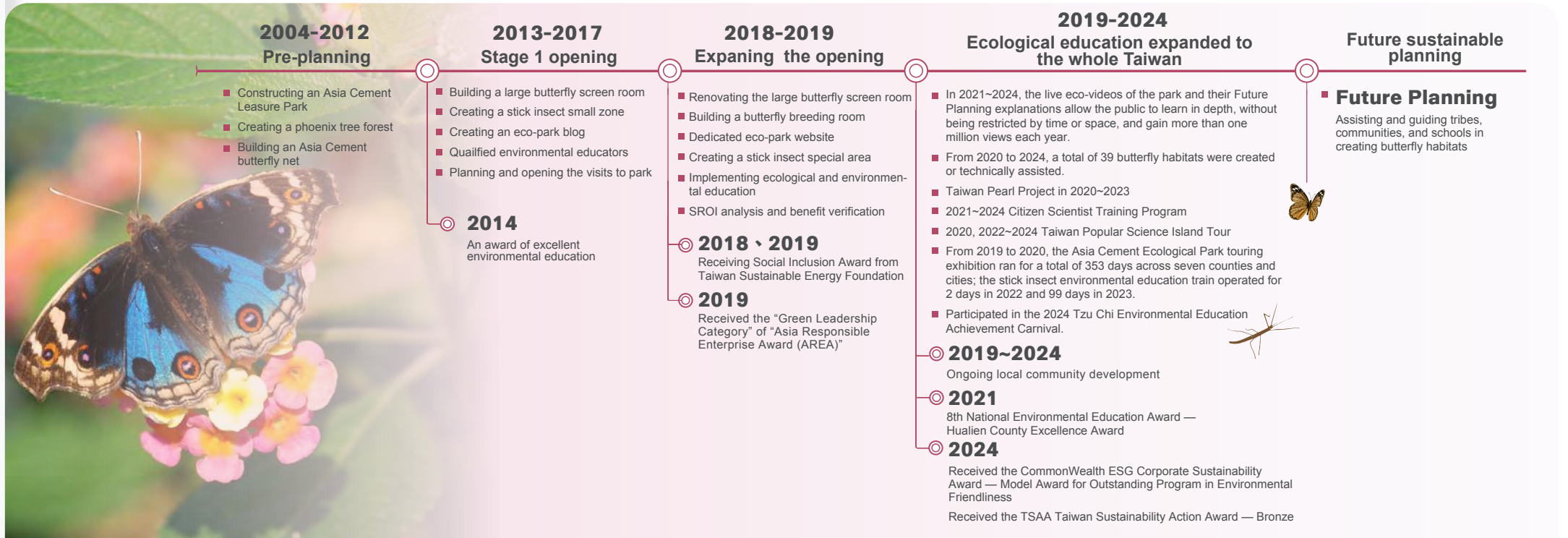
- ① Review the quality of educational tours based on the number of visitors, guest interactions, and feedback forms.
- ② Evaluate the effectiveness of the program through reports on the implementation of ecological park management.
- ③ SROI evaluation showed a generated benefit of 13.97 times (based on the 2022 assessment results).
- ④ Through the Corporate Sustainability Implementation Committee and its working groups, continuously track implementation status and the level of goal achievement.

Stakeholder Engagement

- Regular or irregular communication and interaction based on the stakeholder engagement mechanism, and disclosure of information in the sustainability report, relevant platforms, or websites.

Effectiveness of Actions

- ① Visitors to the environmental education tours and users of social media platforms have highly praised and affirmed Asia Cement’s ecological environmental education content.
- ② Due to COVID-19 transmission risks, the Ecological Park was temporarily closed to the public during alert periods. Nevertheless, in 2024, the park’s official website providing ecological information recorded over 670,000 views, and live ecological videos and explanations received over one million exposures!



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5.2.1 Deepen Cultivation of Sustainable Eco-Environmental Education

ACC actively fosters a green and sustainable home, prioritizing mine reclamation and promoting net-zero carbon emissions. The Company elevates environmental awareness to the educational level, creating a multifaceted environmental education platform that integrates production, living, and ecology across its plant, mine, and park zones. By designing and developing educational resources, ACC ensures learners can easily engage an gain a profound understanding, leading them to put knowledge into practice and demonstrate sustainable actions.

Plant



Net Zero Carbon

Sharing net-zero pathways and carbon reduction technologies for the cement and concrete industry; collaborating with government, academia, and research to advance national net zero.

Circular Economy

Promoting dual-mode circular economy using alternative raw materials and fuels, enabling resource recycling.

Low-Carbon Cement

Replacing traditional Portland cement with Portland limestone cement (structural) and masonry cement (mortar) to reduce emissions in construction.

Quarry



Vegetation & Greening

Unique quarry greening methods restore up to 99% of original forest after 18 years; a global model attracting local and international visits.

Blasting Vibration & Soil/Water Conservation

Insists on imperceptible blasting with world's lowest vibration levels; quarry serves as training ground and slope conservation classroom, balancing development with the environment.

Coexistence with Local Communities

Coexistence with Local Communities First in the cement industry to set up a service center, completed Indigenous FPIC process, achieving coexistence and shared prosperity.

Park



Butterfly Ecological Park

Taiwan's largest butterfly park, with ~40 common species bred per environmental capacity; natural habitat attracts protected Troides aeacus.

Stick Insect Zone

Enclosures breed various local & international stick insects; since 2020 restoring native species to teach visitors about camouflage experts.

Leisure Forest

Home to 250 native plant species from near sea level to 3,000m, arranged by scientific taxonomy for observing differences.

Feature — Restoration of the Near Threatened and Rare *Liparis grassicollis*

In the 2024 ecological survey, Asia Cement's research team was delighted to discover a precious and rare orchid species — *Liparis grassicollis*. This finding not only enriches the biodiversity of our park but also highlights the importance of strengthening conservation efforts.

Liparis grassicollis primarily grows in low-elevation shrublands and sunlit plains and is one of the few orchids capable of thriving on coastal beaches with high salinity. Due to its unique habitat requirements and narrow distribution range, *Liparis grassicollis* is a rare botanical treasure and is listed as Near Threatened in Taiwan's Red List. To protect *Liparis grassicollis*, we monitor its population dynamics within its habitat to ensure its continued propagation in the park. Meanwhile, we are also enhancing environmental education to help the public recognize the importance of maintaining ecological integrity.



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ACC's Ecological Environment Education Service

Asia Cement's Ecological Park is open for environmental education visits and cultivates local Indigenous people as interpreters. Additionally, teachers with interpretation experience at national parks and the Forestry Bureau serve as volunteers. The current team includes one certified environmental education professional, six interpreters, five volunteer guides, and fourteen maintenance staff, providing the public with in-depth and broad content.

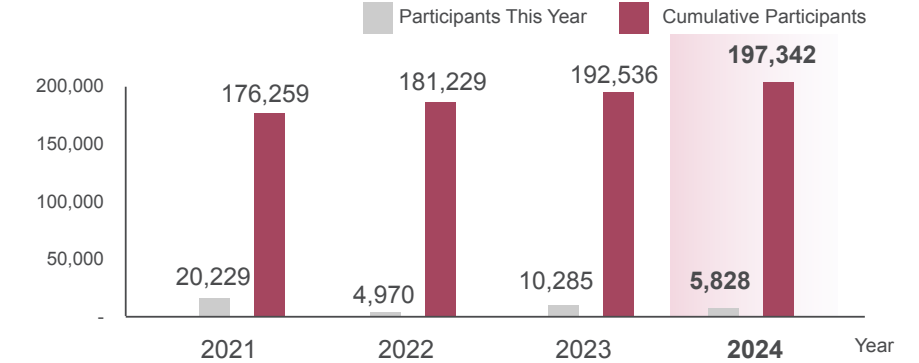
- On-site observation and explanation provided to visiting students or professional teachers
- Build an online database and video resources on the official website that allow users to access information and videos without being restricted by time or location.
- Called upon by different institutions and schools to explain and provide technical aid.
- Train citizen scientists and seed teachers to disperse educational enthusiasm.

In 2024, the park's environmental education services reached 5,746 participants, with each group spending approximately 1 to 4 hours, totaling around 17,000 hours of learning time. In addition, since 2023, the ecological park has offered English guided tours by reservation. As of 2024, the cumulative number of visitors reached 197,342. To enhance the quality of ecological and environmental education, Asia Cement continued to invest in program funding, spending NT\$7.87 million in 2024 to optimize interpretation, maintenance personnel, and space arrangements.

Environmental Education Interpretation	Sessions	Participants	Total Learning Hours
General Public	449	3,045	6,124
Environmental Education Learners	54	1,820	7,153
Tribal Community Members	22	881	3,452
Total	525	5,746	16,729

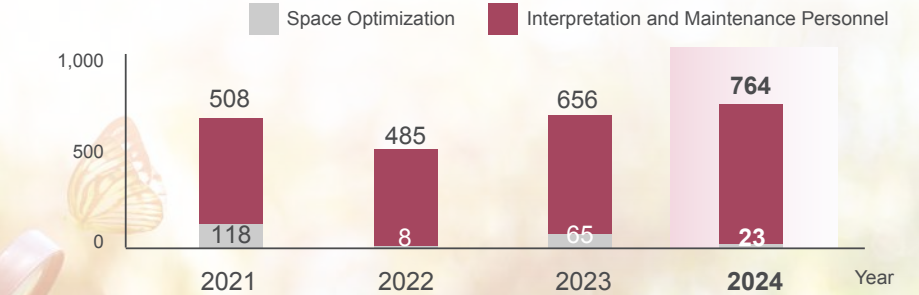
(Note) Visits by government agencies are categorized under environmental education learners.

Asia Cement Environmental Education Service Participants



(Note) The number of visitors was affected by the COVID-19 pandemic from 2021 to 2023 and by the Hualien earthquake in 2024.

Asia Cement Ecological Environmental Education Investment (NTD 10,000)



English guided tour for faculty and students from National Taiwan Normal University and Kwansai Gakuin University, Japan



Visit by faculty from the Department of Mining and Metallurgy, National Taipei University of Technology



Visit by faculty and students from the Environmental Sociology program, National Dong Hwa University



Net Zero Sustainability Visit by the Directorate-General of Personnel Administration, Executive Yuan



Soil and Water Young Cadet Workshop by the Hualien County Environmental Protection Bureau



Environmental Volunteer Experiential Learning Program by the Hualien County Environmental Protection Bureau

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Unlimited time and space for in-depth learning from the park ecological database and videos



The ACC Ecological Park website provides abundant information, detailing the growth process and behavior of butterflies, Phasmatodea, and other creatures through text and images. It also offers pictures of native plants, including their tree forms, flower buds, and fruits, allowing people to explore the park's ecology online in depth.

