



CHINA TIANRUI GROUP CEMENT COMPANY LIMITED
中國天瑞集團水泥有限公司

(Incorporated in the Cayman Islands with limited liability)

Stock Code: 1252



2023

ENVIRONMENTAL, SOCIAL AND
GOVERNANCE REPORT

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1. ABOUT THIS REPORT

About the Group

The main scope of business of China Tianrui Group Cement Company Limited (Stock Code: 01252) (“the Company and with its subsidiaries, collectively referred to as “the Group,” “we,” or “us”) is the production, sales, and export of cement, clinker, fly ash, slag powder, concrete, aggregated, and other cement products. The group has 20 clinker lines and 58 cement grinders, with clinker, cement and aggregates annual production capacity of approximately 28.4 million metric tonnes, 56.4 million metric tonnes, and 30.2 million metric tonnes, respectively.

The Group has established a management framework to meet the standards and policies recognized internationally and to achieve control of environmentally responsible and quality-driven operations. The Group has been committed to sustainable business that balances important environmental, social, and governance (“ESG”) issues through comprehensive frameworks and regular reviews of key performance indicators.

The approximate annual clinker production capacity

28.4 Million tonnes

The approximate annual cement production capacity

56.4 Million tonnes

The approximate annual aggregate production capacity

30.2 Million tonnes

Clinker production line

20 Lines

Cement grinding

58 Sets

2023 Revenue

7,888,810 Thousand RMB



Overview

This Environmental, Social, and Governance Report (the Report) outlines the Group's ESG management approach, strategy, and structure and demonstrates its commitment to sustainable development processes. The Group adheres to the ESG concept of sustainable development and is committed to handling the Group's ESG affairs effectively and responsibly as part of our business strategy. This is a core part of our business because we believe it is key to our continued success in the future.

Reporting Scope

The scope of this ESG report covers the group's main production areas, covering the cement, clinker, and aggregate business, in Henan, Liaoning, Anhui and Tianjing areas, with Henan and Liaoning accounting for the largest portion of our business.

Basis of Preparation of Report

This report is prepared in accordance with Appendix C2 Environmental, Social and Governance Reporting Guide (ESG Guidelines) of Listing Rules issued by Hong Kong Exchange and Clearing Limited (the Exchange), and the Sustainability Reporting Standards (GRI Standards) of the Global Reporting Initiative (GRI), and also make references to standards issued by China Cement Association, T/CCAS 002 Guidelines for Cement Corporate Social Responsibility Report Writing and T/CCAS 001 Cement Corporate Social Responsibility Guidelines (collectively, the "Guidelines"), and this report is prepared in compliance with the industry's prevailing standards for social responsibility disclosure and is based on the industry background to highlight the Group's characteristics.

Reporting Principles

In preparing this report, the group adopted the reporting principles in the ESG Guidelines, as follows:

Reporting Principle	Meanings	Our response
Importance	When the board determines the impact of ESG matters on investors and others issuers should report when stakeholders have significant influence.	The group believes that ESG reporting has a significant impact on investors and stakeholders. During the twelve months ended December 31, 2023, we identified major issues through materiality assessment based on the communication mechanism with stakeholders and the principle of materiality and listed the confirmed major issues and The corresponding measures are the focus of the preparation of this report..
Quantitative	Key performance indicators should be disclosed in a measurable manner, and information on the standards, methods, assumptions or calculation tools used to report emissions and energy consumption, as well as the sources of conversion factors used, should be disclosed.	This report discloses key performance indicators in a quantitative manner, has added supplementary explanations to the disclosed data, and has explained the standards, methods, assumptions or calculation tools used for emissions and energy consumption, as well as the sources of the conversion factors used. and make effective comparisons where appropriate.
Balance	ESG reports should be presented impartially and avoid selections, omissions, or presentation formats that could inappropriately influence the decision-making or judgment of report readers.	This report discloses the challenges faced by the group in terms of sustainable development. and efforts made to objectively reflect the group's operations.
Consistence	Issuers should use consistent disclosure statistics to enable meaningful comparisons of ESG information in the future. Cooperate with the requirements for discussion of ESG matters in the "Business Review" section of the directors report.	The reporting scope and preparation method of this ESG report are basically the same as those of the previous year, and data with changes in disclosure scope and calculation method are explained.

Reporting Period

This report covers the group's ESG related initiatives, difficulties, and strategies for the reporting period, which runs from January 1, 2023, to December 31, 2023.

Information Sources

Information is routinely gathered by the Group using internal systems. The primary sources of information cited in this report are internal communications, pertinent documents, official websites, and statistical data from the Group. The report's contents will be reviewed by the board of directors to make sure no material misstatements, fraudulent records, or significant omissions are included.

Forward-looking Statement

The report includes forward-looking statements that are not promises of future performance, but rather reflect the company's and its subsidiaries' current expectations, estimates, forecasts, beliefs, and assumptions about their respective businesses and markets. Risks associated with the market, unforeseen circumstances, and other factors may have an impact on our performance. As a result, actual outcomes and returns could be different from the report's assumptions and assertions.

Definitions

Unless specified otherwise, this report includes:

- The acronyms for China Tianrui Group Cement Co., Ltd. are "China Tianrui Group Cement Co., Ltd.," "Tianrui Group," "the Company," "our Company," "the Group," or "we."
- The Stock Exchange of Hong Kong Limited is shortened to the Stock Exchange.
- The acronym for "Environmental, Social, and Governance" is "ESG."

To Obtain the Report

The electronic version of this report can be downloaded from the website of Hong Kong Stock Exchange (www.hkexnews.hk) and the website of the Company (www.trcement.com).

Stakeholders' Feedback

The Group welcomes any comments and suggestions regarding this report. Please send an email to ir@tianrui.com or ir@ctrcement.com to provide your feedbacks.

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STATEMENT OF THE BOARD OF DIRECTORS



2. STATEMENT OF THE BOARD OF DIRECTORS

The Group is fully aware of the importance of good corporate governance, including the governance of ESG related matters that are critical to sustainable development. The Board of Directors of the Company (the Board) has reviewed and approved this report and is convinced that the contents of this report are true, accurate, and complete.

The Board of Directors is ultimately in charge of the organization's ESG management policies, strategies, and reports since it is the highest decision-making body in the group. The Board of Directors is in charge of establishing the Group's internal control and risk management frameworks, as well as ESG policies and guidelines to guarantee successful implementation.

The Board of Directors prioritizes and manages important ESG matters (including risks to the group's business) through analysis, identification, evaluation, confirmation, and review. The Board actively participates in relevant training to understand the latest developments in important ESG issues and will consider inviting relevant experts to participate in the Board when corresponding situations arise to enhance the relevant experience of the existing board of directors. The group's major operating units have working groups that set ESG goals and regularly review the effectiveness of the plans. By formulating strategies, the board of directors gives operating units a clear direction to formulate goals, plans, and actions, and regularly reviews the effectiveness of the plans. The working group will regularly monitor and collect ESG information and report to the board every six months to one year. It will also report to the board from time to time the significant ESG risks and opportunities that may exist in the group. The Board regularly reviews strategies and progress and reviews ESG reports to ensure that the group's development direction and disclosure standards meet the expectations of stakeholders in ESG related areas.

The Board and its audit committee evaluate relevant risks through communication with different stakeholders and extensive understanding of the business and incorporate relevant risks into the risk management and internal control systems to promote comprehensive risk management within the group.

The Group will disclose in detail the Group's supervision of ESG matters, ESG management policies and strategies, ESG related goals and progress reviews, as well as the progress and results of key issues through the ESG report.

3. CHAIRMAN'S SPEECH,

Dear Stakeholders

In 2023, with the full assistance and support of shareholders, customers, and all sectors of society, the group adhered to the sustainable development strategy and continued to be customer-centric, based on striving for innovators, relying on industry, and focusing on innovation. As a driving force, we must comply with industry development trends and strive to achieve comprehensive transformation and upgrading of intelligent manufacturing and green and low-carbon economies. Here, we are honored to announce in this report the important achievements of the group in further promoting sustainable development.

