

Stock code: 000877

# 2023 Environmental, Social and Governance (ESG) Report

XINJIANG TIANSHAN CEMENT CO., LTD.

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### **Creating Low-carbon Sustainable Adva**

Climate Action Development of Circular Economy Innovative Low-carbon Products Biodiversity Protection Emission Compliance Management

# 03

### Strengthening the High-quality Talent

Diversity and Inclusion Employee Salary and Welfare Benefits Employee Training and Development Occupational Health and Safety

# 04

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Modernized Governance Responsible Procurement Robust Customer Relationships Responsible Business Operations

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### **About the Report**

The Report is the third environmental, social and governance report (hereinafter referred to as the "ESG Report" or the "Report") of Xinjiang Tianshan Cement Co., Ltd. (hereinafter referred to as "Tianshan Company", the "Company" or "we"). The Report provides an update on the Company's sustainability efforts in 2023. In the Report, we hope to deliver the Company's philosophy, initiatives and performance on environmental, social and governance issues to enhance understanding and communication among our stakeholders.

## Scope of the Report

Unless otherwise specified, the Report discloses information and data covering the Company's environmental, social and governance practices and achievements for the period from January 1, 2023 to December 31, 2023 (hereinafter referred to as "the year" or the "reporting period"). The Report defines the scope of the organization based on the principle of importance. Unless otherwise stated, the materials covered in the Report are from Tianshan Company and all its subsidiaries.

### Principles and Basis –

In the process of developing the Report, we mainly refer to the "Guidelines for Self-Regulation of Listed Companies on Shenzhen Stock Exchange No. 1 -- Standardized Operation of Listed Companies on the Main Board", "Reference of ESG Indicators System for ESG Reports of Listed Companies Controlled by Central Enterprises", the

"GRI Sustainability Reporting Standards" (GRI Standards) of the Global Sustainability Standards Board (GSSB) and the United Nations Sustainable Development Goals (SDGs) for 2030.

### Data Description -

The Report is actual feedback on Tianshan Company's economic, environmental and social responsibility practices, with all the information and data derived from the Company's official documents, statistical reports or the summary and statistics of environmental, social and governance practices of its subsidiaries. Unless otherwise specified, the monetary amounts mentioned in this Report are measured in RMB.

# Review and Approval \_\_\_\_\_

Creating Low-carbon Sustainable Advantages

The Report was confirmed by the Management and the Board's ESG Committee and approved by the Board of the Company on March 25, 2024.

### Publication of the Report

The Report is published in English and Chinese respectively. In case of discrepancies between the Chinese version and the English translation, the Chinese version shall prevail. The Report is issued in both hard copy and electronic form, and the electronic version of the Report is available on the official website of Xinjiang Tianshan Cement Co., Ltd. (http://www.sinoma-tianshan.cn/), Shenzhen Stock Exchange (http://www.szse.cn) and Cninfo (www.cninfo.com.cn).

### Contact Information \_\_\_\_\_

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# Glossary

In the Report, unless the context otherwise specifies, the following terms shall hereinafter be interpreted as follows:

No.	Term	Full name
1	CNBMG	China National Building Material Group Co., Ltd.
2	Sinoma	China National Building Material Company Limited
3	Tianshan Company, the Company, we	Xinjiang Tianshan Cement Co., Ltd.
4	Company Charter	Charter of Xinjiang Tianshan Cement Co., Ltd
5	CUCC	China United Cement Corporation
6	Zhonglian Tongli	Henan Zhonglian Tongli Material Co., Ltd.
7	South Cement	South Cement Co., Ltd.
8	ZhejiangCement	Zhejiang South Cement Co., Ltd.
9	Jiangxi Cement	Jiangxi South Cement Co., Ltd.
10	Zhongnan Cement	Hunan South Cement Co., Ltd.
11	Southwest Cement	Southwest Cement Co., Ltd.
12	Yunnan Cement	Yunnan Tianshan Cement Co., Ltd.
13	Guizhou Cement	Guizhou Tianshan Cement Co., Ltd.
14	Jiahua Special Cement	Jiahua Special Cement Co., Ltd.
15	Xinjiang Cement	Xinjiang Tianshan Cement Ltd.
16	Sinoma Cement	Sinoma Cement Ltd.

17	Sanshi Material
18	Huanan Material
19	Huadong Material
20	CUCC An County
21	CUCC Chuzhou
22	CUCC Jiyuan
23	CUCCLinyi
24	CUCC South Shandong
25	CUCC Nanjing
26	CUCC Concrete Nanjing
27	CUCC Nanyang
28	CUCC Qingzhou
29	CUCC Tengzhou
30	CUCC Ulanqab
31	Huanghe Tongli
32	Shawan Tianshan
33	CUCC Luoyang

Zhejiang Sanshi South New Material Co., Ltd.

- South New Material Technology Co., Ltd.
- Huadong Materials Co., Ltd.
- China United Cement An County Corporation
- China United Cement Chuzhou Corporation
- China United Cement Jiyuan Corporation
- China United Cement Linyi Corporation
- China United Cement South Shandong Corporation
- China United Cement Nanjing Corporation
- China United Concrete Nanjing Co., Ltd.
- China United Cement Nanyang Corporation
- China United Cement Qingzhou Corporation
- China United Cement Tengzhou Corporation
- China United Cement Ulanqab Corporation
- Huanghe Tongli Cement Co., Ltd.
- Shawan Tianshan Cement Co., Ltd.
- China United Cement Luoyang Corporation

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34	Yulong Tongli	Zhumadian Yulong Tongli Cement Co., Ltd.
35	Sinoma Anhui	Sinoma Anhui Cement Co., Ltd.
36	Changshan South	Changshan South Cement Co., Ltd.
37	Shanya South	Hangzhou Shanya South Cement Co., Ltd.
38	Huaikan South	Huzhou Huaikan South Cement Co., Ltd.
39	Jiande South	Jiande South Cement Co., Ltd.
40	NanchengSouth	Jiangxi Nancheng South Cement Co., Ltd.
41	Jiangshan South	Jiangshan South Cement Co., Ltd.
42	SanmingSouth	Fujian Sanming South Cement Co., Ltd.
43	Shaoyang South	Shaoyang South Cement Co., Ltd.
44	Zhuge South	Lanxi Zhuge South Cement Co., Ltd.
45	Hunan Linli South New Material	Hunan Linli South New Material Technology Co., Ltd.
46	Suzhou Tianshan Cement	Suzhou Tianshan Cement Co., Ltd.
47	Ili Tianshan	Ili Tianshan Cement Co., Ltd.
48	Erlangshan Cement	Sichuan Erlangshan Labahe Cement Co., Ltd.
49	Old Town Southwest	Lijiang Old Town Southwest Cement Co., Ltd.
50	Yiliang Southwest	Lijiang Yiliang Southwest Cement Co., Ltd.
51	Sichuan Desheng Cement	Sichuan Desheng Group Cement Co., Ltd.
52	Fumin Jinrui	Fumin Jinrui Cement Building Materials Co., Ltd.
53	Sichuan Golden Cement	Sichuan Golden Cement Co., Ltd.
54	Yunnan Xingjian Cement	Yunnan Xingjian Cement Co., Ltd.
55	Zunyi Saide	Zunyi Saide Cement Co., Ltd.

56	CUCC Baoding
57	Taojiang South
58	Zambia Company
59	Nigeria Company
60	Yunnan Far East Yaxin
61	Changde South
62	Pingxiang New Era
63	CUCC Yinan
64	Lisen Group
65	CUCC Anyang
66	China Building Materials Academy
67	Deqing South
68	Jinshan South
69	Sinoma Pingxiang
70	Sinoma Luoding
71	WangqingNorth
72	CUCC Zaozhuang
73	CUCC Pingyi
74	Huzhou South Mining
75	Ruoqiang Tianshan Cement
76	SZSE
77	The year, the reporting period

- China United Cement Baoding Corporation
- Hunan Taojiang South Cement Co., Ltd.
- China National Building Material Zambia Industrial Park
- Sinoma Nigeria Company Ltd
- Yunnan Far East Yaxin Cement Co., Ltd.
- Hunan Changde South Cement Co., Ltd.
- Pingxiang New Era Concrete Co., Ltd.
- China United Cement Yinan Corporation
- Sichuan Lisen Building Materials Group Co., Ltd.
- China United Cement Anyang Corporation
- China Building Materials Academy Co., Ltd.
- Deqing South Cement Co., Ltd.
- Shanghai Jinshan South Cement Co., Ltd.
- Sinoma Pingxiang Cement Co., Ltd.
- Sinoma Luoding Cement Co., Ltd.
- Wangqing North Cement Co., Ltd.
- China United Cement Zaozhuang Corporation
- China United Cement Pingyi Corporation
- Huzhou South Mining Co., Ltd.
- Ruoqiang Tianshan Cement Co., Ltd.
- Shenzhen Stock Exchange
- January 1, 2023 to December 31, 2023

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**Management's Message** 

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### **Management's Message**

Buffeted by a sluggish global economy and complex macro environment, the building materials industry encountered myriad challenges. The year also proved to be exceptionally difficult for Tianshan Company. Affected by weak social expectations, slow investment growth and profound adjustments in the real estate sector, we were faced with acute supply-demand contradictions, and the industry experienced an unprecedented impact. However, with the joint efforts of all employees and continuous enhancement of excellence in operation, refinement in management and robustness in organization, we reduced the cost of our commercial concrete business to a record low, achieved a significant effect of professional commercial concrete and aggregates management, formed a good synergy of integrated industrial-chain development and implemented an upgraded digitalization plan. We have had a strong development resilience.

Forge ahead with greater resolve to implement the sustainable development strategy. By

focusing on "creating low-carbon sustainable advantages", "strengthening the high-quality talent base" and "delivering win-win cooperation benefits", we identified the strategic objectives across various stages and key issues, and specified major actions, responsible departments and performance assessment, in an effort to form a cross-organizational and cross-sectoral synergy for sustainable development. To implement our sustainable development strategy, we formulated and released 10 ESG policy statements. We made firm commitments to biodiversity conservation, sustainable supply chain management, occupational health and safety and business ethics, and shared our ESG governance, concepts and practices with both upstream and downstream industrial chains.

Pursue excellence to become an innovative world-class enterprise. Adhering to the mission of "materials create a better world", we are dedicated to researching and developing the highmagnesium and low-heat cement tailored for Xinjiang' shigh cold and high-altitude hydraulic projects. The comprehensive power consumption of our first-class clinker production line demonstrated a domestic leading level with a number of indicators meeting national primary energy efficiency standards. Moreover, we strived to promote fuel substitution, and capture, store and use  $CO_2$  in a well-planned way.

With scaled-up application of new energy technologies such as photovoltaic systems, wind power and energy storage solutions, we endeavored to push forward raw materials substitution, accelerated R&D and application of low-carbon clinker technologies, leading the industry in the lowcarbon transition. In the year, 10 of our subsidiaries obtained 12 low-carbon product certifications. We now have 122 national green factories (including national green demonstration factory of readymixed concrete) and 98 provincial green mines. All these achievements have underscored our dedicated efforts to spearhead and advocate for the building materials industry' s transition to sustainability.

Fulfill responsibilities to ensure the health and safety of our employees. Our sustainable development hinges on the health and safety of all employees. Their well-being is our top priority. In the year, we identified, assessed and managed potential human rights risks. We also set up measurable health and safety objectives, striving for zero workplace fatalities and zero new cases of occupational diseases. Additionally, we reinforced our defense lines and shouldered corresponding responsibilities to safeguard the health and safety of our employees, suppliers and contractors.

Looking ahead, we will continue to pursue sustainable development and foster consensus around it. We will strengthen both domestic and overseas cooperation for win-win outcomes, promote lowcarbon technological innovation, and join hands with all employees, customers, shareholders and partners to make greater contributions toward a better planet and society.

Appendix

# **Sustainable Development Strategy**

On the road to becoming a world-class enterprise, sustainable development is indispensable. In 2023, the Company stepped up efforts in sustainable development practices. A sustainable development strategy model featuring Tianshan characteristics and a sound ESG governance framework have been established, which helps the Company remain connected with stakeholders. With all of these efforts, the Company strives to become a first-class enterprise that leads the world in sustainable development.

Overview of the Company

Automa Stat

- Sustainable Development Strategy Model
- ESG Governance Structure
- ESG Performance Highlights
- ESG Awards and Recognitions
- Stakeholder Engagement

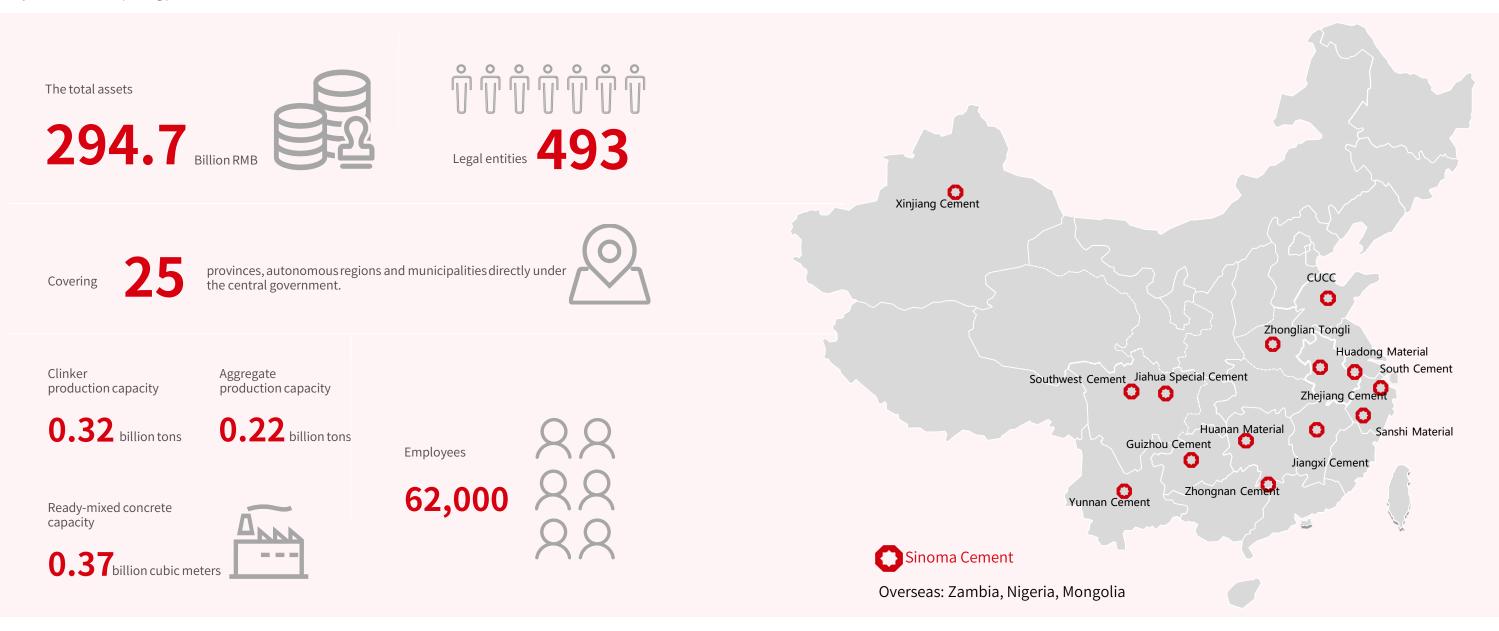


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## **Overview of the Company**

Founded in November 1998 and listed on the Shenzhen Stock Exchange (SZSE) in 1999 (stock code: 000877), Tianshan Company is the core enterprise in infrastructure materials of China National Building Material Group Co., Ltd. (CNBMG). The scope of business covers manufacturing and sales of cement, clinker, ready-mixed concrete and aggregates.

By the end of the reporting period:



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# Sustainable Development Strategy Model

Adhering to the concept of "excellence in operation. refinement in management and robustness in organization", the Company continuously improves the quality of operation and management, so as to prevent business risks and promote sustained improvement in economic efficiency, comprehensive competitiveness, sustainable development capability and industry influence.

Guided by the mission of "materials create a better world" and the "excellence in operation, refinement in management and robustness in organization" concept, Tianshan Company formed a sustainable development strategy system in the year based on development needs and external market conditions. The system has three focuses: creating low-carbon sustainable advantages, strengthening the highquality talent base, and delivering win-win cooperation benefits. By identifying 13 concerned issues with 72 strategic actions, the Company aims to

join hands with the industry partners to create a sustainable industry ecosystem, support the country's "dual-carbon" goals, and build an eco-friendly community.

In order to effectively implement the sustainable development strategy, the Board's Environmental, Social and Governance Committee (ESG Committee), in collaboration with all departments, has improved the supporting and guarantee mechanism, and formulated and published 10 ESG policy statements. With these documents, the Company has specified the strategic actions, work objectives, key initiatives and performance assessment under the 13 concerned issues, and clarified the responsible departments. The Company has also optimized the digital tools for realtime tracking, assessment and management of the progress of various targets and indicators, so as to ensure that the sustainable development strategy falls into place.



Strategic planning of Tianshan Company's sustainable development



ating low-carbon inable advantages	St high-	reng qua
Climate action		Dive
Circular economy		incl
Low-carbon products		Emp rem ben
Biodiversity		Emp
Emission		and
management		Occ hea and

#### Creating low-carbon sustainable advantages

reduce ecological impacts.

#### Strengthening the high-quality talent base

• The focus of "strengthening the high-quality talent base" aims to promote the common improve employees' well-being and sense of belonging.

#### Delivering win-win cooperation benefits

development management, so as to fulfill corporate social responsibilities.



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### **ESG Governance Structure**

To better practice ESG concepts and strategies and improve the Company's competitiveness in sustainable development, the Company has established a sound "governance-management-execution" ESG governance structure, formulated work rules, clarified job duties and formed a long-term ESG work mechanism to further promote the win-win development with stakeholders, achieve the mid- and long-term strategic goals of the Company and promote sustainable development.

Tianshan Company has formulated and implemented the "Rules of the ESG Committee of the Board" and "Management Rules for the ESG Working Group", which defines the Company' s ESG governance structure and promotes the implementation of ESG management issues.

The Board:

The Board is the highest responsible body for the management and public disclosure of the Company's ESG issues, and reviews and approves the Company's ESG strategies and objectives as well as major issues relating to social responsibilities.

#### ESG Committee:

The Board has set up an Environmental, Social and Governance (ESG) Committee (hereinafter referred to as "ESG Committee"), which comprises three directors: Liu Yan, Zhao Xinjun, and Kong Xiangzhong, and the Chairman Liu Yan acts as the head of the ESG Committee. The ESG Committee is mainly responsible for formulating the Company's ESG management policies, objectives, strategies and framework, identifying ESG development trends and assessing ESG risks and opportunities faced by the Company, and supervising and guiding the ESG Working Group.

- Review the Company's ESG and climate change-related policies and strategies to ensure that they comply with laws, regulations and standards
  - Review the Company's ESG and climate change-related management and internal supervision system and make recommendations to the Board on its appropriateness and effectiveness
  - Assess and sort out the ESG and climate change-related risks and opportunities of the Company and make recommendations to the Board
  - Review and supervise the goals and implementation of the Company's ESG and climate change-related work, assess the work and make recommendations to the Board
  - Assess how the Company communicates with stakeholders on ESG matters and ensure that appropriate communication policies and channels are in place to effectively engage the Company's relationships with stakeholders
  - Other job duties delegated by the Company's Board

#### ESG Working Group:

The ESG Working Group as the main coordinating and executive body is authorized by the ESG Committee to assist the ESG Committee in guiding and supervising the governance function of the Company in implementing ESG issues The ESG Working Group is mainly responsible for formulating ESG-related policies and action plans in line with the Company's strategy and ESG objectives; managing ESG-related risks and issues in Company's daily operations; communicating with the Company's subsidiaries and coordinating and promoting the implementation of ESG-related issues; and collecting, collating and compiling the annual ESG report and other ESG-related issues.