The "Latest News" section regularly shares lively and engaging ecological stories, making ecological knowledge more accessible to the public. Even for those who cannot visit in person, the latest ecological videos are available on Facebook, YouTube, and Line groups, allowing people to easily learn and experience the beauty of nature from home.

By the end of 2024, the official website had reached 2.87 million page views. The Asia Cement and Ecological Park YouTube channels featured a total of 385 videos, accumulating 117,000 views. On Facebook, 160 posts garnered 2.79 million impressions and reached over 2.28 million people.



Official website of the Asia
Cement Ecological Park



Eco-Environmental Education Endeavors Affirmed by All Walks of Life



At the conclusion of each visit, staff at the Asia Cement Ecological Park provide participants with a QR code to complete a "Learning Feedback Form," which helps the team continually refine their guided tours and management practices. In 2024, a total of 290 feedback forms were collected, all offering positive evaluations. Asia Cement's Ecological Park will continue delivering high-quality ecological education, spreading seeds of sustainability with tenfold benefits, fulfilling its mission of "creating a sustainable green homeland."



Industry-Academia Collaboration in Environmental Education



Upholding the philosophy of corporate sustainable development, the Asia Cement Ecological Park actively promotes industry-academia cooperation. The park partners with the College of Environmental Studies at National Dong Hwa University to jointly cultivate environmental professionals. It offers students a learning environment that integrates theory and practice, providing hands-on training in ecological surveys, environmental monitoring, and interpretative education to deepen academic knowledge, enhance practical skills, and instill a sense of responsibility for environmental protection.

During internships, Asia Cement provides accommodations and stipends to increase student participation. The program regularly plans internships that allow students to directly engage in ecological restoration projects, including butterfly and insect surveys, native plant maintenance, and environmental monitoring. Through these practical experiences, students not only learn environmental science techniques but also understand how businesses implement environmental protection, further enhancing their ability to address environmental challenges. Additionally, interns help design environmental education activities and lead guided tours, promoting ecological conservation knowledge and raising public awareness of biodiversity and sustainable development.

Looking ahead, the Asia Cement Ecological Park will continue to deepen its collaboration with the College of Environmental Studies at National Dong Hwa University, jointly advancing environmental education, industry-academia research, and talent cultivation, contributing even more to ecological conservation and sustainable development in Taiwan.

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Providing Technical Support to Agencies, Schools, and Communities

In 2022, Asia Cement established an environmental education and ecology team to offer technical assistance to organizations interested in creating butterfly gardens. This support includes ecological surveys, selection of host and nectar plants, habitat maintenance, and operational management details, as well as explanations of potential challenges and solutions. If a site is deemed unsuitable for establishing a butterfly garden, Asia Cement also provides recommendations to avoid resource waste. The goal is to promote sustainable butterfly gardens that go beyond one-time events, thereby ensuring the long-term sustainability of butterfly conservation and education.

Luoshan Community, a member of the International Partnership for the Satoyama Initiative (IPSI), is Taiwan's first organic agriculture demonstration area and is gradually building a biodiversity environment aligned with Satoyama principles. In 2024, Asia Cement assisted in organizing butterfly and dragonfly ecological survey courses and will continue to help Luoshan Community with habitat creation.



Operational Management Training



Outdoor Interpretation



Hands-On Field Practice

Aristolochia plants serve as host plants for the larvae of *Parides choredon*, *Troides aeacus*, *Pachliopta aristolochiae*, and *Atrophaneura horishana*. They require years of cultivation to grow lush and dense. To sustain native Taiwanese swallowtails and help restore protected butterfly species, Asia Cement continuously cultivates and propagates *Aristolochia*, supplying them for use in butterfly habitat creation across various regions.

Train Citizen Scientists and Seed Teachers to Disperse Educational Enthusiasm

To expand teaching capacity, Asia Cement has trained seed teachers through various initiatives, including "Citizen Scientist Training," "Butterfly Habitat Creation Seed Teacher Promotion," and in 2023, introduced the "Stick Insect Survey Seed Teacher Program." When government agencies or organizations have training needs, Asia Cement also provides support.

Some students who developed an interest through participating in citizen scientist training went on to enroll in the Department of Entomology at National Taiwan University, continuing to deepen their stick insect knowledge at the park and further amplifying positive impacts.



Assisted Fuyuan Elementary School in Creating Butterfly Habitats



Le Xue Workshop for Elementary School Science Education by the Hsinchu County National Education Counseling Team



Assisted Luoshan Community with Ecological Survey Courses

Creation of Butterfly Habitats, Forming Butterfly Corridors throughout Taiwan

With economic development, butterfly habitats in Taiwan have been destroyed, leading to a sharp decline in butterfly populations. Planned habitat creation helps mitigate the problems of habitat fragmentation, isolation, and reduction in habitat patches, while also promoting greater dispersion and interaction among plant and animal species. As a practitioner of natural ecology, Asia Cement has established an environmental education and ecology team, offering professional expertise in quarry revegetation. By selflessly sharing its leading ecological operational techniques with society, Asia Cement's sustainable ecological services have become a solid support for government agencies, schools, and communities. Through technical strength and practical action, Asia Cement helps maintain and strengthen butterfly gardens, achieving species conservation and ecological restoration.

Asia Cement continues to assist communities and schools in creating butterfly habitats. As of 2024, a total of 39 small butterfly gardens have been established across Taipei, Hsinchu, Taichung, Tainan, Kaohsiung, Hualien, and Taitung, forming a butterfly corridor around the island.

By 2024, 39 sites have been connected to form a butterfly corridor.

- East: 15 schools, 11 communities, 1 government agency
- South: 2 schools, 2 communities, 1 government agency
- North: 6 schools
- Central: 1 school



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 - 5.1 Local Community Care
 - 5.2 Eco-environmental Education

5.2.2 Expansion and Promotion of Ecological and Environmental Education

In addition to the ecological park, Asia Cement's ecological environmental education facilities extend their services to local institutions and schools, providing host plants or nectar plants to assist in the establishment of butterfly ecological parks. They also bring ecological environmental education into campuses, spreading the longaccumulated energy of Asia Cement's mine afforestation to schools for ongoing growth.

The Asia Cement Ecological Park offers a beautiful natural environment for local institutions, associations, and community residents to organize activities. Besides providing ecological environmental education, it also facilitates community exchange activities, helping residents to invigorate both mind and body and fostering greater cohesion. The ecological park promotes sustainable local tourism development, creates jobs, and helps preserve indigenous culture, bringing vitality and energy to the community. The collaboration and interaction between Asia Cement and the local community continue to be planned and executed.

Taiwan Science Island-Hopping Train

The annual "Taiwan Science Island-Hopping Train" event, organized by the National Science and Technology Council, traveled around Taiwan for six days in 2024, hosting science fairs at various county and city stops. National Dong Hwa University served as the host in Hualien, inviting schools, government agencies, and enterprises to participate. Asia Cement was among the invited organizations. Led by butterfly experts and interpretive educators, Asia Cement guided participants in observing insects and exploring biodiversity.

Asia Cement Eco PARTY: Exploring with Stick Insects

In 2024, stick insects from the Asia Cement Ecological Park were featured in an exhibition at Far Eastern Department Store Hualien. The event showcased various stick insect species with onsite educators providing explanations. Additionally, hands-on workshops allowed children and adults alike to learn about ecology through playful activities, achieving the goal of education through entertainment.



Science Island-Hopping Train Event



Insect Exhibition at Far Eastern Department Store Hualien



Insect Exhibition at Far Eastern Department Store Hualien

Tzu Chi Environmental Education Achievement Carnival

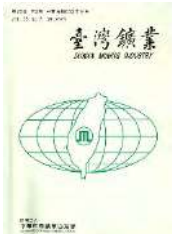
The Hualien County Government and the Tzu Chi Foundation co-hosted the 4th Hualien County Cup Environmental and Disaster Prevention Warrior Competition and Environmental Education Achievement Carnival. Through a combination of online education, on-site experiences, interactive learning, and practical lifestyle applications, the event strengthened public awareness and capabilities in disaster preparedness, promoted environmental protection consciousness, and fostered correct concepts of environmental protection and disaster prevention among all citizens. Asia Cement shared its achievements in implementing circular economy practices and low-carbon environmental protection, showcased stick insects, and promoted sustainable development and net-zero carbon emissions.



Species Conservation and Ecological Restoration

In 2024, Asia Cement published a paper in the Taiwan Mining Journal titled "Asia Cement's Innovative Quarry Management Practices — From Habitat Creation to Connecting Taiwan's Butterfly Corridor, Rebuilding the 'Kingdom of Butterflies'." The paper presented Asia Cement's approaches to creating butterfly habitats, achieving species conservation and ecological restoration. By leveraging corporate strength, this initiative echoes the United Nations Sustainable Development Goal SDG 11 (Sustainable Cities and Communities), fostering positive links between urban areas and the environment, thus providing significant benefits to communities and nature.

- 1 Demonstration site for butterfly habitats, starting with the Asia Cement Ecological Park
- 2 Providing guidance and consultation services for establishing butterfly gardens
- 3 Developing a standard operating procedure (SOP) for creating butterfly habitats
- 4 Building an online butterfly ecology network platform to drive butterfly restoration efforts
- 5 Systematically replicating butterfly ecosystems to expand environmental sustainability impact
- 6 Establishing an ecological database to collect and compile butterfly research data and regularly ecological knowledge



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Site	Environmental Management System		Energy Management System		GHG Inventory		Carbon Footprint		Carbon Footprint Label		Water Resource Efficiency Management System		Circular Economy	
	ISO 14001:2015		ISO 50001:2018		ISO 14064-1:2018		ISO 14067:2018		-		ISO 46001 :2019		BS 8001:2017	
	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate
 Asia cement	Hualien Plants and Mining Area	MIRDC/2026.7.8	Hualien Plants and Mining Area	SGS/2025.12.13	Individual financial	SGS / Annually	7 Products 3 Products	SGS/2026.12.10 AFNOR/2027.2.12	7 Products	MOENV/2030.4.11	Hualien Plants	BSI/2027.11.6		
 Ya Tung Ready-Mixed Concrete	8 Plant Areas	BSI/2026.3.28	4 Plant Areas	BSI/2026.2.7	13 Plant Areas	BSI / Annually			4 Products	MOENV/2027.4.22	2 Plant Areas	BSI/2028.12.3	1 Model	BSI/2024.3.15
 Yuan Long Stainless Steel	Plant Areas	SGS/2025.7.21	Plant Areas	SGS/2026.11.18	Plant Areas	SGS / Annually	4 Products	SGS/2025.03.05						
 Ya Li Precast					Plant Areas	SGS / Annually								
 Nanhwa Cement					Plant Areas	SGS / Annually								
 ChiaHui Power	Plant Areas	LRQA/2027.7.17			Plant Areas	SGS / Annually								
 Fu Ming (Da) Transport	All Site	IMQ/2027.5.7			Plant Areas	SGS / Annually								