The Group has been awarded the honorary title of "Centennial Craftsman Star" as a high-quality material manufacturer of China's characteristic brand enterprise in the construction industry many times. It has been selected as the leading manufacturing enterprise in Henan Province by the Henan Provincial Leading Group for the Construction of a Strong Manufacturing Province for three consecutive years. During the reporting period, the Group was awarded "Ranked 20th in the "Brand Value Ranking of Listed Companies in Henan Province".

We understand that current stakeholders are concerned about the performance of corporate sustainable development. We firmly believe that improving ESG management can increase group revenue, enhance brand image, reduce operating costs, improve overall market competitiveness, and promote harmonious development in communities. The group uses its resources and the high-temperature production process of rotary kilns to harmlessly treat waste and introduce advanced production lines from Germany to establish a waste-free factory to help Xuchang City build a waste-free city. At the same time, the establishment of waste heat recovery devices for the self-generation of electricity, the establishment

of waste recovery devices for the self-generation of electricity, and the establishment of a comprehensive water resource recycling system not only saves costs but also greatly improves resource utilization efficiency. This series of energy-saving and consumption-reduction measures has created better economic and social benefits.

The cement industry continues to implement a series of government policies, such as supply-side reform and environmental protection, and measures such as energy conservation and emission reduction, peak-shifting production, and comprehensive mine improvement. The effect of industry self-discipline has been significantly improved. The group actively plans and rationalizes layout, strictly implements peak-shifting production, actively optimizes production procedures, and promotes digital and intelligent innovation and efficiency-enhancing activities. The group has achieved remarkable results in energy conservation, consumption reduction, and green environmental protection. The group is committed to saving water, energy, and emissions and has achieved great improvement in preventing and controlling environmental pollution. We have completed quality, environment, energy, and occupational health and safety management systems and have also obtained the "five-in-one" certification. Following Dalian Tianrui Cement, Liaoyang Tianrui Cement, Tianrui Nanzhao Cement, and Tianrui Yuzhou Qianjing Cement were awarded the title of "National Green Factory," respectively. At the end of the reporting period, the group has a total of 11 green factories, including 8 at the national level, and 14 green mines, including 6 at the national level.

The group attaches great importance to the innovative application and development of the latest technologies. Use 5G technology to carry out smart mining project pilots, introduce driverless excavators and smart mine trucks

for remote control, thereby greatly improving efficiency, and introducing intelligent logistics systems. Process unmanned smart solutions. This series of innovative application measures promotes production upgrading and transformation, and disruptive innovation provides employees with a healthier, safer, and more comfortable working environment, leading to the sustainable development of the entire industry.

The Group has established two provincial technology R&D centers in Henan and Liaoning and multiple municipal R&D centers to continue the research and development, innovation, and technological transformation of process equipment. Successfully implemented ultra-low emissions, grate coolers, ammonia-free denitrification, high-temperature fans, etc. Key technology research, development, and transformation. During the reporting period, a new subsidiary of the group was rated as a high-tech enterprise, and the number of subordinate high-tech enterprises increased to 19. The total number of A-level, B-level, and performance-leading enterprises in the group has reached 19. Six of the group's subsidiaries have been selected as the "Energy and Carbon Management Demonstration Enterprise" in Henan Province. Among them, Tianrui Zhengzhou Cement Co., Ltd. has been selected as the "Carbon Peak Pilot Enterprise" in Henan Province and successfully applied for Zhengzhou City's Cement Production Green Energy Conservation Engineering Technology Research Center. The group continues to optimize its production processes and has won numerous high-quality awards. Tianrui Cement Ningling Co., Ltd. was listed as a pilot enterprise for DCMM standard implementation in Henan Province in 2023. The group already has 21 smart factories and 26 enterprises integrating information and industrialization to implement standards. Liaoyang Tianrui Cement Co., Ltd. was awarded the title of "Smart Demonstration Factory" in Liaoning Province, was also selected for the list of "Smart Manufacturing Demonstration Factory" by the Ministry of Industry and Information Technology, and won two first prizes in the Liaoning Province Building Materials

Science and Technology Innovation Category. Weihui Tianrui Cement was awarded the title of "National Quality Benchmark Enterprise" by the China Quality Association.

We also participate in public welfare projects such as helping the poor, carrying out community volunteer services, and creating a stable and harmonious community environment. Among them, Tianrui Xiaoxian Cement was awarded the "Healthy Enterprise" award by the Suzhou Municipal Health Commission and the honorary title of "Xiaoxian Advanced Unit that Cares for the Next Generation and Loves Education Aid.". Tianrui Xin Deng Cement was awarded the honorary titles of "Advanced Unit for Respecting Teachers and Emphasizing Education" and "Zhengzhou Garden-style Unit."

Looking forward to the new year, we will continue to uphold the concept of sustainable development, communicate closely and work side by side with stakeholders, and strive to improve ESG management methods and actions in the hope of further improving comprehensive ESG performance. We strive to play an important role in the circular economy, spare no effort to sustainably manage raw materials and -products, and continue to provide high-quality products. In the process of operating decision-making, we are committed to reducing emissions, making good use of resources, improving occupational safety and health, focusing on employee development and training, etc., to further promote the group's mission and goals of sustainable development.

With that, we would also like to sincerely thank all departments and teams for their great contributions to the sustainable development of the region.

04

SUSTAINABILITY PERFORMANCE HIGHLIGHTS



4. SUSTAINABILITY PERFORMANCE HIGHLIGHTS

Environment



Labor Hire

Employee training coverage

100%

Average hours of training for employees

28.79 Hours

Carry out environmental protection training

119 Training

Total number of participants

6,892 People

Total training time

154 Hours

Anti-corruption and anti-corruption training coverage

100%

Carry out antitrust and fair competition training

696 Training

Total number of participants

13,004 People

Total training time

486 Hours

Carry out intellectual property protection training

558 Training

Total number of participants

13,004 People

Total training time

462 Hours

Workers killed and injured due to work-related injuries

0 People

Work injury rate

0%

Number of working days lost due to work injury

0 Day

Investment in occupational disease prevention and control measures

3.65 Million RMB

Occupational disease incidence rise

0 Incidence

R&D

R&D staff

599 People

Approximately the total number of people in the group

9%

R&D investment

364.36 Million RMB

% of annual operating revenue in 2023

4.62%

Smart factory

21 Factories

Obtained "Integration of Informatization and Informatization" certified factory

26 Factories

High-tech enterprises

19 Enterprises

Product Liability

Obtained customer complaint incident
ISO 9001 Quality Management System Certification

0 Incident

Percentage of suppliers performing environmental, social and governance assessments under supplier assessment system
 Percentage of suppliers signing supplier integrity agreements