- Committee for review and approval
- related issues)



• Organize, coordinate and supervise the implementation and execution of ESG and climate change-related work by the subsidiaries of the Company

• Organize and carry out the ESG work of the Company in accordance with the overall ESG and climate change-related management goals, strategies and guidelines approved by the ESG Committee, formulate relevant systems and processes and report to the ESG

Report regularly to the ESG Committee on ESG and climate change-related management (including but not limited to assessment, ranking and management of significant ESG-

Communicate with stakeholders on ESG and climate change-related matters and present feedback concerning important ESG and climate change-related matters or the Company's business to the ESG Committee, management or relevant departments • Other duties and responsibilities delegated by the Board or the ESG Committee

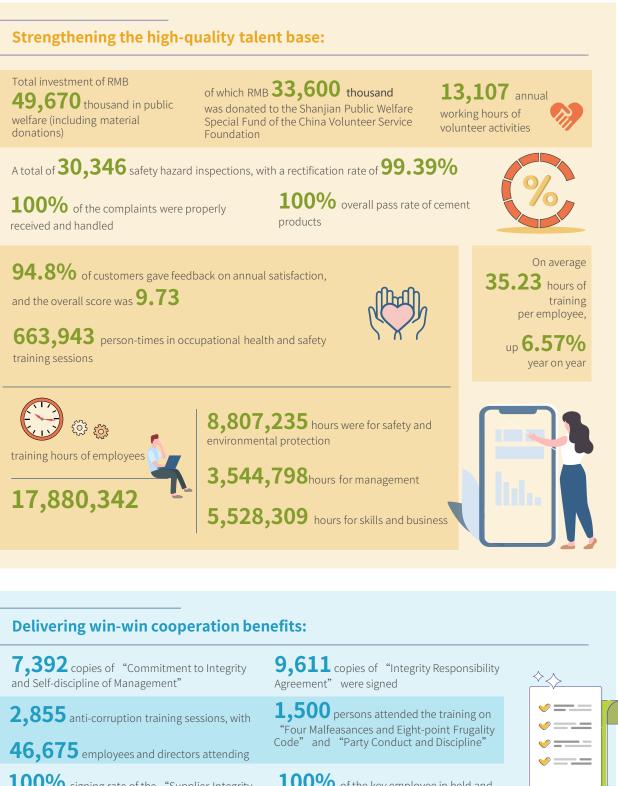
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**ESG Performance Highlights** Creating low-carbon sustainable advantages: **143** subsidiaries acquired green building materials certification A **38** national green mines **98** provincial green mines **26** smart factories **15** digital mines were held **12,751,277** m<sup>3</sup> of operating area where biodiversity impact assessments have been carried out and biodiversity management plans have been developed Total annual investment of RMB **1,666,021.5** thousand in environmental protection, up **14.47%** year on year 166,579,684.27 tonnes of total greenhouse gas emissions, down 11.5% compared with last year **106.37** kg comprehensive energy consumption per unit of clinker products, down **3.35** kg of standard coal compared with last year 93.56% recycled water utilization rate of 100% reusing rate of the treated clinker-producing cement companies wastewater for ready-mixed concrete business 0.26 kg nitric oxide (NO<sub>x</sub>) emissions per unit of clinker, down 6.85% year on year **0.02** kg sulfur dioxide (SO<sub>2</sub>) emissions per unit of clinker, down **0.14%** year on year **0.02** kg particle emissions per unit of clinker, down **21.4%** year on year

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**100%** signing rate of the "Supplier Integrity Commitment"

organized the anti-corruption trainings

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#### Strengthening the High-quality Talent Base

**ESG Awards and Recognitions** 

The Company practices the sustainable development strategy with concrete actions, and is recognized by relevant government and institutions in various aspects. In 2023, the Company and the subsidiaries received a number of honorary awards and were selected into relevant lists, including:

A State of the second s The Company was selected by Forbes China as one of the "2022 Forbes China Top 50 **Sustainable Industrial Enterprises**" ATTAC A The Company was rated as **the highest A-class** in the annual information disclosure assessment by the SZSE for the 5<sup>th</sup> consecutive year A States Ny. The Company won the Panoramic Investor Relations Gold

Award - "Best Institutional **Communication Award**", which was organized **Communication Award**", which was organized by Shenzhen Quanjing Network Co., Ltd. and coordinated by the Institute of China Corporate Governance of Nankai University

The Company won the **"Special Contribution** Award for Corporate Governance" at the 18th Golden Round Table Award for Boards of Directors of Listed Companies in China organized by the Directors & Boards magazine

The Company won the "Best Investor Relations Team Award" at the Luanlu - The 4<sup>th</sup> Elite Secretaries Forum organized by cls.cn

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A State The Company was selected as one of the

A States Activities of the Boards of Listed Companies

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A States

42 1 The 12 May 1982

Appendix







# **Stakeholder Engagement**

The Company regards investors as the basis for capital market development. Respecting, protecting and rewarding investors and treating all investors equally are important principles of corporate governance. In the year, the Company formulated, improved and strictly implemented the "Investor Relations Management Policy", "Investor Rights and Interests Protection Policy", "Information Disclosure Management Measures" and "Management Policy for Internal Information and Insiders", so as to disclose the Company's material information, continue to open up and optimize investor communication channels, and pay attention to and respond to the voices of investors.

Good communication with investors is crucial for the sustained growth and prosperity of the Company. The Company has set up a professional team for investor relations management, which has extensive experience and deep expertise in investor relations, finance and law, as well as good communication skills. The Board Office formulates the annual work plan on a yearly basis, specifying the objectives and key tasks for investor relations management, and updates the work plan every six months to adapt to market changes and the Company's development.

During the reporting period, the Company further improved our communication channels and methods with various stakeholders and endeavored to maintain investor relations in a digital and intelligent way. The Company has launched the "Investor Relations" module on the official website and operated the "Tianshan Company Investor Relations" official account and mini-program to enable investors to stay informed about the latest developments of the Company. In addition, the Company leverages a variety of channels to engage with investors, including the SZSE interactive platform (irm.cninfo.com.cn), performance presentations, regular reports, on-site research, teleconferences, web conferences, third-party roadshow platforms, online interactive platforms, IR mailboxes and investor relations telephone lines. We also regularly carry out themed activities focusing on the Company's business development, green and low-carbon transition, and dissemination of investment value. Through all of these efforts, the Company aims to communicate extensively with investors and respond positively to the many concerns we have learnt about.



"Tianshan Company Investor Relations" cial account and miniprogram

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Stakeholder

Shareholders/Investors

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In 2023, the Company has formulated and implemented the "Annual Investor Relations Plan". Over the year, we successfully held a semi-annual and annual performance presentation, an on-site production line investigation of special analysts, 30 investigations on specific objects, 14 investigations on regional companies in Xinjiang and 16 reverse roadshows. We also welcomed more than 200 investors in research institutions, released 14 records of investor exchanges and attended 16 strategic and peak meetings. We answered 93 questions from investors on the SZSE interactive platform, with a response rate of 100% and received more thanz 100 investor inquiry calls. We will strengthen the communication with investors and organize investor exchange to guarantee the smooth communication between us and our investors.

During the reporting period, the key issues of concern of main stakeholders are as follows:

Stakeholder	Focused Topics	Communication Method		Optimization and upgrading
Directors	Company strategy and planning Company Charter and important policies Important organizational restructuring and personnel arrangement	Shareholders' Meeting Board Meeting Board special committee meetings	Customers	Quality assurance of products Anti-unfair competition Compliance Anti-corruption and integrity p
	Major investment and financing matters Quality of operations Compliance Quality assurance of products and services	Independent directors special meeting Board Consultation	Business suppliers/contractors	Compliance Anti-corruption and integrity p Quality assurance of products
	Optimization, upgrading and green transition of production and operation	Management Masting		Supply chain management
Company Management	Company governance, reform and innovation Compliance of employee occupational safety and health Anti-corruption and integrity promotion	Management Meeting Work reporting and communication Governance and integrity training and management, etc.	Community/industry associations	Green transition Sustainable development Anti-unfair competition Compliance
Employees	Employee occupational health and safety Employee career development and training Labor regulations HR Management	Safety training and practice Career development seminars Support for employees in difficulty Employee representative meetings and seminars, etc.	Press	Ecology and natural resource Optimization and upgrading Green transition Quality assurance of products
	Compliance Quality assurance of products and services	Reporting on work and regular communication with regulators	•	Solid waste disposal and man Wastewater drainage and mar
Government and Regulatory Agencies	Greenhouse gas emission and management Water use and management Employee occupational health and safety Ecology and natural resource protection	Participation in conferences and major events Environmental information disclosure Publishing compliance reports and accepting supervision	Research institutes such as universities/research institutes	Research innovation and inves Quality assurance of products Ecology and natural resource

Focused Topics	Communication Method
Quality of operations Green transition Compliance Quality assurance of products and services Greenhouse gas emission and management Wastewater drainage and management Solid waste disposal and management Labor regulations Optimization and upgrading	Publication of periodic reports Holding shareholders' meeting, performance presentation, analyst presentation, roadshow and reverse roadshow Investor group reception day activities Communication channels such as SZSE interactive platform (irm.cninfo.com.cn), investor hotline and director secretary email
Quality assurance of products and services Anti-unfair competition Compliance Anti-corruption and integrity promotion	Customer research Customer complaint handling and callback Regular disclosure of corporate information
Compliance Anti-corruption and integrity promotion Quality assurance of products and services Supply chain management	Supplier management assessment and communication Contract negotiation and daily meetings Regular disclosure of corporate information
Green transition Sustainable development Anti-unfair competition Compliance	Industry communication and seminar Regular disclosure of corporate information
Ecology and natural resource protection Optimization and upgrading Green transition Quality assurance of products and services Solid waste disposal and management Wastewater drainage and management	Press interviews Press releases and announcements
Research innovation and investment Quality assurance of products and services Ecology and natural resource protection	Research cooperation and communication Regular disclosure of corporate information

# Creating Low-carbon Sustainable Advantages

Guided by the sustainable development strategic focus of "creating low-carbon sustainable advantages", the Company has stepped up efforts to address the risks and opportunities posed by climate change and minimized the adverse impacts of business activities on the environment. The Company continuously optimizes the resource utilization efficiency, sustains biodiversity conservation and strives to achieve a dynamic balance between economic development and environmental protection. In addition, the Company endeavors to reduce the dependence on traditional energies in production and operations, develop a circular economy industry chain, and continue to launch low-carbon products. Moreover, the Company aims to cooperate with industry partners on the road to sustainability and create a green future.

- Climate Action
- Development of Circular Economy
- Innovative Low-carbon Products

- Biodiversity Protection
- Emission Compliance Management



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## **Climate Action**

The Company has carried out climate actions based on the actual operational situation, strategic development needs and current situation of the industry, and formulated specific measures and plans that align with business development and climate objectives, in an attempt to mitigate the impacts and potential threats posed by climate change to the environment.

#### Management System Improvement

The Company is well aware of the importance of environment, and always puts environmental protection in a prime position. In recent years, the Company has advanced "four shifts" of environmental management concepts, that is:

#### Management goal shifts

From "zero penalties" for environmental protection to always prioritizing ecological and green development

- Management mode shifts From meeting the emission standards to reducing pollutant emissions
- Management method shifts From routine management to driving technological progress and management innovation with energy conservation and emission reduction requirements
- Management focus shifts From a greater concern for safety to equal emphasis on safety and ecological protection

The Company continues to improve the environmental management system and endeavors to enhance our dualcarbon management capability.

#### Issue the "Environmental Policy Statement"

The Company continues to fulfill the responsibility for environmental management and has issued the "Environmental Policy Statement" applicable to the Company's headquarters, subsidiaries and partners including suppliers, which clarifies the Company's environmental management actions and the roles and responsibilities of personnel at all levels of the Company. The Board regularly monitors the implementation of environmental management policies.

#### Advance the certification of environmental management system

In the year, the Company promoted the ISO14001 environmental management system certification of our subsidiaries and the certification of green and low-carbon enterprises. By the end of the reporting period, all of the Company's operating subsidiaries obtained the ISO14001 environmental management system certification, reaching a 100% coverage rate.

#### Improve the incentive mechanism for environmental protection supervision

In order to fully implement the environmental protection work, the Company has set up internal management policies such as the "Eco-environmental Protection Hazard Investigation Management Policy", and established a precise serviceoriented inspection mechanism that integrates the functions of "Inspection, Guidance, Training and Service".

The Company has strictly implemented the closed-loop management mechanism for environmental protection hazard investigation and management. The headquarters supervises and randomly checks environmental protection management work. All regional companies conduct peer reviews on the environmental protection management work, so as to learn from each other; and all enterprises under the regional companies self-check and review the implementation of their environmental protection work. In this way, we have achieved the PDCA cycle covering all subsidiaries. In the year, the Company formulated and issued the "Annual Action Implementation Program for Eco-environmental Protection Enhancement", and vigorously carried out special rectification work for ecological and environmental protection, which achieved good results.

In addition, the Company has established a sound environmental protection-related performance management and incentive mechanism, and formulated the "Management Measures for the Evaluation of Occupational Health, Safety and Ecological and Environmental Protection Work", which stipulates the evaluation criteria for the ESG-related work of each subsidiary, and grade evaluations are carried out on their annual work performance. Moreover, the Company has signed the "Responsibility Statement of Annual Operation and Management Target for Regional Companies" with the subsidiaries, and the "Responsibility Statement of Annual Ecological Environmental Protection Target" with all employees, including the Company's senior management, persons in charge of each subsidiary, and managers and employees of the subsidiaries, and made ESG-related management performance tied to the KPIs. The signing rate of these responsibility statements was 100%.

#### Clarify the path to carbon peaking and carbon neutrality

In the year, Tianshan Company has prepared the "Implementation Plan for Reaching Carbon Peaking and Carbon undertake related work. 621 person-times took "dual carbon" related training.

In addition, the Company has participated in the trial demonstration of the "Carbon Emission Online Monitoring" system organized by the Ministry of Ecology and Environment of the People's Republic of China, and was the first in the industry to carry out the pilot application. By the end of the reporting period, four subsidiaries of Tianshan Company was included in the pilot list of the Department of Ecological and Environmental Monitoring of the Ministry of Ecology and Environment of the People's Republic of China, and all of them already submitted their monitoring plans, and it is expected that they will be able to complete the construction of all the monitoring pilot projects next year and report the monitoring results on a regular basis to the China National Environmental Monitoring Center.

The Company is actively building the carbon emission management platform, and multiple subsidiaries of the Company, such as Huaikan South, have set up an intelligent centralized control platform for emission data, realizing real-time online monitoring and management of emission data.

In addition, the Company has been preparing for inclusion in the national carbon trading market. The Company has participated in the policy research of the cement industry's inclusion in the national carbon trading, and carried out internal audits and training sessions on carbon emissions to enhance the carbon management capability of the business management personnel.



Neutrality", which was reviewed and approved by the Board for issuance, to clarify the dual-carbon development path and management measures. In order to continuously improve the carbon management capability, the Company has improved the carbon management system, set up a Dual-Carbon Management Department, and assigned dedicated personnel to

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### **Energy Efficiency Improvement**

The Company attaches importance to energy consumption management of production lines and explores the potential of energy saving and carbon emission reduction. We have optimized the kiln system, renovated the grate cooler, and improved the energy-saving technology of fans, so as to improve the energy efficiency level of each energy-consuming link. During the reporting period, the Company saved 320,846.99MWh of electricity, 660.3 thousand tonnes of standard coal and reduced 183 thousand tonnes of CO<sub>2</sub> emissions. In the year, the comprehensive energy consumption per unit of clinker products reached 106.37 kg of standard coal, down 3.35 kg compared with last year, and the comprehensive electricity consumption per unit of clinker products reached 50.02 kWh, down 1.53 kWh.

#### Energy-saving renovation of preheater technology

In order to effectively reduce system resistance and eliminate incomplete combustion of pulverized coal at the kiln tail, Nancheng South, a subsidiary of Tianshan Company, has carried out a preheater technology renovation project for the 5,000t/d cement clinker production line in an endeavor to reduce coal consumption.

Due to the high crystalline silica of raw materials, the preheater system of Nancheng South was faced with high resistance. Nancheng South has lowered the ventilation resistance of the vertical mill cyclone of the preheater, and reduced the revolutions of the high-temperature fan, tail fan and circulating fan, which has further reduced the energy consumption of major production machines. Besides, Nancheng South has adjusted the position where clinker drops through the renovation project and improved the second air temperature, which has improved the efficiency of pulverized coal combustion and reduced energy consumption.

A total of RMB 5.974 million was invested in this consumption reduction and optimization project for the production line, and the effect exceeded expectations. After the renovation, the standard coal consumption per tonne of clinker produced was reduced by 2.75 kg, and the overall power consumption was reduced by 1.3 kWh. In the year, Nancheng South saved a total of RMB 5.2125 million through this project.



### **Clean Energy Utilization**

To ensure the Company's long-term sustainable development, Tianshan Company actively promotes clean energy transition and reduces greenhouse gas emissions by carrying out a series of initiatives such as the development and renovation of advanced emission treatment technologies and promotion of the application of renewable energies. In the year, the Company invested RMB 481.55 million for the renovation of energy-saving technologies.

#### Upgrading of Carbon Capture Technologies

The Company is actively engaged in carbon capture to minimize greenhouse gas emissions. By storing captured CO<sub>2</sub> or converting it into useful products such as building materials, CO<sub>2</sub> has been reused as a resource.

#### CUCC Qingzhou's 200 thousand tonnes per year of carbon capture by oxyfuel combustion pilot project

In the year, the Company initiated the CUCC Qingzhou's 200 thousand tonnes per year of carbon capture by oxyfuel combustion pilot project. The trial test was carried out in January 2024, and the project is the world's largest carbon capture demonstration line in the cement industry upon completion.

The project was made to establish the annual output of 200 thousand tonnes of CO<sub>2</sub> self-replenishment system at the kiln tail and an exhaust gas treatment and disposal production line, including CO<sub>2</sub> self-replenishment system, kiln tail exhaust gas capture and purification system and oxygen generation system, equipped with supporting facilities such as water and power supply facilities. Upon completion of the project, 95 thousand tonnes of industrial-grade liquid CO<sub>2</sub>, 100 thousand tonnes of food-grade liquid  $CO_2$  and 5 thousand tonnes of dry ice can be produced annually.

The Company is exploring low-cost carbon capture and purification technologies, strengthening cross-industry cooperation, and promoting the industrialized R&D and application of carbon capture, store and utilization, and the Company expects to achieve a carbon capture capacity of 200 thousand tonnes/year in 2025.



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#### Promotion of Low Carbon Transport Vehicles

The Company promotes green and low-carbon transport, and strives to minimize non-renewable energy consumption and reduce environmental pollution.

#### Pilot project of converting mixers from fuel-powered to electricity-powered

In the year, the Company' s subsidiary Wuxi South Concrete Co., Ltd, purchased 30 all-electric concrete mixer trucks and took the lead to replace fuel-powered concrete mixer trucks with all-electric ones in Wuxi. Besides, assuming that each fuel-powered mixer truck travels an average of 60,000 kilometers per year, and consumes 48 liters of fuel per 100 kilometers, each mixer truck consumes 30,000 liters of diesel annually. Assuming that 1 liter of diesel generates 2.67 kg of CO<sub>2</sub>, then 1 mixer truck would produce 80.1 tonnes of CO<sub>2</sub> each year. However, the introduction of 30 all-electric mixer trucks in Wuxi can annually reduce CO<sub>2</sub> emissions by 1,065 tonnes, which is a significant contribution to emission reduction.



In the year, the Company' s subsidiary Sanshi Material put into use a total of 41 new energy all-electric concrete mixer trucks. Each new energy mixer truck reduces carbon emissions by about 91 tonnes per year and air pollutant emissions by nearly 300 tonnes.



#### **Renewable Energy Application**

The Company continues to expand the use of renewable energies, and aims to reduce dependence on traditional energies by constructing solar panels and wind turbines in the Company's production areas, in an attempt to minimize the adverse impact on the environment.

#### Case Photovoltaic power generation project at CUCC Linyi

The Company's subsidiary CUCC Linyi invested RMB 60 million to build a 6.5MW dispersed gridconnected photovoltaic power station, which is now in operation. This power station can generate 7.4 million kWh of electricity per year and save RMB 814 thousand in electricity costs.

In addition, CUCC Linyi invested in the construction of photovoltaic power generation carports in the living and office areas with an annual generation capacity of about 300 thousand kWh; and the construction of the floating fishery-optical complementary photovoltaic power generation equipment in the water ponds of the plant, which generates about 50 thousand kWh electricity per year.

By the end of the reporting period, all CUCC Linyi's photovoltaic projects can generate 10 million kWh of electricity per year, saving more than 3,200 tonnes of standard coal and reducing CO<sub>2</sub> emissions by 8,156.9 tonnes.



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#### e 2.5 MW photovoltaic power generation project at Hunan Jiuhua

The Company's subsidiary Hunan Jiuhua South New Material Technology Co., Ltd., has built dispersed rooftop photovoltaic power generation stations on the rooftops of the mixing building, raw material stacking shed and sand washing production line plant, with an area of about 22 thousand m<sup>2</sup> and an installed capacity of 2.5 MW, and the estimated average annual power generation capacity is 2.25 million kWh.

In May 2023, the project was formally connected to the grid and generated electricity. By the end of the reporting period, the project generated a total of 1,244.1 thousand kWh of electricity and reduced CO<sub>2</sub> emissions by 790.5 tonnes.



#### ase Ruichang aggregate transport corridor photovoltaic power generation project

The Company's subsidiary Ruichang Corridor Transportation Co., Ltd., by fully utilizing the resources within the plant, has built a dispersed photovoltaic power generation station on the rooftop and two facades of the landscape corridor for ore transportation. The station has applied a total of 4,302 pieces of CdTe power generation glass to lay more than 7,000 square meters of photovoltaic power generation equipment. The total installed capacity of the project is about 702.5kWp. During the reporting period, the cumulative power generation of the project was 365.3 thousand kWh, saving 119.83 tonnes of standard coal and reducing 319.95 tonnes of carbon emissions.



### Addressing Climate Change

Tianshan Company is concerned about the impact of climate change on our value chain, and has incorporated climate change-related risks into the Company's comprehensive risk management system. We are committed to minimizing the impact of our business on climate and the environment through systematic governance, comprehensive strategies, proper risk management and more enthusiastic target control. Based on the current situation and characteristics of the industry, and the Company's strategic development plan, and in accordance with the "Recommendations – Tak Force on Climate-Related Financial Disclosure" (TCFD), we have identified climate change-related risks and adopted strong measures in production, operation and supply chain to cope with relevant risks.

#### **Climate Risk Identification**

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As climate change has become widely concerned by all society, Tianshan Company is gradually establishing a lowcarbon friendly development strategy in accordance with the national 14<sup>th</sup> Five-Year Plan and the goal of "Carbon Peaking and Carbon Neutrality", taking into account its business characteristics. In addition, all subsidiaries are required to carry out the corresponding short-, mid- and long-term strategic planning to improve the climate and environment through practical actions.

During the reporting period, Tianshan Company conducted an analysis to identify and assess various risks and opportunities related to climate change in order to gain a more comprehensive understanding of the potential risks and opportunities for the Company. A total of six key transition risks and two physical risks were identified, and the following table shows the specific results of the identification and assessment.