Site	Information Security Management System		Occupational Health and Safety Management Systems		Occupational Health and Safety Management Systems		Occupational Health and Safety Management Systems		TAF Laboratory Quality Management System		Other systems/marks		
	ISO 27001:2013		ISO 45001:2018		TOSHMS		ISO 9001:2015		ISO 17025:2017		-		
	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Boundary of System	Certification body / Validity Period of Certificate	Name	Boundary of System	Certification body / Validity Period of Certificate
 Asia cement	Hualien Plants	MIRDC/2027.12.10	Individual Financial	BSI/2026.6.18 MIRDC/2025.6.27	Hualien Plants	MIRDC/2025.6.27	Hualien Plant, Quarry and Four Storage & Distribution Stations, and Hsinchu Plant	MIRDC/2026.6.15 MIRDC/2025.4.20	Hualien Plant Quality Control Laboratory	TAF/2027.8.24	ISO 37001:2016 Anti-Bribery Management System	Headquarters	BSI/2026.6.11
 Ya Tung Ready-Mixed Concrete	1 Plant Area	BSI/2025.10.31	11 Plant Area	BSI/2025.3.3			8Plant Areas	BSI/2027.7.22			Green Building Material Label	5 Sites 5 Category H Products 3 Pervious Products	April 2024; March 2025; February 2027
 Yuan Long Stainless Steel			Plant Area	SGS/2025.7.8	Plant Areas	SGS/2025.7.7	Plant Areas	SGS/2027.4.25	Laboratory	TAF/2027.11.20	IATF 16949 Automotive Quality Management System ISO 14046:2014 Water Footprint	Plant Areas 1 Products	SGS/2027.4.25 SGS/2025.12.20
 Ya Li Precast			Plant Area	BSI/2026.6.19			Plant Areas	SGS/2027.5.26	Laboratory	TAF/2026.11.13			
 Nanhwa Cement			Plant Area	BSI/2026.6.4			Plant Areas	MIRDC/2025.4.5					
 ChiaHui Power			Plant Area	LRQA/2026.6.9									
 Fu Ming (Da) Transport			all	IMQ/2027.3.12			All Site	IMQ/2027.5.07					

Note

1.

For details on the verification system boundaries, please refer to the certificate content. Certificates can be found at the ESG Resource Center: https://esg.acc.com.tw/resource_center/esg/certifications

2.

AFNOR Asia Ltd., British Standards Institution (BSI), Ministry of Environment (MOENV), Lloyd's Register Quality Assurance (LRQA Taiwan Branch), Ministry of the Interior (MOI), Metal Industries Research & Development Centre (MIRDC), and SGS Taiwan Ltd.

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Environmental		Boundary	2022	2023	2024
Water Resources (thousand tons, ML)	Water Withdrawal	Taiwan	5,866	6,008	6,038
		Mainland China	8,027	7,174	7,113
	Water Discharge	Taiwan	563	495	632
		Mainland China	31	22	58
	Water Consumption	Taiwan	5,303	5,513	5,399
		Mainland China	7,996	7,152	7,055
Waste	Recycled Water	Taiwan	15,581	14,448	12,473
		Mainland China	221,808	210,313	201,334
	Total Waste (tons)	Taiwan	4,322	5,011	4,040
		Mainland China	16,170	21,263	14,657
	Hazardous Percentage (%)	Taiwan	0%	0%	0%
		Mainland China	Note3	0%	0%
Circular Economy	Recycling Percentage (%)	Taiwan	94%	93%	89%
		Mainland China	86%	88%	87%
	Rotary Kiln Alternative Fuel Rate (%)	Taiwan	3.2%	4.4%	6.2%
		Mainland China	0.3%	0.7%	1.0%
	Rotary Kiln Alternative Biomass Fuel Rate (%)	Taiwan	1.1%	2.6%	3.0%
		Mainland China	0.0%	0.0%	0.0%
Alternative Raw and Fuel Materials (tons)	Clinker Production Specific Heat Consumption (MJ/ton)	Taiwan	3,605	3,446	3,593
		Mainland China	3,169	3,181	3,195
	Alternative Raw Material Rate (ARM) (%)	Taiwan	5.5%	6.4%	27.3%
		Mainland China	18.8%	19.1%	20.7%
	Clinker/Cement (Equivalent) Ratio	Taiwan	92%	92%	89%
		Mainland China	80.2%	80.0%	78.9%
	Alternative Raw Material Quantity	Taiwan	366,978	370,932	501,634
		Mainland China	5,888,561	5,920,892	4,800,500
	Alternative Fuel Quantity	Taiwan	27,203	36,642	39,382
		Mainland China	11,191	27,217	35,304

Note

3.In Mainland China, hazardous waste is primarily defined to include spent refractory bricks, waste oil, waste batteries, and used oil drums, which under Taiwanese regulations are classified as general industrial waste.

4.Not employee types include agency workers, dispatched employees, apprentices, and contractors.

5.For Taiwan, “local” is defined based on regions within Taiwan; for Mainland China, it is defined at the prefecture-level city.

Social		Boundary	2022	2023	2024
Workers	Employees (persons)	Taiwan	1,748	1,712	1,773
		Mainland China	3,452	2,948	2,810
	Not employees (person-years)	Taiwan	595	1,253	1,137
		Mainland China	Note4	313	282
Employee Union	Union Membership (persons)	Taiwan	328	326	328
		Mainland China	3,442	2,948	2,810
	Collective bargaining agreements (%)	Taiwan	19%	19%	19%
		Mainland China	100%	100%	100%
Turnover Rate	Turnover Rate (%)	Taiwan	13%	14%	15%
		Mainland China	3.3%	17.6%	5.4%
	Voluntary Turnover Rate (%)	Taiwan	12%	11%	12%
		Mainland China	2.0%	14.7%	0.8%
Parental leave (persons)	Eligible for Parental Leave	Taiwan	56	60	55
		Mainland China	3,452	2,948	2,810
	Applied for Parental Leave	Taiwan	8	8	13
		Mainland China	118	102	77
	Actually Returned to Work	Taiwan	3	4	7
		Mainland China	116	102	77
	Still Employed 12 Months After Return	Taiwan	0	2	6
		Mainland China	146	115	95
Parental Leave (%)	Return to Work Rate after Parental Leave (%)	Taiwan	50%	67%	88%
		Mainland China	98%	100%	100%
	Retention Rate 12 Months after Return to Work (%)	Taiwan	0%	25%	67%
		Mainland China	99%	99%	93%
Workforce Diversity (persons)	Employing disadvantaged groups	Taiwan	17	16	14
		Mainland China	24	27	27
	Local hiring	Taiwan	1,669	1,654	1,689
		Mainland China	Note5	2,475	1,992
	Employing foreign nationals	Taiwan	43	58	84
		Mainland China	46	42	38

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Social		Boundary	2022	2023	2024
Philan- thropic Donations	Resources Invested in Community (NT\$)	Taiwan	66,935,422	79,905,858	84,249,211
	Resources Invested in Community (RMB)	Mainland China	9,813,109	2,590,696	10,472,593
Occupa- tional Safety and Health (persons)	Direct Employee Fatality Rate per 10,000	Taiwan	0	0	0
		Mainland China	0	0	0
	Direct Employee Fatalities (persons)	Taiwan	0	0	0
		Mainland China	0	0	0
	Contractor Fatalities (persons)	Taiwan	0	0	0
		Mainland China	0	0	0
	Third-Party Fatalities (persons)	Taiwan	0	0	0
		Mainland China	0	0	0
	Direct Employee Lost Time Injury Frequency Rate (LTIFR)	Taiwan	0	1.09	2.08
		Mainland China	1.17	0.97	1.29
Training and Education	Direct Employee Lost Time Injury Frequency Rate (LTIFR)	Taiwan	0	0	0
		Mainland China	0.68	0.40	0.37
	Direct Employee Severity Rate of Disabling Injuries per Million Work Hours (SR)	Taiwan	0	2	150
		Mainland China	41	38	42
	Average Annual Training Hours - Managers	Taiwan	27.8	53.8	15.3
		Mainland China	45.7	71.0	88.1
	Average Annual Training Hours Administrative Staf	Taiwan	33.0	18.7	12.8
		Mainland China	18.2	32.8	46.2
	Average Annual Training Hours - Sales	Taiwan	12.4	17.9	7.9
		Mainland China	9.8	35.2	30.4
Note7	Average Annual Training Hours - Plant Personnel	Taiwan	35.4	14.6	4.7
		Mainland China	36.5	48.7	56.3

Note 6.Statistics for Taiwan cover cement plants in 2022 and 2023, and the building materials industry in 2024; statistics for China cover the building materials industry.

7.The average training hours for Taiwan in 2022 were calculated based on the average hours and number of employees by company and category.

Governance		Boundary	2022	2023	2024
Policy Impact	Political Candidate Expenses (Ten Thousand NT\$)		0	0	0
	Industry Associa- tion Expenses(Ten Thousand NT\$)	Taiwan	1,249	1,194	1,267
	Other Expenses (Ten Thousand NT\$)		105	99	122
	Industry Association Expenses(Ten Thousand RMB)	Mainland China	47.65	48.25	44.98
Supply chain manage- ment	Number of Tier 1 Suppliers	Taiwan	176	251	233
		Mainland China	496	441	306
	Number of Tier 1 significant Suppliers	Taiwan	36	34	56
		Mainland China	195	199	111
	Percentage of Spending on Tier 1 significant Suppliers	Taiwan	67%	64%	59%
		Mainland China	61%	61%	51%
	Number of Non-Tier 1 significant Suppliers	Taiwan	27	23	16
		Mainland China	2,343	2,215	2,486
Note7	Total Number of significant Suppliers	Taiwan	63	57	72
		Mainland China	2,537	2,414	2,597



亞洲水泥

ASIA CEMENT CORPORATION

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Global Cement and Concrete Association (GCCA) KPIs