100%

Community Feedback

Charitable donations invest approx

0.86 Million RMB

Awards and Recognition Summary

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Awards/Achievements	Award-winning units	issuing authority
8 national green factories	Dalian Tianrui Cement Co., Ltd.; Liaoyang Tianrui Cement Co., Ltd.; Tianrui Group Zhengzhou Cement Co., Ltd.; Tianrui Xindeng Zhengzhou Cement Co., Ltd.; Tianrui Group Xiaoxian Cement Co., Ltd.; Weihui Tianrui Cement Co., Ltd.; Tianrui Group Nanzhao Cement Co., Ltd.; Tianrui Group Yuzhou Cement Co., Ltd. Qianjing Branch	Ministry of Industry and Information Technology
3 provincial green factories	Haicheng City First Cement Co., Ltd.; Yingkou Tianrui Cement Co., Ltd.; Tianrui Group Ruzhou Cement Co., Ltd.	Department of Industry and Information Technology of Liaoning Province/Henan Province
6 national green mines	Tianrui Group Nanzhao Cement Co., Ltd. East Mining Section of Qingshan Cement Gray Carbon Mining Area, Nanzhao County; Tianrui Group Zhengzhou Cement Co., Ltd. cement limestone mine in Luzhuang Mining Area, Xingyang City; Tianrui Xindeng Zhengzhou Cement Co., Ltd. Dengfeng Lijiamen Cement Limestone Mine; Tianrui Xindeng Zhengzhou Cement Co., Ltd. Renzigou Cement Limestone Mine; Dalian Tianrui Cement Co., Ltd. Yushushan Limestone Mine; Liaoyang Tianrui Cement Co., Ltd.	Ministry of Natural Resources of the People's Republic of China
8 provincial and municipal green mines	Tianrui Cement Group Co., Ltd. Zhifang Limestone Mine; Tianrui Cement Group Co., Ltd. Yunshanzhai cement limestone mine in Guangshan County; Cement limestone mine in Wangzongdian Mining Area, Xingyang City, Henan Province; Shanbi Cement Limestone and Solvent Limestone Mine of Manji Holdings Group Co., Ltd.; The first quarry of Weihui Tianrui Cement Co., Ltd.; Tianrui Cement Group Co., Ltd. Xiaoshangou Quarry; Qingsong Quarry of Tianrui Cement Group Co., Ltd.; Limestone mine for cement in Cement Tuanli Mining Area, Tianruixiao County	Henan Province / Anhui Province Department of Natural Resources

© Energy Saving and Environmental Protection

Awards/Achievements	Award-winning units	issuing authority
Henan Provincial Department of Industry and Information Technology 2022 Provincial Green Building Materials Production Comprehensive Base	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Henan Provincial Department of Industry and Information Technology, Henan Provincial Development and Reform Commission, Henan Provincial Department of Natural Resources, Henan Provincial Department of Ecology and Environment, Henan Provincial Department of Housing and Urban-Rural Development, Henan Provincial Department of Transportation, Henan Provincial Department of Water Resources, Henan Provincial Emergency Management Department, Henan Provincial Market Supervision and Administration Bureau
Provincial comprehensive green building materials production base	Tianrui Group Yuzhou Cement Co., Ltd. Qianjing Branch	Henan Provincial Department of Industry and Information Technology
Henan Province heavy pollution in 2023 Dyeing weather key industry performance Rating Results - Cement Industry Rating grade B	Pingdingshan Ruiping Shilong Cement Co., Ltd.	Henan Provincial Department of Ecology and Environment
Anhui Province is advanced in energy efficiency improvement Typical cases of enterprises	Tianrui Group Xiaoxian Cement Co., Ltd.	Anhui Provincial Department of Economy and Information Technology
2022 Ruzhou City Excellent Enterprise (leading type)	Tianrui Group Ruzhou Cement Co., Ltd.	Ruzhou Municipal People's Government
2022 Trade union work Advanced unit	Tianrui Group Ruzhou Cement Co., Ltd.	Ruzhou Federation of Trade Unions
Henan Province's first "Zero Carbon Neutral Yuanbei Green Manufacturing Technology Second Prize in Applied Innovation Competition"	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Henan Provincial Department of Industry and Information Technology, Henan Provincial Green Manufacturing Alliance, Henan Energy Efficiency Technology Association, Zhongyuan Bank Co., Ltd.
Zhengzhou garden style unit	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Zhengzhou Garden Bureau
Municipal water-saving enterprise	Tianrui Group Ruzhou Cement Co., Ltd.	Pingdingshan City Water Conservancy Bureau, Pingdingshan City Industry and information technology bureau

Product Quality

Award/Achievement Name	Award-winning units	issuing authority
2022 Excellent Laboratory of Cement Enterprises	Tianrui Group Zhengzhou Cement Co., Ltd.	Henan Building Materials Industry Association
Technical innovation of mixing system of cement clinker and reinforced slag First Prize in New Category	Liaoyang Tianrui Cement Co., Ltd.	Liaoning Provincial Building Materials Industry Association
Energy-saving alternative fuel combustion system technology innovation award First Prize	Liaoyang Tianrui Cement Co., Ltd.	Liaoning Provincial Building Materials Industry Association
The 19th National Cement Competition of the 2023 "Menofu Cup" Won 2 special prizes and excellent results in the quality index inspection comparison 2 good awards, 2 fully qualified awards, 5 excellent awards	Tianrui Group Guangshan Cement Co., Ltd.; Panjin Jinrun Cement Co., Ltd.; Tianrui Group Yuzhou Cement Co., Ltd.; Haicheng City First Cement Co., Ltd.; Tianrui Group Xuchang Cement Co., Ltd.; Tianjin Tianrui Cement Co., Ltd.; Tianrui Group Zhoukou Cement Co., Ltd.; Henan Yongan Cement Co., Ltd.	National Cement Quality Inspection and Testing Center
Feng Chenguo and Zhang Junfang respectively won the Operation Expert Award in the 19th National Cement Quality Index Inspection Comparison of the 2023 "Minofu Cup"	Tianrui Cement Group Co., Ltd.	National Cement Quality Inspection and Testing Center
Selected into the first batch of famous and high-quality industrial products in Xuchang City	Tianrui Group Yuzhou Cement Co., Ltd.	Xuchang Municipal Bureau of Industry and Information Technology
Anhui Province 2023 3.15 "Quality Trustworthy Unit"	Tianrui Group Xiaoxian Cement Co., Ltd.	Anhui Market Star Newspaper and Anhui Finance Network
Obtained special cement production license	Dalian Tianrui Cement Co., Ltd.	Liaoning Provincial Market Supervision and Administration Bureau
Won the title of "Dalian Good Product"	Dalian Tianrui Cement Co., Ltd.	Dalian Enterprise Federation
Henan Province Quality Integrity Brand Advanced Enterprise	Weihui Tianrui Cement Co., Ltd.	China Quality Supervision Magazine, Henan Quality Network
National Cement Inspection Comparison 40th Anniversary Best Contribution Award	Weihui Tianrui Cement Co., Ltd.	China National Testing and Testing Holdings Group Co., Ltd.
Three-star industrial enterprise	Weihui Tianrui Cement Co., Ltd.	Xinxiang Municipal People's Government
2022 Excellent Laboratory of Cement Enterprises in Henan Province	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Henan Building Materials Industry Association
High-performance cement research and development won the 2023 "BBMG Tongda" Cup third prize	Tianrui Cement Group Co., Ltd.	Henan Provincial Mechanical, Metallurgical and Building Materials Industry Committee, Henan Building Materials Industry Association
The transformation of the aggregate line jaw crushing transmission method won the 2023 "Jinyu Tongda Cup" third prize	Tianrui Cement Group Co., Ltd.	Henan Provincial Mechanical, Metallurgical and Building Materials Industry Committee, Henan Building Materials Industry Association
The improvement of the unloading stability of the pulverized coal bunker won the 2023 "Gold Medal" Third Prize of "Sumi Tongda Cup"	Tianrui Cement Group Co., Ltd.	Henan Provincial Mechanical, Metallurgical and Building Materials Industry Committee, Henan Building Materials Industry Association
Φ3.8×13m cement mill to increase production and reduce consumption in 2023 "Jinyu Tongda Cup" third prize	Tianrui Cement Group Co., Ltd. (Linru Company)	Henan Provincial Mechanical, Metallurgical and Building Materials Industry Committee, Henan Building Materials Industry Association

