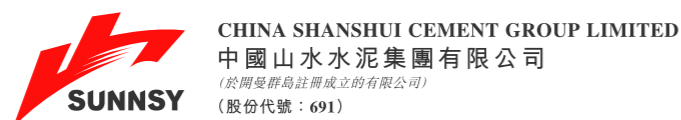


2023[🌿]

Environmental, Social and Governance (ESG) Reporting



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01

About the Report

This Environmental, Social and Governance Report (the “Report”) is the eighth Environmental, Social and Governance Report of China Shanshui Cement Group Limited (the “Company”), which mainly discloses the performance relating to Environmental, Social and Governance (“ESG”) of the Company and its subsidiaries (collectively referred to as the “Group”, “Shanshui Group” or “China Shanshui Group”) in 2023, so as to enable each stakeholder to have a better understanding of the Group’s sustainability philosophy, management approach, measures, relevant performances, etc. The Report is to be read in conjunction with the “Corporate Governance Report” section of China Shanshui Cement Group Limited 2023 Annual Report (“2023 Annual Report”), so as to have a holistic view on the Group’s ESG performance.

Reporting Period

Unless otherwise stated, the Report’s reporting period is consistent with the 2023 Annual Report of the Group, which is from 1 January 2023 to 31 December 2023 (the “Reporting Period”). Where necessary, some of the content goes beyond the aforesaid period so as to enhance the comparability of the Report.


Reporting Organizational Scope


Unless otherwise stated, the Report covers the Company and its subsidiaries, and the reporting organizational scope of the Report remains the same as the previous reporting scope. Unless otherwise stated, all information disclosed in the Report was sourced from the Group’s documents and statistical reports, and the currency mentioned was in RMB.

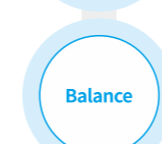
Reporting Guideline


The Report was prepared based on the ESG Reporting Guide under Appendix C2 to the Rules Governing the Listing of Securities (“Listing Rules”) issued by the Stock Exchange of Hong Kong Limited (“SEHK”). Moreover, it was prepared based on the principles of materiality, quantitative, balance and consistency to determine and disclose its contents. The Report was prepared in accordance with the “mandatory disclosure requirements” and “comply or explain” provision set out in the ESG Reporting Guide issued by SEHK.

In the process of preparing the Report, the Group’s application of the above reporting principles was as follows:

- 

Identify the material issues related to the Group during the Reporting Period through materiality assessment, and then prepare the Report with the focus on the identified material issues;
- 

Disclose the standards and methods used in the relevant data calculation in the Report and disclose the applicable assumptions or calculation tools;
- 

The Report presents the Group’s performance during the Reporting Period in an impartial manner, avoiding choices, omissions or presentation formats that may unduly influence the decisions or judgments of the readers of the Report; and
- 

The preparation method of the Report is basically the same as that in previous years. Explanations are made for the data where there are changes in scope of disclosure and calculation methodology.

Access to the Report

The Report is published in two languages - Traditional Chinese and English. If there is any inconsistency between the two versions, the Traditional Chinese version shall prevail. You are welcome to obtain the Traditional Chinese and English versions of the Report in a PDF format at the Company’s website, www.sdsunnsygroup.com, and SEHK’s HKExnews website, www.hkexnews.hk.

Comments and Feedbacks

If there are any comments or feedbacks for the Group’s ESG report, you are welcome to contact the Group by email at sdssdshbgs@sdshanshuigroup.com.

02 Chairman's Statement

Since the concept of ESG was first proposed by the United Nations Global Compact in 2004, the pursuit of the unity of economic and social values has become increasingly popular, and more and more enterprises have taken the initiative to embrace ESG and actively explore and practice new ways and modes of high-quality and sustainable development. Historically, the Shanshui Group has promoted and insisted on long-termism, and has always regarded the promotion of economic development, social responsibility, and the protection of investors' rights and interests as its basic propositions. Here, we are pleased to release our annual ESG report, which not only summarizes our achievements in the past year in the areas of the environment, society, and governance, but also makes a firm commitment to promoting green development and contributing to common prosperity.

Stable operation demonstrates resilience. We have continued to strengthen our internal strengths and enhance our competitive edge, and actively responded to macroeconomic and industry pressures. Over the past year, the operation and management have become increasingly scientific and standardized, with a number of important internal control systems revised and perfected. The decision-making, execution, supervision, assessment and other working mechanisms effectively integrated; the audit and legal work fully integrated into the daily operation and management. The "opening up sources of income and cutting down on expenditure" work was firmly in place. Over the past year, the production operation has reached a new level, with the Group's cumulative 350 production indexes hitting record highs. Furthermore, the marketing and sales have made strong efforts against the industry trend, and the market share of leading products has remained stable.

We are committed to "Dual-Carbon" and greening of our operations. We have always insisted on the harmonization of economic and environmental benefits, and invested more than RMB 200 million in green upgrading throughout the year. The clinker enterprises in Shandong and Shanxi have basically completed the ultra-low emission technology renovation, NOx emission and CO2 emission intensity have been decreasing for many years in a row, 70% of clinker enterprises have been certified as green factories at provincial level or above, 80% of belonging mines have been certified as green mines at provincial level or above, and the disposal projects of Kangda Cement and other four companies have been effectively implemented. The environmental indicators are gradually optimized, and the benefits of environmental protection are increasing. Every project and every progress embody the responsibility and mission of Shanshui Group to protect the green water and green mountains.

Co-operation and win-win development. We take it as our responsibility to be the first-class in the industry and provide customers with high-quality products and services, and the brands of "Shanshui Dongyue" and "Gongyuan" have won a good reputation and extensive support in their markets. With the goal of win-win co-operation, we insist on the openness and transparency of the entire procurement process, continue to strengthen all-round management and regular supervision, further regulate the access of suppliers, and establish stable and healthy partnership with upstream and downstream co-operative enterprises; and we respond to the reasonable opinions and demands of the relevant stakeholders in a timely manner on the basis of communication and exchanges.

Promoting harmony with a people-oriented approach. Adhering to the concept of "talent is the first resource", we highlight value creation and strive to build closer and more harmonious labor relations. We have made efforts to improve the talent evaluation system, opened up career development channels, and set up "reserve talent pools" in many operating regions; focused on talent quality improvement, and extensively launched university-enterprise cooperation in production, education, research and application, labor skills competitions, skills training, safety training and other activities, with the proportion of trained personnel exceeding 90% by 2023; implemented employee care, continuously improved the production sites and office environment in the parks, and provided a rich variety of welfare and protection. The sense of identity and belonging of employees has been further strengthened.

We are actively fulfilling our responsibilities as a corporate citizen. We have actively fulfilled our duties as a corporate citizen, and we have continuously spread the concept of social responsibility to every enterprise and every employee. Over the past year, we have made disaster-stricken areas, targeting poverty-alleviation areas, assistance areas, socially disadvantaged groups, and environmental public welfare undertakings with a total amount of more than 5.6 million RMB. We encourage our employees to actively engage in various forms of voluntary activities and cultural and sports activities, and it has become a trend to transmit positive energy.

In the new era, adhering to and practicing the ESG concept is an important path for us to achieve sustainable development, and an important symbol for us to build a first-class enterprise. Shanshui Group will focus on the development of its main business, and on the basis of fulfilling its corporate citizenship responsibility, accelerate the process of enterprise modernization, which is a fusion of the environment, society and governance, and endeavor to benefit the society with its development.

03

About
the Group

the total clinker
production capacity is
50.22 million tons

the total cement
production capacity is
91.95 million tons

has more than
110 subsidiaries (branches)

3.1 Group Profile

China Shanshui Group is a large enterprise group focusing on the production of cement and clinker, and integrating the production and sales of commercial concrete, aggregate, plastic profile, machinery manufacturing and maintenance, and new wall materials. The wholly owned subsidiary is Shandong Shanshui Group, headquartered in Jinan, Shandong Province.

After years of rapid development, the Group's production capacity continues to grow, the level of process technology and equipment continues to improve, and the development area continues to expand. Currently, the total clinker production capacity is 50.22 million tons and the total cement production capacity is 91.95 million tons. The Group has six operating regions including Eastern Shandong, Western Shandong, Southern Shandong, Northeast China, Shanxi and Xinjiang, and has more than 110 subsidiaries (branches) distributed in ten provinces (municipalities and autonomous regions) including Shandong, Liaoning, Shanxi, Inner Mongolia and Xinjiang, forming a market pattern of "North-South Interaction" between Shandong and Northeast China, and "East-West Connection" between Shandong and Shanxi, and giving full play to its good market advantages. While expanding and strengthening the main business of cement, the Group also actively implements the "Cement+" business development models, shifting from expanding the scale of single product to product diversification. At present, the prototype of the whole industry chain, including aggregate, manufactured sand, commercial concrete, cement products, prefabricated building components and cement equipment, has begun to take shape.

High grade cement and commercial clinker are the major products of the Group. The "Shanshui Dongyue", "Shanshui Gongyuan" and "Bohai" series of brand cement enjoy high reputation in China, and are widely used in national key projects such as Beijing-Shanghai High-speed Railway, Jiaozhou Bay Cross-sea Bridge, Qingdao Harbor Tunnel and Haiyang Nuclear Power.

Over the years, the Group has been awarded the honorary titles of National Advanced Group of Building Materials System, National May 1st Labor Award, National Advanced Grassroots Party Organization, National Exemplary Employees' Home, Shandong Civilized Unit and Shandong High-end Brand Cultivation Enterprise, and has been listed among the Top 20 Building Materials Enterprises and Fortune China 500 for many consecutive years.

3.2 Annual ESG Performance Highlights



Environmental Aspects:

- ▶ Invested RMB 216 million in environmental technology transformation
- ▶ Nitrogen oxides (NOx) emissions has continued to decline for seven consecutive years
- ▶ Water recycling rate of production reached 97%
- ▶ A total of 9 national green mines and 16 provincial green mines



Social Aspects:

- ▶ 0 work-related fatality
- ▶ In terms of health and safety, 1,160 training activities were carried out with 30,855 participants (person-time), 281 emergency drills were carried out and 3,658 items of hidden dangers identified
- ▶ 2,085 new occupational certificates acquired
- ▶ 14,162 employees received training, with a training coverage rate of 88.34% and an average of training hours per employee reached 43.83
- ▶ The total amount of employer liability insurance paid for front-line employees reached RMB 2.72 million, and the aggregate limit of indemnity reached RMB 1,000 million
- ▶ RMB 56.6 million invested in public welfare and charity



Governance Aspect:

- ▶ In terms of anti-corruption, 4,000 participants (person-time) took the training.
- ▶ 0 incident of bribery, extortion, fraud and money laundering



04

Strengthening Governance and Fulfilling Responsibilities

4.1 Board Statement

The Group understands the importance of good corporate governance, including governance of ESG-related issues that are crucial to sustainable development. The board of directors of the Company (the “Board”) reviewed and approved the Report on 29 April 2024, and confirmed that the Report is true, accurate and complete.



Supervision on ESG

The Board is responsible for overseeing and approving the Group's ESG management approach and strategy, and is also involved in identifying, evaluating, prioritizing and managing important ESG issues. During the Reporting Period, in order to strengthen the ESG management system and enhance the management and supervision of ESG issues, the Board established an Environmental, Social and Governance Committee (“ESG Committee”) and an Environmental, Social and Governance Working Group (“ESG Working Group”) to take specific responsibility for the implementation of the relevant work. For details, please refer to the section headed “Sustainable Development Management”.

Materiality Assessment

The Board participates in identifying, assessing, prioritizing and managing material ESG-related issues. Based on the sustainability strategy, the Group conducts a materiality assessment of ESG issues once a year. The Board reviewed and confirmed the materiality assessment results and considered material issues as a reference factor for the Group to formulate its overall strategy and supervise the management and performance of such issues. For details, please refer to the section “Materiality Assessment”.



ESG Management Approach and Strategy

ESG and Climate Risks

The Board has responsibilities to ensure that the Group has established an appropriate and effective ESG and climate risk management and internal control system. During the Reporting Period, the Group continued to carry out ESG and climate risk identification and assessment and implemented targeted risk management measures. For details, please refer to the sections of “Sustainable Development Management” and “Addressing Climate Change”.

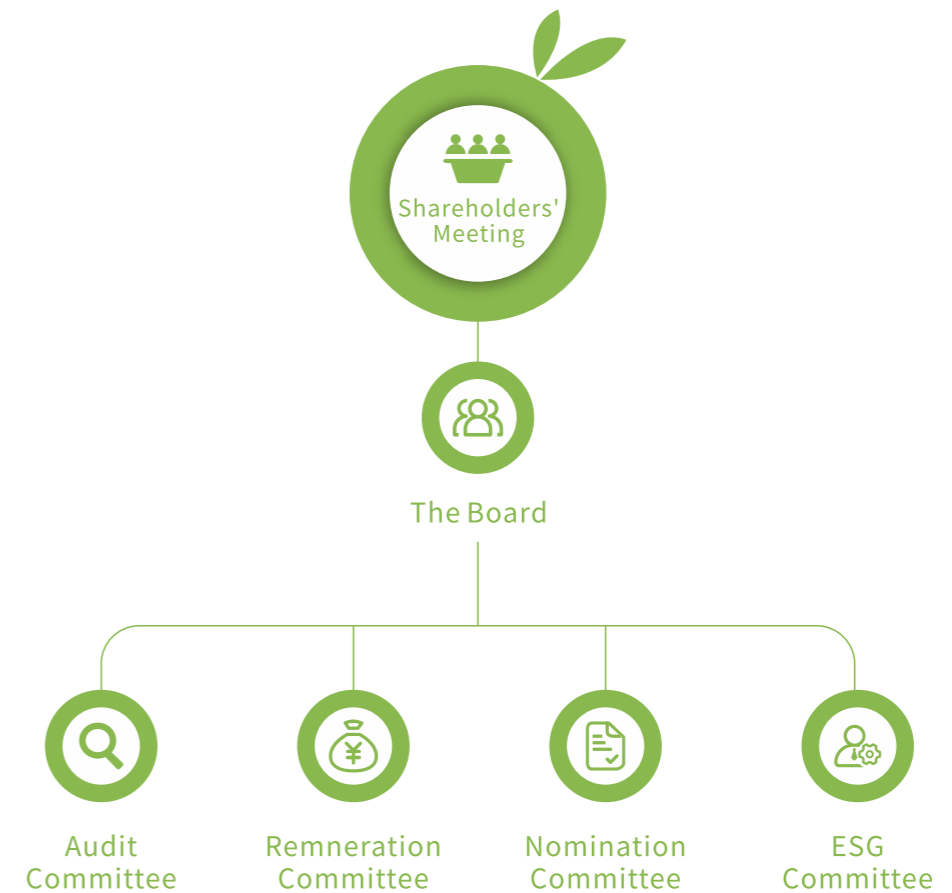


ESG Targets

The Board is responsible for approving the Group’s ESG targets and reviewing the progress of the targets. During the Reporting Period, the Group implemented and recorded action measures under the guidance of the objectives and action plans established in 2021, with an aim to reduce the impact on the environment. For details, please refer to the sections of “Managing Emission Strictly” and “Optimizing the Use of Resource”.

4.2 Corporate Governance

The Group is committed to maintaining a high standard of corporate governance. Good standards of corporate governance are one of the essential elements for the sustainable development of an organization and provide an underlying framework for the enhancement of corporate value, the formulation of business strategies and policies, the promotion of transparency and the enhancement of accountability. The Board has established four committees, namely the Audit Committee, the Remuneration Committee, the Nomination Committee and the ESG Committee, to oversee specific aspects of the Company's affairs. The Group has been actively building a diversified Board. As at the end of the Reporting Period, the Board comprised a total of six directors, including three executive directors and three independent non-executive directors. For more details, please refer to Corporate Governance Report in 2023 Annual Report.



During the Reporting Period, in order to improve the ESG management system and enhance the management and supervision of ESG matters, the Board established an ESG Committee, with specific responsibilities as set out in the Terms of Reference of the Environmental, Social and Governance Committee.

4.3 Sustainable Development Management

The Group has established a hierarchical sustainability governance structure with clear responsibilities to enhance the management of ESG matters. The Group has established an ESG Committee as approved by the Board on 21 April 2023 and set up an ESG Working Group as the executive arm of the ESG Committee to which the ESG Committee may assign specific tasks, including but not limited to the preparation of annual ESG reports, monitoring of ESG performance, identification of ESG risks and overall execution of the Group's ESG activities. The ESG Working Group consists of members from each of the relevant departments of the Group's head office and is coordinated by a dedicated individual. The ESG Committee may meet as and when required, but is required to meet at least twice a year.



The duties of the ESG Committee shall include

- ▶ to co-ordinate and manage the ESG matters of the Group and report to the Board on any significant issues;
- ▶ to provide guidance on and formulate the Company's ESG vision, goals, strategies and structure, and review and monitor the Company's ESG strategies, policies and practices in order to ensure that they align with the Company's needs and comply with the applicable laws, regulations and regulatory requirements and meet the international standards;
- ▶ to identify and determine the priorities of the key topics on the Company's ESG risks, and make recommendations to the Board;
- ▶ to establish risk management and internal control systems, such as ESG policies and programs, to manage and mitigate ESG risks;
- ▶ to formulate the Company's ESG management performance targets and review the progress of implementation goals, and provide suggestions for improving performance;

- ▶ to review and approve annual ESG reports;
- ▶ to perform other ESG-related tasks at the request of the Board, including but not limited to providing recommendations on integrating ESG considerations into the review and monitoring of the Company's strategies, key action plans, annual budget and performance targets; and to coordinate any other ESG related work (including climate change-related matters) as may be assigned by the Board.