Type	Key Performance Indicators		2021	2022	2023	2024	Note
	Item	Unit					
CO ₂	Total direct CO ₂ emissions (gross)	ton CO ₂ /year	2,960,993	2,918,106	2,638,611	2,475,536	Total direct CO ₂ emissions from fossil carbon (excluding on-site electricity generation). Emission quantities were updated to include only CO ₂ from direct sources.
	Total direct CO ₂ emissions (net)	ton CO ₂ /year	2,955,708	2,902,676	2,611,018	2,447,268	Total CO ₂ emissions minus CO ₂ emissions from the alternatives to fossil fuels. Emission quantities were updated to include only CO ₂ from direct sources.
	Specific direct CO ₂ emissions (gross)	KgCO ₂ /ton cementitious material	803	788	778	752	Total CO ₂ emissions per ton of cementing materials produced. Emission quantities were updated to include only CO ₂ from direct sources.
	Specific direct CO ₂ emissions (net)	KgCO ₂ /ton cementitious material	802	784	770	743	The net CO ₂ emissions per ton of cementing materials produced. Emission quantities were updated to include only CO ₂ from direct sources.
Circular economy	Alternative fuel rate (kiln fuels) %		1.62	3.17	4.44	6.15	The proportion of calories contained in alternative fuels to the total calories contained in rotary kiln fuel.
	Biomass fuel rate (kiln fuels) %	%	1.07	1.07	2.61	2.97	The proportion of calories contained in the biomass of alternative fuels to the total calories contained in rotary kiln fuel.
	Specific heat consumption for clinker production	MJ/ton	3,553	3,605	3,446	3,593	Calories of fuel consumed per ton of clinker produced.
	Alternative Raw Materials rate (ARM)	%	4.46	5.48	6.37	27.26	Consumption of alternative raw materials in clinker and cement as a percentage of total raw material used in manufacturing the clinker produced (calculated on a dry basis).
	Clinker/cement (equivalent) factor	%	92.84	92.11	92.02	89.17	Ratio of total clinker consumption to cement production.
Emission Monitoring	Overall coverage rate	Percentage of major pollutants continuously or continually monitored (%)	100	100	100	100	All major pollutants are measured and disclosed in accordance with the regulations of the Ministry of Environment.
	Coverage rate continuous measurement	Percentage of PM, NOx, SO ₂ continuously or continually monitored (%)	100	100	100	100	
	PM	Emission(ton/year)	1,258	1,061	934	819	
		Specific emission(g/ton clinker)	369	314	300	278	
		Coverage rate continous measurement (%)	100	100	100	100%	
	NOx	Emission(ton/year)	4,848	3,976	3,561	3,009	
		Specific emission n(g/ton clinker)	1,423	1,176	1,145	1,023	
		Coverage rate continous measurement (%)	100	100	100	100%	
	SO ₂	Emission(ton/year)	495	424	373	287	Calculation of emissions based on test results.
		Specific emission n(g/ton clinker)	145	125	120	97	
		Coverage rate continous measurement (%)	100	100	100	100%	The statutory testing frequency is once a year and the plant also has a continuous SOx monitoring system (unaudited).
	VOC/THC	Emission(ton/year)	0.00455	0.00448	0.00449	0.00417	Emissions are calculated using the coefficients announced by the Ministry of Environment.
		Coverage rate continous measurement (%)	0.00134	0.00132	0.00144	0.00142	
	PCDD/F	Emission(mg/year)	183	210	193	195	Air pollution fees are declared and calculated based on the dioxin emissions estimated from testing results every two years.
		Specific emission (mg/ton clinker)	53.7	62.0	62.2	66.4	Adjustment of disclosure units.
		Coverage rate continous measurement (%)	100	100	100	100%	The statutory testing frequency is once every two years.

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Type	Key Performance Indicators		2021	2022	2023	2024	Note
	Item	Unit					
Emission Monitoring	Hg	Emission(ton/year)	44.0	37.1	31.9	43.6	Irregular testing is conducted, and emissions are calculated using the coefficients announced by the Ministry of Environment.Adjustment of disclosure units.
		Specific mission(g/ton clinker)	12.9	11.0	10.3	14.8	Adjustment of disclosure units.
	HM1 (Cd, Tl)	Emission(kg/year)	6.02	5.22	4.49	6.15	Irregular testing is conducted, and cadmium (Cd) emissions are calculated using the coefficients announced by the Ministry of Environment. Thallium (Tl) emissions are not calculated due to the absence of announced coefficients.
		Specific mission(mg/ton clinker)	1.77	1.54	1.44	2.09	
	HM2 (Sb, As, Pb, Cr, Co, Cu, Mn, Ni, V)	Emission(kg/year)	118.69	103.00	88.48	120.99	Irregular testing is conducted, and arsenic (As), lead (Pb), and hexavalent chromium (Cr6+) emissions are calculated using the coefficients announced by the Ministry of Environment. Emissions of antimony (Sb), cobalt (Co), copper (Cu), manganese (Mn), nickel (Ni), and vanadium (V) are not calculated due to the absence of announced coefficients. °
		Specific mission(mg/ton clinker)	34.84	30.46	28.44	41.12	
Water	Total Water withdrawal	M³	2,454,240	2,471,673	2,760,224	2,800,861	For detailed information, please refer to Section 2.2.3: Water Usage Indicators and Targets.
	Total Water Discharge	M³	170,515	146,247	128,010	212,081	For detailed information, please refer to Section 2.2.3: Water Usage Indicators and Targets.
	Total Water Consumption	M³	2,283,725	2,325,426	2,632,214	2,588,780	
	Amount of Water Consumption per unit of product	M³/ ton cementitious material	0.620	0.628	0.776	0.786	
Biodiversity	Percentage (%) of quarries with high biodiversity value where Biodiversity Management Plan(BMP) is implemented	%	100	100	100	100	The Hualien Xincheng mountain Quarry which has high biodiversity value, is 2.95 km away from the Key Biodiversity Areas (KBAs). For detailed information, please refer to Section 2.3.1: Biodiversity Management Plan.
	Percentage (%) of Quarries where Rehabilitation Plan(QRP) is implemented	%	100	100	100	100	For detailed information, please refer to Section 2.3.1: Biodiversity Management Plan.
Safety	Fatality rate, directly employed	-	0	0	0	0	Reported as a ratio per 10,000 direct employees.
	Number of fatalities, directly employed	Persons	0	0	0	0	The number of work-related fatalities within one year
	Number of fatalities, contractors	Persons	0	0	0	0	The number of work-related fatalities within one year
	Number of fatalities, third-parties	Persons	0	0	0	0	The number of work-related fatalities within one year
	LTI frequency rate(LTIFR), directly employed	-	0	0	1.09	2.25	The number of lost time injuries per million hours worked
	LTI frequency rate(LTIFR), contractors	-	0	0	0	0	The number of lost time injuries per million hours worked
	Disabling Severity Rate of per 1 million work-hour (SR), directly employed		0	0	2	231	The total number of lost days due to disabling injuries per million hours worked
Note 1. The scope of the cement business statistics includes Asia Cement headquarters, Hsinchu Plant, and Hualien Plant. 2. Air pollutant emission data is based on figures approved by the Environmental Protection Bureau as of the end of March 2024.							

SASB Industry Disclosure Standards

Asia Cement — SASB Disclosure Standards for the Building Materials Industry (2024-12 Edition)

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Topic	Code	Metric (Unit of Measure)	2021	2022	2023	2024	Note	Report Section
 GHG		Scope 1 emissions(ton CO ₂ e)	2,967,231	2,924,459	2,639,026	2,481,375		
	EM-CM-110a.1	Scope 1 percentage covered under emissions-limiting regulations (%)	99.998	99.998	99.998%	99.998	The Hualien Plant is among the first batch of facilities regulated by the Ministry of Environment and is subject to Taiwan's carbon fee collection.	1.1 Net Zero Strategy and Target Roadmap
	EM-CM-110a.2	Scope of management –long-term and short-term strategies or programs for emission, target of reduction and performance analysis	Please refer to Section 1.1.1of the report for detailed information.					
 Air Quality		NOx (N ₂ O not included) (ton)*	4,848	3,976	3,561	3,009	Annual NOx emission amount is calculated according to the successive auto-mon- itoring value.	2.1 Pollution Control and Waste Reduction
		SOx (ton)*	495	424	373	287	SOx emission amount is calculated according to the results of tests, SOx is represented by SO ₂	
		PM ₁₀ (ton)	742	627	554	486	Annual particle emission amount is calculated based on test data, coefficients defined by Ministry of Environment, efficiency of equipment prevention. PM ¹⁰ is estimated based on 58% of particulate matter (the data source is changed to the 2018 Research Paper on the Characteristics of Particulate Emissions from Cement Industry and Mining Areas in Hualien Area)	
		Dioxins (ton I-TEQ)*	1.829E-07	2.098E-07	1.934E-07	1.953E-07	Calculating the earnings from the reported air pollution fee, estimating the emission of dioxin based on the test results of every two years.	
	EM-CM-120a.1	Volatile organic compounds (VOC) (ton)*	0.00455	0.00448	0.00449	0.00417	Calculating the earnings from the reported air pollution fee, calculating VOC emission based on the coefficients defined by Ministry of Environment.	
		Polycyclic aromatic hydrocar- bons (PAH) (ton)	No test	No test	No test	No test	When the rotary kiln is burned at high temperature (up to 1,500°C), PAHs will be thermally decomposed into H ₂ O, CO ₂ , etc., and it is not a regular inspection item designated by the Environmental Protection Agency, so there is no need to detect PAHs in the discharge pipe.	
		Pb (ton)*	0.0237	0.0206	0.0177	0.0242	Calculating the earnings from the reported air pollution fee, calculating Pb emission based on lead coefficient defined by Ministry of Environment (304.8 mg/ton).	
		Hg (ton)*	0.0440	0.0371	0.0319	0.0436	Calculating the earnings from the reported air pollution fee, calculating Hg emission based on lead coefficient defined by Ministry of Environment (550.4 mg/ton).	
		Cd (ton)*	0.00602	0.00522	0.00449	0.00615	Calculating the earnings from the reported air pollution fee, calculating Cd emission based on lead coefficient defined by Ministry of Environment	
 Energy Management		Total energy consumed (GJ)	13,372,308	13,534,7619.	11,959,122	11,705,710		1.2 Energy Resource Management
	EM-CM-130a.1	Percentage grid electricity (%)	9.23	70	10.02	9.34	The electricity from the grid does not include externally purchased green electricity. The calorific value of externally purchased electricity as a proportion of the total energy consumption calorific value.	
		Percentage alternative (%)	1.47	2.86	3.98	5.56	The calorific value of alternative fuels as a proportion of the total energy consump- tion calorific value.	
		Percentage renewable (%)	0	0	0.01	0.10	Renewable energy includes self-generated solar power and externally purchased green electricity.	