© Technological Innovation

Awards/Achievements	Award-winning units	issuing authority
National intelligent manufacturing demonstration factory	Liaoyang Tianrui Cement Co., Ltd.	First Department of Equipment Industry, Ministry of Industry and Information Technology
Xuchang Science and Technology Innovation Award	Tianrui Group Xuchang Cement Co., Ltd.	Xuchang Municipal People's Government
Municipal Enterprise Technology Center	Tianrui Group Xiaoxian Cement Co., Ltd.	Suzhou City Department of Economy and Information Technology
Obtained the certification of innovative small and medium-sized enterprises in Henan Province	Xinyang Tianrui Cement Co., Ltd.	Henan Provincial Department of Industry and Information Technology
Liaoning Province's first batch of high-tech enterprise registration announcement in 2023	Liaoyang Tianrui Cement Co., Ltd.	National high-tech enterprise recognition management work Leading Group Office
Specializing in special new small and medium-sized enterprises	Liaoyang Tianrui Cement Co., Ltd.	Liaoning Provincial Department of Industry and Information Technology
Integration of informatization and informatization rewards (first half of the year)	Yingkou Tianrui Cement Co., Ltd.	Yingkou City Industry and Information Technology Bureau
Integration of informatization and informatization rewards (second half of the year)	Yingkou Tianrui Cement Co., Ltd.	Yingkou City Industry and Information Technology Bureau
2022 Honorary Title of Innovative Small and Medium-sized Enterprises in Henan Province	Pingdingshan Tianrui Yaodian Cement Co., Ltd.	Henan Provincial Department of Industry and Information Technology
2023 "BBMG Tongda Cup" Henan Province Building Materials Industry 5 technological innovation awards	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Henan Provincial Mechanical, Metallurgical and Building Materials Industry Committee, Henan Building Materials Industry Association

© Safe Production

Awards/Achievements	Award-winning units	issuing authority
Advanced collective for safety production in non-coal mines and industrial and trade industries	Tianrui Group Zhengzhou Cement Co., Ltd.	Zhengzhou Municipal Work Safety Committee Office
2022 Advanced Unit in Production Safety	Tianrui Group Yuzhou Cement Co., Ltd.	Yuzhou City Safety Production Committee
Advanced unit of production safety in 2022	Tianrui Group Yuzhou Cement Co., Ltd. Qianjing Branch	Yuzhou City Safety Production Committee
Emergency response skills drill for the industrial and trade industry in Zhanhe District, Pingdingshan City third prize	Pingdingshan Tianrui Yaodian Cement Co., Ltd.	Pingdingshan City Zhanhe District Emergency Management Bureau

◎ Labor Hire

Awards/Achievements	Award-winning units	issuing authority
Municipal harmonious labor relations demonstration enterprise	Tianrui Group Xiaoxian Cement Co., Ltd.	Suzhou Human Resources and Social Security Bureau, Suzhou Federation of Trade Unions, Suzhou Federation of Industry and Commerce
An enterprise with happy employee life in Suzhou City	Tianrui Group Xiaoxian Cement Co., Ltd.	Suzhou Federation of Trade Unions
Government's 2022 job stabilization subsidy	Liaoyang Tianrui Cement Co., Ltd.	Liaoyang Employment and Talent Service Center
2023 Winter "Send Warmth" activity, female employee care room, and model employee innovation studio fund subsidies	Liaoyang Tianrui Cement Co., Ltd.	Liaoyang Federation of Trade Unions
Job stabilization subsidy in 2022	Yingkou Tianrui Cement Co., Ltd.	Yingkou Human Resources and Social Security Bureau
Received the 2021 Employment Subsidy Award for Disabled Persons with a Excessive Proportion of Placement	Dalian Tianrui Cement Co., Ltd.	Dalian Changxing Island Economic and Technological Development Zone Society Business Administration
Honorary title of Liaoning Workers Pioneer	Yingkou Tianrui Cement Co., Ltd.	Liaoning Provincial Federation of Trade Unions
Honorary title of Worker Pioneer	Weihui Tianrui Cement Co., Ltd.	Xinxiang Federation of Trade Unions
2022 Advanced Unit in Trade Union Work	Tianrui Group Ruzhou Cement Co., Ltd	Ruzhou Federation of Trade Unions
2022 Advanced collectives and individuals in non-coal mines and industrial and trade industry systems	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Zhengzhou City Safety Production Committee
Dengfeng Workers' Pioneer	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Dengfeng Federation of Trade Unions
Model employee home	Tianrui Group Ruzhou Cement Co., Ltd.	Henan Federation of Trade Unions
2023 Advanced Unit in Occupational Health Work	Tianrui Group Zhengzhou Cement Co., Ltd.	Zhengzhou Municipal Health Commission

◎ Social Feedback

Awards/Achievements	Award-winning units	Issuing authority
Love donation enterprise	Tianrui Group Zhengzhou Cement Co., Ltd.	Xingyang Municipal Committee of the Communist Party of China, Xingyang Municipal People's Government
"Social Contribution" Advanced Unit, March 8th Red Flag Collective	Tianrui Group Yuzhou Cement Co., Ltd. Qianjing Branch	Qianjing Town Committee of the Communist Party of China, Qianjing Town People's Government
Xiaoxian Caring for the Next Generation and Caring for Advanced Units in Aiding Students	Tianrui Group Xiaoxian Cement Co., Ltd.	Xiao County Care for the Next Generation Working Committee, Love Student Aid Association

◎ Comprehensive Strength of the Enterprise

Awards/Achievements	Award-winning units	Issuing authority
Advanced grassroots party organization	Tianrui Group Zhengzhou Cement Co., Ltd.	Cuimiao Town Committee of the Communist Party of China
Xingyang City Advanced Grassroots Trade Union	Tianrui Group Zhengzhou Cement Co., Ltd.	Xingyang Federation of Trade Unions
The first batch of credit enterprises in Nanyang City to comprehensively assess credit enterprises	Tianrui Group Nanzhao Cement Co., Ltd.	Nanyang City Social Credit System Construction Work Steering Group Office
Support outstanding enterprises in the economic development of the town	Tianrui Group Nanzhao Cement Co., Ltd.	Baitugang Town Committee of the Communist Party of China, Baitugang Town people's government
Civilized and honest merchants in Yuzhou City	Tianrui Group Yuzhou Cement Co., Ltd.	Yuzhou Municipal Quality Supervision Bureau
Wu Jichao won the Yuzhou City May 1st Labor Medal	Tianrui Group Yuzhou Cement Co., Ltd.	Yuzhou Federation of Trade Unions
Suzhou City Health Enterprise Title	Tianrui Group Xiaoxian Cement Co., Ltd.	Suzhou Municipal Health Commission
Suzhou City's "Top Ten Tax Payers" in 2022	Tianrui Group Xiaoxian Cement Co., Ltd.	Suzhou Municipal People's Government
Xiao County's "Top Ten Manufacturing Industries" in 2022 Honorary title of "Top Ten Taxpayers"	Tianrui Group Xiaoxian Cement Co., Ltd.	Xiaoxian County Party Committee, Xiaoxian County People's Government
High quality strategic partner	Tianrui Group Xiaoxian Cement Co., Ltd.	Xuzhou Metro Infrastructure Engineering Co., Ltd.
High quality strategic partner	Tianrui Group Xiaoxian Cement Co., Ltd.	China Railway First Bureau Group Materials Industry and Trade Co., Ltd.
Deepen industrial reform "Blue Ocean Action" pilot enterprise	Tianjin Tianrui Cement Co., Ltd.	Tianjin Binhai New Area Industrial Reform Leading Group
Awarded as a trustworthy enterprise	Dalian Tianrui Cement Co., Ltd.	Liaoning Provincial Department of Ecology and Environment
Won the honorary title of Dalian Bronze Social Organization for Coordinating Labor Relations	Dalian Tianrui Cement Co., Ltd.	Dalian Municipal Human Resources and Social Security Bureau

© Comprehensive Strength of the Enterprise

Awards/Achievements	Award-winning units	Issuing authority
Four-star party organization	Liaoyang Tianrui Cement Co., Ltd.	Organization Department of Liaoyang Municipal Committee of the Communist Party of China, Liaoyang Municipal Committee of the Communist Party of China Commission for Two New Working Committees
Top 10 tax payers	Liaoyang Tianrui Cement Co., Ltd.	Liaoyang Municipal Committee of the Communist Party of China, Liaoyang Municipal People's Government
Enterprises that made outstanding contributions to the 2022 project implementation year activities	Liaoyang Tianrui Cement Co., Ltd.	Wensheng District Committee of the Communist Party of China, Wensheng District People's Government
Optimize the business environment and stabilize the economy to promote high-quality development support and rewards	Liaoyang Tianrui Cement Co., Ltd.	Qingyang Street, Wensheng District
2022 Advanced Enterprise in Investment Promotion, 2022 Industry Develop advanced enterprises	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Dengfeng Municipal Committee of the Communist Party of China, Dengfeng Municipal People's Government
Top 30 manufacturing enterprises in Dengfeng City	Tianrui Xindeng Zhengzhou Cement Co., Ltd.	Dengfeng Industrial Industry Development Leading Group

05

IMPROVE CORPORATE GOVERNANCE, INSIST COMPLIANCE IN OPERATIONS



5. IMPROVE CORPORATE GOVERNANCE, INSIST COMPLIANCE IN OPERATIONS

5.1 Corporate Governance

The Group strictly complies with the requirements of the Company Law of the People’s Republic of China, the Securities Law of the People’s Republic of China, the Securities Listing Rules of the Stock Exchange of Hong Kong Limited, and other laws, regulations, and normative documents, constantly improves the corporate governance structure, and establishes a scientific management system that is standardized, operates efficiently, has clear boundaries, and has effective supervision. The Company has established a corporate governance structure consisting of the shareholders’ meeting, the board of directors, and senior management.