The ESG Committee should report regularly to the Board. At the next Board meeting following a ESG Committee meeting, the Chairman of the ESG Committee shall report to the Board on the ESG Committee's deliberations and recommendations.



On 14 December 2023, the Group held a kick-off meeting for the preparation of the 2023 ESG Report.

4.4 Compliance Operation

The Group strictly complied with the Audit Law of the People's Republic of China, the Accounting Law of the People's Republic of China and the Company Law of the People's Republic of China and other relevant laws, and formulated an internal management system for the auditing work and auditing of the completion of construction works, and continued to improve the internal auditing supervision and internal control mechanism of the Group, to strengthen its risk management and to ensure its compliance with the rules and regulations of the operation.

With the objective of establishing a sound corporate governance structure and accelerating internal management transformation, the Group has established a relatively sound risk management and internal control system to effectively control risks. The audit department of the Group monitors and checks the implementation of the risk management and internal control system. Through regular or irregular special audits of the Group's business activities, the internal control system has been effectively implemented, the level of risk management has been continuously improved, and the quality of operations has been continuously upgraded.

The Group has continued to formulate and improve its corporate internal control system and actively launched the assessment of the effectiveness of the implementation of internal control to enhance the systematization, law-oriented and standardization of the Group's internal control management through the strengthening of internal control management; and launched compliance training to build a compliance culture with full participation of all staff. During the Reporting Period, the Group's functional departments (Legal Department, Marketing Department, Audit Department, Office, etc.) formulated and improved six business internal control systems. Through the comprehensive combination of risk control with business operation, following a comprehensive reviewing and approving process, different segments and functional departments were involved in the whole process of risk control. During the Reporting Period, the Group organized 10 compliance training sessions to establish the concept of full compliance, proactive compliance and substantive compliance.




The Group Conducted Training on Corporate Compliance Management

ESG risk is an important element in risk management. The Group has always attached great importance to ESG risk management. Since 2021, the Group has carried out the identification and assessment of ESG risks. During the Reporting Period, on the one hand, the Group continued to review ESG risks and their management in 2022, and on the other hand, it identified and evaluated other possible material ESG risks by analyzing the megatrends, business operations and environment as well as status of industry peers. The work steps are as follows:

Steps	Details
1	Updating and developing the ESG risk list, and identifying the most relevant ESG risks of the Group
2	Inviting specialists from corresponding functional departments of the Group to assess and prioritize ESG risks
3	Analyzing the results of the survey to determine material ESG risks and formulate corresponding suggestions for actions
4	Reviewing and confirming ESG risk assessment results by the Board or the Management

The Group finally assessed and identified one material ESG risk with high priority and formulated and implemented management measures in a targeted manner.

Material ESG Risks	Internal Management Measures
 Policy risk	<ul style="list-style-type: none"> Actively responding to national policies, reaching “carbon peak” by 2030, and formulating corresponding plans for carbon neutrality. Since 2017, the Group has continued to adopt measures such as replacing dust collection bag, fully sealing transportation, desulfurization and denitrification, and energy-saving transformation. The main economic and technical indicators of the production line are industrial leading. Strictly complying with national and local government policies, and strictly managing air pollutants, waste emissions and resources. Studying new policies and taking timely measures for policy adjustment.

In the future, the Group will continue to improve the construction and implementation of risk management and internal control systems with reference to SEHK's guidelines for listed companies' risk management and internal control system guidelines.

4.5 Strengthening anti-corruption management

China Shanshui Group strictly complies with the relevant laws and regulations on the prevention of bribery, extortion, fraud and money laundering, including but not limited to the Criminal Law of the People's Republic of China, the Anti-Money Laundering Law of the People's Republic of China and the Securities Law of the People's Republic of China. During the Reporting Period, the Group has not violated any of the above relevant laws and regulations on prevention of bribery, extortion, fraud and money laundering, and there was no corruption litigation case filed or concluded against the Group or the employees of the Group.

In order to strengthen the clean governance of the leading cadres and create a clean and positive environment, the Group takes the implementation of the responsibility system for the Party's clean governance construction as a starting point, continuously improves the disciplinary and inspection system, improves the integrity risk account and the problem supervision account, follows up the supervision, precise supervision, and the whole process of supervision, and deeply integrates the Party's clean governance construction and anti-corruption work with the Group's production and operation, so as to promote the Party's clean governance construction and anti-corruption work to achieve new efficacy. On 26 December 2023, the fourth general meeting of the Party members of Shanshui Group elected the fourth Discipline Inspection Committee of Shandong Shanshui Cement Group Co., Ltd. of the Communist Party of China ("CPC"), to promote the strict governance of the CPC in an all-round manner and to strengthen the work of Party ethics building and anti-corruption. The Group strictly enforces the four systems, including the Regulations on Integrity and Self-discipline of Leading Party Members of the Shanshui Group and the Supervision and Monitoring Policy for Leading Party Members of the Shanshui Group, as well as the internal systems, including the Shanshui Group's Regulations on the Work of Letters and Visits and Reporting and the Policy on Reporting, which calls on all employees to adopt a zero-tolerance attitude towards all kinds of bribery and corruption in business transactions and to report all forms of disciplinary offences. The Group has established and maintained channels for reporting and employee supervision by setting up dedicated e-mail addresses, complaint telephone numbers and reception locations, etc., ensuring the smooth flow of channels for reporting, proactively accepting supervision from employees, seriously handling employees' letters, calls and visits, patiently listening to employees' aspirations, and carrying out investigations into reported cases in a serious manner.

The workflow of the letter reporting process is explained

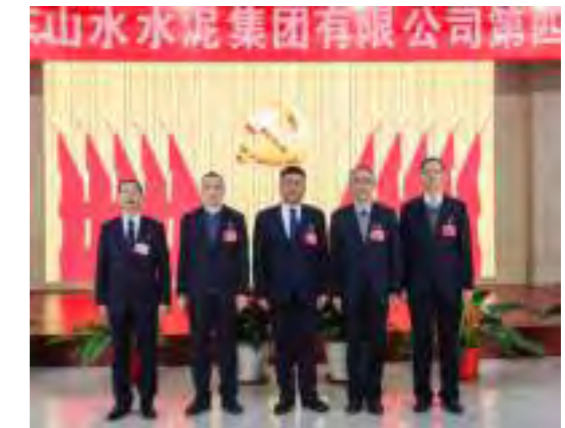
- 1 Each department, operation region, and branches subsidiaries (branches) and reports on incoming visits, phone calls, letters, and mails in accordance with regulations.
- 2 All relevant departments, operating regions and subsidiaries (branches) are required to provide timely replies to the questions reflected.
- 3 The Discipline Office provides timely feedback on the handling of letters, calls and visitors.

The Group attaches importance to anti-corruption education and actively organizes and carries out various forms of thematic education and training to create an atmosphere of professional integrity, to further enhance the vigilance and sensitivity of the Board of Directors, management and employees to corruption, and to provide timely reminders on integrity during festive seasons and holidays, so as to "prevent the occurrence of problems before they happen".

During the Reporting Report, the Group organized and launched activities on clean governance construction and warning education, and required all grassroots party organizations to selectively launch various forms of activities such as answering questions on clean governance and watching warning education videos in light of the actual situation. During the activity period, the Group organized more than 90 visits to integrity governance warning education bases and watched warning education videos, invited experts and scholars to give reports on Party style and clean governance construction for more than 30 times, and launched more than 10 quizzes on integrity knowledge, which resulted in a cumulative total of more than 4,000 person-times receiving warning education. 100% of the personnel in charge of each subsidiary (branch) company or above signed a pledge of integrity and self-discipline and participated in the honesty talk; 100% of the personnel in charge of the Group and each operation region, subsidiaries (branches) and above received the warning education. The training and education activities effectively built up the ideological and moral foundation for employees to engage in professional integrity.



On 12 March 2023, Zibo Shanshui held a meeting on integrity and self-discipline



On 26 December, 2023, the fourth Party members' congress of Shanshui Group was held



On 10 April 2023, the Group organized the headquarter Party members to receive integrity warning education at the Shandong Province Integrity Education Hall



On 16 June 2023, Pingyin Shanshui recieved integrity warning education at the Integrity Education Hall

4.6 Stakeholders Communication

The Group actively maintains communication with all stakeholders to know about their opinions and expectations on the Group’s sustainable development performance. The Group organized relevant ESG work to respond to the opinions and expectations of stakeholders.

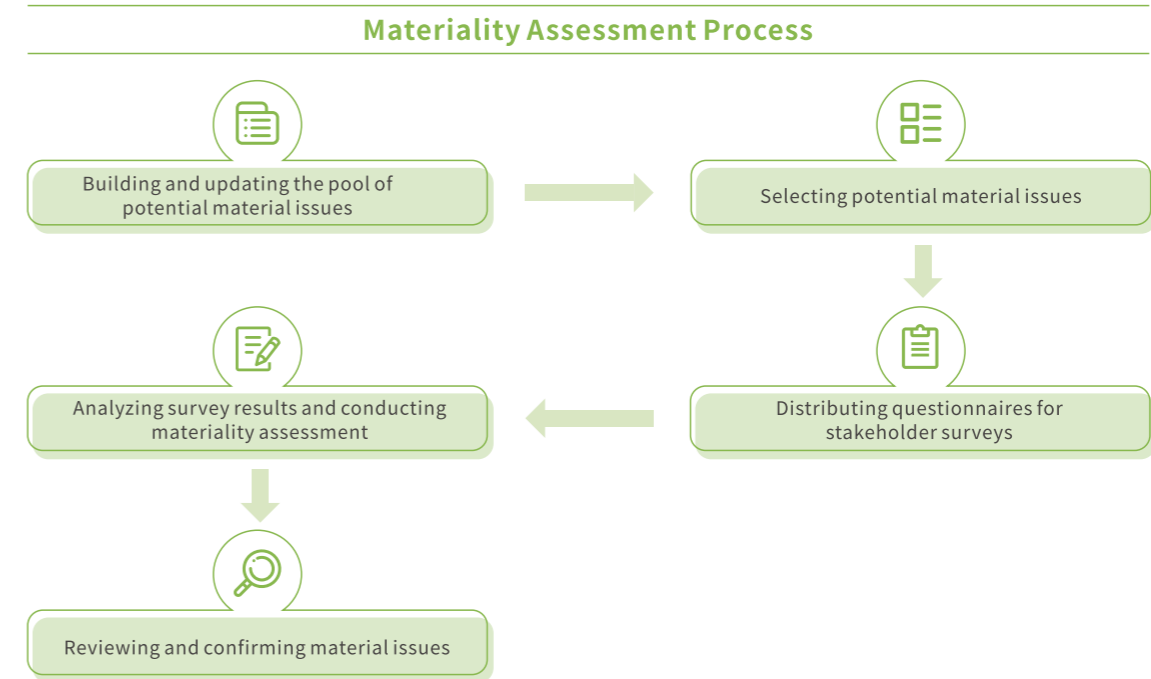
The Group focused on “the degree of influence of the Group” and “the degree of influence on the Group” to identify major stakeholders, so as to carry out more targeted communication. The Group communicated through various channels and formulated relevant actions to respond to the expectations of all parties.

The major stakeholders identified by the Group during the Reporting Period include shareholders and investors, employees, government, customers, suppliers and the public community. The following is a summary of the communication between the Group and its major stakeholders:

Stakeholders	Expectation	Communication Channels	Frequency	Actions of the Group
Shareholders, investors and creditors	<ul style="list-style-type: none"> Business capability Profitability Corporate governance 	<ul style="list-style-type: none"> Shareholders’ meetings Regular reports Results announcements 	Annual/quarterly/irregular	<ul style="list-style-type: none"> Increasing production and operation quality and sustainable profitability Keeping optimizing corporate governance Conducting regular communication and strengthening information disclosure
Employees	<ul style="list-style-type: none"> Employee rights and benefits Occupational health and safety Training and development 	<ul style="list-style-type: none"> Employment contracts Employee activities Training courses 	Regular/irregular	<ul style="list-style-type: none"> Constantly improving the human resource management system and protecting employee rights and benefits Improving employee occupational health and safety work Proactively implementing training to foster employees’ knowledge and skills
Government	<ul style="list-style-type: none"> Legal compliance Compliant operation Implementation of national policies 	<ul style="list-style-type: none"> Policy formulation Work reporting Information disclosure 	Regular/irregular	<ul style="list-style-type: none"> Strictly complying with laws and regulations and proactively cooperating with regulatory departments Strengthening corporate’s compliant operation
Customers	<ul style="list-style-type: none"> Product quality Service guarantee Product research and development 	<ul style="list-style-type: none"> Customer feed back mechanism Customer service The Company’s website 	Annual/quarterly/irregular	<ul style="list-style-type: none"> Enhancing the quality assurance system to guarantee product quality Improving the customer service and feedback mechanism Promoting technological research and innovation to increase efficiency in production
Suppliers	<ul style="list-style-type: none"> Fair and just procurement Cooperation with mutual benefits Sustainable win-win situation 	<ul style="list-style-type: none"> Contracts and agreements Meetings Supplier assessment 	Regular/irregular	<ul style="list-style-type: none"> Strengthening procurement management measures and ensuring fair and transparent bidding and procurement processes Fulfilling contracts and agreements Holding procurement meetings for communication
Community and the public	<ul style="list-style-type: none"> Community investment Harmonious development Environmental protection 	<ul style="list-style-type: none"> Community support Community visits Philanthropic activities 	Regular/irregular	<ul style="list-style-type: none"> Engaging in community support activities, such as rural revitalization Proactively organizing philanthropic activities such as volunteering activities Implementing environmental protection works

4.7 Materiality Assessment

During the Reporting Period, in order to better understand the important views of stakeholders on the Group’s ESG issues, and to respond to their concerns and demonstrate corresponding performance in a targeted manner, the Group conducted the materiality assessment of ESG issues based on the principle of “Materiality”.



The Group divided ESG issues into environmental and social aspects, and invited major stakeholders such as employees, customers and suppliers to rank the material issues in the form of questionnaires based on two dimensions of “Importance to China Shanshui Group” and “Importance to stakeholders”. Based on the results, a materiality assessment matrix was established to preliminarily screen the issues of higher importance under each level.

Based on the materiality assessment results, the Group conducted internal review and confirmation on the issues of higher importance initially screened. The Directors of the Board actively participated in the materiality assessment, evaluating and prioritizing the potential material issues with the management of the Group from the perspective of “Importance to China Shanshui Group”. The results were combined with the opinions of stakeholders such as employees, customers and suppliers. Hence, 17 issues were finally determined as material issues (including 8 environmental issues and 9 social issues). These issues have been approved by the Board and have been taken as the key consideration when conducting ESG work. The Report will focus on the disclosure of material issues.



Material Issues in Environmental Aspect

- 1 Sustainable Development
- 2 Environmental Laws and Regulations
- 3 The Environment and Natural Resources
- 4 Use of Energy
- 5 Ecological Diversity and Green Mine Construction
- 6 Air Emissions
- 7 Serving the "Dual Carbon" Strategy
- 8 Addressing Climate Change

Material Issues in Social Aspect

- 1 Health and Safety
- 2 Operation with Integrity and Compliance
- 3 Product Responsibility
- 4 Development and Training
- 5 Product and Service Innovation
- 6 Human Resources Development and Management
- 7 Employee Caring
- 8 Anti-corruption
- 9 Supply Chain Management



05

Promoting Green Operation
and Responding to Dual-Carbon

5.1 Environmental Management

The Group firmly believes that a stable social and ecological environment is the cornerstone for the healthy development of the enterprise. As a cement company, we shoulder a high level of responsibility for environmental protection and strictly comply with the relevant laws and regulations and industry standards related to environmental protection in our operating regions, including but not limited to the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Prevention and Control of Air Pollution and the Law of the People's Republic of China on Prevention and Control of Water Pollution, etc. During the year, the Group formulated the "Guiding Opinions on Promoting Carbon Peak Achievement Work", which set out the implementation steps and targets for carbon reduction based on the industry situation and technology level, and promoted environmental management work in an orderly manner in order to proactively implement the requirements of the national "Dual-Carbon" policy. Meanwhile, the Group has taken the "Shanshui Group Environmental Protection and Energy Management System" as a means to regulate environmental protection and energy use in production and operation. In terms of pollution prevention and waste disposal, the Group has continued to increase investment in renovation and upgrading to improve the efficiency of energy and water sources, increase the efficiency of comprehensive utilization of resources, and proactively build a "green and smart" mine, achieving realize harmonious coexistence between human beings and nature.

In order to comprehensively strengthen the ecological and environmental protection work and effectively improve the level and quality of environmental protection work, the Group has established a leading group for environmental protection work, and continuously obtained external certification for the environmental management system, low-carbon products and green plants and so on.