Risk Type	Risk Issues Potential Impact on the Company	
Transition Ris	sks	
Policy and Law	Stricter policies and supervision on existing products and services	<ul> <li>Need to invest in technological innovation;</li> <li>Corporate business may need to be further directed towards energy efficiency and low carbon attributes to respond to regulatory requirements</li> </ul>
	Stricter emission and disclosure standards	<ul> <li>Need to invest more in technology, thereby increasing operating costs</li> </ul>
	Applying a price on greenhouse gas emissions	<ul> <li>Increased government levies related to carbon as a result of climate change, leading to higher operating costs</li> </ul>
Technology	<ul> <li>Need to invest more in low carbon environ technologies</li> <li>Need to invest more in clean energy, circulation</li> </ul>	
Market	Rising prices of raw materials and energy	<ul> <li>Need to develop alternative material technologies and reduce the extraction and use of raw materials</li> <li>Adjust and optimize energy structure and improve energy risk response capability</li> </ul>
	Increasingly stricter market demands for low carbon and environmental performance of products	<ul> <li>The risk of being replaced for existing products, the need to improve the green product development system and increase the low-carbon and environmental characteristics of products</li> <li>Increase the proportion of green procurement and manage supply chain environmental risks</li> </ul>

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Risk Type	Risk Issues	Potential Impact on t	he Company	During this	1 2	out the identification an
Reputation Risk	Reputation risk due to commercial activities	if any environment	isted as a heavily polluting enterprise, or -related violation is found, the image and ne enterprise may be potentially		Keep a close eye on th	ne latest relevant laws and ration and formulate corr
Physical Risks					introduced or latest r	equirements
		to suspension of de	sales and increase in operating costs due ownstream construction operations			
Acute	Extreme weather such as floods and typhoor	caused by extreme	weather, and the need to prepare esponse plans in advance	<b>A</b>	Actively promote the	construction of green fac

ChronicIncreasingly high temperatures and frigid weatherPotential safety problems in employee working environment, the need to invest more in employee health and safetyDeclining stability of energy supply, the need to adjust and optimize the energy supply channels		· · ·
	Chronic	<ul><li>environment, the need to invest more in employee health and safety</li><li>Declining stability of energy supply, the need to adjust and</li></ul>

#### Besides, the Company identified the following opportunities in terms of resource use efficiency, products and services:

Opportunity Type	nity Opportunity Issues Potential Impact on the Company		
	More efficient production and distribution processes	<ul> <li>Optimization of production processes and technology to improve production capacity and efficiency</li> <li>Increased investment in response to changing market trends</li> </ul>	
Resource	More efficient transportation methods	<ul> <li>Reduce operating costs by adopting more efficient transportation methods</li> </ul>	
Utilization Efficiency	Use green recycling technologies	<ul> <li>Reduce the impact of operations and production on the environment</li> <li>Improve resource use efficiency while reducing costs</li> </ul>	
	Reduce water consumption	<ul> <li>Reduce the pressure on water access for production and operations</li> <li>Reduce operating costs</li> </ul>	
Products and Services	Develop/expand low-emission goods and services	<ul> <li>Create a first-mover advantage in the industry and improve the Company's reputation and social image</li> <li>Provide low-carbon products or services to the market, respond to market demand, enhance corporate competitiveness and increase revenue</li> </ul>	

During this reporting period	the Company carried out the identification and change, and listed the related climate risk respo
	Keep a close eye on the latest relevant laws and r and the places of operation and formulate corres introduced or latest requirements
	Actively promote the construction of green factor in the R&D, promotion and application of enviro
æ	Increase the utilization of renewable energy sou
<b>\$</b>	Improve the energy efficiency of enterprise prod equipment efficiency and using energy-efficient
	Develop emergency response plans for extreme by climate change and reduce production disru
Ğ	Closely observe the carbon trading situation, tra enhance carbon sink capacity and achieve incor
	Improve employees' awareness of climate risk m happening at the employee level



sk management via employee training to prevent risk from

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#### "Dual-carbon" Goals

In 2022, the Company formulated and released the "14<sup>th</sup> Five-Year Carbon Peaking and Carbon Neutrality Plan", focusing on the three major directions of energy transition, product innovation and carbon sequestration technology, and proposed to achieve the overall goal of reducing the average unit clinker CO<sub>2</sub> emissions by 6.24% by 2025 compared with 2021. Specific planning objectives and implementation measures are as follows:







down by **3.96%** from 2020



Total **CO**<sub>2</sub> emissions were decreased by

11.5% from 2022.

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#### **Environmental Awareness Enhancement**

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The Company strives to realize the change of employees' awareness on environmental protection management. The senior management puts their emphasis on environmental protection into action and participates in the management of related work. The related functional departments transfer from participants to responsible parties and assume related management responsibilities. Grass-roots employees are transferred from local management to the large environmental protection area management. By the end of the reporting period, the Company had 1,464 full-time environmental personnel and managed the environmental performance through graded scoring.

#### Arrangement of Training on Environmental Protection

The Company continuously promotes and implements the environmental protection, strives to enhance the awareness of environmental protection among all employees, and inspires them to actively participate in the proenvironmental campaign, so as to provide strong support for the sustainable development of the Company.

#### Training courses for registered safety engineers and online monitoring for environmental protection

In the year, the Company held 3 sessions of offline training courses for registered safety engineers and online monitoring for environmental protection, and invited university professors, technical consultants and senior training experts to teach a series of courses. The courses covered production safety management, basic knowledge of production safety technology, management requirements and technical specifications for online monitoring, CEMS<sup>1</sup> operation principles, operation techniques, inspection points, safety management case analysis, and other training contents. 582 employees from 257 member enterprises participated in the training, and a closed-book examination after the training was organized under the principle of "promoting training by examination" to verify the training result.



<sup>1</sup>CEMS (Continuous Emissions Monitoring System) is a continuous emissions monitoring system to monitor exhaust emissions from industrial emission sources

#### Special training of the "Management Points and Precautions for Online Monitoring of Pollution Sources in Cement Industry"

In July 2023, the Company organized a special training on the "Management Points and Precautions for Online Monitoring of Pollution Sources in Cement Industry". A total of 2,132 employees at all levels responsible for work related to safety and environmental protection participated in the training.



Industry"



Special training on the "Management Points and Precautions for Online Monitoring of Pollution Sources in Cement

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#### Promotion of Green Operation

The Company's revised "Management Measures for Administration Affairs" to clearly stipulate requirements for the Company's meetings, office environment layout and office supplies consumption:

- Promote remote video conference or teleconference, and if offline meetings are necessary, try to arrange them in the Company's internal conference room to reduce the consumption of non-essential items for the meeting
- The office environment layout shall be subject to the "5S" standardized management<sup>2</sup>, and papers from obsolete files shall be properly reused and recycled
- The consumption of office supplies shall strictly abide by the principle of conservation and office supplies shall be reused as much as possible

Meanwhile, the Company gives tips for environmental protection publicity to employees from time to time through the internal management system and social groups, to advocate:

- Save electricity: Turn off lights when getting off work or leaving offices for a long time and turn off the power when computers, televisions and other hardware equipment are not in use, to reduce standby energy consumption
- Strengthen meeting management: Implement the reservation management policy for meeting rooms, streamline meetings, reduce the number and duration of meetings, reduce paper materials used in meetings, apply more black and white printing and double-sided printing formats, and advocate the paperless office
- Strengthen canteen management: Use energy-saving stoves, conduct cleaning and maintenance on a daily basis, adopt recyclable tableware, and reduce or eliminate the use of disposable tableware. Post slogans on saving food, electricity and water to create an environment of diligence and thrift

To ensure that the total amount and intensity of daily power and water consumption in the office are effectively controlled, the Company has formulated management standards and assessment programs for administrative expenses, so as to supervise the green and sustainable development of the logistics sector in each regional company.

In addition, the Company prefers green and sustainable commodities, such as the sustainable fiber materials applied for all the office papers at the headquarters. We prefer green products when procuring daily supplies, provide a garage for bicycles and electric bicycles, set up parking spots for shared bicycles and other green travel tools, purchase charging piles of electric vehicles, and recommend employees to travel in a low-carbon manner, so as to reduce traffic congestion and air pollution, and improve the life quality.

<sup>2</sup>The "5S" standardized management is an organizational management approach, which aims to continuously optimize production processes through improving the working environment, efficiency and security. The five "S" s represent five Japanese words, Seiri, Seiton, Seiso, Seiketsu, and Shitsuke.

#### Organization of Environmental Protection Activities

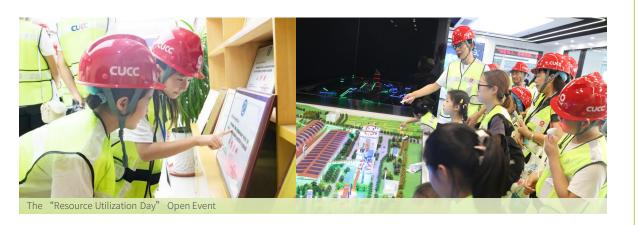
The Company actively carries out promotion activities for environmental protection and strives to convey the importance of environmental protection to employees, customers and society, in a bid to inspire a wider awareness of environmental protection.

#### "8.15" National Ecology Day



#### Case The 4<sup>th</sup> "Resource Utilization Day" Open Event

In the year, 720 employees from 12 member enterprises of the Company organized and held the 4<sup>th</sup> "Resource Utilization Day" Open Event. Guests were invited to visit green factories and gain an understanding of the advanced practices and honorable achievements of the Company in ecological and environmental protection, green development, intelligent manufacturing and safety production.



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## **Development of Circular Economy**

Tianshan Company continues to promote the development of circular economy and minimize the dependence on natural resources. The Company increases the proportion of alternative raw materials and fuels, and gradually promotes the water recycling technology to mitigate the impact on the environment by the Company's production and operation.

### **Use of Alternative Materials**

Tianshan Company actively promotes the use of alternative materials in cement product manufacturing, reducing the emission pollution to the environment while minimizing the dependence on traditional raw materials.

#### Use of alternative raw materials

Approximately 65% of CO<sub>2</sub> from clinker production is generated from limestone raw materials, while alternative raw materials can significantly reduce CO<sub>2</sub> emissions from carbonate decomposition. Tianshan Company researches and learns about applicable alternative resources in the region where each subsidiary is located, such as calcium industrial solid wastes including calcium carbide slag, steel slag, yellow phosphorus slag, fly ash, coal slag, copper slag, magnesium slag, sulfuric acid slag and red mud, and gradually improves the substitution rate of raw materials.

During the year, the Company conducted a series of initiatives for the comprehensive utilization of resources mainly by adopting alternative raw materials such as fly ash, mineral powder and calcium carbide slag. It is expected that the substitution rate of raw material will reach 1.16% and 1.28% by 2025 and 2030 respectively.

#### O Clinker production:

Fully utilize carbide slag, steel slag and industrial solid wastes with calorific value, and carry out technical upgrading of energy conservation and consumption reduction for the production line of carbide slag clinker. In 2023, the Company consumed a total of 3,015 thousand tonnes of acetylene sludge and 53.93 tonnes of steel slags

Concrete production:

Adopt mineral admixtures such as fly ash and mineral powder, and optimize their proportions with additive trial blending to improve concrete performance and reduce environmental pollution. In the year, the Company used 4.8 million tonnes of fly ash and 4.5 million tonnes of mineral powder

Aggregate production:

Use low-grade limestone and waster stone for aggregate production to achieve a 100% utilization rate

Cement production:

The artificial sand and rock flour produced in the processing process of the aggregate production line are utilized in the cement production line, which can lower the production cost and improve efficiency

#### During the reporting period



<sup>3</sup> "Cement +" Enterprise refers to those integrating traditional cement clinker and cement production and basic building materials such as bone materials and commercial mixing in the upstream and downstream industrial chain.

#### Use of alternative fuels

progress in carbon reduction.



During the reporting period, the key performance indicators related to the use of alternative materials are shown in the table below:

#### **Key Performance Indicators**

Percentage of alternative fuels to replace fossil fuels

Percentage of clinker in cement

Percentage of alternative raw materials in cement<sup>5</sup>

Percentage of alternative raw materials in concrete<sup>5</sup>

Percentage of alternative raw materials in other building materials

<sup>4</sup> RDF (Refuse-Derived Fuel) is the combustible portion extracted from urban solid wastes and is applied for energy recovery after processing

<sup>5</sup> Alternative materials do not include gypsum, volcanic ash and other natural raw materials.

The Company develops the "Implementation Plan for Reaching Carbon Peaking and Carbon Neutrality" and proposes to promote the carbon reduction through introducing alternative fuels and other methods. By the end of the reporting period, there were 13 alternative fuel projects completed and put into operation with excellent

	Unit	2023
	%	1.57
	%	73.4
	%	22.16
	%	5.6
terials (such as asphalt) <sup>5</sup>	%	0

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### **Recycling of Water Resources**

Tianshan Company vigorously promotes the recycling of water resources and improves efficiency, so as to boost the Company to develop towards a more environmental-friendly and sustainable way. During the reporting period, the Company's cement enterprises improved their water extraction compliance and the water recycling rate reached 93.56%. Commercial concrete enterprises enhanced the construction of interception and drainage facilities within their factories and the reuse rate of sewage reached 100%.

#### Constructing the recycling and processing system for reclaimed water to save water

Xinjiang Fukang Tianshan Cement Co., Ltd., a subsidiary of Tianshan Company, has built a reclaimed water processing system to process its domestic sewage. The reclaimed water processing facility applies the A/O+MBR wastewater treatment process<sup>6</sup>, and the sewage is directly discharged into the regulating reservoir after filtering dirt by trashracks, biochemically treated, and then poured into the MBR membrane tank. The water treated by the flat ceramic membrane is discharged to the clear water tank and will be reused as reclaimed water for cooling water replenishment and plant greening after meeting the water quality standard of miscellaneous water. The water is recycled internally and not discharged externally. In addition, the cooling water of the equipment is circulating cooling water and is not discharged externally.



<sup>6</sup> A/O + MBR wastewater treatment process: The A/O (Anaerobic/Oxic) biological treatment process is a common sewage process, which is mainly used for urban sewage and industrial wastewater processing. MBR is short for Membrane Bio-Reactor, which is a new water treatment technology that organically combines membrane separation technology and biotechnology.

below:

#### **Key Performance Indicators**

Total consumption of clean fresh water

Water withdrawal by municipal pipe network

Withdrawal of surface fresh water

Withdrawal of fresh groundwater

Water back to extraction source



#### During the reporting period, the key performance indicators related to the use of water are shown in the table

Unit	2023
1 million m <sup>3</sup>	61.52
1 million m <sup>3</sup>	16.90
1 million m <sup>3</sup>	45.89
1 million m <sup>3</sup>	0.72
1 million m <sup>3</sup>	1.99

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### **Innovative Low-carbon Products**

To actively respond to the challenges of climate change and sustainable development, the Company continuously develops and promotes green and low-carbon products and services that meet market demands and provides customers with sustainable and innovative solutions.

#### **Diverse Products**

Carbon reduction of concrete and cement products is a key step in the green and low-carbon development of the industrial chain. The Company strengthens quality control of raw materials and management of the mixture proportion technology, improves the quality of aggregates and cement, and reduces the use of concrete cementitious materials. Efforts are made to explore the carbonization and carbon sequestration of concrete and cement products to facilitate the green and low-carbon development of the industrial chain. The Company has set the goal to achieve the low-carbon cement in the Company' s products no less than 1.42% by 2025. The Company has set the goal to achieve the low-carbon cement in the Company' s products no less than 1.45% by 2030.

In recent years, the Company continues to promote the R&D of special cement<sup>7</sup> and has achieved significant results. Special cement is an environmentally friendly product which can effectively absorb carbon dioxide in the process of hardening. In addition, this stable and endurable product can reduce the consumption of building materials and the energy consumption and CO<sub>2</sub> emission in the production process. In the year, the Company sold 2,467 thousand tonnes of special cement, with an annual increase of 31.05%, and 12,207 thousand tonne of singlepurpose cement<sup>8</sup>, with an annual increase of 16.70%. Among them, Xinjiang Cement produced 1,881 thousand tons of special cement, and single-purpose cement, accounting for 15.28% of total output, of which the annual growth of special cement is 36.69%. Also, Jiahua Special Cement produced 2,055 thousand tonnes of special and single-purpose cement, accounting for 79.58% of total output, of which the annual growth of special cement is 14.72%. We have succeeded in reducing about 25 thousand tonnes of carbon dioxide from the decomposition of carbonate.

Low heat Portland cement researched and produced by the Company is used in the Baihetan Hydropower Station, Wudongde Hydropower Station, Zhentouba Hydropower Station, Shaping Hydropower Station, Longxukou Hydropower Station as well as Sichuan-Tibet Railway and other national construction, and; our oil well cement is used in the oil fields of PetroChina, CNOOC and Sinopec. We were awarded with the WCA Award 2023: New Products for our low heat expansive Portland cement and wearesisting low heat Portland cement.



In the year The Company sold Annual increase of 2,467 thousand 31.05% tonnes of special cement

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Jiahua Special Cement facilitates the construction of the Sichuan-Tibet Railway

The Sichuan-Tibet Railway is a national important strategic deployment and measure to carry out the Tibet governance strategy of the Party Central Committee. The geological and climatic conditions along the railway are complex, and the construction is extremely difficult. However, the railway plays a significant role in Tibet' seco-social development.

In high-cold areas, low-heat cement has low early strength and not high toughness. To address the problem, Jiahua Special Cement researched the mineral properties, crystal structure, hydrochemical mechanism, evolution of performance and regulation techniques of low heat Portland cement-based materials and developed the preparation and application technology of Early strength low shrinkage Portland cement with low heat and high resilience to meet the construction needs of railway projects under harsh geological and environmental conditions.



<sup>7</sup> Special cement refers to cement species that have certain special performance or functions over general purpose cement, and are suitable for specific purposes, or can play special functions and assign special functions to the building.

<sup>8</sup> Single-purpose cement refers to those with special treatment or addition of special materials in terms of raw material ratio and production process to meet specific engineering needs and solve specific problems.

The Company sold

**12,207** thousand tonnes of **16.70%** single purpose cement

Annual increase of



### Early strength low shrinkage Portland cement with low heat researched and produced by

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Road cement researched and produced by Xinjiang Cement facilitates the construction of major transportation engineering in Xinjiang

The special cements including road cement produced by Xinjiang Cement are widely applied in the construction of Xinjiang Ge'ermu-Ku'erle Railway and other national key projects. The Ge'ermu-Ku'erle Railway is the main road to Xinjiang and it is also an important traffic hub connecting the Southern Xinjiang Railway and Qinghai-Tibet Railway. Xinjiang Cement fully supports the construction of national key projects. In the construction of Xinjiang Section of the Ge'ermu-Ku'erle Railway, a total of 1,2 million tonnes of special cements were used, including silicon cement 42.5, slow setting cement 42.5, sulfate resistant Portland cement 42.5 and low alkali cement 42.5. After the completion, the travel time from Ge'ermu to Ku'erle has been reduced from 26 hours to about 12 hours.

In addition, the road cement produced by Xinjiang Cement is also used in the construction of the Urumchi-Weili Expressway, filling the cement gap for water conservancy projects in high-cold and high-altitude areas. At an altitude of more than 3,200 meter, the Urumchi-Weili Expressway is the longest expressway tunnel in the world.



In addition, we reduce carbon emissions from cement products by reducing the intensity of clinker emissions, the amount of clinker and the consumption of powdered grinding electricity. We also provide low carbon and green products in various ways, such as: strengthening cooperation with research units inside and outside the Company, accelerating the R&D and promotion application of new low-calc clinker, increasing the proportion of low-calc clinker; fastening the development of grade powder grinding and high-activity new blend material to reduce the amount of cement clinker; optimizing the LSF (lime saturation factor) of general silicate cement clinker and balancing the strength of clinker with the intensity of carbon emissions.

During the reporting period, China United Concrete Nanjing Co., Ltd., Xinjiang Tianshan Zhuyou Concrete Co., Ltd. and other subsidiaries of Tianshan Company obtained the China green building material product certification. CUCC Linyi obtained the China low-carbon product certification. 10 subsidiaries including Huaikan South and Zunyi Saide obtained 12 certifications of green building materials.

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产品碳足迹证书

\*



"Certificate for China Low-carbon

Product Certification" of CUCC Linvi of

Xinjiang Tianshan Cement Co., Ltd.

以适金米人名伊瓦以伊马兹 南京中徽规联大省指公司 以下五五公司法司第二十 年年 各化人名布米法尼托廷: 南京中國國際主有關空间 中山丁正古山的星名剧委士亨 相关面句: 产品生产者(相述用)基形法注意地 商业中提进最上有符合可 R445643844 主产会点名称ス生产地域 実営・製築機士有限会気高齢分会等 57045435744 #840882482488048004 产品は伝承え(产品生志研究所 数件理理士(骨道証疑士) -----\*\* 刘庄衍 1000 10000 10000 10000 -----





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国绿色建制产品认证证书

<u>දිරිම්</u> 🔛

ハルエバオ(紀述市) 品格及法律地 新編文会院設置職主席開査協会司

绿色建树产最认证证书

"Certificate for China Green Building Materials Product Certification" of Xinjiang Tianshan Zhuyou Concrete Co. Ltd. of Xinjiang Tianshan Cement Co., Ltd.

### **Construction of Green Factories**

The Company gives top priority to the high-end oriented, intelligence oriented and environmental protection oriented transition of production and service, continues to promote business layout and production capacity optimization, and drives the green and intelligent development of the production line. The Company establishes a joint working group for intelligent construction, and compiles and perfects the "Intelligent Factory Construction Guide", "Intelligent Factory Evaluation Standard", "Digital Mine Construction Guide", "Pilot Project of Intelligent Factory and General Plan for Information-based Production", which provide solid theoretical basis and operational guidelines for the implementation, construction and operation, and replication and promotion of green and intelligent projects. During the reporting period, the Company built 26 intelligent factories, 1,038 automated information production lines and 15 digital mines, and a total of 143 subsidiaries were honored with the title of green building materials certification.

#### National green plant of CUCC Anyang

In recent years, CUCC Anyang, a subsidiary of Tianshan Company, has grasped key parts in clean and civilized production, and integrated the concept of cleaning and greening in the whole processes of production and operation, so as to achieve high-quality development based on environmental protection. Main pollutant emission indicators including dust, sulfur dioxide and nitrogen oxides have been controlled at the ultra-low level through the technological transformation of dust collector, the SCR deep denitrification treatment of kiln tail flue gas, noise management and material shed sealing.

CUCC Anyang takes the lead in promoting the green adjustment of transportation structure in the region and building a green supply chain. By the end of the reporting period, it built 67 new charging piles and replaced more than 230 energy transport vehicles, which reduced carbon dioxide emissions by over 200 thousand tonnes annually, and achieved sound economic and social benefits. It was honored with titles of "Henan Green Factory", "Henan Advanced Unit in Energy Saving and Emission Reduction", "Henan Environmental Education Base", and "National-level Green Mine".



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#### Strengthening the High-quality Talent Base

# **Biodiversity Protection**

The loss of biodiversity has been recognized as one of the greatest global risks at present, and biodiversity protection is essential for human well-being and the health of our planet. As the largest cement company in the world, Tianshan Company takes active actions to preserve the ecological environment and avoid or minimize the pollution and damage to the ecological conditions caused by our production and operation.