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Topic	Code	Metric (Unit of Measure)	2021	2022	2023	2024	Note	Report Section
 Water Management	EM-CM-140a.1	Total water withdrawn (10³M³)	2,462	2,476	2,764	2,804		2.2 Water Risk Management
		Total water consumed(10³M³)	2,285	2,326	2,633	2,590		
		Percentage of each in regions with High or Extremely High Baseline Water Stress (%)	0	0	0	0		
 Waste Management	EM-CM-150a.1	Amount of waste generated (ton)	60	52	46	58	The quantity of waste that cannot be recycled and is ultimately disposed of through incineration or landfill.	2.1 Pollution Control and Waste Reduction
		Percentage hazardous (%)	0	0	0	0		
		Percentage recycled (%)	98	98	98	98		
 Biodiversity Impacts	EM-CM-160a.1	Description of environmental management policies and practices for active sites	Please refer to Section 2.3 of the report for detailed information.					2.3 Nature Action and Biodiversity
	EM-CM-160a.2	The area of interfered and impacted on the land (Acre)	49.42	49.42	42.01	42.01	For mining operations area, 1 acre = 0.40469 hectares.	
		Percentage of recovered (%)	77.43	77.90	80.88	81.33	Calculated based on vegetated greening area.	
 Workforce Health & Safety	EM-CM-320a.1	Total Recordable Incident Rate (TRIR) for direct employees	0	0	0.21	0.45	TRIR = (Number of lost time incidents / Total hours worked) * 200,000	4.3 Occupational Health and Safety
		Total Recordable Incident Rate (TRIR) for Contract Employees	0	0	0	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company but are under the direction and supervision of the workplace responsible person.	
		Near Miss Frequency Rate (NMFR) for direct employees	9.33	3.21	5.93	7.22	NMFR = (Number of near miss incidents / Total hours worked) * 200,000	
		Near Miss Frequency Rate (NMFR) for Contract Employees	0	0	0	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company but are under the direction and supervision of the workplace responsible person.	
	EM-CM-320a.2	Number of reported cases of silicosis	0	0	0	0	Preventive measures include dust operation zoning management and respiratory protection plans, among others.	
 Product Innovation	EM-CM-410a.1	Percentage of products that qualify for credits in sustainable building design and construction certifications(%)	None	None	None	None	Over the years, many construction projects under the Group to which the Company belongs have obtained certifications (as shown in the following link). However, due to situations such as multi-year construction timelines and the fact that certification applications can only be submitted upon project completion, it is not possible to quantify the percentage of sales revenue by year. https://www.feg.com.tw/tw/csr/csr_issue.aspx?id=3	1.3 Low-Carbon Manufacturing Value Chain
	EM-CM-410a.2	Total addressable market and share of market for products that reduce energy, water or material impacts during usage or production	Masonry cement	Masonry Cement \ Portland Limestone Cement	Masonry Cement \ Portland Limestone Cement	Masonry Cement \ Portland Limestone Cement		
			3,912,776	379,714,783	92,209,919	153,556,594		
			100%	100%	100%	14%	The scope of the masonry cement market is Taiwan, and Asia Cement is the sole producer of masonry cement in the Taiwan market. The main reason for the difference is that low-carbon cement (Portland Limestone Cement) began to be marketed in Taiwan in 2024.	
Pricing Integrity & Transparency 	EM-CM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities	0	0	0	0		3.3 Risk Management Framework
Index of activities 	EM-CM-000.A	Production volume of major product Lines (ton)	3,635,000	3,679,000	3,358,000	3,109,000	Cement Production	Annual Report
			3,407,000	3,381,000	3,112,000	2,942,000	Clinker Production	
			3,685,762	3,701,844	3,391,910	3,293,480	Cementitious Material Production (including clinker, gypsum, and cement ground mineral additives)	1.2 Energy Resource Management

Note

1.

2.

The scope of cement business statistics includes Asia Cement headquarters, Hsinchu Plant, and Hualien Plant. Only the Hualien Plant is equipped with rotary kilns, with its air pollutant emission items marked by an asterisk (*). In addition, the sources of PM¹⁰ include the storage, transportation, manufacturing, and packaging processes of cement, clinker, and related raw materials. Data is based on figures approved by the Environmental Protection Bureau as of the end of March 2024.

SASB Industry Disclosure Standards

for the Building Materials Industry (2024-12 Edition) (Subsidiary Cement Business)

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Topic	Code	Metric (Unit of Measure)	2024	Note	Report Section
 GHG	EM-CM-110a.1	Scope 1 emissions(ton CO ₂ e)	9,708		1.1 Net Zero Strategy and Target Roadmap Climate-Related Information of Listed Companies
		Scope 1 percentage covered under emissions-limiting regulations (%)	0	None of these entities are regulated by the Ministry of Environment, nor are they subject to the carbon fee scheme in Taiwan.	
	EM-CM-110a.2	Scope of management –long-term and short-term strategies or programs for emission, target of reduction and performance analysis	-		
 Air Quality	EM-CM-120a.1	NOx (N ₂ O not included) (ton)*	1.0		2.1 Pollution Control and Waste Reduction
		SOx (ton)*	1.3		
		PM ₁₀ (ton)	9.6	PM ¹⁰ is estimated at 58% of total particulate matter.	
		Dioxins (ton I-TEQ)*	-	Not applicable due to no relevant emissions.	
		Volatile organic compounds (VOC) (ton)*	2.1		
		Polycyclic aromatic hydrocarbons (PAH) (ton)	-	Not applicable due to no relevant emissions.	
		Pb (ton)*	-	Not applicable due to no relevant emissions.	
		Hg (ton)*	-	Not applicable due to no relevant emissions.	
 Energy Management	EM-CM-130a.1	Total energy consumed (GJ)	128,346	The proportion of purchased electricity calorific value to total energy consumption calorific value	1.2 Energy Resource Management
		Percentage grid electricity (%)	38.96		
		Percentage alternative (%)	0		
		Percentage renewable (%)	0		
 Water Management	EM-CM-140a.1	Total water withdrawn (10 ³ M ³)	473		2.2 Water Risk Management
		Total water consumed (10 ³ M ³)	459		
		Percentage of each in regions with High or Extremely High Baseline Water Stress (%)	0		
 Waste Management	EM-CM-150a.1	The area of interfered and impacted on the land (Acre)	938		2.1 Pollution Control and Waste Reduction
		Percentage of recovered (%)	0	Operating activities do not generate hazardous industrial waste.	
		Percentage grid electricity (%)	90		

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Topic	Code	Metric (Unit of Measure)	2024	Note	Report Section
 Biodiversity Impacts	EM-CM-160a.1	Description of environmental management policies and practices for active sites	-	Not applicable due to no own mining operations.	2.3 Nature Action and Biodiversity
		The area of interfered and impacted on the land (Acre)	-	Not applicable due to no own mining operations.	
	EM-CM-160a.2	Percentage of recovered (%)	-	Not applicable due to no own mining operations.	
 Workforce Health & Safety	EM-CM-320a.1	Total Recordable Incident Rate (TRIR) for direct employees	0.37	TRIR = (Number of recordable incidents / Total hours worked) × 200,000	4.3 Occupational Health and Safety
		Total Recordable Incident Rate (TRIR) for Contract Employees	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company, but are under the direction and supervision of the workplace responsible person.	
		Near Miss Frequency Rate (NMFR) for direct employees	0	NMFR = (Number of near miss incidents / Total hours worked) * 200,000	
	Near Miss Frequency Rate (NMFR) for Contract Employees	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company, but are under the direction and supervision of the workplace responsible person.		
	EM-CM-320a.2	Number of reported cases of silicosis	0	Preventive measures include dust operation zoning management and respiratory protection programs.	
 Product Innovation	EM-CM-410a.1	Percentage of products that qualify for credits in sustain- able building design and construction certifications(%)	-	Over the years, numerous buildings under the Group to which the Company belongs have obtained certifications (see the link below). However, due to multi-year construction periods and the fact that certification applications can only be submitted after project completion, it is not possible to quantify the percentage of sales revenue by year. https://www.feg.com.tw/tw/csr/csr_issue.aspx?id=3	1.1 Net Zero Strategy and Target Roadmap Climate-Related Information of Listed Companies
	EM-CM-410a.2	Total addressable market and share of market for products that reduce energy, water or material impacts during usage or production	1,763,591,000	High-Flow Concrete: Reduces labor requirements and energy needed for pumping. Fair-Faced Concrete: Decreases the need for additional finishing materials. High-Impermeability Concrete: Enhances durability, thereby extending the lifecycle. Pervious Concrete: Facilitates water retention and mitigates flooding; with proper design, enables water reuse. Lightweight Concrete: Utilizes ceramic aggregates as recycled materials. Low-Carbon Concrete: Reduces carbon emissions. Green Building Material (Type H): Improves durability and extends the lifecycle.	
			1.3%	The market share of innovative concrete products is estimated based on the Ministry of Economic Affairs' industrial product sales statistics.	
			5,011,000	Development of rebar couplers for precast products.	
			-	There is no market share estimate available for innovative precast products.	
 Pricing Integrity & Transparency	EM-CM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities	0		3.3 Risk Management Framework
	 Index of activities	EM-CM-000.A	Production volume of major product Lines (Ton/m³)	Ready-Mixed Concrete-m³ (Standalone Financial Reporting Boundary)	4,511,225
Precast Cement Products-m³				8,810	
Ground Granulated Blast Furnace Slag (GGBFS) - tons				356,803	
Limestone Powder - tons				142,758	

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Chiahui Power — SASB Electric Utilities & Power Generation (2023-12 Edition)



Topic	Code	Metric (Unit of Measure)	2024	Note	Report Section
 GHG		Gross global Scope 1 emissions, percentage covered under (ton CO ₂ -e)	2,029,369		1.1 Net Zero Strategy and Target Roadmap Climate-Related Information of Listed Companies
	IF-EU-110a.1	Emissions limiting regulations (%)	100	Subject to Carbon Fee	
		Emissions reporting regulations (%)	100	Regular Reporting and Public Disclosure of Emissions Data	
	IF-EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries (ton CO ₂ -e)	-	Electricity Generated is Not Transmitted to Retail Customers; Not Applicable	
	IF-EU-110a.3	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	-		
 Air Quality		NOx (N2O not included) (ton)*	533		2.1 Pollution Control and Waste Reduction
		SOx (ton)*	7		
	IF-EU-120a.1	PM ₁₀ (ton)	9	PM ₁₀ is estimated at 58% of total particulate matter.	
		Pb (ton)*	-	Not applicable due to no relevant emissions.	
		Hg (ton)*	-	Not applicable due to no relevant emissions.	
		percentage of each in or near areas of dense population (%)	100		
 Water Management	IF-EU-140a.1	Total water withdrawn (10³M³)	2,645		2.2 Water Risk Management
		Total water consumed (10³M³)	2,310		
		Percentage of each in regions with High or Extremely High Baseline Water Stress (%)	0		
	IF-EU-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations (Number)	0		
	IF-EU-140a.3	Description of water management risks and discussion of strategies and practices to mitigate those risks	-		
 Coal Ash Management	IF-EU-150a.1	Amount of coal combustion products (CCPs) generated, percentage recycled	-	No coal consumption; not applicable	
	IF-EU-150a.3	Description of coal combustion products (CCPs) management policies and procedures for active and inactive operations	-	No coal consumption; not applicable	-
 Energy Affordability	IF-EU-240a.1	Average retail electric rate for (1) residential, (2) commercial, and (3) industrial customers	-	Only wholesale to Taipower; not applicable	
	IF-EU-240a.3	(1) Number of residential customer electric disconnections for non-payment, (2) percentage reconnected within 30 days	-	No direct supply to residential use; not applicable	-
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	-	Regular contracting with Taipower; not applicable	