As of the end of the Reporting Period :



▶ 90 subsidiaries of the Group have obtained external ISO 14001 environmental management system certifications, and 72 subsidiaries have obtained external ISO50001 energy management system certifications;



▶ A total of 5 subsidiaries have been assessed as Grade A enterprises in the performance grading of heavy pollutant weather key industries; 4 subsidiaries have been assessed as Grade B enterprises in the performance grading of heavy pollutant weather key industries; and 13 subsidiaries have been assessed as leading enterprises in the performance grading of heavy pollutant weather key industries; and The Group has 22 green plants of clinker enterprises at or above the provincial level, accounting for 67% of the total clinker enterprises.

At the end of the Reporting Period, the Group has achieved the target of having **30** green factories at the provincial level or above.



In addition, during the Reporting Period, the Group has obtained various awards related to environmental protection, including but not limited to:

▶ Four subsidiaries, namely Changle Shanshui, Rizhao Shanshui, Lvliang Shanshui and Wuxiang Shanshui, were awarded the title of national "Green Plants" .

▶ Eight subsidiaries, namely Weifang Shanshui, Weihai Shanshui, Leling Shanshui, Zibo Shuangfeng, Xinghao Cement, Kenli Shanshui, Weishan Shanshui and Shanshui Heavy Industries, were awarded the title of provincial or municipal "Green Plants" .

During the Reporting Period, the Group invested a total of approximately RMB 216.08 million in environmental protection technological upgrading, mainly including ultra-low emission renovation for nitrogen oxides, sulphur dioxide and particulate matters. As at the end of the Reporting Period, the Group's clinker and cement subsidiaries in Shandong Province and clinker subsidiaries in Shanxi Province had basically completed the ultra-low emission renovation to meet the ultra-low emission requirements of no more than 50 mg/m³ for nitrogen oxides, no more than 35 mg/m³ for sulphur dioxide and no more than 10 mg/m³ for particulate matters.



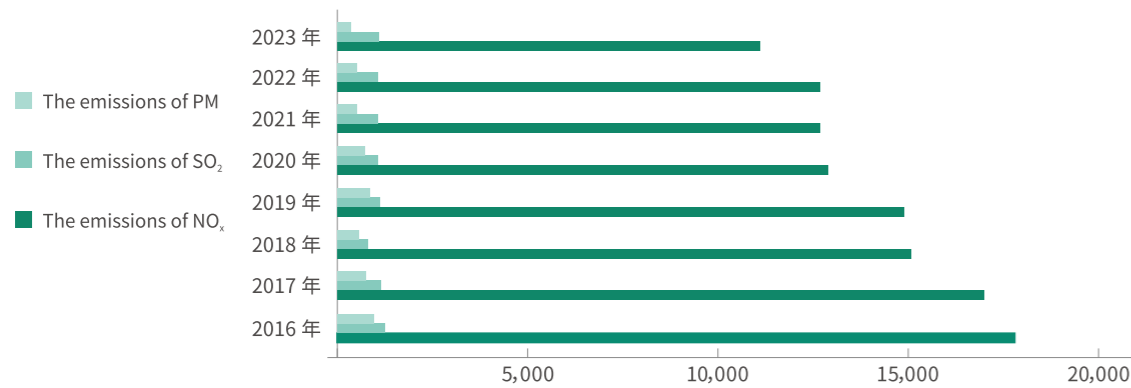
5.2 Managing Emission Strictly

Air Pollutants

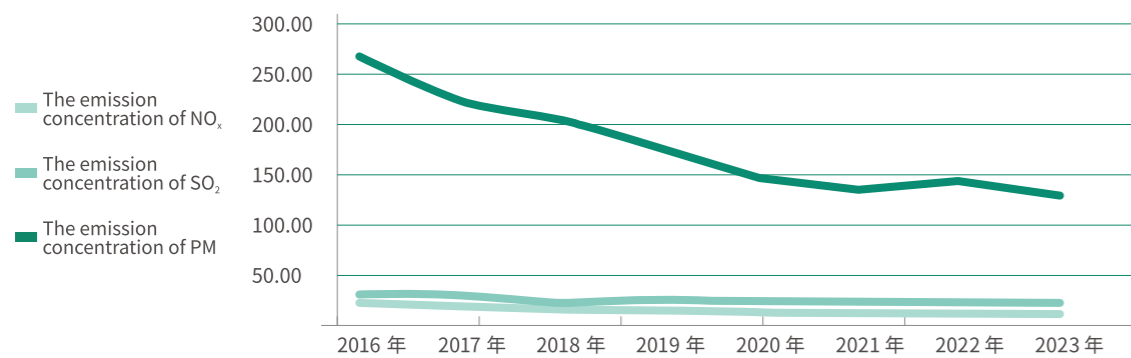
The Group attaches great importance to the management of air pollutant emissions. The Group generates air pollutants during its operations, mainly including NO_x, SO₂ and PM. The Group ensures that its cement and clinker production subsidiaries are issued with pollutant discharge permits, and regularly entrusts independent environmental monitoring agencies to monitor emissions. During the Reporting Period, Shandong Provincial Government issued documents such as the Implementation Plan for Ultra-low Emission Transformation of Cement Industry in Shandong Province and the Implementation Plan for Ultra-low Emission Transformation of Coking Industry in Shandong Province. The subsidiaries of the Group responded quickly to the requirements of local governments, formulating corresponding transformation and implementation plans.

During the Reporting Period, compared with 2022, the Group's NO_x emissions decreased by 128.95 tonnes, which has continued to decline for eight consecutive years; the trend of average emission concentration has also continued to decline.

Total emission of main pollutants in China Shanshui Group (in Tons)



Trend of Average Emission Concentration of Main Pollutants in China Shanshui Group (in mg/m³)



Indicators	Unit	Targets By 2025	2023	2022	2021
Basic Information					
Clinker production	Tons	\	41,711,290.12	40,297,229	44,390,550
Air Pollutants¹					
NO _x emissions	Tons	\	11,136.01	11,264.96	12,667.55
SO ₂ emissions	Tons	\	1,120.12	1,046.43	1,115.52
PM emissions	Tons	\	360.05	304.50	365.61
The Emission Concentration of Air Pollutants					
The emission concentration of NO _x	g/ton clinker	265	266.98	279.55	287.97
The emission concentration of SO ₂	g/ton clinker	24.8	26.85	25.97	25.36
The emission concentration of PM	g/ton clinker	12.0	8.63	12.87	13.05

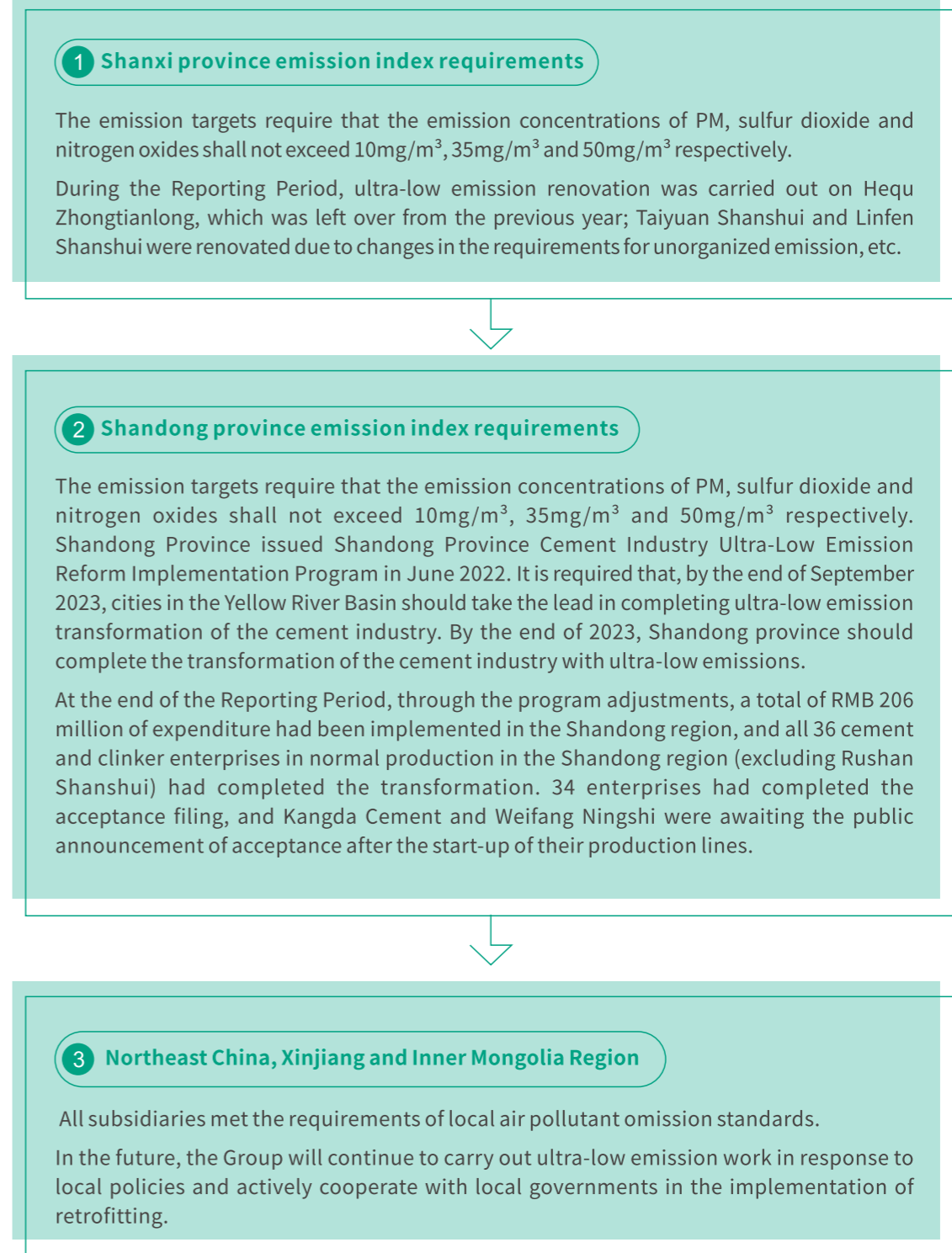


¹As the Group's air pollutant emissions mainly came from the clinker production process, the pollutant-related performance included all 33 clinker production enterprises of the Group, and the data was derived from the monitoring data of the projects.

The Group will continue to reduce the emission of air pollutants in production. For the targets set in 2021, the Group's progress of actions in 2023 is as follows.

Environmental Targets (take 2020 as base year)	Target Completion Progress	Actions Taken During the Reporting Period
The emission concentration of NO _x does not exceed the local emission limit, and the total amount of emission is lower than the total amount of indicators of the pollutant discharge permit	The target for the Reporting Period has been achieved	Completed the ultra-low emission renovation of NO _x in Shandong and Shanxi regions, and achieved that the emission concentration of NO _x did not exceed the local emission limit; invested RMB 44.74 million in step-by-step combustion renovation of Yantai Shanshui, Kanda Cement, Xinghao Cement and Hequ Zhongtianlong, and invested RMB 12.26 million in precision.
The emission concentration of sulphur oxides does not exceed the local emission limits, and the total amount of emissions is lower than the total amount of indicators of the pollutant discharge permit	The target for the Reporting Period has been achieved	Achieved the target that the emission concentration of sulfur dioxide does not exceed the local emission limit and the total amount of emission is lower than the total amount of emission permit; Weishan Shanshui invested RMB 1,080,000 to carry out the renovation of compound desulfurization, so that the sulfur dioxide emission concentration of Weishan Shanshui is in the range of 14-33 mg/m ³ , which meets the requirements of environmental protection emission.
The concentration of PM emission does not exceed the local emission limit, and the total amount of emission is lower than the total amount indicators of the of pollutant discharge permit	The target for the Reporting Period has been achieved	The concentration of PM emission has not exceeded the local emission limit, and the total emission is lower than the indicator of the total emission permit; Kanda Cement has invested 12 million RMB to carry out the renovation of the cement mill dust collector, so that the concentration of particulate matter emission of the two dust collectors has been reduced from 20 mg/m ³ to no higher than 10 mg/m ³ .
The number of rotary kilns with ultra-low emission reaches 15 within 5 years	The target for the Reporting Period has been achieved	By the end of 2023, 7 rotary kilns in Shanxi and 17 rotary kilns in Shandong had completed the ultra-low emission renovation.

According to the requirements of the regulations of corresponding provinces, the Group's current progress of ultra-low emission work is as follows:



Greenhouse Gas Emissions

The Group is well aware that green and high-quality development of the cement industry plays a significant role in the promotion of green development in China. The Group strictly implements the requirements of the “14th Five-Year Plan”, actively responds to the national strategic goal of “Dual-Carbon”, and in accordance with the Implementation Plan for Carbon Dioxide Peaking in the Building Materials Industry, and the Group’s Guidelines for Promoting Carbon Dioxide Peaking, the Group will promote carbon emission reduction from five aspects, which are reducing production from source and reducing solid waste, applying energy saving and consumption reduction technology, promoting alternative energy, improving solid waste utilization ratio, and practicing green development concept, continuously reducing the carbon intensity of products, to ensure the carbon dioxide peaking by 2030 and carbon neutral by 2060.

Indicators	Unit	Targets By 2025	2023	2022	2021	
Greenhouse Gas Emission ²						
Carbon dioxide emissions	In total	Tons	33,620,000	35,293,079	34,580,465	38,037,682
	Scope 1	Tons	\	34,238,385	33,219,049	36,222,290
	Scope 2	Tons	\	1,054,694	1,361,416	1,815,392
Carbon dioxide emissions per ton of clinker production	Tons	0.85	0.85	0.86	0.86	

 In recent years, the Group has adopted the following carbon emission management measures:

- 1 Weishan Shanshui implemented the project of oxygen-enriched combustion of rotary kiln. The construction of the project was completed. The commissioning was conducted, and the coal saving rate reached 2.47% during the commissioning;
- 2 The Group used 52,800 tons of calcium carbide slag as a substitute for limestone, which effectively reduces carbon dioxide emissions and also saves natural limestone resources; and
- 3 The Group used a total of 119,500 tons of alternative fuels, replacing 51,700 tons of raw coal. This reduced carbon emissions by 113,800 tons.

As a technical path to ensure the cement industry's 2060 carbon neutrality target, the Group has also conducted the technical research and design of the carbon capture and utilization and sequestration project, with a planned annual production capacity of 100,000 tons of black ash-based carbon mineralized material pilot production line in 2024, which can sequester 35,000 tons of carbon per year under continuous production conditions.

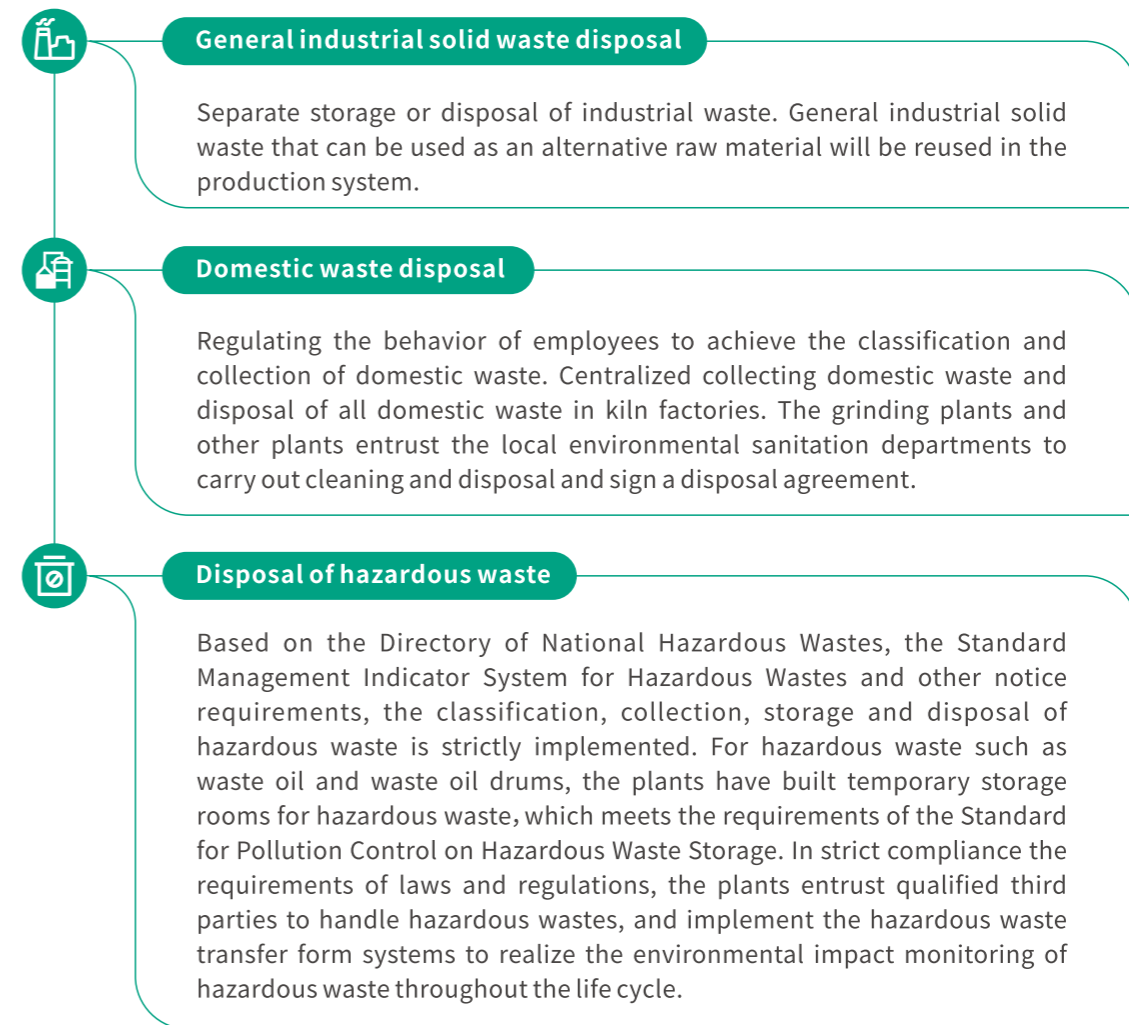
²As the Group's greenhouse gas emissions mainly came from the clinker production process, the data scope only included all 33 clinker production companies. The calculation of carbon dioxide was set out based on the Accounting Method and Reporting Guideline for Greenhouse Gas Emissions of Cement Production Enterprises in China.