According to UN Sustainable Development Goals (UNSDGs), the "Kunming-Montreal Global Biodiversity Framework" under the "Convention on Biological Diversity (CBD)", the "Opinion on Further Strengthening Biodiversity Conservation" issued by the General Office of the Central Committee of the Communist Party of China and the General Office of the State Council, and related conventions and opinions on biodiversity protection, the Company has issued the "Policy Statement on Biodiversity", which applies to all operating regions, suppliers, associates, and other business partners. The Company is committed to protecting biodiversity, and incorporates biodiversity as a key issue in our ESG governance, which is supervised by the Board's ESG Committee, and shall be implemented by the ESG Working Group under the ESG Committee and relevant functional departments.

### **Biodiversity Risk Assessment**

Tianshan Company actively carries out biodiversity risk assessments covering our operations, surrounding areas, and upstream and downstream activities to avoid behaviors that harm biodiversity. The Company continuously improves the research and construction of risk governance, assessment, prevention and control systems of biodiversity, and applies assessment standards and framework related to biodiversity to identify, analyze and evaluate the impact on biodiversity and natural capital by production, operation, procurement and acquisition, and to avoid operation in areas of world or national biodiversity importance.

In addition, based on policies and guidelines related to the red line of ecological and environmental protection, the Company strengthens the awareness of the red line for ecological and environmental protection, applies strict standards in the plant site and layout selection, and protects natural habitats, wetlands, forests, wildlife corridors and agricultural land in the construction of plants and projects. Great efforts are made to reduce the impact on the surrounding environment by all means.

### **Biodiversity Protection Actions**

We value the management of risks and opportunities arising from ecological and environmental changes, bend ourselves to minimizing the damage caused by our production and operation to the environment, and produce cement products in an ecologically friendly manner. The Company strictly abides by the principle of "concurrent mining and reclamation". On the one hand, the Company vigorously restores the ecology of mines and focuses on the greening and beautification of surrounding areas to realize the natural integration of the industry and the surrounding ecology. On the other hand, the Company increases the investment in ecological and environmental protection, actively builds green mines and green factories, and continues to apply the most advanced technologies in the industry into our operation and production to protect the ecosystem, so as to better restore the natural environment and protect the biodiversity.

To avoid ruining the surrounding area, the Company optimizes the mining process and transportation plans based on local conditions to protect the ecosystem and biodiversity to the greatest extent.

#### Joint efforts in the construction of a transportation corridor for minerals and a green logistics system

To solve the difficulty in the transportation of mining materials and avoid the impact on the ecological environment along the route, Chizhou CNBM New Material Co., Ltd., a subsidiary of Tianshan Company, cooperates with the local government and invests about RMB 2.2 billion in constructing a green and intelligent transportation line of minerals with a total length of about 36 kilometers. The corridor is expected to carry 60 million tonnes of minerals per year and save 11,256.25 tonnes of standard coals, which reduces 31,351.4 tonnes of CO<sub>2</sub> emissions and improves the transportation efficiency of minerals in the surrounding regions and reduces carrying costs.



The Company takes a series of measures to minimize the negative impact arising from the operation on the environment to the utmost extent. The Company continuously increases the proportion of electric mining vehicles used in mining and transporting to mitigate the impact of emission pollution on the surroundings. To protect soil resources in the surrounding area of mine lots, the Company launches soil and water conservation projects including the construction of ditches and retaining walls, which effectively protect mining slopes from rainfall.

In addition, the Company always monitors the restoration and regeneration of slope ecology. We develop and implement a restoration plan of mine ecology and carry out ecological restoration during the mining process, which realizes the synergistic development of resource development and ecological protection.

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Optimization and upgrade of mine regreening technologies to build up the new ecology of ecological restoration

Hunan Linli South New Material, a subsidiary of Tianshan Company, cooperates with the Chinese Academy of Sciences and Anhui University of Science & Technology, breaking the traditional practice of mine regreening in China, to improve the ecological environment of the mining area by establishing the natural ecosystem of natural succession.

Hunan Linli South New Material reshapes the landscape according to specific conditions. Based on principles of reducing the engineering amount and disturbance to the damaged land, it strips the slope area of the quaternary system according to the composition of current surface material, which meets the need for platform earth covering while improving the overall stability of the slope and eliminating the potential geologic hazards of landslides or mudslides.

Accordingly, Hunan Linli South New Material follows the principle of "remaining green throughout the year" and adopts the method of "combining seeding and sowing, with tall and short plants in a reasonable mix", to form a new ecosystem embracing pioneer plants, long-term plants, and short-term plants, with different types growing at all seasons. Meanwhile, according to the characteristics of the restoration area and local conditions, Hunan Linli South New Material plants grasses and flowers at different times to turn green, and in different height and coverage, and designs antique landscape walls and pavilions around the factory, constituting the unique style of the mine building.

By the end of the reporting period, the total restoration area of Hunan Linli South New Material was 125 thousand m<sup>2</sup>, with a restoration rate of 100%. In 2022, it was selected in the "Provincial-level Green Mine List Published by the Department of Natural Resources of Hunan Province", representing a scenic spot of the green industry in Hunan.



#### Restoration and regeneration of ecological environment of mines

CUCC Pingyi, a subsidiary of Tianshan Company, launches restoration projects including slope treatment, dust control and land regreening for limestone mines in the plant area. CUCC Pingvi cultivates more than 10 thousand plants in a dozen of species, which regenerates biological habitats while directly enriching biodiversity, attracting birds such as pigeons, swallows, finches and eagles, terrestrial animals such as snakes, rabbits, mice and weasels, and insects including butterflies, bees, ants and cicadas to return to nature.

In addition, CUCC Pingyi plants seasonal fruits and vegetables on the plantation by season and raises domestic animals including chickens, ducks, geese, pigs and sheep in the breeding site. It actively practices the concept of harmonious coexistence between humans and nature and builds a sound relationship between humans and other creatures.

By the end of the reporting period, CUCC Pingyi has invested more than RMB 24 million in mine ecological restoration and increased the greening area by over 50 thousand m<sup>2</sup>.



During the reporting period

the key performance indicators related to the assessment of biodiversity are shown in the table below:

### **Key Performance Indicators**

Total number of operation premises

Total area of operation premises

Total number of operation premises conducting biodiv

Total area of operation premises conducting biodiversi

Total number of operation premises with great impact

Total area of operation premises with great impact on

Total number of operation premises carrying out biodiv

Total area of operation premises carrying out biodivers

<sup>9</sup> Total area of operation premises with great impact on biodiversity refers to the total area of mines and woodlands within the scope of the Company's place of business that may have a significant impact on biodiversity. <sup>10</sup> Total area of operation premises carrying out biodiversity management plans refers to the total area of the Company covered by the biodiversity management plan.

	Unit	2023
	Unit	483
	m <sup>2</sup>	67,180,590
versity impact assessment	Unit	483
sity impact assessment	m <sup>2</sup>	12,751,277
t on biodiversity	Unit	259
biodiversity <sup>9</sup>	m <sup>2</sup>	9,877,700
iversity management plans	Unit	259
rsity management plans <sup>10</sup>	m <sup>2</sup>	23,590,295

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# **Emission Compliance Management**

The Company always practices sustainable business strategies, ensures that emissions comply with relevant regulations and standards throughout our operations, and takes diversified emission reduction measures, so as to contribute to the sustainable development of society and industry.

#### Solid Wastes

The Company highly values the management of waste resources generated from cement products manufacturing, and standardizes the classification, separation and recycling of wastes. The Company has protected the soil environment around the production line while reducing resource waste.

Adhering to the principle of "transition of cement enterprises into urban solid waste purifiers", we adopt cement kilns to co-dispose of domestic wastes, solid wastes and hazardous wastes. The co-disposal project closely integrates cement production and waste treatment, and utilizes the heat energy generated from the incineration of solid wastes for cement production and the "residue" after incineration as auxiliary raw materials for cement, achieving zero emission and treatment of solid wastes while saving social resources.

The Company solves the problem of industrial and urban waste reuse and disposal based on the technological progress of solid waste consumption and resource recycling. We carry out cement kiln co-disposal of waste, and have built 58 cement kiln co-disposal production lines with an annual disposal capacity of 6,229 thousand tonnes. During the reporting period, the Company disposed of 5,723 thousand tonnes of hazardous wastes and solid wastes via rotary kiln co-disposal.

Meanwhile, the Company persists to monitor the hazardous waste management. In 2023, the "Safety and Environmental Protection Identification and Protection Standards" was developed and released, clarifying requirements for hazardous waste management. The Company ensures that hazardous wastes are accurately identified, stored, transported and eventually disposed of in accordance with relevant regulations and environmental standards, to minimize the potential impact on the environment and human health.

# 绿水青山就是金山银山

#### Cement kiln co-disposal of solid wastes to build a "waste-free city"

A "waste-free city" is an urban development model and advanced urban management concept led by the new development concept of innovation, coordination, sustainability, openness, and sharing. It minimizes the environmental impact of solid waste by fostering the green development and lifestyle, continuing to reduce the source reduction and promote the resource utilization of solid wastes, and minimizing the landfill.

Compared with the traditional disposal of hazardous wastes by incineration and landfill, cement kiln codisposal process can avoid building new kilns or requiring more industrial land, and has advantages of less project investment, shorter project construction cycle, and no incineration residues. Nancheng South has established the cement kiln co-disposal of solid wastes project, which sets up a solid disposal workshop, liquid disposal workshop, SMP disposal workshop and hazardous wastes storage facility. It follows five processes of classification, acceptance, temporary storage, pre-treatment, and allocation. For different solid wastes after pre-treatment, they are disposed of at different dosing points in equal proportions.

Since its trial production in December 2022, the project has safely disposed of more than 2,300 tonnes of hazardous wastes and over 3,900 tonnes of general solid wastes, including 2,870 tonnes of contaminated soil and 1,073 tonnes of sludge. When the project is officially put into operation, it will effectively alleviate or eliminate the environmental pollution of hazardous and solid wastes in Fuzhou and its neighboring counties and cities. It will steadily push forward the construction of a "waste-free city", and contribute to the improvement of regional ecological environment and the sustainable development of economy in Fuzhou.



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### Centralized disposal for recycling municipal sludge to achieve a win-win result for ecological environment governance and green economy

The comprehensive utilization of solid wastes by cement enterprises is an important way to realize the recycling and harmless green development with a full level of resource utilization. Sinoma Pingxiang, a subsidiary of Tianshan Company, with the new incineration technology of dryprocess rotary kiln as the core, utilizes the hightemperature incineration of rotary kiln to dispose of sludge and the incineration rate of harmful organic matters in sludge can reach 99.99%.



In addition, Sinoma Pingxiang makes full use of the heating value of organic components to save energy. Inorganic constituents such as ash residue after incineration can be used as raw materials for cement clinker production, which can save cost, reduce energy consumption, and lessen the dust generated in the traditional ash dumping and transportation process. The project has decreased the secondary pollution caused by municipal sludge to the environment, and can pre-process 26,400 tonnes of domestic sludge annually to realize the harmless processing and recycling of sludge.

The project contributes to the ecological environment governance of Pingxiang and its transition towards a waste-free city, which brings benefits to the environment and society and demonstrates the social responsibility and commitment taken by the central enterprise. It is also a vital step in the transition and upgrading of Sinoma Pingxiang and its green development.

#### Case Comprehensive utilization and recycling of industrial solid wastes

To implement national ecological civilization construction and green development strategies, and respond to the national policy, CNBMG has made a joint investment of RMB 150 million with external parties in the development of comprehensive utilization and recycling of industrial solid wastes project.

The project co-disposes of industrial solid wastes and hazardous wastes in cement kilns based on the production line and land of Sinoma Luoding, a subsidiary of Tianshan Company. Various kinds of industrial solid wastes and hazardous wastes enter into the cement kiln system after being screened, crushed and matched to meet technological requirements for cement production, and are harmlessly disposed of in the high-temperature and alkaline environment of the cement kiln system at 1,400°C or above.

After the project is put into operation, it is expected to dispose of 100 thousand tonnes of solid hazardous wastes per year, save about 3,000 tonnes of standard coal, and reduce carbon emissions by about 8,000 tonnes.



solid waste project

### Waste Gas Management

The Company focuses on exhaust emission management and independently develops and introduces advanced environmental protection processes, which greatly cut down pollution emissions. The Company has formulated the "Key Periods of Atmospheric Pollution Control Work Plan". According to the ultra-low emission standards and implementation progress requirements of each region, the Company has accelerated the ultra-low emission transformation of cement enterprises and implemented the upgrading and renovation projects of environmental protection facilities represented by SCR, denitrification tubes, wet desulfurization and other technical routes.

In the year, the Company signed the "Eco-environmental Protection Goal Responsibility Statement" with each regional company, specifying the target of reducing  $NO_x$ ,  $SO_x$  and particle emissions per unit product. By the end of the reporting period, through emission reduction measures such as ultra-low emission transformation, control of sulfur content of raw combustion materials and upgrading of existing dust collection equipment, emissions of clinker  $NO_x$ ,  $SO_2$  and particle decreased by 6.85%, 0.14% and 21.4% year-on-year respectively. All targets have been exceeded.



	Ultra-low emission and emission reduction tec new dry-process cement clinker line to reduce N
	Dust collection bag expansion and transformat and optimize production lines to significantly re
X	<b>Denitrification transformation:</b> Apply reliable d harmless gas and reduce waste gas emissions;
	Desulfurization transformation: Introduce com emission concentration, while ensuring the stab

Exhaust emission management measures

chnology: Conduct emission reduction technology transformation for NOx and ammonia escape emission concentration;

ation: Implement dust collection bag expansion and transformation, educe particle emissions;

denitrification technology to convert polluting waste gas into

npound desulfurization technology to effectively control pollutant bility of kiln system operation.

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#### Promotion of ultra-low emission renovation projects to facilitate green development

Deging South, a subsidiary of Tianshan Company, conducted an ultra-low emission renovation project in July 2021. It invited external experts to conduct assessment and monitoring, carried out self-checking and benchmarking, and put forward renovation and upgrading plans. Deqing South continuously monitors dust emissions. It equipped its production lines with more than 160 units of air box pulse bag dust collectors and realized whole sealing of the raw material shed. After over a year of renovation, Deqing Nanfang realized the "zero emission" in the most complicated dust point of the grinding station, and fully completed the ultra-low emission transformation.

Meanwhile, Deqing South innovated the automatic bag insertion, packaging, bulk loading and loading system, taking the lead in realizing the automatic data transmission and unattended operation of cement shipment in the whole process in the industry. Such progress protected workers' occupational health from the threat of manual work in this position.

After the upgrading and renovation, Deqing South can reduce dust emissions by more than 670 tonnes per year, and maintain the intensity of organized dust emissions below 10mg/m<sup>3</sup> and the unorganized emissions below  $0.5 \text{mg/m}^3$ .



#### SCR<sup>11</sup> denitrification project for flue gas of kiln tail in clinker line

To cope with the complex and changeable condition of flue gas in the cement industry and overcome the difficulties and pain points of existing denitrification technology, Changxing South Cement, a subsidiary of Tianshan Company invested RMB 29.9 million in a clinker production line of 5,000t/d, which has the first SCR denitrification equipment for cement kiln in medium temperature and dust condition at home and abroad. With such equipment, Changxing South Cement realized to denitrify more than 90% of complex and high nitrate exhaust, with the NO<sub>x</sub> emission concentration less than 50mg/Nm<sup>3</sup> and ammonia escape less than 5mg/Nm<sup>3</sup>, in the range of 190 ~220°C. In addition, the power generating efficiency of waste heat is not affected.

Compared with the traditional denitrification, the compound medium temperature and dust technology realizes the stable ultra-low emission of nitric oxide and improves the denitrification efficiency and operation cost, with little impact on the current process and equipment. It is a strong technological support to the transformation and upgrading, environmental protection, green development and blue sky in the cement industry.



<sup>11</sup>Selective Catalytic Reduction (SCR) is an advanced air pollution control technology used to reduce nitric oxide (NO<sub>x</sub>) emissions. SCR technology is mainly applied in coal-fired power plants, industrial boilers, power plants and other high-temperature combustion equipment

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#### Wastewater Drainage Management

The Company keeps a watchful eye on the water use and indicator management in the production of cement products and applies digital tools to monitor water consumption data in real time, so as to minimize water waste.

#### Wastewater drainage management

The Company strictly abides by the principle of "clean water and sewage diversion, rain and sewage diversion, separate collection, and processing by quality" to ensure the scientific and environmental management of wastewater discharges.

- Clean water and sewage diversion: The Company cleans and diverts industrial wastewater and domestic sewage at the source through strict management and equipment control, so as to ensure that all kinds of wastewater will be properly processed and then discharged in compliance with the standard or reused after reaching the recycling standard. At present, all factories of the Company have been equipped with processing equipment for domestic wastewater, and all processed wastewater is reused. Wastewater of washing tanks from enterprises under the Company operating commercial concrete business can be reused after collection and processing.
- Rain and sewage diversion: In order to avoid pollutants from rainwater entering the processing system, the drainage system is designed rationally to separate rainwater and sewage. Water quality monitoring wells are set up as required before rainwater and sewage pipes are connected to municipal rainwater and sewage pipes, which can monitor the collection and discharge management of rainwater in real time. In the year, the Company carried out special management for unorganized emissions and diversion of rainwater and sewage, and all potential risks investigated were rectified.
- Separate collection: To facilitate the subsequent processing and recycling of water in a proper manner, the concentration, volume and method of wastewater discharge shall comply with requirements of environmental impact assessment and discharge license. Wastewater collection and processing shall be in stringent accordance with the principle of classification. To prevent hazardous substances entering the surrounding area through rainwater runoff, enterprises discharging wastewater containing heavy metals and toxic and hazardous substances shall be equipped with rainwater collection facilities, and shall not directly discharge rainwater, whether diluted or not, so as to minimize the pollution to natural water and soil.
- Processing by quality: In accordance with relevant national regulations, hazardous substances in wastewater shall be removed by physical, chemical, biological and other means to ensure that the processed water meets environmental standards and can be safely discharged or recycled.

The Company has built corresponding facilities for centralized sewage processing and automatic monitoring equipment based on requirements of environmental impact assessment and sewage discharge license. The Company also has networked with the monitoring equipment of the ecological and environmental protection authorities to achieve real-time monitoring of sewage data. Meanwhile, we have explicitly prohibited setting up sewage outfalls in the protection zone of drinking water sources. All other established sewage outfalls will discharge sewage after processing in strict accordance with discharge requirements.

By the end of the reporting period, the Company's four wet aggregate production lines were equipped with wastewater processing systems. The processed wastewater can be recycled to realize zero wastewater discharge.



Deging South has constructed a series of water treatment support facilities while carrying out the "Project of Optimizing and Upgrading the Production Line of the Green and Intelligent Cement Grinding Station with an Annual Output of 2.6 million Tonnes". At the early stage of the factory construction, a 2,000 m<sup>3</sup> initial rainwater collection tank was built and a rainwater ditch was dug. The rainwater, road wash water and backwash water are pumped to the tank through the ditch after sedimentation and oilwater separation. Deqing South has built a wastewater treatment plant with a treatment capacity of 5m<sup>3</sup>/h, into which all the Company's domestic and canteen wastewater are discharged for treatment. In addition, Deging South has built three sets of intelligent ship wastewater reception facilities, which collect all domestic wastewater from ship operators into the plant. After all of the Company's wastewater is treated to meet the standards, it can be used as supplementary water for production or greening and road watering, achieving zero wastewater discharge.

After the operation of the water treatment system, its annual water withdrawal from river networks has been significantly reduced. In the year, Deqing South 's water withdrawal was 31,960 tonnes, a decrease of 52.51% from that before the renovation in 2019. Thus, it can save about RMB 60 thousand in water resource fees for river networks each year. Deqing South was awarded the honorary title of "Zero Discharge" factory in Huzhou City and "Top 100 Waste-free City Cells" in Zhejiang Province.





#### Realization of the zero discharge of wastewater from factories, a new chapter in

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#### Domestic wastewater treatment in Jinshan South

Glossary

Jinshan South, a subsidiary of Tianshan Company, is located in a remote area. In the past, its domestic wastewater could not be treated, resulting in pollution. In the year, Jinshan South invested RMB 1.05 million in the renovation of domestic wastewater treatment. Afterwards, the water quality can reach GB/T 18920-2020 urban wastewater recycling for urban miscellaneous use. The treated water can be used for greening and site spraying, thus reducing pollution.



#### Water quality monitoring and management

The Company regularly monitors the water to ensure its quality. Every year, the Company sends groundwater samples to the professional institution for testing, while regularly sending samples of production water withdrawn from rivers to the laboratory for testing.

In addition, the Company's production boilers water is treated with industrial salt prior to its use, so as not to affect the subsequent production or to cause water quality problems.

#### Reduction of water consumption

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In response to the macro-environmental situation of water scarcity and environmental pressures, the Company actively implements water conservation measures to manage and reduce water consumption.

#### Construction of the main water reuse tank, achieving water conservation and zero discharge

Jiangsu Xinjie South Cement Co., Ltd., a subsidiary of Tianshan Company, has expanded the existing water tank into a main water reuse tank connecting to the factory's open and hidden water reuse channels. Water discharged during production and rainwater is collected through various ditches to the tank and, after settling, is sent to ' its water treatment system. The treated water then flows to the underground water reservoir for production. In this way, the Company saves on water and electricity costs and achieves near-zero discharge.





# Strengthening the High-quality Talent Base

Under the sustainable development strategy of "strengthening the high-quality talent base," the Company attaches great importance to employee development by integrating talent cultivation into our development strategy and being committed to creating a diverse, equitable and inclusive workplace. In addition, we prioritize the health and safety of our employees and promote the high-quality application of intelligent production safety management systems to strengthen our intrinsic safety.