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Topic	Code	Metric (Unit of Measure)	2024	Note	Report Section
 Workforce Health & Safety	IF-EU-320a.1	Total Recordable Incident Rate (TRIR) for Direct Employees	0	TRIR = (Number of recordable incidents / Total hours worked) × 200,000	4.3 Occupational Health and Safety
		Total Recordable Incident Rate (TRIR) for Contract-Based Employees	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company, but are under the direction and supervision of the workplace responsible person.	
		Fatality Rate (%) for Direct Employees	0		
		Fatality Rate (%) for Contract-Based Employees	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company, but are under the direction and supervision of the workplace responsible person.	
		Near Miss Frequency Rate (NMFR) for Direct Employees	0	NMFR = (Number of near miss incidents / Total hours worked) * 200,000	
		Near Miss Frequency Rate (NMFR) for Contract-Based Employees	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company, but are under the direction and supervision of the workplace responsible person.	
 End-Use Efficiency & Demand	IF-EU-420a.2	Percentage of electric load served by smart grid technology (%)	0		-
	IF-EU-420a.3	Customer electricity savings from efficiency measures, by market (MWh)	935.54		
 Nuclear Safety & Emergency Management	IF-EU-540a.1	Total number of nuclear power units, broken down by results of most recent independent safety review	-	No nuclear power generation; not applicable.	-
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	-	No nuclear power generation; not applicable.	
 Grid Resiliency	IF-EU-550a.1	Number of incidents of non-compliance with physical or cybersecurity standards or regulations (Number)	0		-
	IF-EU-550a.2	System Average Interruption Duration Index (SAIDI)	-	Not applicable	
		System Average Interruption Frequency Index (SAIFI)	-	Not applicable	
 Activity Metrics	IF-EU-000.A	Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	-	Not applicable	1.2 Energy Resource Management
		Number of: (1) residential, (2) commercial, and (3) industrial customers served	-	Only wholesale to Taipower; not applicable	
	IF-EU-000.B	Total electricity delivered to: (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers	-	Only wholesale to Taipower; not applicable	
	IF-EU-000.C	Length of transmission and distribution lines (km)	3.03		
	IF-EU-000.D	Total electricity generated (MWh)	5,657,996		
		Percentage by major energy source (%)	99.999		
		Percentage of Solar Photovoltaic Power Generation (%)	0.001		
		Percentage in regulated markets (%)	100		
	IF-EU-000.E	Total wholesale electricity purchased (MWh)	30.88	Excluding electricity consumed by power generation facilities.	

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Fu Min (Da) Transportation — SASB Road Transportation (2023-12 Edition)



Topic	Code	Metric (Unit of Measure)	2024		Note	Report Section
 GHG	TR-RO-110a.1	Gross global Scope 1 emissions (ton CO ₂ -e)	27,813			1.1 Net Zero Strategy and Target Roadmap Climate-Related Information of Listed Companies
	TR-RO-110a.2	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	-			
		Total fuel consumed (GJ)	319,093			1.2 Energy Resource Management
	TR-RO-110a.3	Percentage natural gas (%)	0			
		Percentage renewable (%)	0			
 Air Quality	TR-RO-120a.1	NOx (N ₂ O not included) (ton)*	2.46			2.1 Pollution Control and Waste Reduction
		SOx (ton)*	0			
		PM ₁₀ (ton)	0.09	PM ₁₀ is estimated at 58% of total particulate matter.		
 Workforce Health & Safety	TR-RO-320a.1	Total Recordable Incident Rate (TRIR) for Direct Employees	1.66	TRIR = (Number of recordable incidents / Total hours worked) × 200,000		4.3 Occupational Health and Safety
		Total Recordable Incident Rate (TRIR) for Contract-Based Employees	0	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company, but are under the direction and supervision of the workplace responsible person.		
		Fatality Rate (%) for Direct Employees	0			
		Fatality Rate (%) for Contract-Based Employees	0			
 End-Use Efficiency & Demand	TR-RO-320a.2	Employee Voluntary Turnover Rate (%)	30.1	Contract-based employees (including dispatched personnel and contractors) are not in an employment relationship with the company, but are under the direction and supervision of the workplace responsible person.		4.2 Talent Attraction and Retention
		Employee Involuntary Turnover Rate (%)	1.4			
	TR-RO-320a.3	Approach to Managing Short- and Long-Term Health Risks of Drivers	-			4.3 Occupational Health and Safety
 Accident & Safety Management	TR-RO-540a.1	Number of Road Traffic Accidents (cases)	5			-
	TR-RO-540a.3	Number of Hazardous Material Spills and Releases to the Environment (cases)	0			
		Total Volume of Hazardous Material Spills and Releases to the Environment (m³)	0			
 Activity Metrics	TR-RO-000.A	Revenue Ton-Kilometers (RTK)	2.23E+14			1.2 Energy Resource Management
	TR-RO-000.B	Load Factor	54.9%			-
	TR-RO-000.C	Number of Employees	435			4.2 Talent Attraction and Retention
		Number of Truck Drivers	31			-

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Yuan Long Stainless Steel — SASB Iron & Steel Producers (2023-12 Edition)

Topic	Code	Metric (Unit of Measure)	2024	Note	Report Section
 GHG	EM-IS-110a.1	Scope 1 emissions(ton CO ₂ e)	4,084		1.1 Net Zero Strategy and Target Roadmap Climate-Related Information of Listed Companies
		Scope 1 percentage covered under emissions-limiting regulations (%)	0	Not subject to regulation by the Ministry of Environment, nor to the carbon fee scheme in Taiwan.	
	EM-IS-110a.2	Scope of management –long-term and short-term strategies or programs for emission, target of reduction and performance analysis	-		
 Air Quality	EM-IS-120a.1	CO (ton)	0		2.1 Pollution Control and Waste Reduction
		NOx (N ₂ O not included) (ton)*	2.71		
		SOx (ton)*	0		
		Particulate matter PM ₁₀ (ton)	0.05	PM ₁₀ is estimated at 58% of total particulate matter.	
		Manganese (MnO) (ton)	-	No testing conducted.	
		Lead (Pb) (ton)*	0		
		Volatile organic compounds (VOCs) (ton)*	0.868		
 Energy Management	EM-IS-130a.1	Polycyclic aromatic hydrocarbons (PAHs) (ton)	-	No testing conducted.	1.2 Energy Resource Management
		Total energy consumedV (GJ)	189,336		
		Percentage grid electricity (%)	60.21		
	EM-IS-130a.2	Percentage renewable (%)	2.34		
		Total fuel consumed (GJ)	71		
		Percentage coal (%)	0		
		Percentage natural gas (%)	98.73		
 Water Managemen	EM-IS-140a.1	Percentage renewable (%)	0.00		2.2 Water Risk Management
		Total water withdrawn (10 ³ M ³)	68		
		Total water consumed(10 ³ M ³)	32		
		Percentage of each in regions with High or Extremely High Baseline Water Stress (%)	0		

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GRI Content Index

Statement of use	Asia Cement has reported in accordance with the GRI Standards for the period 2024.1.1~2024.12.31.
Use GRI 1	GRI 1: Foundation 2021
Applicable GRI Sector standard(s)	GRI 14: Mining Sector 2024

Disclosures	Page	Section/Notes	Externally Verified
GRI 2: General Disclosures 2021			
2-1 Organizational details	80	3.5 Economic Performance and Tax Information	✓
2-2 Entities included in the organization's sustainability reporting	03	About The Report	✓
2-3 Reporting period, frequency and contact point	04	About The Report	✓
2-4 Restatements of information	22	1.1 Net-Zero Strategy and Target Roadma	✓
	28	1.2 Energy Resource Management	✓
	121	5.1 Local community care	✓
2-5 External assurance	03	About The Report	✓
	15	Material Topics and Stakeholders	✓
	03	About The Report	✓
2-6 Activities, value chain and other business relationships	80	3.5 Economic Performance and Tax Information	✓
	87	3.7Sustainable Supply Chain Managemen	✓
	97	4.2 Talent Attraction and Retention	✓
2-7 Employees	137	ESG Key Data	✓
	97	4.2 Talent Attraction and Retention	✓
2-8 Workers who are not employees	137	ESG Key Data	✓
2-9 Governance structure and composition	65~66	3.1 Corporate Governance Overview	✓
2-10 Nomination and selection of the highest governance body	65~66	3.1 Corporate Governance Overview	✓
2-11 Chair of the highest governance body	65~66	3.1 Corporate Governance Overview	✓
2-12 Role of the highest governance body in overseeing the management of impacts	65	3.1 Corporate Governance Overview	✓
	68	3.2 Sustainability Governance Structure	✓
2-13 Delegation of responsibility for managing impacts	65	3.1 Corporate Governance Overview	✓
	69	3.2 Sustainability Governance Structure	✓
2-14 Role of the highest governance body in sustainability reporting	15	Material Topics and Stakeholders	✓
2-15 Conflicts of interest	-	Board Information in the Annual Report	✓
2-16 Communication of critical concerns	66	3.1 Corporate Governance Overview	✓
2-17 Collective knowledge of the highest governance body	66	3.1 Corporate Governance Overview	✓
2-18 Evaluation of the performance of the highest governance body	66	3.1 Corporate Governance Overview	✓