³This indicator is a commonly used production indicator of the Group.

Waste

The Group attaches great importance to the standardization of the harmless disposal process of solid waste and hazardous waste, by taking effective measures to ensure that hazardous waste is treated professionally, safely and effectively. Meanwhile, the Group’s subsidiaries promote efficient recycling of non-hazardous waste to reduce the negative environmental impact caused by waste. During the Reporting Period, the Group achieved the recycling of non-hazardous wastes and 100% compliant disposal of hazardous wastes.

The hazardous waste generated by the Group is mainly the waste engine oil replaced by large reducers, while the non-hazardous waste is mainly general production and domestic waste. The Group follows the national environmental protection requirements to dispose of waste in accordance with the principle of “Classified Collection, Separate Zoning/Storage, Self-Utilization”:



5.3 Optimizing the Use of Resource

Energy

The Group strives to improve energy efficiency and reduce energy consumption, complying with the requirements of standards and documents such as the Limits to Energy Consumption Per Unit of Cement Production and the Catalogue for the Elimination of High-energy-consuming and Outdated Mechanical and Electrical Equipment (Products) (1st to 4th batches) to carry out energy management.

By 2025, the Group plans to reduce the comprehensive coal consumption per unit product of cement clinker by 3 kgce/t compared with that in 2020, and achieve 40% of benchmark production line ratio, much higher than the 30% ratio required by the industry.

	Indicators	Unit	Targets By 2025	2023	2022	2021
Use of Resources						
Indirect Energy	Electricity consumption ⁵	kWh in '000s	\	3,835,518.43	3,723,056.56	4,134,836.97
	Electricity consumption per ton of clinker production ⁶	kWh in '000s	0.053	0.054	0.055	0.055
	Electricity consumption per ton of clinker production ⁷	kWh in '000s	\	0.071	0.076	0.075
Direct Energy	Raw coal consumption	kWh in '000s ⁸	\	33,465,024.23	33,971,791.51	36,526,802.96
	Raw coal consumption per ton of clinker production ⁹	Tons	\	0.117	0.122	0.119
	Standard coal consumption per ton of clinker production ¹⁰	Tons	0.1004	0.0986	0.1024	0.1011
Total energy consumption		kWh in '000s ¹¹	\	37,300,542.67	37,694,848.06	40,661,639.93
Resource Recycling						
Electricity generated from waste heat recovery		kWh	\	1,403,069.13	1,292,028.54	1,425,276.40
Proportion of waste heat power generation in clinker enterprise electricity consumption		%	\	62.92	58.36	58.50

During the Reporting Period, the Group continued to invest in energy-saving technological upgrading and production optimization. In terms of clean energy, the subsidiaries of the Group promote the use of solar energy-saving street lamps under appropriate conditions. The Group conducted photovoltaic power generation projects at the Group level, and conducts research on the construction conditions at the subsidiary level. During the Reporting Period, due to the adjustment of the construction mode of the Group's photovoltaic projects, it was decided that the pilot point would be changed from the Southern Shandong operation region to the Northeastern operation region.

After communication with suppliers of photovoltaic power generation technology, the Group has shortlisted suitable suppliers to carry out evaluation and investigation for certain companies in the Northeast Operation Region, and has completed the preliminary work for six pilot sites during the Reporting Period. Upon completion of the projects, the installed capacity of the projects will reach 39MW, with an estimated average annual power generation capacity of 46 million kWh. Upon the success of this pilot project, the Group will promote solar photovoltaic power generation projects in other operating regions of the Group according to local conditions.

The Group will continue to promote the construction of green energy projects. In addition to the photovoltaic project, the Group plans to conduct an oxygen-enriched combustion test in 2024 at Yingjisha Shanshui to improve the efficiency of energy usage.

During the Reporting Period, the Group's energy efficiency targets and completion progress are as follows:

Environmental Targets

Improve energy use efficiency, reduce energy consumption and the product indicators meet the national energy consumption limit standards.

Target Completion Progress

The target for this Reporting Period has been achieved.

Actions Taken During the Reporting Period

Weishan Shanshui completed the construction of the oxygen-enriched combustion project and carried out the commissioning, and the coal saving rate reached 2.47%.

Case Environmental Modification Highlight

Since 2022, Zibo Eco-Environmental Protection Committee and the Department of Eco-Environment of Shandong Province have successively issued guiding documents such as the implementation plan for ultra-low emission renovation, the Group has determined the technical plan for process denitrification through inspection and organizing technical personnel to carry out demonstration work with the support of the Group's Development and Technology Department.

Zibo Shanshui's ultra-low emission renovation of nitrogen oxides carried out multi-faceted and phased renovation attempts and optimization adjustments; in respect of the non-organized emission of particulate matter, Zibo Shanshui invested RMB 7.46 million in the renovation of equipment and facilities as assessed by a third-party assessment unit.

⁴As some subsidiaries of the Group did not engage in production activities, the resource consumption data included data of 82 companies of the Group, including kiln-grinding enterprises (including kiln enterprises) and grinding enterprises. The calculation of unit conversion involved in the calculation of direct and indirect energy consumption was set out based on the General Principles of Comprehensive Energy Calculation (GB/T 2589-2008).

⁵Electricity consumption includes purchased electricity and residual heat power generation.

⁶This indicator is a commonly used production indicator of the Group.

⁷This indicator is a commonly used production indicator of the Group.

⁸In order to comply with the disclosure requirements of the relevant regulatory requirements, the Group conducted the "kWh in '000s" unit conversion according to the General Principles for Calculation of Comprehensive Energy Consumption GB2589-2020.

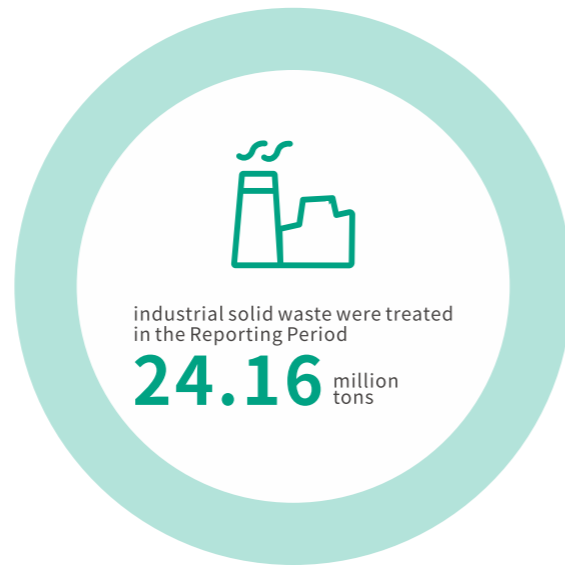
⁹This indicator is a commonly used production indicator of the Group.

¹⁰This indicator is a commonly used production indicator of the Group.

¹¹In order to comply with the disclosure requirements of the relevant regulatory requirements, the Group conducted the "kWh in '000s" unit conversion according to the General Principles for Calculation of Comprehensive Energy Consumption GB2589-2020.

Utilizing Resources Comprehensively

The Group attaches great importance to the comprehensive utilization of resources in the production process and actively consumes industrial waste. The Group has reached cooperation with local steel and chemical plants to cooperatively recycle industrial wastes. The Group effectively uses converter slag and electric furnace slag produced by iron and steel companies, fly ash and desulfurized gypsum from coal-fired power plants, and sulfuric acid slag and fluor gypsum from chemical plants. After processing with advanced production technology, various types of high-quality cement can be produced. While reducing the pollution caused by industrial solid waste to the environment, transforming it into treasure has both circular economic benefits and socio-environmental benefits. A total of over 24.16 million tons of industrial solid waste were treated in the Reporting Period.



The Group actively consumes industrial waste and produces various types of high-quality cement:

- ▶ The raw materials comprised of sulfuric acid slag, converter slag, steel slag, etc. are used to replace traditional iron raw materials, while fly ash replaces natural shale as aluminum's raw material;
- ▶ Using fly ash and coal-fired slag as a cement mixture; and
- ▶ Replacing natural dihydrate gypsum with desulfurized gypsum.

The Group actively promotes the co-processing of cement kilns in accordance with the Technical Specifications for Environmental Protection in Collaborative Disposal of the Solid Waste of Cement Kilns, the Technical Specifications in Collaborative Disposal of the Solid Waste of Cement Kilns and other systems. Relying on its own technological advantages, the Group comprehensively promotes collaborative disposal projects in three areas, namely urban and rural domestic waste, municipal sludge and industrial hazardous waste. By doing so, a complete solid waste disposal solution has been created. While fulfilling its social responsibilities, the Group promotes green development, drives industry progress and achieves sustainable development. During the Reporting Period, Kazuo Company, together with Kangda Cement and Liaoning Gongyuan, completed their action plans; and construction of Liaoning Gongyuan's hazardous waste project was completed.

Indicators	Unit	2023	2022	2021
Total solid waste utilization	10 thousand tons	2,416.33	1,556	1,741
Packaging bags of cement	Pieces	161,360,000	146,080,000	226,403,436

During the Reporting Period, the Group actively promoted the projects of the co-processing of cement kilns and is committed to strengthening the recycling of resources. The Group increased the waste recycling and disposal rate and made significant progress:

- ▶ A total of 115,100 tons of hazardous waste and sludge were disposed of in conjunction with the Group. The Group utilized 24.16 million tons of industrial wastes such as fly ash, desulfurization gypsum, coal-fired slag, slag, converter slag and coal gangue.

The Group plans to commence the operation of the Chifeng Yuanhang Cement kiln co-disposal project by the end of 2025.



Water Resource

160,600 tons
mine wastewater and rainwater

460 million
with a recycling volume

97% over
a recycling rate

In the process of obtaining water, the Group has always adhered to the requirements of the environmental assessment approvals and actively cooperated with the local environmental protection authorities to ensure that adequate consideration has been given to the issue of water abstraction and that various measures have been implemented. The Group has fully considered the issue of water extraction for its projects during the planning and design stages, comprehensively analyzed the pressure on local water resources and adopted appropriate water extraction methods and water conservation techniques. During the Reporting Period, the Group extracted 160,600 tons of mine wastewater and rainwater; all production water was recycled for use in waste heat power generation and equipment cooling, with a recycling volume of 460 million cubic meters and a recycling rate of over 97%.

During the Reporting Period, due to the difference in water quality between production recycled water and domestic wastewater, production recycled water, as the main source of drainage, has a higher calcium and magnesium ion content along with the evaporation of water during the cooling process of water recycling. Therefore, production recycled water has to be treated separately from domestic wastewater. The circulating water to be discharged after precipitation and crystallization can be used for road spraying and dust suppression, water spraying in the material yard, vehicle flushing and green water spraying. The concentrated water from cogeneration and boiler discharge water are directly fed into the cogeneration recycling tank for recycling, and the Shanshui Group has achieved zero discharge of wastewater. During the Reporting Period, the Group implemented its water resources policy in accordance with the environmental protection requirements of various regions and did not receive any warnings or penalties from the government on water resources issues. The increase in net freshwater consumption per ton of clinker was mainly due to the increase in clinker production compared to 2022, and the increase in water consumption per ton of clinker was due to the further development of mine management, which resulted in an increase in water consumption for controlling mining dust.

Indicators	Unit	2023	2022	2021
Total water consumption	Tons	12,257,441	11,546,075	12,248,400
Water consumption per ton of clinker production ¹²	Tons	0.2578	0.25	0.25
Water consumption per ton of cement production ¹³	Tons	0.0282	0.027	\

During the Reporting Period, the Group's water consumption targets and completion progress are as follows:



¹²Water consumption per ton of clinker referred to the calculated water consumption per ton of clinker produced based on the water consumption of clinker production.

¹³To better align with the production process, this indicator has been used since the Reporting Period. Water consumption per ton of cement refers to the water consumption per ton of cement production based on the water consumption of cement production.

5.4 Constructing “Green and Smart” Mine

The mining of the Group adheres to the development concepts of innovation, coordination, green, openness and sharing, and always follows the principle of adapting to the local conditions in the construction of green mines to minimize the impact of mining activities on the mines and the surrounding environment, and to realize the coordination and comprehensive development of the entire process of mineral resources development.

During the Reporting Period, in order to further improve the level of mine management and ensure the sustainable development of the mining subsidiaries of the Group, according to the national standards and local government requirements, such as Green Mines Construction Specification of Cement Limestone Industry(DZ/T 0318-2018), Measures for Management of Green Mine Construction of Shandong Province, and Three-year Action Plan for Green Mine Construction of Liaoning Province, the Group has implemented the Measures for the Management of Mine Resources and formulated the Measures for the Management of Construction Projects (Trial), which further clarified the requirements for the construction and management of the green mines, and guided the construction work to commence accurately. Meanwhile, the Group has set up a mine management leading Group and formed a three-level mine management structure of the Group, operation region and clinker subsidiaries. The management measures stipulate that by refining the mine resource management system. Each operating region and clinker subsidiary arrange mine management personnel to be responsible for mine resource management according to the actual situation.

Number and Proportion of Green Mines			
Operating Regions	Targets By 2025 ¹⁴	Up and Running Proportion by 2023	Number by 2023
Overall situation of the Group	86%	78%	25
Eastern Shandong Operating Region	100%	78%	8
Western Shandong Operating Region	100%	100%	2
Southern Shandong Operating Region	100%	100%	4
Northeast China Operating Region	91%	82%	9
Shanxi Operating Region	67%	67%	2
Xinjiang Operating Region	33%	33%	1

¹⁴The targets by 2025 have been updated based on actual start and completion during the Reporting Period.

The Group’s mine management has shifted from six aspects, namely mining area environment, resource development approaches, comprehensive utilization of resources, energy conservation and emission reduction, technological innovation and digital mines, corporate management and image, to standardized and scientific mining. The Group carried out green mine construction on the basis of scientific, standardized, green, environmentally friendly and harmonious mining. After the improvement of management in recent years, most of the mining subsidiaries of the Group have conducted the standardized, scientific, green and environmentally friendly mining for mines.



Achievements and highlights of professional management

- ▶ Acquired mine resources legally. During the Reporting Period, the Group has legally and newly obtained a total of 19.39 million tons of mining resources; and
- ▶ The construction of green mines continued to improve. During the Reporting Period, 5 new mines of the Group obtained provincial-level green mine certification, and all the re-examinations of green mines organized by the government were successfully passed, resulting in a total of 25 green mines at the provincial level and above.

Ecologicalizing the Environment of Mines

The Group continues to practice the concept of “Lucid Waters and Lush Mountains are Invaluable Assets”. With the mission of protecting the ecological environment, supported by scientific and technological innovation, and the concept of green development, the Group has always integrated green development into the whole process of development, utilization and protection of mineral resources, and further promoted the formation of a new pattern of harmonious development of regional mining sites, and harmonious development of human and nature.

Ecological restoration and management of mines is particularly important to the construction of green mines. Mine management always adheres to the concept of green development, and mine production and ecological management are organically integrated, so that "while mining, treatment and rehabilitation are carried out, development is carried out in the midst of protection, and protection is carried out in the midst of development".

Case Anqiu Shanshui Conducted Mulching Greening

Anqiu Shanshui Yinjiazhuang Mine has achieved mining by cutting the slopes and lowering the angles of the stop-mining platforms on the west side of the mine area, mulching and greening, planting Shu cypresses and sowing grasses, planting trees and greening on the two sides of the roads in the mine area, installing guardrails at the boundaries of the mine area, and constructing a garden-type greening landscape in the functional area, so as to minimize the damage to the geomorphology of the mine area, increase the coverage rate of greening of the mines, and make the mine area environment in harmony with the surrounding environment.



Case Pingyin Shanshui Adheres to the Concept of Green Development and Vigorously Promotes the Organic Integration of Mine Production and Ecological Management

During the Reporting Period, Pingyin Shanshui vigorously promoted the restoration and management of the ecological environment of the mine, planting more than 4,000 Shu cypresses, white pines, red-leaved heathers and other seedlings on both sides of the mine road, and laying turf of nearly 10,000 square meters, and restoring the greening of the high and steep slopes on the west side of the road by hanging mesh spraying of nearly 17,000 square meters, and restoring the greening of the mining site and the platform of the 245 platform of nearly 70,000 square meters, with the greening of a total area of more than 100,000 square meters. The ecological environment has been restored and managed with remarkable results, and the mine has truly been turned into a green and ecological mine.