The Group has established a three-tier management system to identify, collect, assess, respond, evaluate, and improve risk management and internal control. The three-tier management system includes (the 3rd layer) within each branch company or subsidiary, a risk management team, in charge by branch level manager, looking after the relevant functional departments and business units; (the 2nd layer) within the headquarters of the Company, a risk management office managed directly by the general manager, with the assist by the relevant functional department and the regulatory units, and (the first layer) our internal audit structure, the executive department of specific supervision functions, supervised by the Company’s board of directors and the audit committee under the board of directors. The risk management team issued a risk management manual as guidance to conduct daily risk identification, relevant information collection, and reporting to the risk management office. Our legal department serves as the consulting agency of the risk management office and provides suggestions on the formulation of risk management-related systems and major risk management methods, the Company’s risk management organizational structure, and its responsibilities plan. The Risk Management Office is a permanent risk management organization that provides improvement suggestions to the Risk Management Office and if necessary, reports to the Audit Committee.

We strictly follow the principles of board diversity and actively build a diversified board of directors. We adhere to the principles of meritorious service and take the gender, age, culture, and race of directors into consideration. At the end of reporting periods, the Board consisted of 9 members, including 5 executive directors, 1 non-executive director, and 3 independent non-executive directors, including 1 female director.

5.2 ESG Governance Structure

The Board of Directors is the highest decision-maker for the Group's ESG management and bears the ultimate responsibility for the Group's ESG policies, strategies, and reports. To better manage the Group's ESG performance and identify potential risks, the Board of Directors, with the assistance of the ESG working group, regularly conducts materiality assessments and refers to the opinions of different stakeholders to evaluate and prioritize important ESG-related issues.

The Group has established an ESG working group with the participation of the Group's executive directors, board secretaries, office directors, functional departments, senior management of each operating unit, and corresponding functional departments to strengthen the management of ESG-related matters. As the highest operational management decision-making body of the Group, the Group's Board of Directors assumes overall responsibility for the performance of ESG issues, ESG development strategies, ESG policies, and ESG management measures, and integrates them into the Group's long-term development plan. The Board of Directors monitors and reviews the Group's ESG governance practices at all operational levels through the Audit Committee to maintain a high level of ESG governance and safeguard compliance, ensure the effectiveness of ESG risk management and internal control systems, and incorporate ESG risk factors into decision-making process. The board of directors understands the group's ESG progress and major ESG practices through regular meetings, checks the consistency and completion of the current progress with the target direction, supplements and revises the ESG development strategy for the next stage, and clarifies the future short-term, medium- and long-term ESG development. Goals and directions. The ESG working group regularly collects ESG information, closely monitors the Group's ESG performance, ensures compliance with ESG-related laws and regulations, and prepares ESG reports. Under the coordination of the group's functional departments, each operating unit promotes ESG-related policies during operations and continues to optimize ESG-related work through management.

The Group reduces the impact of its operations on the environment by formulating ESG-related goals and indicators. The Group will be committed to integrating sustainable development into business operations and fulfilling corporate responsibilities. The ESG working group regularly reports to the Board of Directors to evaluate the implementation and effectiveness of the internal control mechanism and review the progress of established goals and indicators. The ESG working group will also participate in enterprise risk management to assist in the assessment and identification of the Group's ESG risks and opportunities.

BOARD OF DIRECTORS

- ⦿ Supervise all ESG matters
- ⦿ Provide management guidelines and strategies
- ⦿ Review ESG-related goals and indicators and review progress

ESG WORKING GROUP

- ⦿ Collect and analyze ESG data and evaluate the effectiveness of policies and procedures
- ⦿ Ensure implementation of plans to achieve ESG goals and indicators
- ⦿ Review ESG-related goals and indicators and review progress
- ⦿ Prepare annual ESG report and report to the board of directors

5.3 Stakeholder Communication

Stakeholder communication and importance assessment are an integral part of the Group's process of promoting sustainable development. The Group maintains good communication with stakeholders through diversified communication channels, fully understands the views and expectations of stakeholders, and thus fully considers the concerns of each stakeholder in operational decisions.

Our main communication channels, frequency and key issues with various stakeholders are as follows:

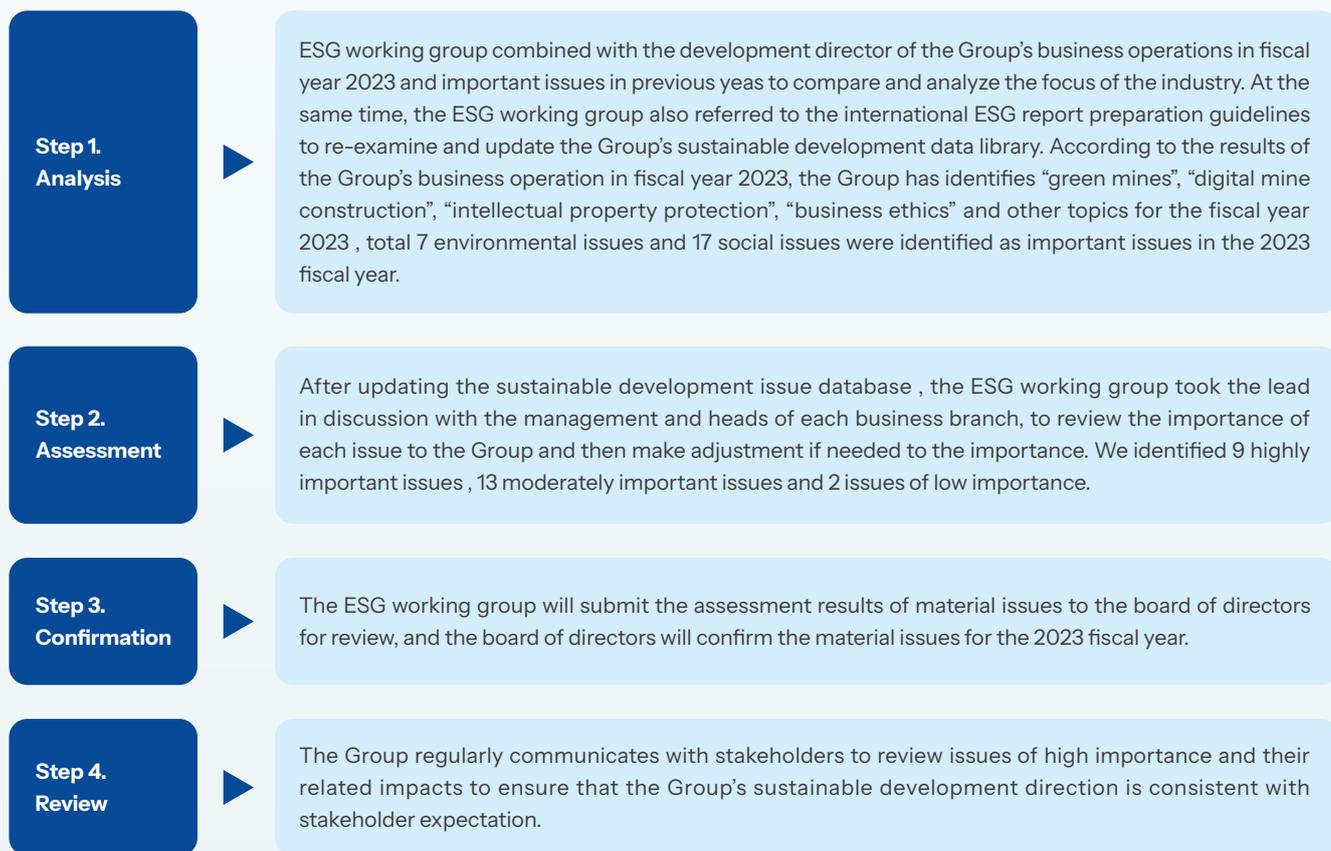
Stakeholder	Communication Channel	Frequency	Focus on Issues
Shareholders	Annual Report/Interim Report Announcement/Circular for Annual/Special Shareholder Meeting Official Website/Emails/Hotline	Semi-Annually Irregularly Annually/ Irregularly Irregularly	Investment returns Corporate governance Business operation Innovation
Government and Regulatory Agencies	Annual/Interim Reports Announcements/Circulars	Semi-Annually Irregularly	Compliance with laws and regulations Employment and local economic development
Employees	Performance Evaluations Meetings and Trainings E-mails, WeChat Messages, Bulletin Board	Quarterly Irregularly Irregularly	Employee benefits Occupational H&S Employee development and training
Customers	Satisfaction survey Assessment interviews and on-site inspection Customer service hotline and emails	Irregularly Irregularly Irregularly	Quality products and services Customer interest protection Customer privacy
Suppliers	Public bidding Supplier satisfaction assessment Interviews and site visits Supplier meeting	Irregularly Irregularly Irregularly Annually	Procurement procedure Win-win cooperation Green procurement Receivable turnover
Professional Bodies	Satisfaction survey and assessment Emails, hotlines and interviews	Irregularly Irregularly	Win-win cooperation Resource links
Local Communities	Media Charitable activities Donations Face-face visits Forums and seminars	Irregularly Irregularly Irregularly Irregularly Irregularly	Community participation Public welfare supports Environmental protection awareness Environmental education Marketing events