- Diversity and Inclusion
- Employee Salary and Welfare Benefits
- Employee Training and Development
- Occupational Health and Safety



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#### Strengthening the High-quality Talent Base

## **Diversity and Inclusion**

To make every employee feel respected, supported and encouraged, the Company strives to develop a diverse workforce, and has a "zero tolerance" attitude to discrimination and harassment in the workplace. Besides, the Company safeguards employee' s legitimate rights and interests and adheres to the principle of equal employment with openness and fairness. We strictly prohibit the employment of child labor and forced labor, and continue to improve our employee communication channels, listen to their concerns, and enhance their sense of identity and satisfaction.

### **Strict Employment Practices**

The Company has established internal management policies on salary and dismissal, recruitment and promotion, equal opportunities, diversity, anti-discrimination, anti-harassment, and other welfare benefits, such as the "Recruitment Management Measures" and "Labor Contract Management Measures". Based on them, we protect the rights and interests of our employees and treat them fairly and equitably. In the year, the Company recruited 1,976 new employees.

For recruitment and hiring, the Company always adheres to the principle of fair competition and be selected on merit. We standardize management procedures for hiring, contract signing, probationary management, dismissal, etc. Authentic, accurate and valid personal information is required to be provided by all new employees upon hire and will be verified by the Company. Candidates whose materials or information are found to be false will not be hired. In doing so, we protect the legitimate rights and interests of both the Company and our employees and regulate employment conduct.

We strictly prohibit the employment of child labor and forced labor. The Company carefully verifies the identity information of new employees and clearly stipulates in the verification process that candidates must be 18 years of age or older, thereby preventing the hiring of child labor from the outset. The Company follows the principle of equality, voluntarism and consensus in the signing and modification of employment contracts, ensuring that all employees are employed voluntarily and preventing forced labor. During the reporting period, the Company had no child labor or forced labor.

The Company clearly specifies employees' working hours and leave hours to guarantee their rights to rest and leave. Management procedures of employees' leave and rest have also been improved. For over-time employees, overtime payments will be paid in accordance with relevant management regulations on employee salary.

### **Respect for Equality and Freedom**

During the reporting period, the Company formulated and publicly released the "Policy Statement of Human Rights" ("Policy of Human Rights"), which applies to the Company, subsidiaries, suppliers, and other partners. The content of the Policy of Human Rights includes the Company's commitment to adhere to all internationally recognized human rights principles as set forth in the "United Nations Universal Declaration of Human Rights", the "Declaration on the Protection of Human Rights", and the core conventions of the International Labor Organization. In the Policy of Human Rights, the Company also upholds diversity in employment and opposes discrimination, guarantees equal pay for equal work, and respects freedom of association for employees.

In order to implement the Policy of Human Rights and ensure its effectiveness, the Company regularly identifies potential human rights risks. The scope of identification includes the operation of Tianshan Company's businesses (including subsidiaries), the Company's upstream and downstream value chain, as well as new businesses (mergers and acquisitions and associates). Topics contain forced labor, child labor, freedom of association, collective bargaining, equal pay for equal work, and discrimination, and involve a variety of groups, including employees, women and children, original inhabitants, migrant workers, contract workers, and local communities. On an annual basis, we review the effectiveness of human rights management in accordance with the "Policy of Human Rights", set targets and, based on these, continuously improve management capabilities.

For violations of the "Policy of Human Rights" at all levels, the Company has developed mitigation and remediation plans. If, during the process of identifying human rights risks, violations such as child labor or forced labor are discovered, we will immediately report them to the Human Resources Department for cause trace, and conduct a comprehensive and objective investigation. After receiving the investigation results, the Company will communicate with the victims to find solutions (such as compensation in accordance with laws and regulations), and will impose administrative penalties on the violators and require them to participate in training on respecting employees' rights. Finally, the Company will review and summarize lessons learned to prevent recurrence.

### Protection of Employees' Rights and Interests

The Company values the development of a diverse and inclusive culture. We regularly train all employees on diversity, inclusion, anti-discrimination and anti-harassment. We also explicitly prohibit harassment (including sexual harassment) and discriminatory behavior in the Policy of Human Rights.

The Company has set up a whistleblower mailbox for employees and other interested parties to report instances of harassment and discrimination. The Human Resources Department will promptly conduct independent investigations and follow-up upon receipt of reports. If the investigation confirms that the report is true, the offender will be disciplined by the Company. If there is any damage to the victims, the offender will be liable for compensation. In addition, depending on the severity of the reports, the Company determines whether to impose administrative penalties on the relevant units involved and requires them and the offenders to provide explanations regarding the rectification plan.

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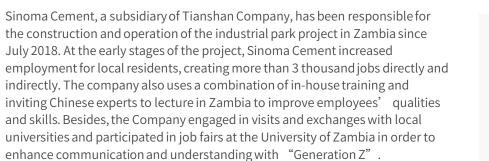
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The Company values and safeguards the rights and interests of female employees. We provide equal opportunity and treatment for women in hiring, training, and promotion; ensure equal pay for equal work; and encourage female employees to develop their leadership and take up management positions. In the year, the total amount of Company and all level companies' senior management is 1,241, among which female managers are 93, accounting for up to 7.49%.

The Company values and protects the rights and interests of local residents, and we explicitly oppose employment discrimination on the basis of ethnicity, race, gender, age, and religious beliefs and employ them on an equal basis. The Company is also committed to developing communities in countries other than China. In projects in countries like Zambia, Nigeria and Mongolia, we actively engage in community development, helping residents improve infrastructure and partnering with local communities for shared growth.

#### Mutual benefit and win-win between Sinoma Cement and the people and enterprises of Zambia



The company increases the procurement of local materials and services, actively works with local suppliers, subcontractors and service providers, and cultivates local supply chain, industrial chain and value chain. Through cooperation with the Company, more than 100 local enterprises such as equipment, materials and financial banks have achieved sustainable and healthy development.



welfare documentaries of Zambia Company



on activities with Chalimbana University in Zambia

#### Employee sports day by Mongolia Company to deepen interaction between Chinese and Mongolian employees

In the year, Mongolia Company held the "6<sup>th</sup> Employee Sports Day - Family Competition for Fun", providing a stage for local employees to showcase their sports talents, with the participation of Chinese and Mongolian employees, their families, security companies and other cooperation units. Through this event, the Company hoped to enrich the cultural life of local employees, deepen the interaction between Chinese and Mongolian employees, and strengthen employee unity.

#### **Smooth Communication Channels**

Tianshan Company continues to improve the democratic management system in enterprises with the workers' representatives congress as the fundamental form. The Company has established trade unions at all levels to facilitate employees' suggestion channels. Through them, we fully protect employees' rights to know, to participate, to be heard, and to oversee. During the reporting period, the Company ensured the participation of employees in the decision-making and management of daily operations through the following ways:

#### Appointment of worker directors and worker supervisors

participate, to be heard and to oversee.

#### Improvement of trade unions

employees, with union membership rate of 99.2%.

#### Implementation of the workers' representatives congress

then make sure that the opinions expressed and suggestions made are implemented.

#### Improvement of factory affairs disclosure

The Company shall disclose major corporate matters and various matters involving the interests of employees matters. In the year, the Company recommended 6 units and 1 unit for the title of model unit and demonstration unit for national open and democratic management of factory affairs, respectively.



The Company has appointed worker directors and worker supervisors in accordance with the law. Their rights include listening to the opinions and suggestions of the workers, representing them in exercising their rights to

The Company has established trade unions, and equips them with appropriate part-time personnel to ensure their standardized daily operation. By the end of the reporting period, the trade unions included 61,168

The Company has set up the Workers' Representatives Congress and held annual congress meetings to report to the representatives on the production and operation of the Company. In addition, the Company collects opinions and suggestions from all employees at the meetings. The business departments concerned

in a lawful, timely, truthful and scientific manner and guarantee employees' rights to know about important

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#### Workers' representatives congress of Tianshan Company

In March 2023, the Company successfully held the first workers' (members') representative meeting, implementing grassroots regulations of the trade unions, and effectively safeguarding the rights of employees to know, to participate, to be heard, and to oversee. A total of 177 employee representatives attended, including union cadres, Party and government leaders, and worker role models. At the meeting, employee representatives expressed their opinions and suggestions on the establishment of trade unions in regional companies and member enterprises. They also urged and guided 5 companies to establish trade unions, 75 companies to hold union elections, and 3 regional companies to conduct by-elections for union chairmen and committee members.

In the year, the workers' representatives congress of the Company deliberated 212 issues on suggestion right, 297 issues on passing authorization, 51 issues on the right of supervision and evaluation, 141 issues on democratic suffrage and 35 other issues, and provided 49 legal advisory services.



## **Employee Salary and Welfare Benefits**

By establishing the "Management Measures for Employee Salary and Benefits", "Management Measures on Leave and Attendance" and other internal regulations, the Company specifies regulations on salary structures, salary management, welfare benefits, statutory holidays and holiday payroll. The Company also pays employees' post-performance salary, and provides employees with competitive salaries and welfare benefits, including fully paid five social insurances, the housing fund and the enterprise annuity.

### **Salary and Performance**

Based on the established internal policies such as the "Performance Management Measures", the Company has set up a multilevel and grade-based performance management system using a variety of methods to manage and evaluate employees' performance:

In terms of team performance evaluation, the headquarters sets annual operation accountability targets and assigns these targets to each subsidiary. The completion of these targets at the subsidiary level is tracked monthly.

In terms of target management, the Company implements an annual quantitative evaluation mechanism for all employees. Management of the Company is required to sign "two letters and one agreement<sup>12</sup>" which set out annual performance targets. The Company evaluates middle-level cadres (department heads) based on the achievement of annual departmental goals. We require them to specify the annual goals of subordinates based on their work priorities and responsibilities, and regularly review the achievement of employee goals and conduct employee performance management.

In terms of multi-dimension performance evaluation, the Company evaluates employees through democratic cadre evaluations, annual comprehensive evaluations, and other methods, including comprehensive evaluations of employee performance based on the opinions and evaluations of their immediate supervisors, peers and subordinates.

In terms of employee communication, the Company carries out monthly and annual conversations with employees to discuss challenges they face in their roles, progress in meeting work goals, etc., so as to support employees in their continuous development, enhance their capabilities to perform job responsibilities, and facilitate the achievement of both individual and team performance goals.

We are constantly optimizing our salary policy. We have improved our salary incentive system with market-based incentives as the core and medium- and long-term incentives as the main pillar. In the year, in order to share our success with our employees, we formulated a medium- and long-term incentive plan for employees below senior management. The plan, which includes equity incentives for employees in mixed-ownership companies, excess profit sharing and virtual equity, will be piloted and rolled out later.

<sup>12</sup> "Two letters and one agreement": Letter of Responsibility for Business Performance during the Term, Letter of Responsibility for Annual

Business Performance, and Job Appointment Agreement

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#### Strengthening the High-quality Talent Base

### Welfare Benefits

Tianshan Company is committed to providing employees with diverse and high-quality welfare benefits. We provide daily benefits such as movie tickets and gift vouchers, and conduct activities such as high-temperature sympathy, sick sympathy, funeral sympathy, and wedding and birth blessings for our employees. The Company has established a dietary committee to actively listen to employee feedback on issues, continuously improve services, and ensure that employees are provided with healthy, nutritious, and delicious food.

We also take care of our employees' physical and mental well-being. We organize sports competitions and lectures on mental well-being to help them reduce stress and create a healthy, energetic and positive workplace.

#### Case Mental well-being lecture by CUCC Qingzhou

On November 17, 2023, CUCC Qingzhou invited the national second-level psychological counselor, KSME lecturer, career planner, and specially appointed psychological expert by the Federation of Trade Unions of Weifang City to give a lecture on mental well-being entitled "KSME Problem Solvers - Making Problem Solving More Efficient and Pleasant". The purpose is to guide and help employees to relieve psychological pressure and develop a positive and healthy attitude. The lecturer focused on difficulties in work and life, explaining profound theories through concrete examples and simple language to teach employees how to rationally deal with work and life pressures and cultivate an optimistic attitude. More than 50 employees attended the lecture. In the future, CUCC Qingzhou plans to provide continued mental well-being services for its employees, comprehensively enhancing their happiness and sense of belonging.



"KSME Problem Solvers - Making Problem Solving More Efficient and Pleasant", a lecture on mental well-being

#### Case

In the year, the first Tianshan Company badminton competition was successfully held in Changsha City, Hunan Province, with 22 representative teams and 227 employees from headquarters, regional companies and member enterprises participating. During the competition, employees demonstrated and shared skills with each other, upheld the concept of "friendship first, competition second," and strengthened friendship and team unity.



#### Case Monthly collective birthday parties for employees of Jiangxi Yushan South Cement Co., Ltd.

Jiangxi Yushan South Cement Co., Ltd. holds monthly collective birthday parties for employees to make them feel at home and increase their sense of belonging and happiness, through which the Company takes care of its employees in a timely manner, creates a warmer and more harmonious working atmosphere, improves the communication between the Company and its employees, and increases their satisfaction.



Collective birthday parties for employees

#### "Pleasant Work and Happy Life" badminton competition by Tianshan Company

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## **Employee Training and Development**

The Company places great emphasis on employee growth and development. We are building a professional platform for qualified personnel management at all levels step by step, providing employees with diversified training programs and reasonable promotion channels, and giving them a platform to display themselves.

#### **Talent Development Plan**

In order to continuously improve the talent development system, the Company has formulated internal policies such as the "Talent Pool Management Measures" and "Talent Inventory Operation Manual" based on the industry development direction and our own business needs. To continuously improve the talent management system and lay a solid foundation for sustainable development, the Company acts actively to build a full-level reserve talent pool and develop talent assessment reports and plans of the Company and its subsidiaries. In the year, the Company performed the following work related to building the talent development system:

#### **Employee talent inventory**

In 2023, the Company conducted an all-employee (Tianshan Company Headquarters and 15 regional companies) talent inventory. The goal was to get a clear picture and assess the comprehensive skills of the managers through the inventory, establish a talent competency model for key positions in Tianshan Company, and create a talent portrait and map of managers. Meanwhile, the Company planned to build a "talent pool" and a "reserve cadre pool" at all levels, and to compile an "Insight Report on Talent Team Data" based on the results.

#### Establishment of overseas talent pool

In order to further improve the international management system of Tianshan Company and strengthen the organization and talent guarantee of international work, the Company has formulated the "Work Plan on Human Resources Guarantee of Overseas Subsidiaries" Through employee self-registration and referrals from regional companies, we have built an overseas talent pool that includes 131 professional talents in business management, financial management, sales management, and technology.

#### Introduction of "Dual Carbon" (carbon peaking and carbon neutrality) and digital talents

To advance the low-carbon transition and digitalization strategy, the Company has increased efforts to attract carbon peaking, carbon neutrality, and digital talents. In the year, the Company established the Dual Carbon Management Department, and brought in talents of "dual carbon" management. For digital talents, the Company established the Digital Department, and appointed a special vice president and a chief data officer to advance digitalization efforts. In the future, we will continue to introduce relevant professional talents through public recruitment.

### **Talent Development System**

The Company has formulated and implemented the "Training Management Measures" with the aim of becoming "a world-class demonstration enterprise". We have also established a three-tier (i.e., the Company headquarters regional companies - member enterprises) training management system, which defines the full process of training management measures from training needs analysis to training effectiveness assessment.

The Company follows the principle of "Three Tiers and Three Definitions" <sup>13</sup> and a training method of "mainly internal training sessions, supplemented by external training sessions". By fully utilizing resources at all levels, we have established a multi-channel, multiform, multilevel employee growth training platform with special emphasis. In this way, we can continuously cultivate professional talents and improve employees' skills.

#### Construction of a training center with Tianshan Company characteristics Case

The Tianshan Company Training Center was built, integrating teaching, R&D, accommodation, catering, gymnasium and other functions. The center focuses on high-end products, intelligence, environment, "cement+" and other fields, utilizes internal and external resources, and adopts a "theory + internet + practice" training approach to provide talents for the high-quality development of the Company.

At present, the center is not only a demonstration base for cultivating professional technical and highly skilled talents, but also a provincial safety training institution and a place to hold provincial production safety examinations in Zhejiang Province. The center has a professional training team and hundreds of internal part-time instructors. Since its inception, 192 training events have been successfully conducted while 10,825 people have been trained.



<sup>13</sup> "Three Tiers and Three Definitions" : "Three Levels" : the Company headquarters - regional companies - member enterprises, "Three Definitions" : defined location, defined position, and defined intention.

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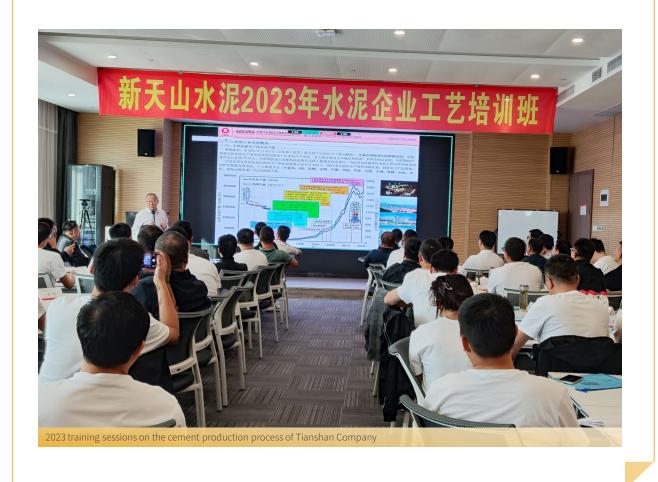
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#### 2023 training sessions on the cement production process of Tianshan Company

In the year, Tianshan Company organized training sessions (2<sup>nd</sup> round) on the cement production process. The purpose was to reserve young professional and technical talents for the high-quality development of the Company. The trainees were engineering and technical personnel involved in front-line operations control and process and management of cement production in member enterprises. This time, the Company invited experts such as Cai Yuliang and experts in cement calcination and grinding to give lectures at Tianshan Company. Cai Yuliang is a former professor and senior engineer at SINOMA International Engineering Co., Ltd. and national master of engineering design. The content included cutting-edge applications of cement industry denitrification and cement kiln joint disposal technology, basic application knowledge of cement calcination and grinding, lean improvement of the cement process, typical case analysis of kiln grinding process parameters, and diagnosis of other difficulties.

103 trainees from 13 regional companies of Tianshan Company participated. After the training, they all commented that the lessons were closely related to their work and that they had a better understanding of their work.



#### Case 2023 training sessions on intelligent posts of Tianshan Company

By the end of the reporting period, Tianshan Company organized 2 training sessions on intelligent posts. The trainees were technicians involved in automation and instrument operation and maintenance at member enterprises. The Company arranged in-house lecturers to illustrate the operation of automation instruments and interpret the work instruction on standard operations, and shared cases of Tianshan Company's excellent intelligent factory practice. The Company also invited experts in the field of intelligence to explain the application of basic knowledge such as automation control, process parameter measurement, and DCS programming in cement factories. Throughout the training, the Company encouraged trainees to interact and learn from each other, enhancing their ability to apply theoretical knowledge.

116 trainees from 12 regional companies of Tianshan Company participated. After the training, they all commented that the knowledge they learned can guide them in work.



The key performance indicators for talent attraction and retention in the Company in the year are shown in the table below:

Key Performance Indicators

Training hours per employee (all types of training)

Total expenses for employee training and developmen

Turnover rate

Voluntary turnover rate (include voluntary turnover and retirement)

	Unit	2023
	Hour	35.23
nt	RMB 10,000	3,017.95
	%	11
ıd	%	8

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### **Talent Promotion Channel**

The Company has built an individual sequence of competency model in the Company headquarters, regional companies and member enterprises. By following the four major principles, namely introducing systematically, selecting competitively, cultivating comprehensively and assessing incentively, a professional platform for qualified personnel management at all levels shall be built in a rational, orderly and step by step way to meet short-term and long-term qualified personnel needs for business development.

The Company strengthens the construction of a dual-channel system for career development. The Company has developed differentiated promotion requirements and channels for management and technical sequence positions, ensuring that employees in different positions can follow a development path that matches their job characteristics and clearly sets out their career development prospects.

#### Management sequence

The management sequence of the Company, from low to high, is assistant, supervisor, senior manager, assistant general manager, middle-level deputy, middle-level chief, assistant president, management team deputy, and management team chief. For employees below the middle level, the Company promotes qualified employees based on job requirements and the results of annual performance evaluations. For middle-level deputies and above cadres, the Company adheres to the principle of combining Party supervision with marketoriented employment mechanisms. In addition, we have innovated the cadre management mechanism and optimized the cadre training, selection and appointment mechanism. We continue to step up efforts to promote young and professional talents who have worked at the grassroots level and achieved market success to the cadre team, and fill the cadre team with professionals and promising young people.

#### Technicalsequence

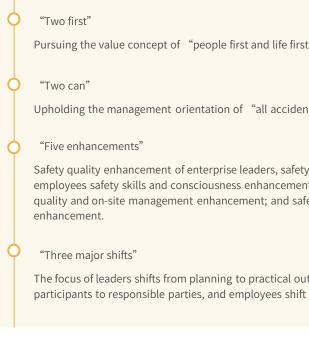
The Company has established a "dual channel" for technical talents, providing them with two development paths: the professional sequence and the operational sequence. The Company has set up 6 ranks in the professional sequence: technician, assistant engineer, engineer, deputy chief engineer, chief engineer, and expert engineer; and 6 in operational sequence: junior technician, intermediate technician, senior technician, master technician, senior master technician, and special master technician. The Company evaluates the professionalism and operational skills of employees in terms of ethics, job fulfillment and performance, and uses the evaluation results as the basis for promotion and appointment.



## **Occupational Health and Safety**

The safety and health of employees is the cornerstone of sustainable development of Tianshan Company. The Company conscientiously implements the important decisions and deployments of the Communist Party of China Central Committee and the State Council on production safety, fully comprehends the main idea of the Group's work conference. We adhere to the "2253" management idea, uphold the value concept of "people first and life first", uphold the management orientation of "all accidents can be prevented and all accidents can be avoided". We continuously strengthen our safety management system and implement production safety management measures to reduce related risks.

#### "2253" management idea



During the reporting period, the Company formulated and publicly released the "Occupational Health and Safety Policy Statement" ("Policy Statement"). This Policy Statement applies to all employees of the Company headquarters, holding subsidiaries, suppliers, employees of contractors, associates and other business partners. The Board and senior management together regularly review and improve the implementation of the Policy Statement. The content of the Policy Statement includes the Company's commitment to setting quantitative targets for occupational health and safety, to improving the related management system, and to encouraging employees or their representatives to provide feedback or suggestions.