Pingyin Shanshui invested 4 million RMB to install an intelligent high-pressure sprinkler system and build a 2,000 cubic meter high level water tank, which can be controlled in various ways by the sprinkler system. Its functions include automatic centralized control of spray guns, remote intelligent control by mobile phone, combined with fog trucks, sprinkler trucks, car washers, blasting, shoveling, transportation and other processes to achieve wet operation, to meet the requirements of environmental standards.



Scientific Approach to Mining

The Group adheres to the mining principles of scientific mining and civilized mining.

Case The Pingyin Shanshui Mine adopts a top-down, step-by-step approach to mining, and strictly adheres to its production policy

Pingyin Shanshui Mine adopts the top-down step-by-step mining method, and strictly implements the production policy of " Simultaneous Mining and Stripping, Stripping First, and Simultaneous Mining of Rich and Poor", with the ore recovery rate reaching over 99%; in the process of mine production, it has increased the investment efforts and actively introduced advanced production technology, adopting the intelligent and environmentally friendly high-pressure submersible drilling rigs for piercing in the mining site, and the milliseconds delayed blasting deep-hole technology promoted by China, so as to increase the productivity and reduce the energy consumption of the products; the centralized management of the working level of the mining site regulates the mining order to ensure the normal production of the mine.



Using resources efficiently

The Group has been actively revitalizing its existing resources to meet its production requirements. During the Reporting Period, the comprehensive utilization rate of the Group's mine resources reached 100%. The Group reasonably utilized the existing resources and reasonably matched the amount of waste rock resources on the premise of ensuring the quality of clinker. As at the end of the Reporting Period, the Group matched the use of 3.47 million tons of high magnesium and low-calcium limestone, thus prolonging the service life of the mines.

the comprehensive utilization rate of the Group's mine resources reached

100%

the Group matched the use

3.47 million tons

The Digitalization of Management Information

Case Digital Mine Construction of Pingyin Shanshui

During the Reporting Period, the Group introduced purely electric unmanned driving trucks into the mine, and also introduced an external support team for the unmanned driving technology of the trucks, which adopts a multi-sensor fusion sensing solution, analyzes the environment through AI technology, and then combines with intelligent algorithms, to participate in real-time sensing of the surrounding environment and planning of reasonable routes. At the same time, the technical support team also adopts a multi-mode positioning solution to effectively avoid the inaccurate positioning caused by the complicated terrain in the mining area, and has established a remote driving cabin platform that can simultaneously take care of the remote driving mode of mining trucks within the mining area, which is in a leading position in the entire industry.



5.5 Addressing Climate Change

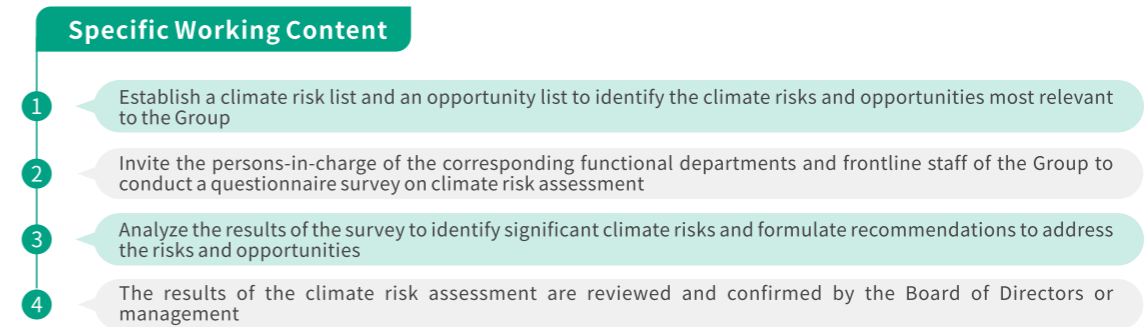
The Group has actively responded to the national policies and requirements on "Dual-Carbon", proactively implemented major national policies such as the Notice of the Action Plan for Carbon Dioxide Peaking Before 2030 and the Measures for the Administration of Carbon Emission Trading (for Trial Implementation), and has continued to pay attention to matters relating to climate change. The Group is keenly aware of the potential impact of climate change and other environmental risks on its business. The Group has continued to refer to the international standardized framework of the Task Force on Climate-related Financial Disclosure (TCFD) in guiding its climate management matters, and has taken active actions at the four levels of governance, strategy, risk management, and indicators and targets.

Level	Specific Actions
Governance	<ul style="list-style-type: none"> ▶ The Board is responsible for incorporating and overseeing ESG risks, including climate change related risks, into the Company's overall risk management system. ▶ The Group has set up the ESG Committee and ESG Working Group which identify, evaluate and manage ESG-related risks and opportunities, including climate risk. ▶ All relevant functional departments and business units have made climate change response one of their priorities.
Strategy	<ul style="list-style-type: none"> ▶ The Group is fully aware of the potential significant impacts of climate change on the Group and the risks and opportunities arising from it. The Group has established a mechanism to assess and monitor risks and opportunities on a regular basis. For detailed information on the impact of the identified risks and opportunities on the Group, please refer to the section headed "Climate Risks and Opportunities Assessment".
Risk Management	<ul style="list-style-type: none"> ▶ The Group started the annual climate risk identification and assessment work, and updated the Group's climate risk list by analyzing its own business value chain and referring to the relevant public information of TCFD. ▶ The persons in charge of the relevant functional departments of the Group assessed the various climate risks, identified and recognized the risks that have a significant impact on the Group. ▶ Please refer to the following climate risk and opportunity table for details of climate risk and opportunity response measures.
Indicators and Targets	<ul style="list-style-type: none"> ▶ The Group has set specific targets and corresponding achievement measures in the areas of "water resource usage", "waste discharge" and "energy usage", and regularly reviews the achievement of the targets. Please refer to the section headed "Managing Emission Strictly" and "Optimizing the Use of Resource" for more information. ▶ The Group has also set a target to increase the proportion of green mines in its overall business. Please refer to the section headed "Constructing "Green and Smart" Mine" for more details. ▶ Every year, the Group compiles greenhouse gas emission data for the current year. Please refer to the section headed "Managing Emission Strictly" for more details.

Climate Risks and Opportunities Assessment

The Group is also very concerned about the opportunities and risks to the Group arising from the transformational risks brought about by climate change.

Since the Reporting Period, the Group has been identifying and evaluating climate risks and opportunities, and the following steps have been taken:



The Group ultimately assessed and identified 2 high priority climate risks and opportunities and formulated and implemented management measures for them in a targeted manner.

Climate Risk Category	Specific Climate Risks	Potential Financial Impact	Measures
Policy and Legal Risks	Stricter policy oversight of existing products and services	Decrease in operating revenue Increase in operating costs	<ul style="list-style-type: none"> ▶ Actively promoted the deployment and implementation of the "Dual-Carbon", and carefully studied the relevant policies with a view to formulating a suitable path for the Group; ▶ Starting from 2017, the Group has continued to adopt measures such as replacement of baghouse dust collection, full sealing of conveyor, desulphurization and denitrification, and energy-saving renovation, and the major economic and technological indicators of its production lines are all leading in the industry;
	Stricter emission disclosure requirements	Increase in operating costs	<ul style="list-style-type: none"> ▶ Strictly comply with national and local policies and systems, and strictly manage air pollutants, waste emissions and resources; and ▶ Conduct research on new policies and take timely countermeasures in response to policy adjustments.



The Group proactively identify and seize climate opportunities:

Climate Risk Category	Specific Climate Risks	Potential Financial Impact	Measures
Resources Efficiency	Use of recycling technology	Decrease in operating costs	<ul style="list-style-type: none"> ▶ The Group continues to develop low-carbon products and certify its products as low-carbon and green building materials products, so as to increase the low-carbon and environmental attributes of its products and competitiveness in the market; and ▶ The Group plans to implement the substitution of fossil energy by biomass fuels in subsidiaries with the necessary conditions, so as to reduce the amount of coal used at the kiln end and the emission of sulfur dioxide, nitrogen oxides and greenhouse gases.
Source of energy	Use of low emission or renewable energy source	Decrease in operating costs	
	Adoption of new technology	Decrease in operating costs	
Products and Services	Expansion of low-emission goods and services	Increase in operating revenue	
	Transfer in consumer preference	Increase in operating revenue	
New Markets	Adoption of supportive policy incentives	Increase in operating revenue	
Adaptability	Energy substitution or diversification	Decrease in operating costs	

The Group is fully aware of the importance of adopting scientific methods to quantify the impact of climate risks and opportunities on the financial situation and to consider the conditions under different climate scenarios in order to analyze and reflect the climate-related risks and opportunities under specific circumstances in the management of risk and opportunity assessment. The Group would further refine the process of assessing climate risks and opportunities in the future and consider incorporating methods such as scenario analysis to enhance its resilience to climate change.



06

Caring for Employees and Growing Together

6.1 Strengthening Safety Management

The Group regards the life safety and occupational health of employees as the core of corporate production safety. The Group strictly complies with laws and regulations at the national, provincial, municipal and local levels relating to the provision of a safe working environment and the protection of employees from occupational hazards, including but not limited to the Work Safety Law of the People’s Republic of China, the Standards for Determining the Potential Risks of Major Accidents of Industry and Trade Enterprises, internal systems such as the Measures for the Administration of Accountability for Production Safety and the Regulations on Safety Management of Related Parties were revised and improved to clarify the organizational structure, division of responsibilities and management requirements, etc. At the same time, detailed specifications were also provided for the investigation and handling of accidents, management of related parties, safety of inventory clearance and safety of inspection and repair operations, etc., so as to consolidate the foundation of the Group's safety management and to effectively safeguard the rights of the safety and health of all the employees.

Adhering to Safe Production

The Group always adheres to the production safety concept of “People-Oriented, Life First”. By clarifying the safety management structure, improving the safety hazard investigation mechanism, promoting the normalization of safety production training for employees and suppliers, and strengthening the professional safety team, the Group contributes to the safe development.

Implementing safety leadership responsibility and strengthening safety leadership



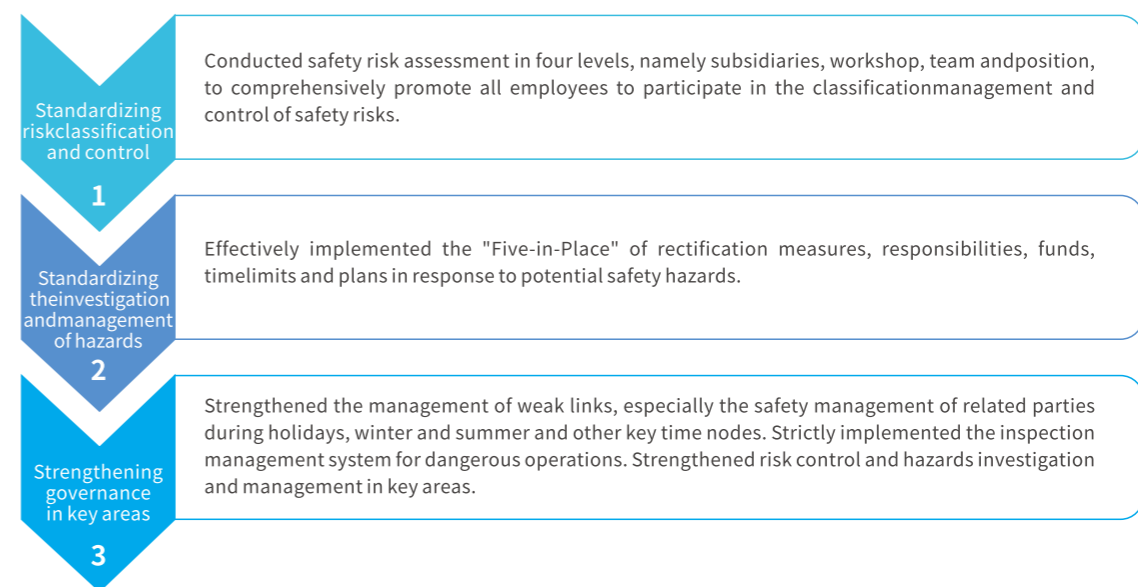
Establishing and improving safety supervision system

The Group has established a top-down and complete three-level safety supervision system, i.e., the Group, Operating Regions and Subsidiaries, and improved the three-level safety management network of the subsidiary, workshop and team, to ensure a comprehensive oversight over the safety of personnel and equipment during the production process. On the one hand, the Group continuously updated and improved the relevant safety management system and safety operation procedures, to urge all units to improve the rules and regulations. On the other hand, by using the supervision means of safety audit, the Group organized professional safety management personnels to organically combine self-audit, mutual audit, cross-audit and other methods to comprehensively identify safety management problems, discover safety management highlights, and improve the overall safety management level.

Controlling safety risks by levels and investigating and managing hazards

The Group firmly believes that the investigation and management of potential safety hazards is a prerequisite and core component for the protection of corporate production. In order to effectively prevent the occurrence of safety accidents, the Group combines the investigation and management of potential safety hazards with the construction of a "safety dual-prevention system", and carries out activities such as safety audits, special inspections and safety training, so as to penetrate deeply into key areas and critical areas, and to gradually form a "five-tier potential safety hazard investigation and management system". At the same time, the Group pays close attention to the closed-loop rectification of potential hazards, increases investment in safety, and ensures that rectification measures, responsibilities, funds, timeframes and plans are "five in place", as well as making full use of information technology and other modern means to carry out full-process, full-procedure, full-time hazard management by means of a combination of "online and offline" methods. In 2023, the Group invested a total of RMB 0.237 billion in safety at its plants and mines, which will provide solid financial support for the updating and improvement of safety protection facilities, the investigation and treatment of potential safety hazards, the provision of labor safety products for employees and safety education and training.

The process of safety risk classification control and hazards investigation and treatment:





Carrying out safety training and strengthening emergency drills

Safety education and training is an important means to raise employees' safety awareness, consolidate their safety knowledge and enhance their safety skills. The Group has always regarded "safety education and training" as an important tool for safety management, and has urged units at all levels to regularize and standardize their safety training work, and to carry out seasonal, specialized and regular safety education and training activities. At the same time, the Group actively promoted the application of information technology, innovatively developed and utilized a training platform APP, fully integrated offline and online training, and implemented graded and categorized training, which effectively solved the problems of insufficiently targeted training and poor monitoring effect for all employees, and built a safety line of defense for the operation of the enterprise. During the Reporting Period, the Group's subsidiaries conducted 12,484 safety training sessions, with 256,402 training person-times; 1,010 on-site disposal programs and comprehensive emergency drills for accidents such as mechanical injuries, collapses, poisonings and asphyxiation, and clogged preheaters, with 16,860 training person times.



the Group's subsidiaries conducted
12,484



training person-times
256,402



on-site disposal programs and comprehensive emergency drills for accidents such as mechanical injuries, collapses, poisonings and asphyxiation, and clogged preheaters
1,010



training person times
16,860

Case Holding Safety Activities During the Safety Month

During the Reporting Period, the Group closely centered on the theme of "Everyone cares about safety, everyone knows how to respond to emergencies", issued a timely notice on the Group's safety month activities, formulated timely activity plans for units at all levels, and launched a series of activities for the "Safety Month", such as the launching ceremony, safety publicity and consultation day, safety hazards on-the-spot shooting, safety speech contests, safety training, and emergency rescue exercises, etc., which took on a wide variety of forms with a lot of highlights. During the Safety Month, a total of 1,160 training sessions were held, with 30,855 training person times, 281 emergency drills were conducted, and 3,658 items of hidden dangers were inspected. The launching of the activities helps creating a favorable safety atmosphere, achieving significant results in the comprehensive implementation of corporate safety responsibilities, enhancing employees' awareness of safety risks and emergency rescue capabilities, and effectively preventing the occurrence of safety accidents.



Launching Ceremony



Safety Publicity and Consultation Day



Speech Contest on the Theme of Safety Month



Safety Month Knowledge Contest



Emergency Drill

Case In-depth Investigation and Management of Hidden Dangers in Employees' Homes to Realize the Concept of Enterprise Safety Management

To infiltrate safety work into the daily family life of employees, launching activities such as the entry of employees' families into factories, safety messages, family hidden danger investigation and escape route mapping, etc., and urging the families of employees to focus on electricity, gas and transportation safety, through the launch of activities to effectively enhance the safety awareness of the families of employees and popularize the relevant emergency knowledge and skills, so as to safeguard and protect the safety of the family life of the employees.

Home Safety Hazard Checklist



Residence Escape Route Map



Professionalisation of Safety Management Teams

The Group actively set up safety directors in accordance with regulatory requirements and encouraged employees to obtain the certificate of registered safety engineer. Currently, the Group has a total of 99 registered safety engineers. The continuous improvement of the professional quality of safety management personnel is conducive to the effective implementation of safety management work.



Conducting Supplier Safety Training

The Group also paid attention to the safety training of suppliers, and required suppliers to comply with construction and other safety regulations and to receive safety education and training before entering the construction sites, such as watching safety publicity videos, to ensure that suppliers understand relevant environmental safety regulations. Besides, suppliers must be informed, or they must sign the safety notice before signing the contract.