5.4 ESG Materiality Assessment

In addition to its business development strategies and industry practices, based on our assessment results on the important matters, combined with domestic and international ESG regulations and disclosure guidelines for the fiscal year 2023, as well as sustainable development trends, the Group identified our material ESG issues. The relevant stakeholders of the Group and the management and employees of each major functional department reviewed the Group’s operations identified relevant ESG matters, and assessed the importance of relevant matters to the group’s business and each stakeholder.

The Group has reviewed the assessment results of important areas. After the Group’s business analysis and management review, based on the operational priorities of the 2023 financial year, we have identified a total of 9 highly important issues, 13 moderately important issues, and 2 issues of low importance. The Group will continue to regularly monitor business operations and ESG performance, and adjust ESG development strategies, and improve performance based on actual performance.

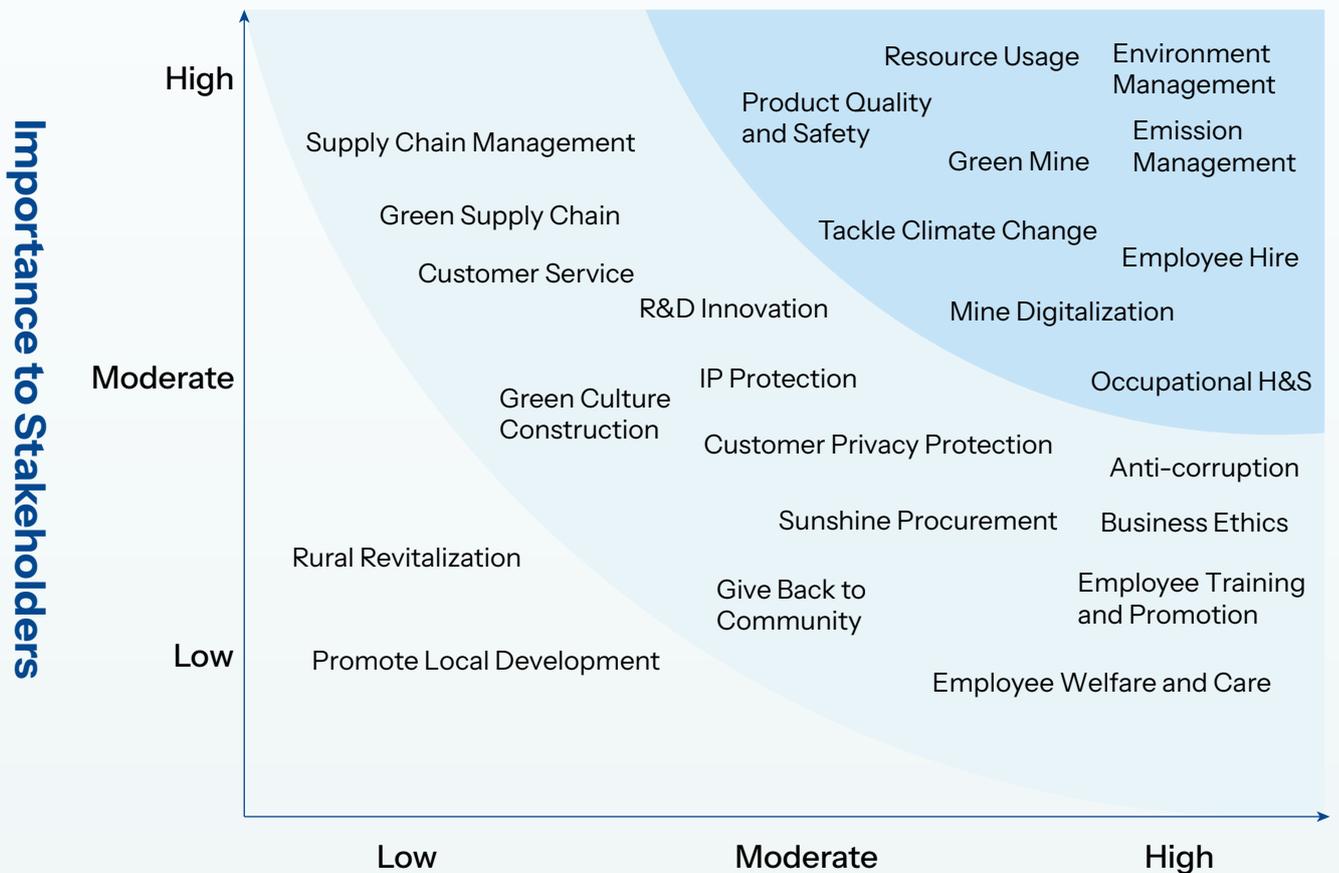
The Group’s assessment process of material issues for the 2023 financial year is as follows



This report will describe the work and progress made by the Group in the fiscal year 2023, on 24 important issues in the subsequent chapters. It will also pay attention to issues of high importance in operations and formulate corresponding strategies, principles, improve policies and set long-term goals to continue to respond to stakeholders' expectations and report on the Group's contribution to ESG.

The following table sets out the important issues of the Group in 2023

Matrix Chart for Importance of Issues



The Importance for Corporate ESG Governance

5.5 Core Value of Sustainable Development

The Group actively fulfills its social responsibilities and focuses on the coordination of corporate development and economic, social, and environmental development. We are committed to leading and developing the green cement industry. The Group actively responds to the “carbon peaking and carbon neutrality” policies, implements the developmental philosophy of “lucid water and lush mountains are valuable assets”, and achieves a harmonious unity between the production of high-quality cement products and ecological and environmental protection. Moreover, the Group believes that strong ESG propositions and management can help companies manage and control compliance risks, which will ultimately help increase the Group’s revenue, and build brand image to improve corporate competitiveness.