The Company has set quantified targets of zero work-related fatalities, zero new occupational diseases and a serious injury rate per 1,000 employees of ≤ 0.8%. We also actively promote the safety culture and effectively fulfill our safety management responsibilities. In the year, the Company had 0 new cases of occupational diseases, and a serious injury rate per 1,000 employees of 0.44%. The expenditure on production safety amounted to RMB 1,004,860 thousand.

Upholding the management orientation of "all accidents can be prevented and all accidents can be avoided

Safety quality enhancement of enterprise leaders, safety and environmental protection managers and team leaders; employees safety skills and consciousness enhancement; on-site protective equipment and facilities enhancement; quality and on-site management enhancement; and safety management and risk prevention and control capabilities

The focus of leaders shifts from planning to practical outcomes, the roles of functional departments shift from participants to responsible parties, and employees shift from operators to managers of their respective territories. About the Report

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### **Production Safety Management System**

Glossary

Tianshan Company has formulated internal rules and regulations such as the "Production Safety Management Regulations", "Production Safety Responsibility System", and "Safety Management System of Related Parties". We continuously improve our safety management system, and clarify the basic principles, organizational structure, division of responsibilities, investigation and handling, and emergency response requirements for production safety, so as to standardize our management process.

The Company continues to improve the top-down three-level (the Company headquarters - regional companies - member enterprises) safety management structure. We have clearly defined safety management responsibilities at all levels, facilitated communication channels between upper and lower levels, and established a sound safety management system that includes "supervision and random inspection" at the headquarters level, "inspection and mutual inspection" at the regional level, and "self-inspection and review" at the enterprise level. They ensure that safety management covers all employees and runs smoothly.

The Company has established the Production Safety Management Committee ("Safety Committee") at the headquarters level. It is the top leadership and decision-making body of the Company's production safety and occupational health management, with the Company's main responsible person as the director, main persons in charge as deputy directors, and chief department heads as members. Responsibilities include the deployment, organization, and oversight of the production safety management. The Company holds the production safety meeting every three months to learn the state important instructions on production safety, summarize the achievements in production safety of last three months, and deploy the key jobs and clarify the safety responsibilities of the following three months.

The Safety Committee has offices that are under the direction of the Company's Safety and Environmental Protection Department. Responsibilities include implementing the guidance of the Safety Committee and carrying out day-to-day work related to production safety and occupational health management. The Company also sets up safety committees in regional companies, as well as their own safety and environmental protection departments, with dedicated safety and health managers responsible for relevant regional work. The Company also requires member enterprises to establish their own safety and environmental protection departments on the principle of "establishing as many as possible" and in accordance with management needs. These departments should be equipped with competent safety and health managers responsible for relevant internal work.

### **Production Safety Management Measures**

The Company continuously promotes normalized, standardized and technological management and the improvement of production safety. We seriously investigate hidden safety dangers and risks, implement safety management responsibilities, promote safety awareness in the production process, and continuously reduce production safety risks.

#### Development of Intelligent Factories

Tianshan Company actively promotes "prosperity from science and technology". We are gradually replacing unsafe and outdated equipment and technologies by iterating and updating automotive, intelligent and informationized equipment and technologies, and gradually promoting unmanned operation of risky tasks under harsh conditions. The Company fully promotes the development of the intelligent production safety management system, accelerates the pace of digital transformation, strives to achieve mechanization and automation to reduce human involvement, and focuses on improving the level of intrinsic safety. Thus, we can effectively prevent various production accidents from the root and guarantee employees' lives and health. In the year, the Company included 188 cement kiln subsidiaries in the scope of system development, and achieved digital transformation for 85 subsidiaries.

To reduce safety risks and further prevent safety accidents, Sanming South has installed a video surveillance system in the factory. This system uses AI to recognize and analyze video images, monitoring workers, equipment, and the environment of the production site to eliminate human monitoring errors and improve safety. Sanming South also uses intelligent helmets, intelligent chest card positioning, and AI video surveillance to display location and video in real time on electronic maps. This allows for oneclick alarms to ensure the fastest possible rescue and prevent personnel from missing the rescue time in the event of danger.

#### Intelligent factory renovation and upgrading of CUCC Tai'an Case

The standardized data center and dispatch system of the 5G mining base station in CUCC Tai' an have been completed and preliminarily debugged, enabling remote excavator control and unmanned electric card operation. At present, the hardware construction of the Company's intelligent laboratory and operation center has been completed and put into operation.



#### Case Optimization of intelligent security comprehensive control platform of CUCC Luoyang

CUCC Luoyang has upgraded and renovated its intelligent security comprehensive control platform in a phased manner. CUCC Luoyang has added 41 sets of key area monitoring and voice broadcasting devices and renovated the plant's optical fiber cable line with more than 100 new points. This enables it to implement real-time control of equipment and personnel in key areas such as raw material transport, hazardous areas, restricted areas, pits, conveyor corridors, electrical rooms, and flammable and explosive materials. In summary, the upgraded platform can help CUCC Luoyang coordinate the safety control goals of different regions and lay a solid foundation for production safety.

#### Case Application of intelligent production safety management system at Sanming South



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#### Implementation of the Responsibilities for Production Safety

According to the principle of "horizontal to the edge and vertical to the bottom", the Company signs a "Safety Target Responsibility Agreement" with each member enterprise every year, and the main responsible person of each enterprise signs a Safety Target Responsibility Agreement with each department and primary staff level by level. The Company focuses on safety process control, develops monthly assessment mechanisms of production safety target indicators, and incorporates the results into the monthly production and operation performance of member enterprises to improve the overall safety management effect.

In case of serious injury, work-related fatalities and other safety accidents, the Company promptly conducts a serious accountability process for the person in charge, and requires all accident-related employees to analyze the causes of accidents, draw lessons and rectify the existing safety management vulnerabilities. The Company will also inform all staff of the specific situation to avoid the recurrence of similar accidents.



#### Management and Control of Health and Safety Risks

The Company adheres to the policy of "safety first, prevention oriented and comprehensive management". We have formulated regulations such as the "Management System of Safety Risk Grading and Management and Control" and the "Management System of Production Safety Inspection and Hidden Danger Troubleshooting and Governance", and established a top-down grading, management and control mechanism on occupational and safety risks. The Company headquarters supervises and urges regional companies and member enterprises to establish a safety risk grading and control mechanism and a supervision mechanism to handle major hazards. The Company headquarters supervises and inspects the risk grading and control of member enterprises. Regional companies guide, supervise and inspect the risk grading and control of member companies and assist the Company in supervising the handling of major hazards. While member enterprises, as the responsible entities for risk grading and control, organize and implement the Company's risk grading and control work.

The Company performs at least one comprehensive occupational health and safety risk assessment each year. The scope includes the production process, equipment and facilities, work environment, and personnel behavior. Based on the results of the assessment, the Company creates a risk list and develops emergency preparedness and action plans for the identified risks. The Company requires member enterprises to set up safety risk boards in conspicuous locations and key work areas and to create safety risk reporting cards for posts. The content of the reporting cards includes main safety risks, categories of hidden dangers, consequences, controls, emergency measures, and reporting methods to enhance risk monitoring and alerting.

To further reduce health and safety risks, in accordance with the overall requirements of "full coverage, zero tolerance, strict law enforcement, and focus on effectiveness", the Company continues to enhance the hidden danger troubleshooting for each part, each link and each position of the whole production and operation process. The Company carries out comprehensive risk investigation according to seasonal inspection, holiday inspection, various professional inspections (electrical, dust and poison prevention, pressure vessels, fire prevention, dangerous chemicals). In response to the prominent problems identified in the above investigation, the Company has implemented a series of special rectification measures to thoroughly eliminate the hidden dangers. Measures include "Special Rectification Measures for Major Safety Hidden Dangers at the End and Beginning of Each Year", "Mine Production Safety Inspection", "Special Rectification Measures for Belt Conveyors" and "Special Investigation and Rectification Measures for Gas and Gas Cylinders". Besides, the Company has entrusted China Testing & Certification International Group Co., Ltd. (CTC) to conduct the "1+N+X" special safety and environmental protection audit, and invited external safety and environmental protection experts to identify related risks. In the year, the Company completed external safety audits for 101 subsidiaries and environmental audits for 55 subsidiaries.

During the reporting period, the Company and enterprises at all levels conducted 30,346 safety hazard inspections and 233,294 inspections to identify potential hazards, with a rectification rate of 99.39%.

#### During the reporting period



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30,346

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#### Safe Workplace

The Company is committed to creating a healthy, safe and comfortable workplace for the employees. Considering the characteristics of the building materials industry, the Company has formulated internal systems and regulations to fully guarantee employees' health, such as the "Occupational Health Management System", "Personal Labor Protective Equipment Management System" and "Management System of Health and Safety of Related Parties". During the reporting period, 472 enterprises at all levels of the Company obtained ISO 45001 Occupational Health and Safety Management System Certification.

The Company attaches high importance to the prevention and control of occupational diseases. We prevent, control and reduce occupational hazards in the following ways:



The Company continues to upgrade the supporting facilities and first-aid equipment for dust proof, anti-poison, noise reduction and emergency management at production workplaces, while strictly complying with the requirements of labor protection to equip the operators with work clothes, helmets, safety shoes, gloves, anti-noise earmuffs, anti-dust masks and other labor-protective equipment with reliable quality. In addition, the Company requires every personnel exposed to occupational hazards to sign the "Occupational Health Notice"



The Company annually provides a health checkup for all employees (full-time and outsourced employees), covering routine internal medical test, routine surgical test, routine eye tests (including the slit lamp exam), routine E.N.T exam, routine dental exam and multi-purpose ECG exam. Besides, the Company adjusts the items based on the age and sex of the employees.



In accordance with the "Law of Occupational Disease Prevention" and "Regulations on Supervision and Management of Occupational Health", the Company organizes occupational disease medical examinations for employees in hazardous places to confirm their health status, and transfers employees with occupational contraindications to other positions. At the same time, the Company cooperates with a third party to detect the factors that can cause occupational hazards in the workplace, assess the occupational hazards level of the workplace and take countermeasures.



The Company complies with laws and regulations, pays work injury insurance premiums for employees every month, and reasonably arranges the working hours of employees to avoid overworking.

#### Health checkup for CUCC Xintai employees

In September 2023, CUCC Xintai Taifeng Cement Corporation provided employees with a health checkup, covering ECG, routine blood test and abdominal ultrasound. Meanwhile, CUCC Xintai invited first-aid attendants from Red Cross and hospitals to teach first-aid skills and regularly monitor the blood pressure and blood glucose of employees with hypertension and hyperglycemia. By doing so, the Company guarantees the health and safety of employees.



Tianshan Company emphasizes the health and safety management of outsourced employees in the production safety management system. We apply the same standards of occupational safety management to full-time and outsourced employees. Before outsourced employees take their posts, we conduct safety training and related exams and inform them of the safety risks. By doing so, we create a healthy and safe working environment.

To fully understand and monitor contractors' ability of health and safety management, the Company requires each member enterprise to strictly review the safety management qualification and safety risks of contractors. The Company also requires the member enterprises to take into account occupational health and safety when entering into contracts with contractors, and sign the "Safety Agreement" with them, to define roles and responsibilities of safety management. Before a project starts construction, the unit in charge of the project shall review the safety certificates, tool lists and other materials provided by the contractor, and then submit the materials to the safety and environmental protection department for verification. The construction permit is issued only after the verification is passed. In this way, we guarantee the health and safety of outsourced employees further. The Company will assess and review contractors that are found violating the code of safety management based on the "Safety Agreement" .

#### Case Safety training for outsourced employees by Zhejiang Cement

In November 2023, Zhejiang Cement held a health and safety training for 15 outsourced employees who would work on the site. During the training, Zhejiang Cement informed them of the risks in the project, such as crane injury, electric shock, falling from a height and mechanical injury, and standardized the preventive measures before entering the site. Zhejiang Cement requires that all outsourced employees are allowed to start work or construction on site only after they have assessed safety work and implemented safety measures in line with the operating regulations and process on production safety and occupational health.



In 2023, the number of work-related fatalities of the Company's employees and contractors, and the lost time injury frequency rate (LTIFR) are shown in the following table:

Key Performance Indicators	Unit	2023
Number of work-related fatalities (employees)	Person(s)	3
Number of work-related fatalities (contractors)	Person(s)	2
Lost time injury frequency rate (employees)	Case (s)/ million working hours	0.11
Lost time injury frequency rate (contractors)	Case (s)/ million working hours	1.62

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### **Production Safety Publicity**

The Company cares about and actively develops safety culture. We frequently organize various safety culture exchanges and training to continuously improve employees' safety awareness.

#### Safety Culture Construction

The Company keeps fostering a safety culture. We organize related activities during the "Production Safety Month" including safety quizzes to enhance employees' awareness and ability of identifying and preventing safety risks. In the current year,

- The Company compiled and released a total of 18 issues of the "Safety and Environmental Protection Work Briefing", introducing the excellent practices of member enterprises in production safety in a bid to drive member enterprises to rapidly improve their safety management capability by learning from each other.
- Based on the common problems, typical industrial accidents and seasonal risk characteristics found during inspections, the Company timely prepared and released 9 issues of "Warnings for Safety and Environmental Protection Accident Risks" to warn enterprises at all levels to enhance risk control and prevent the presence of accidents.
- The Company prepared and released "Compilation of Production Accidents in the Cement Industrial" and "Production Accident Cases in Commercial Concrete Enterprises", covering 378 accidents of 28 types. The Company required all member enterprises to learn a lesson from those accidents and create a stable and favorable environment for safe production based on their own conditions.
- The Company has established the "zero violation" feedback mechanism to encourage employees to engage in safety management. In addition to the mechanism, the Company also promoted the safety culture through safety talks and the public safety lecture by the general manager. In this way, our employees have changed their mindset from "pursue safety for the sake of requirements" to "pursue safety for the sake of ourselves" .



#### Case

In June 2023, Anhui Guangde South Cement held a kickoff meeting for "Production Safety Month". The meeting had four agendas: 1. Wu Aijun, the deputy general manager of the Company delivered an address and watched "Prevention First", a production safety publicity video, with meeting attendees; 2. Wang Guoging, the general manager of the Company gave a public speech on "enterprise top leaders' awareness safety" for all attendees in accordance with the theme - "everyone aware of safety and able of emergency response"; 3. Wu Aijun read out the plans for the "Production Safety Month"; 4. The leaders led all meeting attendees to take the "safety oath" and complete the signing ceremony. The meeting improved employees' safety awareness and helped them further understand the importance and necessity of production safety.



Kickoff meeting of "Production Safety Month"

#### Kickoff meeting of "Production Safety Month" in Anhui Guangde South Cement

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#### "Ankang Cup" Safety Quiz by Dushan South

In June 2023, Guangde Dushan South Cement Co., Ltd. (Dushan South) held the "Ankang Cup" Safety Quiz on the theme of "everyone aware of safety and able of emergency response" . All middle-level leaders of the Company participated in the quiz. The quiz had Q&A and interactive sections. The questions included required questions, quick response questions and risk questions. The quiz not only showed employees' theoretical knowledge and teamwork ability, but also got the audience more involved.



With the purpose of "driving employees to learn, and training employees through contest", the quiz served as a platform where all departments could pursue improvement by exchanging and competing with each other, creating an atmosphere of "everyone aware of safety and able of emergency response". 21 players from 7 teams participated in the guiz, with the first, second and third prize winners and excellent players selected on site.

#### Training on emergency response and first-aid skills in Guorui Concrete and Ruilei Building Materials

In 2023, Hangzhou Guorui Concrete Corporation and Hangzhou Ruilei Building Materials Corporation organized employees to participate in the training on emergency response and first-aid skills at Linping Emergency Center, Hangzhou. The training corresponded to the theme of Production Safety Month -"everyone aware of safety and able of emergency response". The training included knowledge and skills in wound dressing, fracture fixation, CPR and Heimlich maneuver.



#### Safety Awareness Publicity

The Company actively conducts training on production safety and safety risk prevention. We have established a "level-, category- and personnel-based" mechanism for safety and environment protection training. Moreover, we continuously enhance employees' safety knowledge through the approach of "mandatory examination and training through examinations".

#### "Public lecture on production safety" by Shanggao South

In the morning of June 6, 2023, Jiangxi Shanggao South Cement Co., Ltd. (Shanggao South) organized all employees to attend the "public lecture on production safety". In the lecture, the general manager of Shanggao South and the leaders in charge interpreted the "15 Solid Measures" about safety production proposed by General Secretary Xi Jinping. In addition, they also shared the safety accidents they experienced.

#### Case Training on fire safety in CUCC Qingzhou

From January 10 to 17, 2023, CUCC Qingzhou organized a training on fire safety of the cement industry in the form of on-site training and self-teaching. Then, its safety and environmental protection department organized a closed-book exam to assess the training result and ensure safety and stability in the summer production. All employees were present at the 14-hour training.





# **Delivering Win-win Cooperation Benefits**

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Guided by the sustainable development strategy of "delivering win-win cooperation benefits", the Company continuously advances modernized governance and builds a responsible supply chain to fully ensure stable production and operation. On this basis, the Company has established a reliable customer management system. Besides, the Company has been fulfilling social responsibilities in line with the core values of "innovation, performance, harmony and responsibility" to create greater social value.

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Modernized Governance

- Responsible Procurement
- Robust Customer Relationships
- Responsible Business Operations



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## **Modernized Governance**

Glossary

The Company strives for modernized and sustainable corporate governance. To this end, we constantly deepen compliance management, adhere to business ethics and strengthen information security to create a favorable internal and external governance environment where we can create long-term value for society in implementing the business strategies.

### **Compliance Management**

Compliant operation is the key to sustainable development. The Company has established the Rule of Law Construction Working Organization and the Compliance Management Committee. These two organizations carry out the construction of the central enterprise under the rule of law and compliance management and promote the implementation of the responsibility of the first person responsible for the rule of law construction. The Company has set the review of legal compliance as a mandatory pre-procedure and "one vote veto" for violations, and requires the Compliance Management Committee to fully perform its function. The leaders of the Company and the subsidiaries take the lead in signing the "Compliance Commitment" and actively keep their compliance commitments as a model. In 2023, Tianshan Company signed a total of 40,931 copies of the "Compliance Commitment".

The Company has three lines of defense against potential compliance risks, consisting of business departments, functional departments and supervision departments, in a bid to fully carry out compliance management:

01) The first line of defense 02) The second line of defense 03) The third line of defense

Business departments of the Company and member enterprises, which identify, assess, control, collect and report risks in operation and business, and make timely rectifications.

The Legal Compliance Department, which performs the internal control and compliance of business lines through business management, supervision and inspection and organizes other departments for rectification.

The Disciplinary Inspection Department, Audit Department and other related departments, which supervise or urge enterprises to make timely rectification to the identified issues and investigate risk incidents that have resulted in losses and enforce accountability according to rules.

The Company holds monthly meetings on rule of law construction and conducts special training on compliance to continuously reinforce the compliance awareness of the staff, keep the concept of compliance in mind and develop a corporate culture of compliance with the law. During the reporting period, the Company conducted a total of 25 internal and external training sessions on compliance management system construction, experience sharing on major dispute case management, standardized operation of listed companies, anti-monopoly compliance, legal risk prevention for directors, supervisors and senior executives in their duties and practical operation of investment and M&A of the Company, etc. In addition, a total of 45,587 employees participated in these training sessions.

### **Business Ethics**

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The Company has formulated and published the "Code of Business Conduct" and "Anti Corruption Policy" for all full-time, part-time and outsourced employees. The two policies cover many aspects, including corruption, bribery, discrimination, information confidentiality, conflicts of interest, antitrust/anti competition, money laundering and/or insider trading, reporting, environment, health and safety. The "Anti Corruption Policy" is also applied to all stakeholders that have business with the Company and all subsidiaries. It clearly forbids briberies in the form of kickback, donation, sponsorship, political contributions or any other illegal and improper payments.

The Company integrates the "Code of Business Conduct" into employees' performance assessment, which is directly connected to their salary and promotion. We hold a "zero-tolerance" attitude to any violation of business ethics. Any employees who are directly or indirectly involved in violation of the "Code of Business Conduct" are subject to administrative punishment including warning, record of demerits, demotion, removal and dismissal based on the severity of violations, with their salaries deducted in accordance with the "Implementation Rules for Reducing the Salary of Leaders of Member Enterprises Suffering Disciplinary and Administrative Punishment". Moreover, the employees are disqualified for promotion and any award nomination during the effective period of disciplinary action.

#### Supervision Management

The Company continuously strengthens the supervision of business ethics and anti corruption and requires the leaders to fulfill double duties of their position and integrity building. We have established the Party Conduct and Integrity Construction and Anti-Corruption Leading Group with the Party Secretary as the leader and the Coordination Group of the Party Conduct and Integrity Construction and Anti-Corruption Work with the Secretary of the Discipline Inspection Committee as the leader. Focusing on the "Comprehensive supervision", the two groups regularly hold the meeting of the Party conduct integrity construction and anti-corruption to listen to the reports on the fulfillment of supervision and management duties by all functional departments and analyze and identify the integrity risks to the Company and subsidiaries. All functional departments conduct daily supervision based on their key work, which is supervised by the general office of the Disciplinary Inspection Committee. We have formed a comprehensive supervision mechanism to nip the general and potential problems in the bud.



Meetings of the Party conduct and integrity construction and anti-corruption held by the Coordination Group of member enterprises of Tianshan Company

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In 2023, the Company has formulated the inspection plan of regional companies and inspected 4 regional companies and identified the non-fulfillment of supervision responsibility. Furthermore, we further emphasized the responsibility of the Party management and self-governance and made integrated efforts to ensure that leaders do not have the audacity, opportunity, or desire to become corrupt. We are also committed to cleaning work-style construction and require leaders to be role models who perform their duties and exercise their power in accordance with regulations, actively assume their responsibilities and remain honest, clean and self-disciplined.