Disclosures	Page	Section/Notes	Externally Verified
2-19 Remuneration policies	66	3.1 Corporate Governance Overview	✓
	101	4.2 Talent Attraction And Retention	✓
2-20 Process to determine remuneration	67	3.1 Corporate Governance Overview	✓
2-21 Annual total compensation ratio	102	4.2 Talent Attraction And Retention	✓
2-22 Statement on sustainable development strategy	05~06	Words From The Chairman	✓
	10	Sustainable vision strategy	✓
2-23 Policy commitments	18	1. Accelerating the Advancement of Low-Carbon Solutions	✓
	45	2. Implementing Environmental Protection and Harmonious Coexistence with Nature	✓
	84~86	3.6 Ethical Business Practices and Anti-Bribery	✓
	93,111	4.1 Diversity, Inclusion, and Human Rights Protection 4.3 Occupational Health and Safety	✓
	18~44	1. Accelerating the Advancement of Low-Carbon Solutions	✓
2-24 Embedding policy commitments	45~63	2. Implementing Environmental Protection and Harmonious Coexistence with Nature	✓
	84~86	3.6 Ethical Business Practices and Anti-Bribery	✓
	93,111	4.1 Diversity, Inclusion, and Human Rights Protection 4.3 Occupational Health and Safety	✓
2-25 Processes to remediate negative impacts	84~86	3.6 Ethical Business Practices and Anti-Bribery	✓
	94~97, 119~129	4.1 Diversity, Inclusion, and Human Rights Protection 5.1 Local community care	✓
2-26 Mechanisms for seeking advice and raising concerns	84~86	3.6 Ethical Business Practices and Anti-Bribery	✓
	94~97, 119~129	4.1 Diversity, Inclusion, and Human Rights Protection 5.1 Local community care	✓
2-27 Compliance with laws and regulations	13~17	Material Topics and Stakeholders	✓
2-28 Membership associations	72	3.1 Corporate Governance Overview	✓
2-29 Approach to stakeholder engagement	13~17	Material Topics and Stakeholders	✓
2-30 Collective bargaining agreements	103	4.2 Talent Attraction and Retention	✓
Disclosures	Page	Section/Notes	Externally Verified
GRI 3: Material Topics 2021			
3-1 Process to determine material topics	13~17	Material Topics and Stakeholders	✓
3-2 List of material topics	14		✓

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Material Topics	Standard	Disclosures	Sector Standard REF#	Page	Omitted	Section/Notes	Externally verified	Impact Boundary Within the Organization	Impact Boundary Outside the Organization (Stakeholders)
-	-	Mine Name: Xincheng mountain Quarry Location: Hualien County, Taiwan Coordinates: 24.144416, 121.623746 Area: 399.49 hectares	14.0.1	-	-	-	✓	-	-
14.1 GHG emissions	GRI 3: Material Topics 2021	3-3 Management of material topics	14.1.1	18	-	1. Accelerating the Advancement of Low-Carbon Solutions	✓	ALL	Community, Government
		302-1 Energy consumption within the organization	14.1.2	26,157~157	-	1.2 Energy Resource Management	✓		
	GRI 302 : Energy 2016	302-2 Energy consumption outside of the organization	14.1.3		N/A	-			
		302-3 Energy intensity	14.1.4	26~28,157~158	-	1.2 Energy Resource Management	✓		
		305-1 Direct (Scope 1) GHG emissions	14.1.5	22,157~158	-		✓		
		305-2 Energy indirect (Scope 2) GHG emissions	14.1.6	22,157~158	-		✓		
	GRI 305 : Emissions 2016	305-3 Other indirect (Scope 3) GHG emissions	14.1.7	23	-	1.1 Net-Zero Strategy and Target Roadmap	✓		
		305-4 GHG emissions intensity	14.1.8	20,28,157~158	-		✓		
		305-5 Reduction of GHG emissions	14.1.9	24	-		✓		
14.2 Climate adaptation and resilience	GRI 3: Material Topics 2021	3-3 Management of material topics	14.2.1	64	-	3. Robust Governance Drives Sustainable Competitiveness	✓	A	-
	GRI 201 : Economic Performance 2016	201-2 Financial implications and other risks and opportunities due to climate change	14.2.2	76	-	3.4 Climate Risks and Opportunities	✓		
14.3 Air emissions	GRI 3: Material Topics 2021	3-3 Management of material topics	14.3.1	45	-	2. Implementing Environmental Protection and Harmonious Coexistence with Nature	✓	ALL	Community, Government
	GRI 305 : Emissions 2016	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	14.3.2	46,146,157~158	-	2.1 Pollution Control and Waste Reduction	✓		
14.5 Waste	GRI 3: Material Topics 2021	3-3 Management of material topics	14.5.1	45	-	1. Accelerating the Advancement of Low-Carbon Solutions	✓	A	Community, Government
		306-1 Waste generation and significant waste-related impacts	14.5.2	49,157~158	-		✓		
		306-2 Management of significant waste-related impacts	14.5.3	49,157~158	-		✓		
	GRI 306: Waste 2020	306-3 Waste generated	14.5.4	49,157~158	-	2.1 Pollution Control and Waste Reduction	✓		
		306-4 Waste diverted from disposal	14.5.5	49,157~158	-		✓		
		306-5 Waste directed to disposal	14.5.6	49,157~158	-		✓		
14.8 Closure and rehabilitation	GRI 3: Material Topics 2021	3-3 Management of material topics	14.8.1	92	-	4. Fostering a Diverse, Inclusive, and Healthy Workplace	✓	M	Community, Government
	GRI 402: Labor/Management Relations 2016	402-1 Minimum notice periods regarding operational changes	14.8.2	101	-	In accordance with legal requirements (Labor Standards Act)	✓		
	GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	14.8.3	108	-	4.2 Talent Attraction and Retention	✓		
14.9 Economic impacts	GRI 3: Material Topics 2021	3-3 Management of material topics	14.9.1	64	-	3. Robust Governance Drives Sustainable Competitiveness	✓	ALL	Community, Customers, Suppliers
	GRI 201 : Economic Performance 2016	201-1 Direct economic value generated and distributed	14.9.2	81	-	3.5 Economic Performance and Tax Information	✓		
		203-1 Infrastructure investments and services supported	14.9.3	121	-	5.1 Local community care	✓		
	GRI 203 : Indirect Economic Impacts 2016	203-2 Significant indirect economic impacts	14.9.4	57	-	3.4 Climate Risks and Opportunities 1.3.1 Low-Carbon Manufacturing Value Chain	✓		
	GRI 204 : Procurement Practices 2016	204-1 Proportion of spending on local suppliers	14.9.5	88,157~158	-	3.7 Sustainable Supply Chain Management	✓		

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Material Topics as Defined by Asia Cement	Standard	Disclosures	Page	Section/Notes	Externally verified
Circular Economy	GRI 3: Material Topics 2021	3-3 Management of material topics	18	1. Accelerating the Advancement of Low-Carbon Solutions	✓
Low-Carbon Green Processes	GRI 3: Material Topics 2021	3-3 Management of material topics	18	1. Accelerating the Advancement of Low-Carbon Solutions	✓
Innovative Low-Carbon Products	GRI 3: Material Topics 2021	3-3 Management of material topics	18	1. Accelerating the Advancement of Low-Carbon Solutions	✓
Human Capital Management	GRI 3: Material Topics 2021	3-3 Management of material topics	92	4. Fostering a Diverse, Inclusive, and Healthy Workplace	✓
Supply Chain Management	GRI 3: Material Topics 2021	3-3 Management of material topics	64	3. Robust Governance Drives Sustainable Competitiveness	✓
Customer Relations	GRI 3: Material Topics 2021	3-3 Management of material topics	64	3. Robust Governance Drives Sustainable Competitiveness	✓
Risk and Opportunity Management	GRI 3: Material Topics 2021	3-3 Management of material topics	64	3. Robust Governance Drives Sustainable Competitiveness	✓

Note ALL All Site A Asia Cement S Yuan Long Stainless Steel N Nanhwa Cement Y Ya Tung Ready-Mixed P Ya Li Precast Prestressed F Fu Ming(Da) Transport J ChiaHui Power M Mines

Specific Topic	Explanation
14.4 Biodiversity	Determined as not material through impact assessment
14.6 Tailings	Determined as not material through impact assessment
14.7 Water and effluents	Determined as not material through impact assessment
14.10 Local CommunitiesNote	Determined as not material through impact assessment
14.11 Rights of Indigenous PeoplesNote	Determined as not material through impact assessment
14.12 Land and Resource Rights	Determined as not material through impact assessment
14.13 Artisanal and Small-Scale Mining (ASM)	Determined as not material through impact assessment
14.14 Security Practices	Determined as not material through impact assessment
14.15 Critical incident management	Determined as not material through impact assessment

Note Due to stakeholder concerns, relevant content is still disclosed as a specific topic.

Specific Topic	Explanation
14.17 Employment Practices	Determined as not material through impact assessment
14.18 Child Labor	Determined as not material through impact assessment
14.19 Forced Labor and Modern Slavery	Determined as not material through impact assessment
14.20 Freedom of Association and Collective Bargaining	Determined as not material through impact assessment
14.21 Non-Discrimination and Equal Opportunity	Determined as not material through impact assessment
14.22 Anti-Corruption	Determined as not material through impact assessment
14.23 Payments to Governments	Determined as not material through impact assessment
14.24 Public Policy	Determined as not material through impact assessment
14.25 Conflict-Affected and High-Risk Areas	Determined as not material through impact assessment



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GRI 14 Mining Sector 2024

Material Topics : GHG emissions (Sector Standard 14.1)

302-1 Energy consumption within the organization (14.1.2)

302-3 Energy intensity (14.1.4)

Electricity (TJ)	Gasoline (TJ)	Diesel (TJ)	Total Energy Input (TJ)	Energy Intensity (GJ/ton)
18.56	0.13	25.44	44.13	0.012

305-1 Direct (Scope 1) GHG emissions (14.1.5)

305-2 Energy indirect (Scope 2) GHG emissions (14.1.6)

305-4 GHG emissions intensity (14.1.8)

Scope 1 Emissions (tons CO ₂ e)	Scope 2 Emissions (tons CO ₂ e)	Total Emissions (tons CO ₂ e)	GHG Emission Intensity (tons CO ₂ e)	Limestone Production (tons)
1,871	2,547	4,417	0.0012	3,745,069

Material Topics : Air emissions (Sector Standard 14.3)

305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions

Nitrogen Oxides (tons)	Sulfur Oxides (tons)	Particulate Matter (tons)
No emissions	No emissions	186

Material Topics : Waste (Sector Standard 14.5)

GRI 306 : Waste

At the Xincheng mountain Quarry area, only domestic waste is generated, for which no statistics are maintained. Waste removal and disposal are included in the relevant operational contracts with contractors.

Material Topics : Occupational health and safety (Sector Standard 14.16)

403-2 Hazard identification, risk assessment, and incident investigation (14.16.3)

Each year, a comprehensive review is conducted on the potential hazards of operational activities and the existing control measures, serving as the basis for reassessing risks. This year, a total of 4 risk re-assessments were carried out, covering civil works, quarry operations, repair workshop, and crushing system.

Special Health Hazard Operations Health Management Statistics

Hazard Type	Health Management Classification				Improvement Plan
	Level 1	Level 2	Level 3	Level 4	
Noise	3	2	0	0	Implement a personal hearing protection program; enhance use of protective equipment
Dust	5	0	0	0	Classify and control dust areas Implement a respiratory protection program

403-5 Worker training on occupational health and safety (14.16.6)

Occupational Safety Training	Employees (participants)	Not Employee Workers (participants)	Total
	161	1,319	

Note Occupational safety training for contractors at the Hualien Plant is conducted in a unified manner and includes not Employee workers entering the quarry.