Concept of Sustainable Development



The Group has integrated the concept of sustainable development into all subsidiaries, ensuring that from top to bottom, from inside to outside, from the management, and employees to all stakeholders, the Group's sustainable development concept is upheld and implemented in daily life. The Group plans to continue to improve information transparency on the current basis, assume greater environmental and social responsibilities, and create a green and sustainable future for the next generation.

To implement the Group's sustainable development philosophy and create long-term value for our stakeholders, we promise to :

Comply with applicable laws, regulations, industry standards, and normative documents, practice good ethics, and operate with integrity

Adhere to the concept of environmental protection, reduce emissions, improve resource use efficiency, strictly manage waste emissions, and reduce the adverse impact of business operations on the environment

Carry out occupational health protection work for employees and improve occupational safety and health levels

Promote a good business ecology and create a mutually beneficial and win-win situation

5.6 Uphold UN Sustainable Development Goals

In the actual production and operation process, the Group is supportive of the UN Sustainable Development Goals (SDGs) through practical actions, regards the UN SDGs as the Group’s long-term development direction, paring them with the Group’s sustainable development strategy, and committee itself to eradicating poverty, protecting the planet and ensuring that everyone can live in peace and prosperity by 2030.

1 No Poverty 8 Decent Work and Economic Growth

The Promoter of Common Prosperity

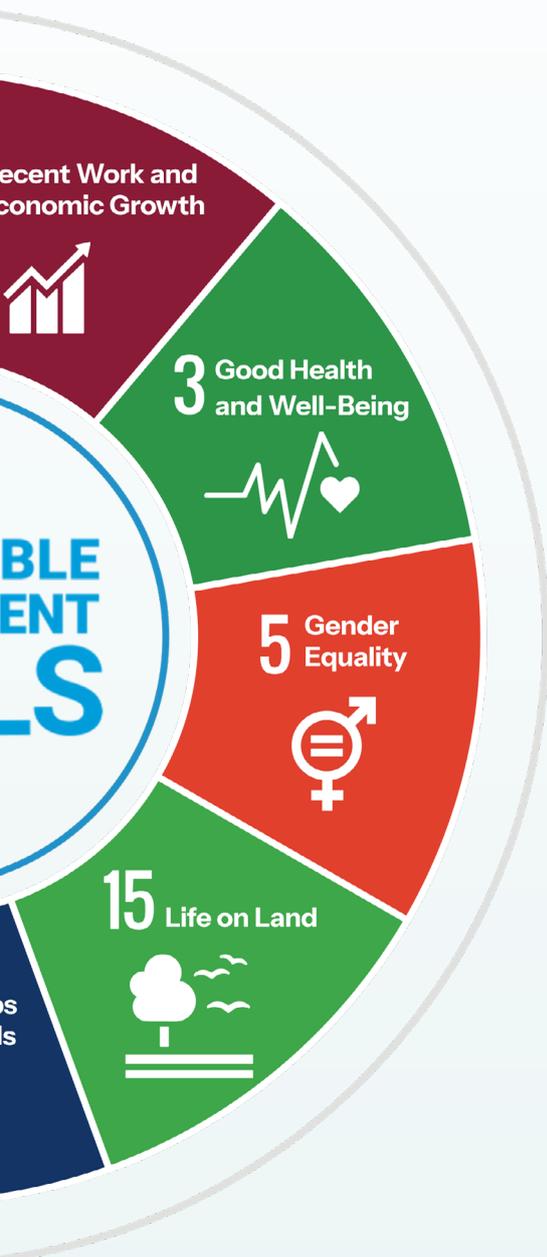
The Group provides employees with attractive salaries and benefits to ensure their life stability and provides employees with training and promotion channels for their life-long development. The Group is well aware that as an enterprise, it should assume social responsibilities, and give back to the community with corporate donations, volunteer activities, public welfare undertakings, and other actions, promoting community development.

7 Affordable and Clean Energy 13 Climate Action

The Builder of Climate Transformation

The Group has reduced carbon emission per unit of product upgrading low-carbon emission reduction technologies and promoting the low-carbon transformation of enterprise. It has deployed waste heat power generation facilities in multiple factories, recycled resources, and implemented waste heat power generation practices in rotary kilns to supply additional electricity power and increase the proportion of clean energy use. The Group has made practical efforts to mitigate climate change, actively responded to the global challenges brought by climate change, and implemented a climate change risk management layout.





3 Good Health and Well-being
5 Gender Equality

The Supporter of Employee's Rights and Interests

The Group has earnestly considered the interests of employees. To implement the people-oriented concept, it has formulated a series of measures for employee safety and occupational disease prevention and control and conducts regular physical examinations to minimize the risk of occupational diseases. In the process of employment and employee development, we will never discriminate based on gender. We are providing equal pay for equal work, and creating a healthy and harmonious job-hunting and working environment.

15 Life on Land

The Guardian of the Ecological Environment

The Group is well aware that the ecological environment is the basis of human survival. During the business development process, it ensures the good management of materials and emissions throughout the entire process, it manages to achieve exhaust gas emissions well below national and local standards, zero discharge of factory production wastewater, and harmless treatment of solid waste in the factory.

In addition, for the development of mining resources, the Group adheres to the principle of "developing while managing" and conducts mining operations together with slope greening and vegetation restoration to ensure the integrity of the ecological environment.

12 Responsible Consumption and Production

17 Partnership for the Goals

The Guarantor of Product Quality

Providing high-quality products and services is the Group's business philosophy. The Group has set up its laboratory to obtain the cement enterprise laboratory certificate and entrusts inspection agencies at or above the provincial level to regularly test product quality, and customer complaints are investigated within 24 hours. The Group selects suppliers through principles such as sunshine procurement and builds a robust and sustainable supply chain. As a leading enterprise in the cement industry, the Group has a thorough understanding of industry development trends, actively participates in industry exchange meetings, and promotes and leads industry development.

5.7 Steady Operation

The Group strictly complies with all laws, regulations, and industry regulatory requirements for the Group's operations. Relevant departments within the Group regularly review current laws and regulations update and then make adjustments to the Group's policies and guidelines, while improving the Group's internal control system, clarifying the responsibilities and authorities of each department, and standardizing various business processes to ensure that the Group's business interactions are legal, compliant and efficient, while providing compliance training to employees. The Group adheres to product and service-oriented. Always maintain the output of high-quality cement products. Follow the normal operation of the market, understand the current overcapacity situation in the cement industry, and rationally adjust production capacity and supply. At the same time, in response to changes in the operating environment, the Group optimized its organizational structure and personnel structure based on business attributes and characteristics, focusing on business positioning and core business resources. Integrate and tap development potential to enhance its competitiveness to cope with the uncertainty of the external environment.

Business Ethics

The Group firmly believes that business ethics is a cornerstone and essence of the long-term development of enterprises, which can help enterprises remain invincible in the commercial market and maintain market fairness. Competition order, thus promoting the development and advancement of industry. Maintaining good business ethics can safeguard the corporate image of the Group, enhance corporate reputation, and help for the sustainable development of enterprises. Antitrust and fair competition are important aspects of business ethics and are the necessary basis for maintaining market fairness and impartiality. It is also an important means to build new development patterns and promote high-quality development of the industry. As a leading enterprise in the cement industry, the Group has always promoted good practices in the industry. It takes sexual development as its core value and adheres to the values of anti-monopoly and fair competition. Prevent and manage possible risks in advance to protect fair market competition, achieve healthy and sustainable development, and protect consumer interests and social public interests. During the reporting period, the Group conducted a total of 696 antitrust cases. A total of 13,004 people participated in fair competition training, with a total training time of 486 hours. During the reporting period, no anti-competitive behavior, antitrust, or litigation over antitrust practices.