Case Linqu Shanshui on-site safety education and training for construction units

In 2023, Linqu Shanshui signed a construction contract for an outsourced project, together with a construction safety agreement and on-site safety training. The training covered the Safety Production Management Agreement, safety production conditions and relevant regulations on safety protection for construction personnel, labor discipline, safety risks and preventive measures in the foreign-associated construction industry, emergency response measures, the rights and obligations of production safety for employees, license enforcement for special positions, and cases of relevant accidents. After the training to strengthen safety awareness, good protection, standardized operation, and prevention, so as to effectively avoid the occurrence of environmental safety and social risks.

During the Reporting Period, the Group conducted 1,586 training sessions for outsourced construction units, with a training duration of 3,569.6 hours.



Protecting Employees' Health

The Group is fully aware of the potential hazards of relevant occupational diseases arising from its business operations. In order to strengthen the effective management of employees' occupational health, the Group has taken multiple measures to gradually establish a sound and effective occupational disease prevention and control management system.

- Seized sources of occupational diseases to make management**
 Increasing relevant investment and taking control measures from dust, high temperature, noise, etc., to improve the working conditions of employees, and advocate clean production.
- Carried out occupational health monitoring for employees**
 The Group strictly implemented pre-job, on-the-job and off-the-job occupational health examinations, and timely arranged post-transfers if occupational illness and allergies were found.
- Strengthened publicity and education**
 The Group carried out special training on occupational health, especially for employees and positions exposed to noise, dust, and hazardous chemicals. The Group strengthened the management and control of occupational health risks and improved the ability of employees to identify risks.
- Strengthened the management of occupational hazard warnings**
 The Group actively carried out annual occupational hazard project declaration, regularly monitored occupational hazard factors, announced relevant testing information in a timely manner, and implemented rectification in a timely manner if problems were found.

The Group has firmly established a red-line awareness of safety and adhered to the bottom-line mentality, formulated employee health and safety targets for 2023, and guided and supervised all operation regions, branches (subsidiaries) and departments to complete the signing of the 2023 Occupational Health and Safety Targets and Responsibility Letter as well as the hierarchical refinement of the safety targets. During the Reporting Period, the number of work-related fatality was 0, the number of new pneumoconiosis occupational diseases was 0, and the adoption rate of production safety standardization was 100%. In order to further implement "treating employees well" and effectively protect the lives and health of employees, the Group has centrally procured and deployed AEDs in 2023 and formulated a plan to launch relevant emergency rescue training to improve the skills of employees in the operation and use of AEDs, so as to safeguard the lives and health of employees.

Case The Group Organized Training on Fire Safety Knowledge

In order to further enhance the safety awareness of employees at the Group's headquarter, popularize fire safety knowledge and improve fire safety skills, on the morning of 22 November 2023, the Group's headquarter organized a training on fire safety knowledge. The training provided employee with a more in-depth and comprehensive understanding of fire safety and further enhanced their self-rescue and fire prevention capabilities. The Group Headquarter took the training as an opportunity to continue to strengthen the fire safety education of the employee, comprehensively inspect the fire safety facilities and thoroughly eliminate the potential safety hazards, so as to build a fire safety barrier for the high-quality development of the enterprise.



Case The Group Has Increased Its Investment in Science and Technology and Renovated Its Protective Facilities to Minimize Dust Emissions and Safeguard the Occupational Health of Its Employees

The Group has continuously increased its investment in science and technology to promote the construction of enterprise automation, informatization and intelligence, which has effectively enhanced the level of intrinsic safety management and greatly reduced occupational health and safety risks. For example, fully automatic bag insertion machines and intelligent loading machines have been adopted in some of the production lines, and additional confinement devices have been installed to prevent occupational hazards at source; and an unmanned weighbridge system has been implemented to reduce the frequency of exposure of employees to occupational hazards.



Automatic Clinker Bulk Loading System



The Bottom Belt Seal of the Dosage Bin is Made of Nanoplatelet Contact Type and Assembled Sealing Shell.



Automatic Bagging, Transportation and Loading Machinery and Equipment



During the Reporting Period, the status of the Group's work injuries and work-related fatalities is set out in the table below:

	2023	2022	2021
Number of work-related fatalities	0	0	2
Rate of work-related fatalities	0	0	0.011%
Lost days due to work injury	588	112	0

6.2 Protecting Employees' Rights and Interests

The Group adheres to the people-oriented philosophy and is committed to providing employees with a broad growth platform and an equal and harmonious working environment. The Group strictly abides by relevant laws and regulations that have significant impacts on the Group relating to remuneration and dismissal, recruitment and promotion, working hours, holidays, equal opportunities, other benefits and welfares, and prevention of child labor and forced labor, including but not limited to the Labor Law of the PRC, the Labor Contract Law of the PRC, the Provisions on the Prohibition of Using Child Labor, the Law of the PRC on the Protection of Minors, the Social Insurance Law of the PRC, and Hong Kong's Employment Ordinance. During the Reporting Period, the Group has strictly complied with the above-mentioned relevant laws and regulations. The Group has also formulated and implemented several internal policies to protect the rights and interests of employees in every aspect of the employment process.

Employee Rights, Interests and Care

The Group has formulated and implemented the Regulations on Recruitment Management of Shanshui Group. The recruitment is carried out based on the principles of openness, fairness, justice, equal competition and merit-based selection. During the Reporting Period, the Group did not have any violations of employing child labor or minors and did not have any violations of withholding workers' identity documents, educational certificates or requests of paying various deposits.



Employment

Recruitment of child labor is strictly prohibited

- ▶ Specifying the minimum working age in the recruitment brochure, and strictly reviewing the applicants' information during the recruitment process, such as ID cards, household registration books, and academic certificates to ensure that they reach the minimum legal working age.
- ▶ If child labor is found, the employment will be terminated immediately, and the internal unit shall provide an explanation. The responsible unit shall be informed and develop corrective measures to prevent such a situation from happening again.

Anti-forced labor

- ▶ Regulating the employment mechanism, strictly investigating and overseeing the violations including forced overtime work, withholding the identity documents and academic certificates of employees, or payment of various deposits, to ensure that the employment relationship is established on a voluntary basis.

Diversity and Anti-discrimination

- ▶ Adhering to the principle and concept of diversity and openness, and do not treat employees differently due to their ethnicity, gender, religion, etc.

Dismissal

- ▶ For employees leaving the Group, the Group first communicates with employees in accordance with the Regulations on Resignation Management of Shanshui Group, in order to understand their reasons for leaving. The Group assists employees in completing the resignation procedures according to situations and implements compensation for resignation. In addition, necessary rectifications that need the subsidiaries' attention are carried out by the Group for improvement.



Remuneration and benefits

- ▶ The Group has further optimized the organizational structures and remuneration system of the Group, and clarified the position setting, job responsibilities, personnel allocation and remuneration packages of major management positions at all levels of the Group one by one, laying the foundation for further clarification of the career development paths of employees in the future.
- ▶ The Group regularly reviews the remuneration packages of its employees in light of market conditions, corporate economic benefits and employees' income levels. It is noteworthy that at half-year and year-end, the Group rewards its employees by grades based on the operating conditions.
- ▶ The Group actively takes the lead in complying with the regulation of staggering production halt. During the production halt, relevant compensation is paid under national regulations to protect the legal rights and interests of employees. At the same time, the Group has formulated a reasonable salary distribution system and reward and punishment measures during normal production months. The overall compensation does not decrease due to the reduction of working hours.



Promotion

- ▶ To provide a broad growth platform for all kinds of talents and promote outstanding employees to stand out and grow rapidly, the Group has formulated and implemented the Selection, Training and Adoption Plan for Reserve Talent of Shanshui Group.



Working hours and holidays

- ▶ The Group fully respects employees' rights of taking rest and leaves. The Management Measures for Employee Attendance of Shanshui Group and the Implementation Measures for Paid Annual Leaves of Shanshui Group have been formulated and implemented, complying with the labor law's requirements that employees should not work more than 40 hours per week. The Group strictly controls overtime work and the absence of rest on statutory holidays to prevent forced labor. In addition, appropriate subsidies are also provided for work outside of normal working hours.

In addition to making contributions to various social insurances (including basic pension insurance, medical insurance, unemployment insurance, maternity insurance and work-related injury insurance) and housing provident fund as required by the Social Insurance Law, the Group has arranged employer's liability insurance for employees in production and related positions, with a total investment of RMB 2,723,800. For general employees, the Group arranges regular health check-ups, and occupational health check-ups are added for special positions, and serious illness relief is provided to employees suffering from serious illnesses. In addition, the Group provides employees with half-year awards, year-end awards, holiday benefits, seasonal work uniforms and labor protection supplies, etc.

In accordance with the Interim Measures for Outbound Employees of Shanshui Group, the Group grants out-of-home subsidies and annual rewards to employees assigned by the Group. In particular, employees who work in Xinjiang can receive a monthly living allowance if their families don't have a job. The Group has effectively implemented and strongly supported the vacation policies and treatment for male and female employees who have given birth to two or three children as stipulated and advocated by the state. Various incentives and preferential policies for parents of one-child is implemented. For disabled employees, the Group creates suitable positions for placement and strictly implements relevant treatment policies to protect their rights and interests. In case of extreme weather conditions such as rainstorms and snowstorms, in order to ensure the safety of employees' commuting, the Group organized staggered commuting or work from home in a timely manner, and implemented flexible working hours. At the same time, wages and benefits would not be affected during the period of remote work.

The Group actively invites family members of its employees to visit the working and living environment of its employees so that they can have a "zero-distance" experience of its corporate culture and development. The Group also provides employees with souvenirs or benefits on occasions of special significance to employees, such as a farewell party for retired employees and condolences to retired military employees on the 1 August Military Day. In the Group's Xinjiang operation region, where about 50% of the employees are ethnic minorities, the Group fully respects the ethnic customs and living habits of its ethnic minority employees, and specializes in the procurement of festive welfare products suitable for ethnic minorities, and provides them with exclusive welfare benefits on the Uygur Autonomous Region Guerbang Festival and the Meat Ceremony. Meanwhile, the Group also organizes various activities for its staff on festivals such as the 8 March Women's Day and the 4 May Youth Day.



Employee Structure and Performance

As at the end of the Reporting Period, the number of employees and turnover rate of the Group were set out in the table below:

Number of employees and turnover rates of the Group

	2023	2022
Total Number of Employees ¹⁵	16,032	17,470
Total Employees by Gender		
Male	12,165	13,192
Female	3,867	4,278
Total Employees by Region		
Headquarters	558	503
Eastern Shandong Operating Region	4,141	4,403
Western Shandong Operating Region	3,322	3,863
Southern Shandong Operating Region	1,403	1,460
Northeast China Operating Region	4,228	4,629
Shanxi Operating Region	1,876	2,091
Xinjiang Operating Region	504	521
Total Employees by Job Responsibilities		
Production	8,733	9,718
Sales	1,182	1,247
Technician	1,801	1,807
Finance	617	657
Administration and Management	1,525	1,630
Others	2,174	2,411
Total Employees by Education Level		
College or Above	5,844	5,712
Technical Secondary School, Technical School and Senior High School	5,977	6,977
Secondary School or Below	4,211	4,781

¹⁵During the Reporting Period, all employees of the Group were full-time. There were no part-time employees.

	2023	2022
Total Employees by Age		
16-20 years old (Including 20 years old)	8	20
21-30 years old (Including 30 years old)	1,561	1,991
31-40 years old (Including 40 years old)	5,769	6,309
41-50 years old (Including 50 years old)	4,879	5,278
Over 50 years old	3,815	3,872
Others		
Number Of Disabled Employees	124	82
Employee Turnover Rate by Gender		
Male	11.28%	7.19%
Female	13.01%	7.60%
Employee Turnover Rate by Region		
Headquarters	4.48%	7.36%
Eastern Shandong Operating Region	7.94%	5.95%
Western Shandong Operating Region	17.01%	6.21%
Southern Shandong Operating Region	5.77%	4.25%
Northeast China Operating Region	13.43%	8.88%
Shanxi Operating Region	14.02%	9.90%
Xinjiang Operating Region	8.73%	10.56%
Employee Turnover Rate by Age		
16-20 years old (Including 20 years old)	37.50%	0.00%
21-30 years old (Including 30 years old)	15.31%	14.67%
31-40 years old (Including 40 years old)	7.8%	5.23%
41-50 years old (Including 50 years old)	5.41%	2.39%
Over 50 years old	24.09%	13.58%

6.3 Promoting Career Development

The Group adheres to the philosophy of "people-oriented, integration of engineering and learning" and is committed to enhancing the momentum of talent development and continuously deepening the talent-strengthening of the enterprise to promote the common development of employees and the enterprise. Talent and technology are the inevitable needs for the Group's industrial development and the extension of the entire industrial chain. Therefore, strengthening technical training is an effective way to enhance the labor performance of an enterprise, strengthen its competitiveness and achieve high-quality development. The Group attaches great importance to the training and cultivation of technical talents and organizes high-standard and high-quality technical training activities for its employees every year to facilitate the cultivation of talents and career development.

appointing **29**

with an increase of **2,085**

the Group recruited more than **300**

dynamically managing and optimizing the training of **268**

1

Attracting Talents by Focusing on Needs

Through various measures such as recruitment from institutions, internal recommendation and specialized introduction, the Group recruited more than 300 personnel of various categories throughout the year, and the proportion of the Group's personnel with junior college degrees or above increased by 4 percentage points.

2

Building up a platform and ladder to "utilize talents", improve the evaluation system, and open up the development channels.

Enterprises in the Shandong, Northeast China and Shanxi regions further strengthened the construction of "reserve talent pools", dynamically managing and optimizing the training of 268 reserve talents of various categories throughout the year, and promoting and appointing 29 management personnel.

3

Multiple Measures Simultaneously to "Nurture Talents"

Various types of specialized training have been carried out regularly, with nearly 90% of the staff participating in the training; the company encourages the upgrading of job skills, with an increase of 2,085 certified personnel; it innovates the mode of cooperation between schools and enterprises, and explores the establishment of a long-term mechanism for the cultivation of talents that is a deep fusion of "industry-academia-research-use". Aqi Shanshui adopted the "dual system of enterprise-school and work-learning" mode of cultivation to carry out the training of the "new type of apprenticeship". Qingdao Shanshui, Zibo Shanshui and other companies have respectively launched research cooperation with famous universities in their areas, and selected key personnel to participate in the topic of research and development, which enhances the technological innovation ability of enterprises and cultivates professional talents for high-quality development at the same time.

4

Caring for Talent to Stay

Practicing the talent development concept of "people-oriented, common growth", the Group continues to optimize the working environment, which further strengthens the sense of identity and belonging of employees.

5

Safety Production Month and Quality Month Training

By carrying out various forms of skill improvement training for employees, the comprehensive ability of employees was effectively improved. The forms of activities included special training, knowledge competition, skill competition, emergency drills, speech competitions, and publicity consulting, etc.

6

Daily Training

The operating regions and subsidiaries formulated training activities according to the actual situation, and improved the business ability of employees through multiple channels and levels, to encourage employees to learn knowledge, improve skills and strengthen ability.

Learning Knowledge, Improving Skills, Strengthening Ability, and Improving Employees' Business Literacy Through Multiple Channels and Levels (Excerpt)

Successful Completion of the Comprehensive Capability Enhancement Program for Senior Managers of the Group's Enterprise

Specialized Training for "Safety Month" of the Group

Special Training on Concrete Quality Improvement and Efficiency Enhancement in Eastern Shandong Operating Region

Welding Skills Competition for the Employees of the Group

Training Course on Competency Enhancement for Integrated Office Personnel of the Group

The "Unlimited Potential, Breakthrough Limit and Achieve Excellent Results in the 100-Day" Labor Competition Mobilization Meeting in Eastern Shandong Operating Region

Specialized Training on Intellectual Property Protection and Risk Prevention and Control of the Group

The 2023 Technical Training (Phase I) of the Group

Special Training Camp for Management Elites "Building Dreams and Sailing Away" in Southern Shandong Operating Region.

The Sixth Welding Skills Competition for Employees of Shanshui Heavy Industry in Changqing District of Jinan City

The "Vitality Western Shandong and Winning 2023" Spring Intensive Training Course for Marketing Teams in Western Shandong Operating Region

The Training of "Building Team Cohesion and Realizing Self-value" of Lvliaing Shanshui

During the Reporting Period, the training performance of the Group was set out in the table below:

Categories		2023	2022
Total employees trained		14,162	15,733
Percentage of employees trained			
By gender	Male	87.53%	89.46%
	Female	90.87%	91.89%
By job responsibilities	Production	96.36%	98.79%
	Sales	81.98%	79.07%
	Technician	76.90%	84.06%
	Finance	98.87%	99.09%
	Administration and Management	88.20%	89.33%
	Others	66.15%	63.09%
Average training hours per employee (hour)		43.83	50.60
By gender	Male	43.74	50.73
	Female	44.11	50.21
By job responsibilities	Production	47.19	50.89
	Sales	31.03	36.57
	Technician	45.43	48.01
	Finance	43.91	60.78
	Administration and Management	41.17	62.60
	Others	33.75	44.62



07

Providing High Quality and
Dedicated Service

7.1 Guaranteeing Product Quality



The Group adheres to the business tenet of "customer first, quality first" and the general requirement of "optimizing service systems, improving service procedures, standardizing service contents and improving service quality", and strives to provide customers with products and services with the highest quality. The Group strictly complies with relevant laws and regulations relating to health and safety, advertising, labelling and privacy matters relating to the products and services provided and methods of redress, including but not limited to the Standardization Law of the PRC, the Metrology Law of the PRC, the Regulation of the PRC on the Administration of Production License for Industrial Products, the Product Quality Law of the PRC and the Rules for Implementation of Manufacturing License for Cement Products. During the Reporting Period, no product sold or shipped was subject to recalls by the Group for safety and health reasons.