We also require all suppliers to sign the "Integrity Commitment". Once we are aware of a supplier's violation of business ethics including corruption, we will impose punishment, such as request for correction, suspension of business, elimination of business and inclusion in the "blacklist of partners" in accordance with national laws and regulations and internal rules. We have established strict management process regulations for supplier access, inspection, performance audit and withdrawal management to improve the standardization and transparency of the procurement process. Meanwhile, the supervisory department of the Company assists business departments in supervision of bidding and other processes to ensure that employees of both parties conform to the "Code of Business Conduct" and protect the legitimate rights and interests of both parties.

#### **Reporting Channels**

We have opened channels for reporting violations of business ethics. We encourage our employees and partners to report any actual or suspected violations of the "Code of Business Conduct" through telephone, email, visit, mail and other means. Once receiving the reporting, the Disciplinary Inspection Committee analyzes and handles the reported case based on following scenarios:

#### If the case falls within the scope of investigation

The Committee will transfer the case to the disciplinary inspection committees of regional companies for investigation and handling in accordance with the cadre management authority. The Disciplinary Inspection Committee also requires the disciplinary committees of regional companies to write and submit an investigation report to the case trial office of the Disciplinary Inspection Committee of Tianshan Company for review. Once the review is passed, the case will be reported to the Secretary of the Discipline Inspection Committee for approval and conclusion. If there is any violation of rules and disciplines, we will file the case and investigate and punish the party concerned; if there are other non-compliance issues such as failure to follow policy requirements, we will issue a "Suggestions for Discipline Inspection" to the party concerned for correction.

#### If the case doesn't fall within the scope of investigation

The Committee will transfer the case to related business departments for handling and follow up the case based the investigation result and the Company's systems.

We work hard to protect the safety of whistleblowers and reporting content. In accordance with the "Rules for Protecting Whistleblowers and Accusers by the Central Commission for Discipline Inspection of the Communist Party of China and the Ministry of Supervisory of the People's Republic of China", we spare no effort in protecting the information of whistleblowers from leakage and forbid any forms of reiteration and framing on the whistleblower and witness. By doing so, we strictly protect the privacy of whistleblowers and guarantee them exercising legitimate rights.

During the reporting period, the Company had no violation of the "Code of Business Conduct" related to corruption, bribery, discrimination, harassment, customers' privacy, conflicts of interest, money laundering or insider trading.

#### Stronger Awareness

Tianshan Company has made good publicity of business ethics and anti-corruption. We organize activities of the Party conduct and integrity and anti-corruption construction for the Board of Directors and employees at all levels to continuously strengthen their awareness of fighting against corruption and abiding by the "Code of Business Conduct".

In 2023, the training on business ethics and anti corruption covered all the directors and employees in key positions:

#### Integrity training for all employees



We guided them to fasten the "first button" of integrity - have the awareness of integrity and adhere to the principle of integrity when working.

#### For responsible persons:



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We supervised and urged them to fulfill their double duties of their positions and integrity building to carry out the Party management and governance. We required them to be aware of responsibilities, shoulder responsibilities and fulfill responsibilities to put their organization under sound management.

#### For employees in important positions:

We regularly organized integrity training for employees in purchase, finance and other important positions and revealed integrity risks in business. We reminded business employees to constantly hold the discipline principle and conscientiously resist corruption to remain undefiled.

- We organized the training on "Four Malfeasances and Eight-point Frugality Code" and "Party Conduct and Discipline" to interpret the CPC Eight-point Decisions. In the current year, a total of 1,500 employees participated in related special training.
- □ We held the meeting of the Party conduct and integrity construction and anti-corruption. In the meeting, the secretary of our Disciplinary Inspection Committee made a report on the Party conduct and integrity construction and anti-corruption and shared cases for warning.
- □ We held the warning conference to share the typical cases handled by the disciplinary inspection committees at all levels and give warnings.
- □ We selected works of integrity culture from regional companies and held the online exhibition on the theme of "Integrity Tianshan on a New Journey" to celebrate the 20<sup>th</sup> National Congress of the Communist Party of China and further implement the "Opinions on Strengthening the Integrity Culture Construction in the New Era". We have promoted our active and healthy political culture and created a fair and upright political environment.



Works from the online exhibition on the theme of "Integrity Tianshan on a New Journey"

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## **Information Security**

We have formulated the "Information Security Management System" and established the Cybersecurity and Informatization Working Group. The chairman of the Company is the team leader and the president and the vice president in charge of the digital department are the deputy leaders. The Chief Data Officer (CDO) and the deputy general managers in charge of business departments are team members. We have established the responsibility system of information security management. The system clarifies the responsibilities of information security management positions, including network administrator, system administrator, database administrator and safety administrator. We have also included the number of information security and cybersecurity incidents into the annual KPI assessment of employees of the digital department. By doing so, we have strengthened their attention to information security and cybersecurity and further improved our prevention and control over the risks of information security and cybersecurity.

We require all employees to know the reporting process of related issues to prevent and control potential information security risks. If an employee finds an information security issue, he/she can report it to the Digital Department through internal OA, email, WeChat, telephone and other means. The Digital Department verifies and investigates the issue. If the department confirms it is an information security issue, the department will take corresponding measures. If the issue can't be handled in a short time, the department will initiate the emergency plan. After the issue is handled, the department will feed back the result to the reporter and record the issue.

We continue to improve employees' awareness of information and cybersecurity protection. In the current year, we organized the following training:

- In June 2023, we organized our information officers to sit for the CCSC Level I exam organized by the National Computer Network Emergency Response Technical Team/Coordination Center of China. All participants passed the exam and obtained the certificate. When they were preparing for the exam, the Company provided them with training on laws and regulations concerning information and cybersecurity, including the "Cybersecurity Law", "Data Security Law", and "Measures for the Security Assessment of Outbound Data Transfer".
- In September 2023, we organized employees of all regional companies to participate in the safety lectures during the China Cybersecurity Week. This enhanced employees' awareness of prevention and control over the information and cybersecurity risks.

To prevent the information technology system interruption or cyber attacks, we have established emergency response plans for information and cybersecurity events. We also test whether the emergency response plans work every year. We regularly engage a third party to scan the security vulnerabilities of our information technology system. Then, we improve present safety strategies and processes based on the safety risk report provided by the third party to strengthen our information and cybersecurity management. We have obtained the certification of cybersecurity protection III, and get timely re-certification as required.

## **Responsible Procurement**

We are committed to optimizing the efficiency of our supply chain, by which we can provide premium products and services with our suppliers. We have formulated and published the "Supplier Code of Conduct" and "Sustainable Supply Chain Management Policy" for all suppliers. We require all suppliers to fulfill their commitment to employees' rights, environmental protection, risk management and other aspects. We have also established the supplier management structure and dynamic evaluation mechanism to realize a sustainable win-win development with our partners.

## Supplier Management Structure

The Company has established a three-tier management structure for suppliers comprising headquarters, regional companies and member enterprises. We also conduct on-site reviews of our suppliers on an annual basis, and are committed to building a competitive and sustainable product supply chain.

Supply chain management department of the headquarters	<ul> <li>Formulate and publish the supplier man- management mechanism, covering supplier evalu establish and improve the supplier evalu evaluate suppliers of the materials collect</li> <li>Conduct qualification review and access headquarters, organize on-site inspection qualified suppliers.</li> <li>Establish and maintain the database of s database, qualified supplier database and supplier database</li> </ul>
	<ul> <li>Comprehensively manage suppliers of m corresponding procurement strategies a</li> <li>Coordinate and instruct the supply chain</li> </ul>
Supply chain management departments of regional companies	<ul> <li>Develop more detailed supporting mana Company headquarters.</li> <li>Conduct qualification reviews and access new suppliers by relevant personnel, and</li> <li>Establish and maintain the database of s qualified supplier database, qualified sup</li> <li>Evaluate suppliers of the materials collec evaluation results and ratings, and refine</li> <li>Be responsible for the management of m region, and formulate corresponding pro-</li> </ul>
Supply chain management departments of member enterprises	<ul> <li>Implement the supplier management system</li> <li>Be responsible for the management of the suppliers, and formulate corresponding</li> <li>Establish, maintain the enterprise's supplier</li> <li>Evaluate cooperative suppliers regularly</li> <li>Participate in supplier evaluation and some</li> </ul>

- nagement measures and supervise the implementation; establish the lifecycle plier registration and access, performance evaluation and elimination
- luation system; establish the evaluation standards and process; regularly ectively purchased by the headquarters.
- s assessments of suppliers of the materials collectively purchased by the ions and evaluations of new suppliers by relevant personnel, and select
- f suppliers, including potential supplier database, potential qualified supplier and ineligible supplier database.
- material procurement, logistics services, and other services, and formulate and management plans.
- in management departments of regional companies and member enterprises.

agement measures according to the supplier management measures of the

- ess assessments of suppliers, organize on-site inspections and evaluations of nd select qualified suppliers
- f suppliers in the region, including potential supplier database, potential upplier database and ineligible supplier database.
- ectively purchased by regional companies regularly, manage them based on he the supplier database of regional companies.
- material procurement, logistics services, and other service suppliers in the rocurement strategies and management plans.
- systems of Tianshan Company's headquarters and regional companies. he enterprise's material procurement, logistics services, and other service procurement strategies and management plans.
- oplier database, and ensure timely updates and maintenance of the data.
- and manage them based on evaluation results and ratings.
- ourcing efforts of Tianshan Company's headquarters as needed.

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### Lifecycle Management

By incorporating ESG-related requirements into the supplier lifecycle management, the Company defines ESG management requirements for the processes of supplier access, cooperation, review, and exit. This approach aims to identify, assess, and manage environmental and social risks throughout the supply chain.





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11,565	12,006	2
suppliers that received responsibility assessment and review	suppliers sustaining long-term cooperation with the Company	supplier quality system
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947	5,035	
suppliers that passed energy management system certification	key suppliers that passed the online/on-site	key assess si

### **Supplier Capability Building**

Committed to promoting green development across the supply chain, the Company actively carries out supplier development plans and provides targeted resources and assistance to suppliers. During the cooperation and review processes, the Company provides guidance to suppliers and encourages them to use new eco-friendly materials. Meanwhile, the Company discusses with partners the reuse of solid waste resources and other issues. Additionally, the Company continuously empowers suppliers through active guidance on their regular safety inspections, safety training, emergency drills, etc. and promotion of knowledge learning and exchange activities about laws and regulations, social and environmental aspects. During the reporting period, a total of 493 key suppliers participated in capability building programs, with the training covering 100% of suppliers.

In the next year, the Company will focus on the following actions in respect of supplier capability building:

(Z <sup>z</sup>	Encourage suppliers to engage in ESG-related certifications to
2	Provide customized suggestions on how to improve ESG mana environmental management systems and fulfillment of social
	Encourage suppliers to participate in ESG training via various or related knowledge and skills;
V	Carry out large-scale category-based centralized procurement informatization and management, and use new energy or clea improve social benefits.



enhance their corporate image and reputation.

agement based on suppliers' actual situations, including the establishment of responsibilities, to help suppliers improve their management;

channels to help suppliers understand and master the ESG management-

nt, encourage the use of digital logistics platforms to improve the level of logistics ean energy vehicles for transportation, to reduce environmental impact and

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## **Robust Customer Relationships**

The Company is committed to establishing long-term, stable, cooperative, and win-win business partnerships with customers. In the year, continuous efforts have been made to optimize product quality, protect intellectual property, listen to customer voices, and build a better network of products and services to support the long-term sustainable development of the enterprise.

### **Product Quality Guarantee**

We are committed to providing our customers with high-quality and high-standard products and services. By setting stringent requirements for product quality while improving the efficiency and precision of quality management with information and intelligent technologies, the Company enhances product competitiveness and maintains the leading position in the industry.

As an advocate of "improving quality and efficiency, embracing optimization and upgrade", the Company fully implements the concept of underpinning survival and development with quality. To this end, the Company has developed company-level regulations, such as "Quality Management Measures", "Product Quality Supervision and Management Measures" and others. In terms of the commercial concrete business, the Company has developed "Technology and Quality Management Measures of Commercial Concrete Business", "Inspection and Evaluation Outlines for Basic Technology and Quality Management of Commercial Concrete Business", "Quality Management Measures for Raw Materials of Commercial Concrete Enterprises". These documents clearly stipulate the quality requirements for highquality products. Moreover, the Company has refined the retention of quality files. The Company strengthens the maintenance of product quality. In the event of quality issues or accidents, the Company will resolutely identify the causes and enforce accountability.

With the ISO90001 quality management system implemented in all aspects, the Company conducts sample inspections on the products of member enterprises regularly and analyzes the sample inspection results of each party. Based on the results as well as feedback from the market and customers, the Company updates relevant standards and revises quality optimization measures to improve the quality and market competitiveness of cement products. During the reporting period, the products, services or brands of the Company won 952 honors at the prefecture/municipal level or above. In addition, the Company also achieved a 100% comprehensive cement product pass rate, a 100% pass rate for national-level sampling inspections of main business products, and a 100% pass rate for main business products submitted for inspections.

#### "Cloud-based Rebound Hammer System" developed by Sanshi Material empowering quality control Case

The rebound hammer data management system independently developed by Sanshi Material is designed to test the concrete strength of the concretecast parts of construction projects, with the rebound data uploaded to the server in a timely manner. It has solved many problems facing concrete enterprises during traditional data collection, such as difficult operations, low efficiency and error-prone and data authenticity. This system featuring query efficiency and traceable results, provides powerful data support for the quality acceptance of customers' construction projects, enables the process of concrete quality testing, and satisfies the quality inspection needs of nearly 40 operating enterprises of Sanshi Material for various engineering projects.



#### Case Suzhou commercial concrete operating platform digitalizing quality lifecycle management

The digital lifecycle management and control system of concrete quality of the Suzhou platform is designed for the dynamic and digital management of quality-related data involved throughout the whole business processes based on the concrete production process as well as on-site events and quality incidents, from material procurement, inspection, stockyard management, mix ratio management, test block management, to disposal of surplus or returned products or materials. The system achieves the controllability and traceability of quality throughout the whole process, creating significant value in the improvement of enterprises' overall efficiency, risk control, and cost reduction and efficiency enhancement. Additionally, it also provides a meaningful example for the industry.





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#### Strengthening the High-quality Talent Base

### **Intellectual Property Protection**

Strengthening the protection of intellectual property serves as a crucial measure for stimulating product innovation and maintaining customer trust. The Company analyzes and identifies the risks associated with intellectual property, and develops corresponding risk management strategies and countermeasures to keep these risks always controllable, governed, and tolerable. Furthermore, the Company has established our own trademark information database, and makes active efforts in trademark registration, trademark maintenance, trademark licensing, trademark disposal and trademark protection. Moreover, the Company has also formulated assessment and accountability mechanisms. Meanwhile, the Company has developed and refined "Trademark Management Measures" to protect intangible assets like the Company's trademarks and enhance trademark management. Effective trademark management not only enhances the recognition and reputation of our brand, but also helps the Company establish and maintain the enterprise credibility, increasing the value of intangible assets like the Company' strademarks.

The Company continues to increase the investment in technological innovation, driving high-quality development through technological innovation. In the year, the Company has accumulatively held 3,857 valid patents (including 3,398 utility model patents and 429 invention patents), and has successfully registered a total of 30 software copyrights. Sanshi Material was granted the software copyright of "Zhejiang Sanshi South New Material Sampling Inspection Management System". The invention patent was granted to "A kind of Cement Clinker Prepared by Using Low-grade Limestone and Preparation Method" developed by China United Cement Nanyang Corporation.

The national invention patent was granted to "Process Technology of Clinker Production using High-silica and Lowcalcium Limestone" independently developed by Jiangxi Anfu South Cement Co., Ltd.

#### **Voice of Customers**

Upholding the "customer-oriented" service philosophy, the Company has formulated the "Customer Relationship Management Measures for Cement Business" and the "Customer Complaint Management Process Manual". These documents clearly outline the rules for customer complaint channels, complaint handling procedures, formulation and implementation of complaint resolution, and tracking of complaint handling results. Additionally, the Company has established a standardized and efficient customer complaint handling process, thus forming a closed-loop management covering the customer complaint collection, response, processing, feedback and tracking of handling results. This ensures rapid response, prompt handling, and timely feedback.

For handling customer complaints, the Company actively facilitates access to service inquiries, by offering a customer management information platform, hotline, email addresses and mailbox, aiming to provide convenient and diverse feedback channels for customers. Within 24 hours upon receiving a complaint, customer service specialists will coordinate with relevant departments to verify the complaint, and discuss the reasons, emergency response, and improvement measures. Furthermore, they will track the implementation and effectiveness of the complaint handling process.

For the customer satisfaction survey, the Company partners with third-party agencies to conduct annual customer satisfaction survey that covers 95% of our customers. The survey is conducted through online targeted push SMS, allowing respondents to complete the questionnaire via both PC and mobile devices anonymously. The survey covers various dimensions such as overall satisfaction, product quality, packaging quality, delivery service, technical service, marketing service, settlement and payment, complaint handling, willingness to recommend, and willingness to continue cooperation. For commercial concrete batching business, the survey focuses on five aspects, including marketing personnel's services, concrete technical services, concrete pumping services, mixer truck transportation services and complaint handling. In 2023, the customer overall satisfaction score was 9.73.

发明专利证书	发明专利证书	计算机软件著作权登记证书	Satisfaction Survey Results	Unit	2020	2021	2022	20
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tent certificates	2002 A+00 /f 05 II # 1 X (0.1 TO		(3) In the year, the customer satisfa 94.8%.	ction survey covered the Comp	pany 's three business segme	ents of cement,, ready-mixed o	concrete and aggregates, with a	) coverage rati
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## **Responsible Business Operations**

Adhering to the principles of openness, sharing, friendship, and mutual assistance, the Company actively participates in industry communication, promotes rural revitalization and engages in public welfare activities. Our responsible business operations and contributions to the society align the Company's growth with our commitment to fulfilling social obligations.

## **Industry Communication**

Tianshan Company consistently maintains an open and collaborative approach, seeking mutual benefits and winwin outcomes. The Company collaborates with government organs and peer companies to explore new technologies and products, and actively participates in setting industry standards, driving the high-quality development of the cement industry.

Participation in the formulation of the "Technical Specification for the Application of Manufactured Sand Concrete in Rail Transit Engineering"

Addressing the complexities of concrete requirements in rail engineering and the uneven quality of manufactured sand available in the market, the Suzhou Concrete and Cement Products Research Institute Co., Ltd. proposed key performance evaluation, optimization methods and control indicators of manufactured sand in 2023, by leveraging the accumulation of scientific research projects at the provincial and municipal levels in the early stage. Thus, concrete batching technologies for both general and special requirements (such as high strength, impermeability, frost resistance, and chloride ion resistance) were developed, and results such as key production and construction considerations were clarified. The project of formulating "Technical Specification for the Application of Manufactured Sand Concrete in Rail Transit Engineering", which is an industry standard as well as a local standard of Jiangsu Province drafted by Suzhou Concrete and Cement Products Research Institute Co., Ltd., has been approved for initiation and the first work conference has been held. The formulation of the standard helps to standardize and guide the production and construction of manufactured sand concrete for rail transit engineering, thus alleviating the shortage of sand, promoting the technological progress and industrial development of manufactured sand concrete, and creating good social and economic benefits.



Work conference on the formulation of the industry standard "Technical Specification for the Application of Manufactured Sand Concrete in Rail Transit Engineering"

#### Participation in the "China Cement Industry Green Development Forum & Ultra-clean Emission Technology Exchange Conference"

In April 2023, Zhongnan Cement actively participated in the "China Cement Industry Green Development Forum & Ultra-clean Emission Technology Exchange Conference" hosted by China Cement Network (www.shuini.biz). The conference focused on the theme of "Innovation-Driven Pollution and Carbon Emission Reduction, Green Development", aiming to discuss with all walks of life the green development of the cement industry under new circumstances. Zhongnan Cement was invited to attend the conference and actively engaged in extensive exchanges with industry association representatives and technical experts, pointing out that "facing the tide of the new era, the cement industry needs to go higher. In recent years, leading domestic cement enterprises have also invested a lot of manpower and resources in the field of intelligent upgrading, and built a number of advanced demonstration plants. In the future, digital and intelligent technologies will certainly open a new chapter for the cement industry and inject new momentum." Zhongnan Cement contributed new ideas and new thinking to the sustainable development of the industry.



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## **Rural Revitalization**

During the reporting period, Tianshan Company and our subsidiaries actively fulfilled social responsibility through 70 assistance projects in the local communities and villages where operations are carried out. In addition to helping poor areas achieve leapfrog development, and maintain regional stability and social harmony, this initiative also serves to shape the good image of the enterprise, improve the development environment of the enterprise, and raise the brand awareness of the enterprise, thus laying the foundation for the long-term development of the enterprise.



#### Case Multiple ways of assistance drive community development

For a long time, Hunan Linli South New Material has been strengthening assistance measures according to the actual conditions in Linli. As a central enterprise, it plays a cohesive role in rural revitalization by a combined means of people-benefiting industry, cooperative Party building, and regular revisits to promote the implementation of all tasks.

People-benefiting industry 

> Since the establishment, we have been guiding our local enterprises to carry out transportation, labor and other related service businesses based on our corporate features, providing 500 jobs for people nearby and creating industrial clusters. Paying close attention to the development of local education, the Company has donated RMB 900 thousand to the education foundation of Linli County to support Linli's education development.

Cooperative Party building

The Party branch of Hunan Linli South New Material collaborated with the general Party branch committee of Baiyansi village to explore an innovative mechanism of "Party members from different Party branches serving communities together", realizing the complementarity of strengths and mutual promotion between Party organizations in different fields and protecting the life safety of the people. This kind of Party building has created a new way of communication, which turns the advantages and resources of Party building into the advantages and resources for development, bringing new energy and a new style to the rural revitalization.

**Regular revisits** 

> Respecting the old and cherishing the young is a Chinese traditional virtue. As a central enterprise, Hunan Linli South New Material should inherit and develop it. On each March 15, Hunan Linli South New Material visits the nursing home, which adds a touch of color to the ordinary life of seniors, and also makes them feel the care and help from the Party and the society.