403-8 Workers covered by an occupational health and safety management system (14.16.9)

Occupational Health and Safety Management System	Implemented Due to Legal Requirement	Internal Audit (Number of People)		External Audit (Number of People)	
		Employees	Not Employees	Employees	Not Employees
ISO 45001:2018	nont	35	37	35	37

Note Under this management system, the proportion of both employees and not Employee workers covered by internal and external audits is 100%.

403-9 Work-related injuries (14.16.10)

Type	Recordable Occupational Injuries		Recordable Occupational Injuries		Recordable Occupational Injuries		Total Hours Worked
	Cases	Rate	Cases	Rate	Cases	Rate	
Employees		0	0	0	0	0	152,977
Not Employees		0	0	0	0	0	76,154

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403-10 Work-related ill health (14.16.11)

Confirmed Occupational Diseases (by Law) : 0

Material Topics : Economic impacts (Sector Standard 14.9)

204-1 Proportion of spending on local suppliers (14.9.5)

Since the Xincheng mountain Quarry is under the jurisdiction of the Asia Cement Hualien Plant, the procurement expenditures related to the quarry are included in the Hualien Plant's accounts and are not separately reported.

Report the proportion of workers hired from the local community at the quarry, disaggregated by gender, as well as the organization's definition of "local community."(14.9.6)

Xincheng mountain Quarry	Employee			Contractors		
	Male	Female	Total	Male	Female	Total
Number of People	37	0	37	154	14	168
Hired from Local Community (%)	97%	0%	97%	78%	6%	84%
Hired Indigenous (%)	43%	0%	43%	48%	4%	52%

Note

"Local" is defined as Hualien.

Specific Topic : Water and effluents (Sector Standard 14.7)

303-1 Interactions with water as a shared resource (14.7.2)

303-2 Management of water discharge-related impacts (14.7.3)

303-3 Water withdrawal (14.7.4)

303-4 Water discharge (14.7.5)

303-5 Water consumption (14.7.6)

Water Source	Primary Water Use Information	Discharge Volume	Total Water Withdrawal (ML)	Total Water Consumption (ML)	Water Recycled & Reused (ML)
Hualien Plant On-site Recycled Water	Air pollution control, dust suppression	No discharge	261,438	261,438	2,841

Specific Topic : Local communities
Additional sector disclosures(14.10.4)

- The number and types of grievances from local communities during the reporting period;

The percentage of grievances that were addressed and resolved during the reporting period;

The percentage of grievances resolved through remediation during the reporting period.

Local Community Communication and Services	Number in the Year	Number Handled in the Year	Number Resolved in the Year	Number Resolved Through Remedial Measures
Communication Cases (cases)	1	1	1	1
Service Cases (cases)	135	135	135	0

- Note
- Handled in accordance with Asia Cement's "Communication, Participation and Consultation Management Procedures."

Communication cases are managed under the ISO 14001 Environmental Management System. This case involved quarry washing equipment damaged by an earthquake, which led to dust from transport vehicles on the roads. After notification from nearby residents, water trucks were promptly dispatched to clean the roads, and road surfaces were washed daily during the transport period. The quarry washing equipment was also repaired and restored to normal operation within two days.

Service cases involve requests from the local community for Asia Cement's assistance, such as clearing roads and removing rockfalls after earthquakes, repairing cracks and potholes near residences, restoring residents' water supply, clearing clogged drainage ditches, distributing supplies to villagers, providing large machinery, maintaining road cleanliness, and coordinating with village offices for disaster reporting and immediate cleanup during typhoons.

Specific Topic : Rights of Indigenous Peoples (Sector Standard 14.11)

411-1 Incidents of Violations Involving Rights of Indigenous Peoples (14.11.2)

No incidents involving violations of indigenous peoples' rights occurred

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ASSURANCE STATEMENT

SGS TAIWAN LTD.'S REPORT ON SUSTAINABILITY ACTIVITIES IN THE ASIA CEMENT CORPORATION'S SUSTAINABILITY REPORT FOR 2024

NATURE AND SCOPE OF THE ASSURANCE

SGS Taiwan Ltd. (hereinafter referred to as SGS) was commissioned by ASIA CEMENT CORPORATION. (hereinafter referred to as ACC) to conduct an independent assurance of the Sustainability Report for 2024 (hereinafter referred to as the Report). The assurance is based on the SGS Sustainability Report Assurance methodology and AA1000 Assurance Standard v3 Type 2 Moderate level during 2025/04/01 to 2025/05/23. ACC Taiwan and oversea operational and production or service sites as disclosed in ACC’s Sustainability Report of 2024. The boundary is not the same as ACC’s consolidated financial statements. SGS reserves the right to update the assurance statement from time to time depending on the level of report content discrepancy of the published version from the agreed standards requirements.

INTENDED USERS OF THIS ASSURANCE STATEMENT

This Assurance Statement is provided with the intention of informing all ACC’s Stakeholders.

RESPONSIBILITIES

The information in the ACC’s Sustainability Report of 2024 and its presentation are the responsibility of the directors or governing body (as applicable) and the management of ACC.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of assurance based upon sufficient and appropriate objective evidence.

ASSURANCE STANDARDS, TYPE AND LEVEL OF ASSURANCE

The assurance of this report has been conducted according to the AA1000 Assurance Standard (AA1000AS v3), a standard used globally to provide assurance on sustainability-related information across organizations of all types, including the evaluation of the nature and extent to which an organization adheres to the AccountAbility Principles (AA1000AP,2018).

Assurance has been conducted at a type 2 moderate level of scrutiny.

SCOPE OF ASSURANCE AND REPORTING CRITERIA

The scope of the assurance included evaluation of quality, accuracy and reliability of specified performance information as detailed below and evaluation of adherence to the following reporting criteria:

Reporting Criteria Options

1	AA1000 Accountability Principles (2018)
2	GRI (In Accordance with)
3	GRI 14: Mining Sector 2024
4	SASB Construction Materials Sustainability Accounting Standard (Version 2023-12.)

- The evaluation of the reliability and quality of specified sustainability performance information in ACC’s Sustainability Report is limited to determined material topics or those clearly marked in the report as conducted in accordance with type 2 of AA1000AS v3 sustainability assurance engagement at a moderate level of scrutiny for ACC and moderate level of scrutiny for its subsidiaries or joint ventures
- The evaluation of the report against the requirements of GRI Standards, includes GRI 1, GRI 2, GRI 3, GRI 14, 200, 300 and 400 series claimed in the GRI content index as material and is conducted in accordance with the standards.
- Evaluation of the report against the SASB Disclosure and Metrics included in the Construction Materials Sustainability Accounting Standard (Version 2023-12).

ASSURANCE METHODOLOGY

The assurance comprised a combination of pre-assurance research, interviews with relevant employees, superintendents, Sustainability committee members and the senior management in Taiwan; documentation and record review and validation with external bodies and/or stakeholders where relevant.

LIMITATIONS

Financial data drawn directly from independently audited financial accounts, Task Force on Climate-related Financial Disclosures (TCFD), The Taskforce on Nature-related Financial Disclosures (TNFD) have not been checked back to source as part of this assurance process.

INDEPENDENCE AND COMPETENCE

SGS affirm our independence from ACC, being free from bias and conflicts of interest with the organisation, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors registered with ISO 26000, ISO 20121, ISO 50001, SA8000, QMS, EMS, SMS, GPMS, CFP, WFP, GHG Verification and GHG Validation Lead Auditors and experience on the SRA Assurance service provisions.

FINDINGS AND CONCLUSIONS

ASSURANCE OPINION

On the basis of the methodology described and the assurance work performed, we are satisfied that the specified performance information included in the scope of assurance is accurate, reliable, has been fairly stated and has been prepared, in all material respects, in accordance with the AA1000 AccountAbility Principles (2018).

We believe that the organisation has chosen an appropriate level of assurance for this stage in their reporting.

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- **AA1000 External Assurance Statement**
- Issuing Organization and List of Committee Members

ADHERENCE TO AA1000 ACCOUNTABILITY PRINCIPLES (2018)

INCLUSIVITY

ACC has demonstrated a good commitment to stakeholder inclusivity and stakeholder engagement. A variety of engagement efforts such as survey and communication to employees, customers, investors, suppliers, CSR experts, and other stakeholders are implemented to underpin the organization's understanding of stakeholder concerns. For future reporting, ACC may proactively consider having more direct two-ways involvement of stakeholders during future engagement.

MATERIALITY

ACC has established effective processes for determining issues that are material to the business. Formal review has identified stakeholders and those issues that are material to each group and the report addresses these at an appropriate level to reflect their importance and priority to these stakeholders.

RESPONSIVENESS

The report includes coverage given to stakeholder engagement and channels for stakeholder feedback. Some of the major topics have the impact on subsidiaries, so it is recommended to plan to disclose the corresponding management policies of the subsidiaries.

IMPACT

ACC has demonstrated a process on identify and fairly represented impacts that encompass a range of environmental, social and governance topics from wide range of sources, such as activities, policies, programs, decisions and products and services, as well as any related performance. Measurement and evaluation of its impacts related to material topic were in place at target setting with combination of qualitative and quantitative measurements.

QUALITY AND RELIABILITY OF SPECIFIED PERFORMANCE INFORMATION

On the basis of the verification work performed, we checked Sustainability Committee minutes of meetings, Supplier evaluation management documents, Human resources statistics system reports, ISO 14001, 50001 and 45001 certifications). We have confidence that the specified performance information included in the scope of assurance is reliable at a moderate level of scrutiny for ACC and at a moderate level of scrutiny for its subsidiaries or joint ventures.

ADHERENCE TO GRI

The report, ACC's Sustainability Report of 2024, is reporting with in accordance with the GRI Universal Standards 2021. The significant impacts were assessed and disclosed with in accordance with the guidance defined in GRI 3: Material Topic 2021 and the relevant 200/300/400 series Topic Standard related to the material topics claimed in the GRI content index. The report has properly disclosed information related to ACC's contributions to sustainability development.

For future reporting, subsidiaries are encouraged to disclose their policies and commitments on material topics and medium- and long-term performance indicators, so as to provide a comprehensive picture of ACC's management of its significant impacts on the economy, environment and people (including their human rights).

ADHERENCE TO SASB

ACC has referenced with SASB's Standard, Construction Materials, VERSION 2023-12 to disclose information of material topics that are vital for enterprise value creation. The reporting boundaries of the disclosed SASB information correspond to those used in ACC's audited Sustainability Report of 2024. Process to identify, assess, and manage SASB-topic-related risks and opportunities were integrated into ACC's overall management process. It is recommended to continue active and effective statistics and disclose relevant information to investors.

Signed:
For and on behalf of SGS Taiwan Ltd.



Stephen Pao
Business Assurance Director
Taipei, Taiwan
25 June, 2025
WWW.SGS.COM



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(The names are published in alphabetical order.)

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