The Group attaches great importance to product quality and has formulated product internal control and quality inspection standards that are stricter than the national standards, including but not limited to the Quality Management Regulations, the Quality Management System, the Internal Control Standards for Cement Product Quality and Regulations on the Administration of Random Inspection and Inspection of Bulk Raw Fuel Materials and Products Quality (Trial). At the same time, the Group ensures production efficiency and product quality by purchasing manufacturing equipment with excellent performance, providing employees with systematic professional training, and establishing strict quality management standards.

The Group's quality inspection is divided into the inspection of raw materials and fuels when entering the plant, process inspection, ex-factory cement inspection, inspection and self-calibration of monitoring and measurement equipment, self-calibration, verification of personnel capabilities, external comparison, etc. After entering the plant, raw materials and fuels will be inspected in every vehicle in accordance with technical requirements, and the unqualified materials will be rejected. The raw materials will be stored in different areas and used together. Process inspection and ex-factory cement inspection shall be implemented according to the List of Process Quality Control Items in Quality Control Room. Cement can only be delivered after 1 day of qualified strength confirmation, and the inspection data for 3 days and 28 days will be filled subsequently. The Group also clearly indicates product information on product packaging in accordance with national standards, including but not limited to implementation standards, cement varieties, strength levels, producer names and production license marks. The name and strength grade of cement are printed with different colors on both sides of the package of cement according to the type of cement.

Furthermore, the Group also strictly regulates the product recall process and has formulated and implemented internal policies such as the Control Procedures for Unqualified Products, the Control Procedures for Non-compliance, Correction and Prevention Measures, and the Control Procedures for Incident Investigation and Handling.

In order to standardize the recall procedures for unqualified products and prevent and minimize the damage that may be caused by unqualified products, the Group has formulated a product recall system:

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▶ If the products are found to be unqualified after sampling inspection, or the customers complain about the product quality, when the customer complaint is analyzed and confirmed as reasonable and the product surely has quality problems, the recall procedure will be initiated;
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▶ The Group will track the regional markets, terminal building material points and customers based on records where products should be recalled. Also, the Group will arrange corresponding warehousing and transportation to ensure timely and efficient emergency recall immediately and actively take relevant response or remedial measures. The recalled products will be identified on-site and stored separately by type;
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▶ Through the quality assessment of the recalled products, the Group will make specific disposal decisions and analyze the causes, so as to take targeted corrective measures to prevent similar problems from happening again; and
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▶ The Group will also follow up on related work on the adverse effects in the market due to unqualified products.

In accordance with the requirements of the Self-Statement Disclosure and Supervision System of Corporate Standard, the Group's subsidiaries have made public announcements on the "Public Information Service Platform for Corporate Standard" to accept the supervision from the society. During the Reporting Period, the Group had no major quality accidents.

7.2 Maintaining Quality Services

Customers are the foundation for the survival and development of an enterprise. While continuously improving product quality, the Group continues to improve the after-sales service system, strengthens the service of Shanshui Group for customers, and follows up customer service and sales simultaneously, covering all regions. The Group strictly complies with the Constitution of the PRC, the Contract Law of the PRC, the Law of the PRC on the Protection of Consumer Rights and Interests, the Tort Law of the PRC, the Trademark Law of the PRC, the Patent Law of the PRC, the Advertising Law of the PRC, the Anti-Unfair Competition Law of the PRC and other laws and regulations.

Addressing Customers' Complaint

The production subsidiaries of the Group cover ten provinces (regions) including Shandong, Liaoning, Shanxi and Xinjiang, and also municipalities. Each production subsidiary has set up a sales department and customer service department to provide professional sales services according to the types of end customers.

The Group has established a service system for pre-sales consultation, in-sales reception and after-sales return visits. Each of the Group's subsidiaries has established a customer service department with dedicated customer service personnel engaged in pre-sales, in-sales and after-sales services. Customer service personnel actively acquire customers' opinions on product quality, performance, packaging and other aspects through telephone inquiries, questionnaire surveys, on-site visits and symposiums. The Group has established customer files to continuously improve and track the quality of products and services.

In order to standardize the after-sales service, the Group has formulated the Customer Service Management Regulations to standardize the customer complaint handling process and further improve the efficiency of customer complaint handling. After receiving customer complaints, each subsidiary of the Group handles the complaints in strict accordance with the requirements of the quality complaint management process, details of which are as follows:



- ▶ Determine the content of customer complaints and feedback. If it reflects the sales service problem of the salesman and the customer proposes that the sales service personnel violate their work duties, and the sales manager of each subsidiary will organize personnel to verify the complaint. If the complaint is credible, it will be dealt with seriously in accordance with the relevant management system. If the complaint is inconsistent with the facts, the sales service personnel will be ordered to properly explain the situation to the customer; and

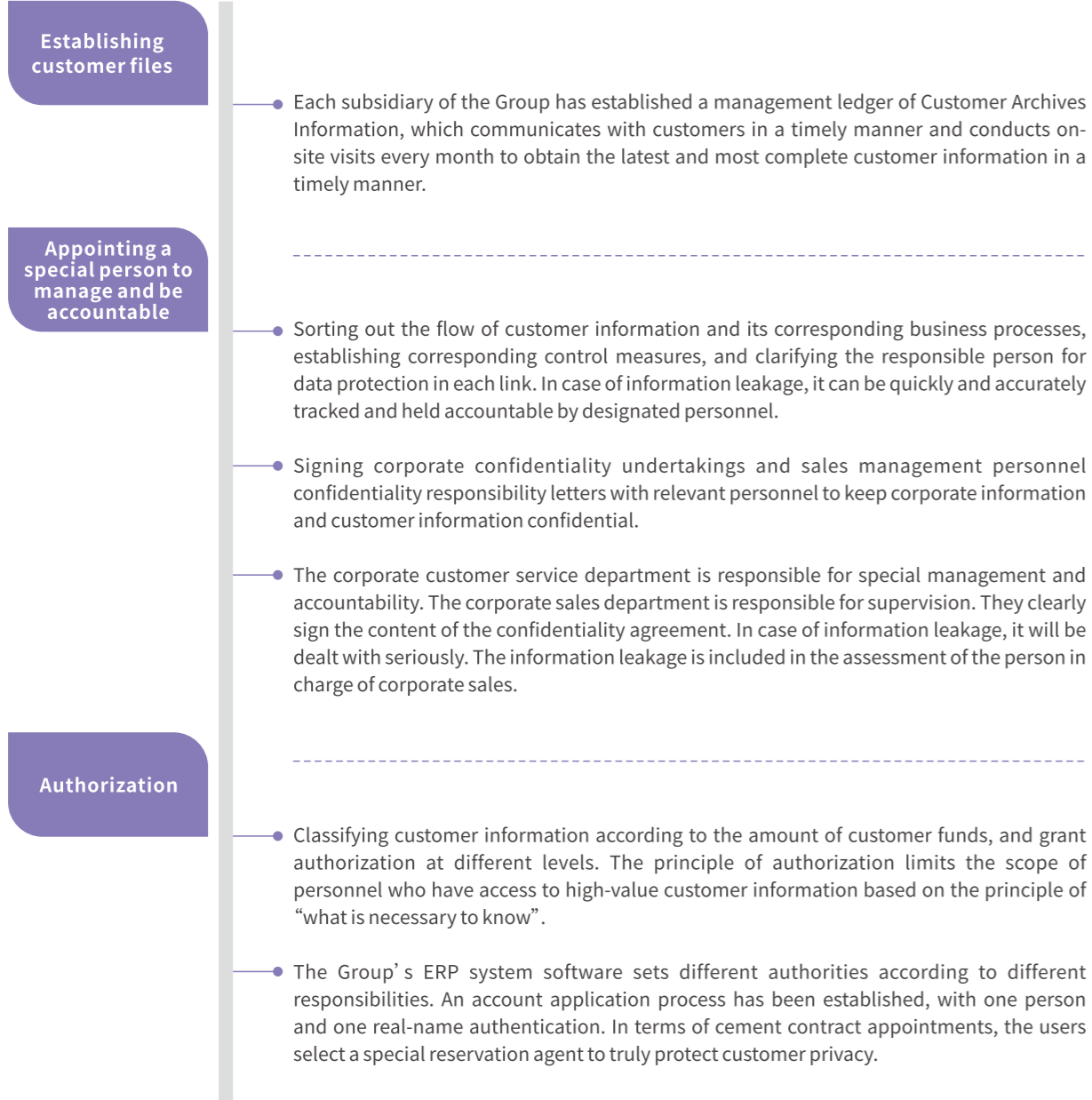


- ▶ If the customer gives feedback on the quality of the product, the salesman responsible for the customer will first call on the site to deal with the problem as soon as possible, and determine the customer's complaint, the type of cement used, the ex-factory time, the ex-factory number, the transportation vehicle and other information, and fill in the Quality Complaint Handling Feedback Form in detail to provide relevant explanations to the customer. If customers disagree with the handling opinions, they will report the complaint to the company's sales department in a timely manner, and the sales department will contact the relevant personnel of the laboratory to conduct on-site handling and on-site sampling.

During the Reporting Period, the Group received a total of 4 complaints, among which 1 complaint was related to the use of products. Through on-site inspection and communication, the relevant company conducted on-site inspections, extracted test samples on-site in order to issue test reports, and instructed the customer to regulate the use of the product, and properly resolved the customer's problem. The remaining three complaints were related to the denial of entry to high-emission vehicles, which were resolved through communication with the customer. The Group has replied and resolved all the complaints received.

Protecting Customer Privacy

The Group always commits to protecting the privacy of both itself and its customers, and is keenly aware of the importance of customer information to business operations. Therefore, all subsidiaries of the Group have formulated a customer privacy protection policy and have adopted the following series of measures to ensure the security and confidentiality of customer information, and are fully committed to safeguarding the privacy of its customers.



Regulating Advertising

The Group maintains and uses trademarks and conducts advertising activities in strict accordance with relevant laws and regulations. Regarding advertising, the Group's operating regions have issued relevant systems in a unified manner, including the approval and implementation of advertising plans, etc., to standardize advertising management. The marketing center in the operating region reviews and approves the advertising plan based on the Group's overall brand operation principles and regional characteristics. The sales department of each subsidiary assigns dedicated personnel to be responsible for implementation, so as to ensure that the advertising campaigns are in line with the brand image as well as effectively meet the requirements of the characteristics of the regional markets.



Protecting Intellectual Property

Maintaining and safeguarding intellectual property rights reflects the responsibility that an enterprise must shoulder to customers, which is also conducive to the healthy development of the industry and further enhances the brand perception of stakeholders. In accordance with the requirements of the Guidelines for the Administration of Intellectual Property Rights of Industrial Enterprises, the Group has established an intellectual property management system and formulated and implemented an intellectual property strategy. The Group has established an intellectual property management organization that is responsible for intellectual property management and supervision of the implementation of the system to ensure that the intellectual property rights of enterprises are implemented.

The Group's intellectual property rights, including company trademarks, are managed by the Group's legal department. At the same time, the legal department is also responsible for filing with government authorities to ensure the proper use of intellectual property rights. All enterprises are required to follow the Group's uniform requirements and obtain authorization for the use of intellectual property rights. In order to enhance employees' understanding of intellectual property rights and legal awareness, the Group's subsidiaries have organized courses on intellectual property rights and related laws in light of the actual situation. By providing employees with specialized training on intellectual property rights from time to time, employees are helped to gain an in-depth understanding of intellectual property laws and build up their awareness of property rights.

In order to safeguard and protect intellectual property rights, maintain the Group's brand image and protect consumers' rights and interests, each operating region conducts a comprehensive monthly visit to cement customers in the region and conducts research and sample testing on products in the market to ensure that no "counterfeit" products enter the market. The Group strengthens the identification, the control of fraud prevention and control measures of all products within the Group. Product delivery notes are marked with the "Shanshui Dongyue" label. Lead seal management is used for cement transportation bulk tank trucks to ensure the consistency of product delivery and receipt. In addition, all subsidiaries of the Group actively carry out anti-counterfeiting activities, actively report to the local government authorities in a timely manner about the counterfeit cement products in the market, and cooperate with them to vigorously investigate and crack down on counterfeit cement products. All subsidiaries also strengthen the monitoring of incidents of infringement of the Group's intellectual property rights, handle litigation matters, and safeguard the basic rights and interests of the Group. Meanwhile, the Group has formulated systems and policies to strictly protect the intellectual property rights of others to avoid economic and reputational losses caused by the infringement of the intellectual property rights of others. During the Reporting Period, counterfeit and fake "Shanshui Dongyue" cement was effectively contained, and the sales environment was further optimized to further enhance consumer confidence and satisfaction.

7.3 Innovation in Product and Service

The Group adheres to the spirit of pragmatism and innovation and is committed to promoting continuous product innovation. At the same time, the Group also adheres to the concept of customer first and always puts customers' needs and satisfaction in the first place, continuously strengthens the sense of service and endeavors to enhance the customer experience, and strives to provide customers with better quality products and services.

Product Innovation

The Group regularly carries out various forms of quality month activities such as special training, skill competitions, tackling problems in technologies, customer seminars and market research, to improve the quality awareness of all employees, steadily improve product quality, and enhance market competitiveness. By carrying out school-enterprise cooperation with Jinan University, Qingdao Agricultural University, Qingdao University of Technology and other professional colleges and universities, the Group has continuously intensified its efforts to tackle the key problems of Marine engineering, sulfate resistance, low magnetic and other special cement technologies. The Employees actively participate in the national cement chemical analysis comparison and the cement inspection comparison activities organized by various provinces and cities to improve their operation level.

During the Reporting Period, the Group continued to develop low-carbon products and certified its products as low-carbon and green building materials products to increase the low-carbon and environmental attributes of the products and their competitiveness in the market. During the Reporting Period, Anqiu Shanshui, Shuozhou Shanshui and Linfen Shanshui developed and certified low-carbon products.



During the Reporting Period, the Group actively organized its employees to participate in skills competitions with the aim of comprehensively testing and enhancing their business capabilities and encouraging them to achieve outstanding results. Below is an excerpt of some of the winning cases:

- Zibo Shuangfeng Shanshui Cement Co., Ltd. was honored with the "Best Contribution Award" at the 40th Anniversary of the National Cement Inspection Comparison (1983-2023).
- Liaocheng Shanshui Cement Co., Ltd. was honored as one of the top ten cement enterprises in Shandong Province.



Shandong Cement Co., Ltd. won the "Menoflex Cup" 2023 "Grand Prize" in the 19th National Inspection Competition of Cement Quality Indicators.

Dedicated Service

During 2023, the market competition intensified, shifting from traditional quality and price competition to service competition. The Group’s enterprises have firmly established the service concept of “Customer First and Reputation First”, continuously strengthened service awareness, improved the added value of products, and enhanced product competitiveness.

During the Reporting Period, the Group continued to strengthen the professional knowledge learning of customer service employees and relevant employees in cement, clinker and concrete to improve their professional quality and improve the business level of customer service. Each corporate customer service department strengthens the pre-sales service work, conducts monthly on-site visits to users, properly connects the corporate production department with customers, coordinates and communicates with the production department in a timely manner on customers’ opinions and suggestions to continuously improve product quality, and strengthens service awareness to improve customer satisfaction. At the same time, the Group has increased its investment in brand building by customizing the company's product brochures to promote bagged cement in the rural market, etc.; distributing quarterly satisfaction survey forms to customers and users and conducting anonymous questionnaire surveys on the service situation, in order to understand the needs of various parties and to further improve the quality of service; and strengthening the promotion of the corporate brand image and the enhancement of the corporate culture by paying regular visits to the customers.

Case Rizhao Shanshui Provides Technical Guidance for High-Speed Widening Projects to Enhance Added Value of Services

Rizhao Shanshui in the Shenhai high-speed widening project was established at the beginning of the project, attentively assisted the project laboratory to find and adjust the equipment with high-quality service and solid professional knowledge, strengthened the customer's trust in the quality of our products, won the customer a high degree of recognition, and has laid a solid foundation for the subsequent cooperation between Rizhao Shanshui and the Shenhai high-speed project.



7.4 Establishing Win-Win Procurement

The Group takes achieving continuous win-win development with partners as the objective of supply chain management. The Group always upholds the basic principles of “openness, fairness and impartiality”, standardizes supply chain management and controls the environmental and social risks in the supply chain with reference to the Group’s five basic regulations, namely the Management Measures for Monitoring and Control of Procurement and Supply of Shanshui Group, the Coal Procurement and Supply Management Measures of Shanshui Group, the Management Measures for Centralized Procurement of Materials of Shanshui Group, the Waste and Old Materials Disposal Management Measures of Shanshui Group, and the Supplier Management Measures of Shanshui Group (Edited). The Group has established a material supplier management and control system with a three-level structure, consisting of the headquarter, operating regions and subsidiaries. The Group strives to implement centralized procurement and to supply general, shared, large quantity and resource-based materials, and has established a centralized procurement platform.