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#### Strengthening the High-quality Talent Base

#### "Four Focuses" helps villagers out of poverty Case

Actively fulfilling its political and social responsibilities as a state-owned enterprise, Xinjiang Tianshan Cement Ltd. focuses on the overarching goal of ensuring lasting social stability, security and enduring prosperity, and works together with the assisted villages to build a beautiful and happy home. It has established a "1234" pattern for rural revitalization, namely, "1 common goal, 2 responsibilities, 3 proper establishments and 4 focuses". In 2023, the Party organizations of Xinjiang Cement at all levels held 30 activities of national unity and donated money, materials and cement valuing at more than one million for the construction of beautiful countryside. It also built and dispatched a team and 6 first Party secretaries totally. In 2023, the per capita net income of the assisted villagers increased by 20.9% compared to 2022.

- Focus on industrial assistance: Guide farmers to adjust industrial structure with scientific planting instead of traditional donations. For example, farmers are encouraged to plant special fruits like semaiti apricot and "green ruyi" melon to improve fruit quality and economic benefit. Meanwhile, growing fruits and vegetables and raising poultry with the advantages of garden economy are also recommended. Besides, online and offline sales channels are penned up to help farmers gain more.
- Focus on employment assistance: Achieve full employment of surplus labor through rural workshops, management of livestock land, flexible self-employment, labor export and corporate recruitment.
- Focus on will and wisdom double assistance: Xinjiang Tianshan Cement Ltd. assigns cadres to widely publicize poverty alleviation policies, and set up "bilingual" night schools and skill training courses for ethnic minorities. Through bilingual courses and legal education, the villagers are developing good family customs and personal hygiene habits. These measures improve the life quality of villagers and stimulate the endogenous motivation of poor families.
- Focus on livelihood improvement: Xinjiang Tianshan Cement Ltd. spares no effort to comprehensively improve rural living environment, and donates cement, money and goods of more than RMB 100 thousand. It contributes to the significant improvement of the villagers' production and living environment through village road construction, well building, green forest planting, courtyard improvement, house renovation and toilet construction.



#### Case Online consumption assistance mobilizes employees' enthusiasm for poverty alleviation

In September 2023, Zhonglian Tongli organized more than 30 Party members to Zhaoyang District, Zhaotong City, Yunnan Province to carry out "subscribing for apple trees and deepening assistance" activity. During the activity, Party representatives visited the base of education on the history of revolution in Zhaotong, conducted in-depth research in the township assisted at the group level (including Shouwang Township and the Yongfeng Town market), and visited some apple planting bases in Zhaotong. After preliminary research and investigation, "Hebaodan" was selected as the platform to implement the online consumption poverty alleviation model of "subscribing-planting-supplying", which fully mobilized employees' enthusiasm to alleviate poverty through consumption and enabled remote control and full assistance. So far, the completed transactions have reached over RMB 30 thousand.



Zhonglian Tongli subscribes for apple trees

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## **Public Welfare Activities**

For a long time, the Company has been actively organizing volunteer teams to carry out various volunteer activities, such as blood donation, caring for poor children, visiting lonely seniors, and providing convenience services, to deliver love to the society. In the year, the Company donated RMB 33,600 million to Shanjian Public Welfare Special Fund of China Volunteer Service Foundation, which was used for energy conservation, environmental protection, poverty alleviation, volunteer teaching, employee care, volunteer service and other public welfare fields. Member enterprises actively took part in local social welfare activities in a coordinated manner, with a total donation of about RMB 49,670 thousand throughout the year. In particular, cement, ready-mixed concrete, limestone and other physical objects for the construction of public and social security equipment and facilities, equivalent to about RMB 6,923.1 thousand, were donated based on the industry characteristics.



310 participations in or support activities related to the protection of the rights and interests of women, children or the disabled

#### Case Prompt response to floods

In 2023, Wangqing County, Yanbian Korean Autonomous Prefecture, suffered from floods brought by Super Typhoon Doksuri. Upon hearing this, Wangqing North quickly drafted people with relevant resources, cooperated with the government to dispatch vehicles to transport 31 cartfuls of stones, and successfully blocked the breach. Meanwhile, Wangqing North rescue team together with Shanxizhengmao Engineering Blasting Co., Ltd. a mining company, joined the road and riverbank reinforcement and rescue in the flood-hit area. Additionally, to optimize the flood control and fully prepare for any emergencies, Wangqing North rescue team strengthened night patrol, detailed duties, clarified responsibilities and prepared sufficient relief materials, demonstrating the responsibility of central enterprises with practical actions.



Wangging North participates in flood rescue

#### Case Colorful Class full of love

In August 2023, young volunteers of Huadong Material implemented "Shan Jian" Colorful Class in Manan Township, Yongshan County, Yunnan Province. With building materials-featured courses like culture, handicraft, dance, art, thinking, science and sports, the Colorful Class was carefully designed to lead students to explore knowledge, broaden their horizons and improve their manual dexterity. At the same time, employees of South Cement carried out a 5-day Colorful Class volunteer teaching activity in Shitai County, Anhui Province, with 6 young talents from other subsidiaries of Tianshan Company. They taught children "special milk tea" painting class, "Schubert" attention training class, "little archaeologist" class, "corporate culture" class and other interesting classes, bringing them an unforgettable summer vacation.



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# Appendix **Independent Assurance Report**

Independent practitioner's assurance report

Ernst & Young Huaming (2024) Zhuan Zi No. 80006115\_B01 Xinjiang Tianshan Cement Co., Ltd.

To the Board of Directors of Xinjiang Tianshan Cement Co., Ltd.:

#### Scope

We have been engaged by Xinjiang Tianshan Cement Co., Ltd. (the "Company") to perform a 'limited assurance engagement,' as defined by International Standards on Assurance Engagements, here after referred to as the engagement, to report on ESG Key Performance of the Company as listed below (the "Subject Matter") contained in Xinjiang Tianshan Cement Co., Ltd.'s Environmental, Social and Governance (ESG) Report for the year ended 31 December 2023 (the "ESG Report").

#### The Subject Matter

No.	Subject Matter	Unit
1	Total coal consumption	Tonne
2	Total emission of sulfur dioxide (SO <sub>2</sub> )	Tonne
3	Nitric oxide (NOx) emission	Tonne
4	Consumed volume of solid wastes	10,000Tonne
5	Total water consumption	Tonne
6	Amount of public charity investment (including material donations)	RMB10,000
7	Total investment in safety production	RMB10,000
8	The attendance rate of key employee in held and organized anti- corruption trainings	Percentage
9	Occupational health and safety management system certifications for the manufacturing enterprises	Number

Other than as described in the preceding paragraph, which sets out the scope of our engagement, we did not perform assurance procedures on the remaining information included in the Report, and accordingly, we do not express a conclusion on this information.

#### Independent practitioner's assurance report (continued)

## Criteria applied by the Company disclosed in the ESG Report (the "Criteria").

#### The Company's responsibilities

The Company's management is responsible for selecting the Criteria, and for presenting the Subject Matter in accordance with that Criteria, in all material respects. This responsibility includes establishing and maintaining internal controls, maintaining adequate records and making estimates that are relevant to the preparation of the Subject Matter, such that it is free from material misstatement, whether due to fraud or error.

#### EY's responsibilities

Our responsibility is to express a conclusion on the presentation of the Subject Matter based on the evidence we have obtained.

We conducted our engagement in accordance with the International Standard for Assurance Engagements Other Than Audits or Reviews of Historical Financial Information ('ISAE 3000 (Revised)'), and the terms of reference for this engagement as agreed with the Company on 25 January 2024. Those standards require that we plan and perform our engagement to express a conclusion on whether we are aware of any material modifications that need to be made to the Subject Matter in order for it to be in accordance with the Criteria, and to issue a report. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risk of material misstatement, whether due to fraud or error.

We believe that the evidence obtained is sufficient and appropriate to provide a basis for our limited assurance conclusions.

#### Ernst & Young Huaming (2024) Zhuan Zi No. 80006115 B01 Xinjiang Tianshan Cement Co., Ltd.

In preparing the Subject Matter, the Company applied the GRI Sustainability Reporting Standards (GRI Standards) of the Global Sustainability Standards Board (GSSB) and criteria as defined and Glossarv

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Independent Assurance Report

Independent practitioner's assurance report (continued)

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Ernst & Young Huaming (2024) Zhuan Zi No. 80006115\_B01 Xinjiang Tianshan Cement Co., Ltd.

#### Our independence and quality management

We have maintained our independence and confirm that we have met the requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, and have the required competencies and experience to conduct this assurance engagement.

EY also applies International Standard on Quality Management 1, Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services engagements, which requires that we design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

#### Description of procedures performed

Procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement. Consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. Our procedures were designed to obtain a limited level of assurance on which to base our conclusion and do not provide all the evidence that would be required to provide a reasonable level of assurance.

Although we considered the effectiveness of management's internal controls when determining the nature and extent of our procedures, our assurance engagement was not designed to provide assurance on internal controls. Our procedures did not include testing controls or performing procedures relating to checking aggregation or calculation of data within IT systems.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for preparing the Subject Matter and related information, and applying analytical and other appropriate procedures.

#### Our procedures included:

- 1) Conducted interviews with personnel to understand the business and reporting process;
- 2) Interviewed with key personnel to understand the process of collecting, collating and reporting on the Subject Matter during the year ended 31 December 2023;
- Checked that the calculation criteria have been correctly applied in accordance with the 3) methodologies outlined in the Criteria;
- Undertook analytical review procedures of the quantitative disclosures in the Subject Matter 4) to support the rationality of the data: and
- 5) Tested, on a sample basis, underlying source information to check the accuracy of the data.

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Description of procedures performed (continued) We also performed such other procedures as we considered necessary in the circumstances.

#### Conclusion

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Based on our procedures and the evidence obtained, we are not aware of any material modifications that should be made to the Subject Matter for the year ended 31 December 2023, in order for it to be in accordance with (or based on) the Criteria.

#### Restricted use

Our responsibility in performing our procedures and reporting thereon is to the Company only and in accordance with terms of reference for this engagement as agreed with them. The report may not be suitable for another purpose. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any reliance of any such third party may place on the report is entirely at its own risk.



#### Independent practitioner's assurance report (continued)

#### Ernst & Young Huaming (2024) Zhuan Zi No. 80006115 B01 Xinjiang Tianshan Cement Co., Ltd.

Ernst & Young Hua Ming LLP Beijing, China 26 March 2024

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## **ESG Key Performance**

Key Pe	rformance Indicators	Unit	2023	2022	2021
1. Crea	ating Low-carbon Sustainable Advantages	;			
Climat	e Action				
1	Total greenhouse gas emissions <sup>14</sup>	Tonne	166,579,684.27	188,226,668	215,371,680
2	Direct emissions (Scope 1)	Tonne	163,036,585.43	184,836,532	/
3	Indirect emissions (Scope 2)	Tonne	3,544,098.25	4,235,019	/
4	Total non-renewable energy consumption	MWh	264,105,793.07	312,864,965	365,817,640
5	Total coal consumption	Tonne	27,650,916	30,220,942	35,446,027
6	Total natural gas consumption <sup>15</sup>	m <sup>3</sup>	2,804,000	5,505,400	10,285,600
7	Total renewable energy consumption <sup>16</sup>	MWh	21,630.77	23,734.84	/
8	Total power consumption <sup>17</sup>	MWh	20,567,391.40	21,555,104.80	24,123,818.39
9	Purchased electricity consumption	MWh	14,356,101.00	14,771,652.80	17,688,508.65
10	Self-generated electricity consumption	MWh	6,211,290.4	6,797,789.23	7,934,690.7
Develo	opment of Circular Economy				
11	Total water consumption <sup>18</sup>	Tonne	79,353,902	85,135,405	97,866,227
12	Recycled water utilization rate of clinker-producing cement companies	%	93.56	92.45	83.72
13	Reusing rate of the treated wastewater for concrete business	%	100	100	/
Biodiv	ersity Protection				
14	Land area affected by business operations	m²	9,877,700	11,132,500	9,543,900
15	Restored land area	m²	3,099,050.8	7,613,200	7,156,200
16	Investments in green mine construction and ecological restoration projects	RMB 10,000	3,052	7,557	/
17	Number of national green factoriesf(including national green demonstration factory of ready- mixed concrete)	Number	122	88	46

<sup>14</sup>The total greenhouse gas emissions, direct emissions (Scope 1) and indirect emissions (Scope 2) of the Company in 2022 have been corrected according to the national verification data, and the data for 2023 is forecast data.

<sup>15</sup>Due to the restructuring of the Company's capacity, the replacement of part of the natural gas production line, and the increase in the use of new energy vehicles, the Company's total natural gas consumption continued to decrease in the year. <sup>16</sup>In the year, the Company consolidated the statistical caliber of this indicator and corrected the data for 2022. Total renewable energy consumption refers to the total electricity consumption of the Company for photovoltaic power generation in the current year. <sup>17</sup> Total power consumption includes purchased electricity consumption and self-generated power consumption.

<sup>18</sup> Statistics in total water consumption cover municipal water, groundwater, and surface water.

Key Performance Indicators		Unit	2023	2022	2021
18	Concrete Green Demonstration Factory	Number	69	62	/
19	Number of national green mines	Number	38	38	40
20	Number of provincial green mines	Number	98	78	69
Emissi	on Compliance Management				
21	Nitric oxide (NO <sub>x</sub> ) emission	Tonne	52,908	61,630	88,030
22	Total emission of sulfur dioxide $(SO_2)$	Tonne	4,152	4,525	6,517
23	Industrial particulate matter emission	Tonne	5,138	7,113	10,151
24	Direct mercury emission	Tonne	2.03	0.39	0.44
25	Chemical oxygen demand (COD)emission	Tonne	0.06	0.80	1.39
26	Proportion of companies meeting noise level standards	%	100	100	100
27	Proportion of recyclable cement packaging bags	%	100	100	/
28	Self-produced hazardous solid wastes	10,000 t	0.09	0.24	0.18
29	Self-produced non-hazardous solid wastes	10,000 t	211.34	168.27	260.44
30	Self-processed non-hazardous solid wastes	10,000 t	193.72	166.08	246.48
31	Absorbed and discharged volume of solid wastes	10,000 t	7,587.97	7,657.81	9,373.04
32	Consumed volume of solid wastes	10,000 t	7,209	7,139.70	/
33	Discharged volume of solid wastes	10,000 t	47.16	137.45	/
34	Others for disposal	10,000 t	331.54	380.66	/

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Key Pe	erformance Indicators	Unit	2023	2022	2021
2. Stre	ngthening the High-quality Talent Base				
Divers	ity and Inclusion				
35	Total number of employees	Number	61,662	67,956	70,829
	Total number of employees by gender				
36	Male	Number	47,651	53,482	54,110
37	Female	Number	14,011	14,474	16,719
	Total number of employees by employ	ment type			
38	Full time	Number	60,321	65,089	65,189
39	Other (including part-time, intern and outsourced)	Number	1,341	2,867	5,640
	Total number of employees by age				
40	30 and below	Number	6,491	6,795	6,720
41	Between 30 and 50	Number	38,070	43,493	45,947
42	50 and above	Number	17,101	17,668	18,162
	Total number of employees by region				
43	Chinese mainland and Hong Kong, Macao and Taiwan	Number	61,545	67,848	70,812
44	Overseas	Number	117	108	17
45	Proportion of women in senior management of the Company	%	7.49	3.3	/
Emplo	yee Salary and Welfare Benefits				
46	Number of employee activities held and organized annually	Number	2,006	4,049	1,238
47	Number of employees participated in activities in the year	Person-time	81,935	107,952	77,652
48	Comforting special employees and helping employees with difficulties in a year	Person-time	3,108	2,550	3,607
49	Total expense on comforting special employees and helping employees with difficulties	RMB 10,000	268.5	317	381

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Key Pei	rformance Indicators	Unit	2023	2022	202
50	Assistance to children's education of the difficult employees or enrollment scholarship for employees' children in a year	Person-time	589	627	88
51	Total expense on offering grants to the children of employees with difficulties in going to school or rewarding the children of employees to go to school	RMB 10,000	93.87	69	15
52	Helping employees with critical diseases in a year	Person-time	179	186	21
53	Total expense on helping employees with critical diseases	RMB 10,000	36.8	57	7
Occupa	itional Health and Safety				
54	New cases of occupational diseases	Number	0	0	
55	Serious injury rate per thousand persons	%	0.44	0.8	
56	Accident rates of minor and serious injuries	%	0.44	0.06	
57	Total investment in safety production	RMB 10,000	100,486	80,000	
58	Lost work days due to work injuries	Day	18,030	30,000	24,00
59	Number of employees participated in occupational health and safety training	Person-time	663,943	1,068,530	123,23
60	Near accident rates of full-time employees	%	0.024	0.02	0.0
61	Near accident rates of contractual personnel	%	0.01	0	0.0
62	Number of work-related fatalities	Person-time	3	5	
63	Death rate per thousand people	%0	0.05	0.07	0.0
64	Occupational health and safety management system certifications for the manufacturing enterprises	Number	472	418	
3. Deliv	ering Win-win Cooperation Benefits				
Moderr	nized governance				
65	Number of anti-corruption training sessions held and organized	Number	2,855	1,269	2,17
66	The attendance rate of key employee in held and organized anti-corruption trainings	%	100	100	

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Key Pe	erformance Indicators	Unit	2023	2022	2021
67	Number of employees (including directors) who participated in anti-corruption training	Person-time	46,675	52,153	64,726
Respo	nsible procurement				
68	Number of suppliers who have established long-term cooperation with the Company	Number	12,006	10,241	11,029
69	Including: Chinese mainland and Hong Kong, Macao and Taiwan	Number	10,308	10,239	11,029
70	Overseas	Number	33	2	0
71	The number of suppliers screened and controlled by the Company's environmental and social risks	Number	6,444	7,388	8,955
72	Including: Chinese mainland and Hong Kong, Macao and Taiwan	Number	6,520	7,386	8,955
73	Overseas	Number	0	2	0
Robus	t Customer Relationships				
74	Expenditure investments in scientific research and innovation	RMB million	31.69	37.49	27.68
75	National intelligent manufacturing demonstration factories	Number	1	1	2
76	Intelligent manufacturing demonstration factories	Number	21	21	9
77	Digital mine	Number	15	10	4
78	Accumulated number of patents for utility models	Number	3,398	2,474	1,258
79	Accumulated number of invention patents	Number	429	278	192
80	Accumulated number of design patents	Number	11	15	/
81	Products recalled due to safety and health concerns	%	0	0	0
82	Lawsuits involving product and service safety and health	Case	0	0	0
83	Cement product overall pass rate	%	100	100	100
84	Number of complaints about products and services received during the year	Number	143	125	225

Key Pe	rformance Indicators	Unit	2023	2022	202
85	The percentage of complaints properly replied to and disposed accounted for	%	100	100	10
86	Number of complaints due to the disclose of customer information	Number	0	0	
Respoi	nsible Business Operations				
87	Amount of public charity investment (including material donations)	RMB 10,000	4,967	6,569.84	3,242.6
88	Amount of targeted assistance/rural revitalization investment (including material donations)	RMB 10,000	3,531.7	3,276	2,15
89	Amount of educational investment (including material donations)	RMB 10,000	137.9	231	
90	Amount of public facility construction investment (including material donations)	RMB 10,000	668.42	1,107	
91	Other donations	RMB 10,000	629.35	1,787.84	1,089.6
92	Number of industrial assistance projects	Number	69	76	1
93	Number of established volunteer organizations or groups	Number	41	64	e
94	Number of volunteers among employees	Number	3,233	3,833	4,32
95	Hours of volunteer activities	Hour	13,107	17,445	17,14
96	Total investment of all subsidiaries' annual support in volunteer activities from the Company in a year	RMB 10,000	3.1	40.7	49
97	Number of participations in or support activities related to the protection of the rights and interests of women, children or the disabled	Number	310	131	ī
98	Number of universities and colleges covered by the scholarship	Number	0	14	2
99	Number of students received scholarships	Person	0	20	2
100	Total amount of scholarship	RMB 10,000	10	2.8	13
101	Number of entrepreneurial practice bases	Number	4	8	
102	Student internship position situation	Person/day	20,200	22,597	21,08
103	Number of events participated organized by industry associations (above the provincial level)	Number	152	141	Ę

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#### Strengthening the High-quality Talent Base

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Source Consumption	Materials	02 Creating Low-carbon Sustainable Advantages - Development of Circular Economy
Source consumption	Energy	02 Creating Low-carbon Sustainable Advantages - Climate Action
	Packaging Material	02 Creating Low-carbon Sustainable Advantages - Emission Compliance Management
	Wastewater	02 Creating Low-carbon Sustainable Advantages - Emission Compliance Management
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Biodiversity	Impacts of Production, Services and Products on Biodiversity	02 Creating Low-carbon Sustainable Advantages - Biodiversity Protection

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	Product Safety and Quality	04 Delivering Win-win Cooperation Benefits – Robust Customer Relationships	
Product and Service Management	Customer Service and Rights	04 Delivering Win-win Cooperation Benefits – Robust Customer Relationships	
	Innovative Development	04 Delivering Win-win Cooperation Benefits – Robust Customer Relationships	
Supply Chain Safety	Supplier Management	04 Delivering Win-win Cooperation Benefits – Responsible Procurement	
Management	Supply Chain Management	04 Delivering Win-win Cooperation Benefits – Responsible Procurement	
	Tax Payment	/	
	Community Co-building	04 Delivering Win-win Cooperation Benefits – Responsible Business Operation	
Social Contribution	Public Welfare Activities	04 Delivering Win-win Cooperation Benefits – Responsible Business Operation	
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Governance Indicators			
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#### Governance Indicators

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Compliant Operation and	Compliant Operation	04 Delivering Win-win Cooperation Benefits - Modernized Governance
Risk Management	Risk Management	04 Delivering Win-win Cooperation Benefits - Modernized Governance

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## Feedback

#### Dear Reader:

Thanks for your time! Thanks for reading Xinjiang Tianshan Cement Co., Ltd.' s 2023 Environmental, Social and Governance Report. To provide you and other stakeholders with more valuable information, and effectively promote the Company to improve its ability and level of corporate social responsibility, we sincerely look forward to your comments and suggestions.

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You could also provide your valuable comments or suggestions via telephone, email or express delivery.

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