During the Reporting Period, the Group had a total of 3,670 suppliers, all of which were managed in accordance with the Group’s procurement and supply management measures. It mainly includes the following types of suppliers: raw materials and fuels, equipment and spare parts, consumable materials, engineering, and outsourcing construction, transportation as well as labor.

During the Reporting Period, the breakdown of suppliers by geographical region was set out in the table below.



Region	umber	Region	umber
Eastern China	1,972	Northwest China	138
Northern China	754	Central China	164
Northeast China	547	Southern China	37
Southwest China	58	Total	3,670



Promoting Responsible Supply Chain

The Group is committed to building a safe and green sustainable supply chain. The Group identifies and manages potential environmental and social risks throughout the supply chain management process. The Group sets strict supplier access standards, implements supplier classification management, and incorporates supplier assessment, review and elimination into the whole process of supply chain management.



Supplier Access

- ▶ When selecting suppliers, the Group fully considers the following factors: supplier's business qualification, business performance, supply capacity, product quality, product price and social reputation. Under the same conditions, the Group gives priority to enterprises with brand advantages, quality advantages and social responsibility.
- ▶ During the Reporting Period, the Group continued to improve the supplier management system, and transferred the supplier access qualification review to online review. The Group could quickly and accurately obtain the true information of suppliers in terms of reputation, environmental protection and safety penalties by searching from TianYanCha. The Group could also conduct background investigation and preliminary screening of suppliers in terms of environmental and social risks. The process applies to all suppliers.
- ▶ The Group strictly reviews the qualification of suppliers and resolutely keeps the red line and bottom line. For example, for suppliers that handle chemicals, the Group will strictly review whether they are qualified when handling waste oil, and clearly stipulate the disposal requirements in the contract. For the construction unit entering the site, it is required to sign a safety agreement and specify the safety requirements in the bidding to reduce the possible social risks.
- ▶ In addition, the Group has formulated the Administrative Measures for the Application of Materials (Trial) to provide channels for enterprises with technical potential to help promote new technology products, achieve a win-win situation and fulfill social responsibilities.



Supplier Classification Management

- ▶ The Group classifies and ranks suppliers and gradually reviews the overall status of the supply chain. Suppliers are assessed in five categories according to the assessment criteria of each type of subject, namely raw materials and fuels, equipment, spare parts and consumable materials, engineering and outsourcing construction, transportation and labor service suppliers. The assessment criteria are determined according to the characteristics of the classification of suppliers.



Supplier Assessment and Review

- ▶ In order to ensure that suppliers can always meet the entry standards and continuously optimize the structure of the supplier database, the Group adopts a mechanism of quantitative assessment and the superior selection and the inferior elimination. The Group adopts various forms of assessment of suppliers.
- ▶ The Group continuously assesses the risks of the suppliers through inquiry of information on environmental and social aspects from TianYanCha in time. For key suppliers with cooperation intentions and significant suppliers, the Group will deepen its assessment through on-site investigation, visits and communications to avoid environmental and social risks.
- ▶ In addition, all suppliers are subject to quantitative assessment through the supplier management system. Based on the system's real-time recording function, the Group can evaluate suppliers in a timely manner in the event of major safety and environmental accidents. Each subsidiary of the Group conducts a unified assessment of suppliers at the end of the year to ensure that suppliers can provide better service to the Group.



Suppliers' Classification Grades Adjustment

- ▶ Based on the assessment results, the Group adjusts the grading of suppliers, adjusts the grading for excellent performance, and considers increasing the share of cooperation with suppliers. On the other hand, the Group will reverse the requirements for improvement of unqualified suppliers or consider canceling their business cooperation qualifications and blacklisting suppliers.



Green Procurement

- ▶ The Group takes environmental protection as the core concept. On the one hand, it continues to purchase energy-saving and consumption-reducing products, strictly monitors environmental pollution, and does not prioritize price over environmental protection. Most of the products are purchased in the vicinity, continuing to achieve energy conservation and environmental protection at the logistics level. On the other hand, based on the characteristics of the cement industry, it actively consumes solid waste materials from other industries, such as fly ash and desulfurized gypsum, to achieve a circular economy at the social level.



Promoting Transparent Procurement

The Group has long been committed to transparent procurement and has set up an online procurement platform, through which suppliers can participate in tendering and bidding fairly through self-registration. The Group clearly stipulates in the Management Measures for Procurement and Supply that suppliers on the specialized online procurement platform who meet the bidding requirements can participate in the bidding. Qualified bidders shall not be restricted or excluded from participating in the bidding, or be illegally interfered with the bidding activities in any way. Employees participating in the bidding must strictly abide by the business code and professional ethics. During the bidding process, all units and personnel participating in the bidding shall comply with relevant national laws, regulations and the Group's relevant regulations. They shall adhere to the principles, be honest and self-disciplined, and maintain confidentiality. They are also required to sign a self-regulation letter. The Group adheres to openness and transparency in the procurement process and provides contact information for supervision and reporting to accept supervision from the society.





08

**Friendly Community and
Achieving Win-Win**

8.1 Participating in Community Welfare

The Group has always been committed to fulfilling its corporate social responsibility and obligations as a corporate citizen. In accordance with the Welfare Donations Law of the PRC, the Company Law of the PRC and other relevant laws and regulations, the Group has formulated the Management Measures for External Donation and Sponsorship of Shanshui Group (Provisional) to further standardize the Group's external donation process, donation scale, donation scope, etc., and strengthen the Group's management of donations and sponsorship matters, so as to comprehensively and effectively promote and advocate the Group's brand and corporate image.

The Group implements unified management on the external donation and sponsorship of subsidiaries. The scope of external donations and sponsorships of the Group includes donations and sponsorships to disaster-stricken areas, designated poverty alleviation areas, designated assistance areas, disadvantaged social groups, and social welfare undertakings such as science, education, culture, health, environmental protection, energy conservation and emission reduction. During the Reporting Period, the Group participated in various charitable and other donation activities, with a total amount of charitable and other donations amounting to RMB 5.66 million and carried out community charity activities to show love to people in need in society. The Group's subsidiaries organized more than 200 volunteer services for nearly 2,000 hours.

On 27 March 2023, Kazuo Company donated more than 300 pounds of clothing to the poor mountainous area



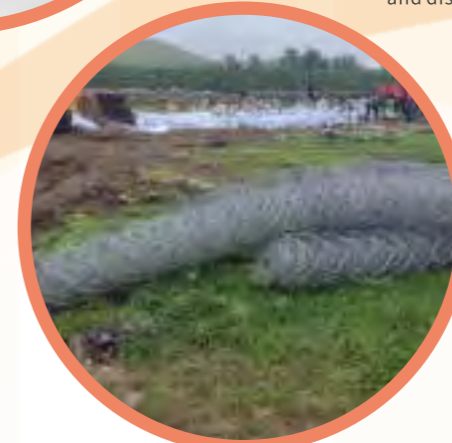
On 8 January 2023, Kangda Cement sent rice, peanut oil, flour, and other necessities and RMB 2,000 in consolation money to the elderly in poor households.



On 12 January 2023, Binzhou Shanshui visited and consoled 20 households of old party members in its jurisdiction, with living materials of rice, noodles, oil and milk amounting to about RMB 5,000.



On 24 May 2023, Shule Shanshui donated materials and sports supplies worth RMB 3,163 to Shule County Recreational School, taking practical actions to promote the vocational development of people with disabilities.



On 20 July 2023, Zhagi Shanshui organized a forklift and 20 workers to help villagers in Yilit repair the riverbank for flood control.



On 16 September 2023, young volunteers from the Group's Youth League Committee accompanied the children in difficulty (brother and sister) who were helped by the Group's donation of the "Hope Hut" to visit the new museum of Science and Technology in Shandong Province, to build the "Protecting Children's Hearts" brand of voluntary service.



On 1 June 2023, Yingjisha Shanshui visited students in difficulty and sent them schoolbags, stationery and other holiday gifts totaling RMB 2,700.



On 26 August 2023, Pingyin Shanshui participated in the Golden Autumn Scholarship Activity and distributed 118,000 RMB in scholarships

SEHK's ESG Reporting Guide Index

Mandatory Disclosure Requirements	Description	Relevant Chapter (s) in the Report or Other Explanation
Governance Structure	A statement from the board containing the following elements: (i) a disclosure of the board's oversight of ESG issues; (ii) the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses); and (iii) how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.	4 and 5
Reporting Principles	A description of, or an explanation on, the application of the reporting principles in the preparation of the ESG report.	1
Reporting Boundary	A narrative explaining the reporting boundaries of the ESG report and describing the process used to identify which entities or operations are included in the ESG report. If there is a change in the scope, the issuer should explain the difference and reason for the change.	1
Mandatory Disclosure Requirements	Description	Relevant Chapter (s) in the Report or Other Explanation
A. Environmental		
Aspect A1: Emission		
General Disclosure	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	5.1
KPI A1.1	The types of emissions and respective emissions data.	5.1 and 5.2
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	5.6
KPI A1.3	Total hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	N/A ¹⁶
KPI A1.4	Total non-hazardous waste produced (in tons) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	N/A ¹⁷
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	5.2
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	5.2 and 5.3

Aspect A3: The Environment and Natural Resources		
General Disclosure	Description	Relevant Chapter (s) in the Report or Other Explanation
	Policies on the efficient use of resources, including energy, water and other raw materials.	5.3
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	5.3
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	5.3
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	5.3
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	5.3
KPI A2.5	KPI A2.5 Total packaging material used for finished products (in tons) and, if applicable, with reference to per unit produced.	5.3
Aspect A3: The Environment and Natural Resources		
General Disclosure	Description	Relevant Chapter (s) in the Report or Other Explanation
	Policies on minimising the issuer's significant impact on the environment and natural resources.	5.4
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	5.4
Aspect A4: Climate Change		
General Disclosure	Description	Relevant Chapter (s) in the Report or Other Explanation
	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	5.5
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	5.5
Mandatory Disclosure Requirements	Description	Relevant Chapter (s) in the Report or Other Explanation
B. Social		
Aspect B1: Employment		
General Disclosure	Description	Relevant Chapter (s) in the Report or Other Explanation
	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	6.2
KPI B1.1	Total workforce by gender, employment type (for example, full- or parttime), age group and geographical region.	6.2
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	6.2

¹⁶The hazardous waste generated in the production process of the Group is mainly waste engine oil, which is recycled, so this indicator is not applicable.

¹⁷The non-hazardous waste generated in the production process of the Group is recycled, so this indicator is not applicable.

Aspect B2: Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	6.1
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	6.1
KPI B2.2	Lost days due to work injury.	6.1
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	6.1
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	6.3
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	6.3
KPI B3.2	The average training hours completed per employee by gender and employee category.	6.3
Aspect B4: Labour Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	6.2
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	6.2
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	6.2
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	7.4
KPI B5.1	Number of suppliers by geographical region.	7.4
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	7.4
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	7.4
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	7.4

Aspect B6: Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	7.1 and 7.2
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	7.1
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	7.2
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	7.2
KPI B6.4	Description of quality assurance process and recall procedures.	7.1
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	7.2
Aspect B7: Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	4.5
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	4.5
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	4.5
KPI B7.3	Description of anti-corruption training provided to directors and staff.	4.5
Aspect B8: Community		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	8.1
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	8.1
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	8.1

Definitions

In the Report, unless otherwise stated, the following words and expressions have the following meanings:

Eastern Shandong Operating Region	For	Business located at the Eastern Shandong Province, including Weifang, Qingdao, Yantai, Weihai, etc.
Western Shandong Operating Region	For	Business located at the Central and Western Shandong Province, including Zibo, Jinan and Hebei Province and Tianjin, etc.
Southern Shandong Operating Region	For	Business located at the Southern Shandong Province, including Zaozhuang, Jining, Heze and Henan Province, etc.
Northeast China Operating Region	For	Business located at Liaoning Province, the Eastern Inner Mongolia, Jilin Province etc.
Shanxi Operating Region	For	Business located at Shanxi Province, Shaanxi Province etc.
Xinjiang Operating Region	For	Business located at Kashi, Xinjiang
Linqu Shanshui	For	Linqu Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region
Anqiu Shanshui	For	Anqiu Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Liaocheng Shanshui	For	Liaocheng Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Zibo Shanshui	For	Zibo Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Pingyin Shanshui	For	Pingyin Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Zaozhuang Chuangxin	For	Zaozhuang Chuangxin Shanshui Cement Co., Ltd., belonging to Southern Shandong Operating Region
Bohai Cement	For	Bohai Cement (Huludao) Co., Ltd., belonging to Northeast China Operating Region
Zhaqi Shanshui	For	Jalaid Qi Shanshui Cement Co., Ltd., belonging to Northeast China Operating Region
Dalian Shanshui	For	Dalian Shanshui Cement Co., Ltd., belonging to Northeast China Operating Region
Shenyang Shanshui	For	Shenyang Shanshui Gongyuan Cement Co., Ltd., belonging to Northeast China Operating Region
Shanshui Heju	For	Jincheng Shanshui Heju Cement Co., Ltd., belonging to Shanxi Operating Region
Jincheng Shanshui	For	Jincheng Shanshui Cement Co., Ltd., belonging to Shanxi Operating Region
Wuxiang Shanshui	For	Wuxiang Shanshui Cement Co., Ltd., belonging to Shanxi Operating Region
Shuozhou Shanshui	For	Shuozhou Shanshui New Era Cement Co., Ltd., belonging to Shanxi Operating Region
Yingjisha Shanshui	For	Yingjisha Shanshui Cement Co., Ltd., belonging to Xinjiang Operating Region
Lvliang Shanshui	For	Lvliang Shanshui Cement Co., Ltd., belonging to Shanxi Operating Region.
Weishan Shanshui	For	Weishan Shanshui Cement Co., Ltd., belonging to Southern Shandong Operating Region.
Taiyuan Shanshui	For	Taiyuan Shanshui Cement Co., Ltd., belonging to Shanxi Operating Region.
Yishui Shanshui	For	Yishui Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region.
Kazuo Company	For	Kalaqin Left Congyuanhao Cements Co.,Ltd. belonging to Northeast China Operating Region.

Liaoning Gongyuan	For	Liaoning Shanshui Gongyuan Cement Co., Ltd., belonging to Northeast China Operating Region.
Kangda Cement	For	Kangda (Shandong) Cement Co., Ltd., belonging to Eastern Shandong Operating Region.
Liaoyang Qianshan	For	Liaoyang Qianshan Cement Co., Ltd., belonging to Northeast China Operating Region.
Linfen Shanshui	For	Linfen Shanshui Cement Co., Ltd., belonging to Shanxi Operating Region.
Rizhao Shanshui	For	Shandong Shanshui Cement Group Co., LTD. Rizhao Branch, belonging to Eastern Shandong Operating Region.
Shule Shanshui	For	Shule Shanshui Cement Co., Ltd., belonging to Xinjiang Operating Region
Binzhou Shanshui	For	Binzhou Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Leling Shanshui	For	Leling Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Zibo Shuangfeng	For	Shenyang Shuangfeng Cement Co., Ltd., belonging to Western Shandong Operating Region
Yantai Shanshui	For	Yantai Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region
Panjin Shanshui	For	Panjin Shanshui Cement Co., Ltd., belonging to Northeast China Operating Region
Shanshui Heavy Industries	For	Shandong Shanshui Heavy Industries Co., Ltd.
Gucheng Shanshui	For	Gucheng Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Wulanhao Shanshui	For	Wulanhao Shanshui Cement Co., Ltd., belonging to Northeast China Operating Region
Chaoyang Shanshui	For	Chaoyang Shanshui Dongxin Cement Co., Ltd., belonging to Northeast China Operating Region
Aqi Shanshui	For	Alu Kerqin Qi Shanshui Cement Co., Ltd., belonging to Northeast China Operating Region
Chifeng Yuanhang	For	Chifeng Shanshui Yuanhang Cement Company Limited, belonging to Northeast China Operating Region
Hequ Zhongtianlong	For	Hequ Zhongtianlong Cement Co., Ltd, belonging to Shanxi Operating Region
Baishan Shanshui	For	Baishan Shanshui Cement Co., Ltd., belonging to Northeast China Operating Region
Changle Shanshui	For	Changle Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region
Weifang Shanshui	For	Weifang Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region
Weihai Shanshui	For	Weihai Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region
Kenli Shanshui	For	Kenli Shanshui Cement Co., Ltd., belonging to Western Shandong Operating Region
Xinghao Cement	For	Yantai Xinghao Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region
Weifang Ningshi	For	Weifang Ningshi Shanshui Cement Co., Ltd., belonging to Eastern Shandong Operating Region
Clinker	For	A semi-finished product in the cement production process
Commercial concrete	For	Commercial concrete, also named as ready mixed concrete
PRC or China	For	The People' s Republic of China
Hong Kong	For	Hong Kong Special Administrative Region of the PRC
"14th Five-Year Plan"	For	"14th Five-Year Plan" with the full name of the Outline of the 14th Five-Year Plan for National Economic and Social Development of the People' s Republic of China