696

Sessions

Training, Antitrust and Fair Competition

13,004

People

Number of People trained, Antitrust and Fair Competition

486

Hours

Total Hours of Trainings, Antitrust and Fair Competition

Antitrust and fair competition trainings		
Indicators	Unit	Year 2023
Antitrust and fair competition trainings	Sessions	696
Number of employees trained	People	13,004
Training duration	Hours	486

Anti-corruption Management

The Group strictly abides by the applicable laws, regulations, and normative documents in each location where it operates, and has formulated systems and regulations such as the “Employee Anti-Corruption Practice Regulations” to strictly prevent corruption, fraud, transfer to improper benefits, and other violations of laws and disciplines are strictly prohibited. The Group has always regarded anti-corruption as an important corporate responsibility and continues to carry out anti-corruption work and strive to create a clean business environment.

The Group has equipped professionals to set up specialized units for auditing and supervision, and appointed supervisors to be responsible for internal review. The Group has established working relationships with local audit and judicial authorities liaison mechanisms to observe and report crimes such as bribery, extortion, fraud, and money laundering. The Group appoints independent non-executive directors to oversee the Company’s operations and carry out supervision.

The Group continues to implement the work of building a culture of integrity, continues to strengthen daily supervision, and conducts a series of training activities to improve the integrity of internal management and employees. Integrity construction activities cover all on-the-job employees, laying a good foundation for the company’s subsequent development and business expansion, and laying the foundation for the Company’s high-quality development and protection.

During the reporting period, the Group has no corruption incidents or resulting legal proceedings.

6,892 People

Number of employees participating in anti-graft and anti-corruption

100%

Percentage of governance-related staff who have participated in the training

100%

Of employees participating in anti-graft and anti-corruption training

100%

Of anti-corruption policies and procedures communicated to governance-related staff

100%

Of anti-corruption policies and procedures communicated to employees

Anti-graft and anti-corruption training for employees		
Indicators	Unit	Year 2023
Number of directors who have received training	People	9
Number of employees what have received training	People	6,892
Number of governance-related staff who received training (breakdown by regions)		
Central China	People	86
Northeast China	People	45
Percentage of governance-related staff who received training (breakdown by regions)		
Central China	%	100%
Northeast China	%	100%
Number of employees who have received training (breakdown by titles)		
Senior management	People	139
Middle management	People	489
Director	People	444
General employees	People	5,820
Percentage of employees who received training (breakdown by titles)		
Senior management	%	100%
Middle management	%	100%
Director	%	100%
General employees	%	100%
Percentage of governance-related staff who received training(breakdown by regions)		
Central China	People	86
Northeast China	People	45
Percentage of anti-corruption policies and procedures which have communicated to governance-related staff (breakdown by regions)		
Central China	%	100%
Northeast China	%	100%

Anti-graft and anti-corruption training for employees		
Indicators	Unit	Year 2023
Number of employees informed the anti-corruption polices (breakdown by regions and titles)		
Central China	People	5,454
Northeast China	People	1,438
Senior management	People	139
Middle management	People	489
Directors	People	444
General employees	People	5,820
Percentage of employees informed the anti-corruption policies (breakdown by regions and titles)		
Central China	%	100%
Northeast China	%	100%
Senior management	%	100%
Middle management	%	100%
Director	%	100%
General employees	%	100%

The Group encourages all employees, customers, partners, suppliers, engineering contractors, and other relevant parties to give back and report any violation of the Company’s anti-corruption policy. During the reporting period, the Group signed an “integrity and self-discipline agreement” with 100% of the supplies in the resource pool to restrict the behavior of suppliers and prevent violation of laws and discipline violations occur. The Group has established a smooth reporting channel to ensure the openness and transparency of reporting while also protecting the privacy and information of the whistle-blowers, and ensuring that the handling process and results should be made public and transparent, without favoritism based on position and identity, and cases should be handled strictly and investigated carefully.

981 Individual

Total number of business partners informed the Group’s anti-corruption policies and procedures

327 Individual

Suppliers informed

548 Individual

Customers informed

106 Individual

Engineering clients informed

100%

Percentage of business partners informed the Group’s anti-corruption policies and procedures

33 Units

Operation units which have undergone corruption risk assessed

100%

Percentage of operation units which have undergone corruption risk assessed

0 Cases

Total number of corruption cases found

Results of anti-corruption reviews for business partners and operation units		
Indicators	Unit	Year 2023
Number of business partners informed the anti-corruption policies(breakdown by types and regions)		
Total	Individual	981
Central China	Individual	571
Northeast China	Individual	230
Other regions	Individual	180
Suppliers	Individual	327
Customers	Individual	548
Engineering clients	Individual	106
Percentage of business partner informed the anti-corruption policies(breakdown by types and regions)		
Central China	%	100%
Northeast China	%	100%
Other regions	%	100%
Suppliers	%	100%
Customers	%	100%
Engineering clients	%	100%
Operation units which have undergone corruption risk assessment		
Total number of operation units which have undergone corruption risk assessed	Units	33
Percentage of operations units assessed	%	100%
Total number of cases in which corruption found	Cases	0

5.8 ESG Risk Management

To further improve the Group's ESG management, during the reporting period, the Group comprehensively assessed and identified major ESG-related risks to provide targeted improvements in the future. Provide an important reference for ESG management work. During the reporting period, the Group's entire ESG risk identification and assessments was as follows:

- 1 Combined with legal and policy requirements, gain insights into industry development trends, conduct corporate risk analysis, and establish a list of potential EGS risks;
- 2 Based on the actual situation of the Company's business operations, evaluate the potential risks in the list;
- 3 Sort according to the assessment results and identify key ESG risks;
- 4 The board of directors and management review and approve the evaluation results;
- 5 Based on the actual situation, ESG risks will be fully managed and relevant information disclosed.

After assessment, the ESG risks and related management response measures at the “high” level are as follows:

Climate Change Risks

Physical Risks

Greenhouse gas emissions are exacerbating global warming. Extreme weather events occur frequently, which is detrimental to production and life. Unexpected events may lead to unplanned corporate disruptions and industry economic losses.

The worsening weather hinders the business development process of enterprises, such as the collection and transportation of raw materials are blocked, production conditions deteriorate, etc., which ultimately increases the operating costs of enterprises.

Transition Risks

The state and government have introduced a series of laws, regulations, and policies, the greenhouse gas emission management system has become more perfect, and greenhouse gas emission management has become increasingly strict. After the resumption of Certified Voluntary Emission Reduction (CCER), carbon emission credit trading continues to develop, and carbon emission prices will have an upward trend in the future, increasing corporate carbon emissions costs.

National policies promote the transformation and upgrading of the industry, and it is an inevitable trend for enterprises to reduce emissions in production and launch low-carbon products.

Response Measures

The Group has strengthened its corporate carbon emission management system, tracked and recorded emission sources and emission data of various production operations, and set corresponding goals and checked goal completion regularly.

Improve resource utilization efficiency, comprehensively utilize steel slag and other waste materials, develop comprehensive utilization methods for aggregates and other products, and develop low-carbon products; gradually improve energy usage ratio and increase the energy supply ratio of wasted heat power generation.

Establish a meteorological information tracking mechanism, formulate extreme weather response plans, and conduct corresponding drills to ensure there are no casualties and minimize property losses.

Three Wasted Management Risks

Risk Description

The state and government have further tightened the control of pollutants, international standards, industry standards, and local standards have become increasingly stringent. In particular, local governments have stricter regulations on water pollution. The waste gas emission standards of the cement industry have been further improved, and the compliance risks faced by enterprises have increased. Companies that fail to properly manage their emissions may face penalties and negative public opinion has a very serious negative impact on corporate reputation and ESG development.

Response Measures

The Group conducts real-time monitoring and recording of the emissions from exhaust gas emission sources to ensure that emission levels are below various emission standards.

The factory is equipped with a reclaimed water treatment system and zero discharge of industrial wastewater.

The solid waste is harmlessly treated through a high-temperature rotary kiln, which solves the Company's own and also helps the government deal with municipal solid waste.

Supply Chain Management Risks

Risk Description

Supply chain stability affects a company's product quality stability and supply continuity, thereby affecting customer experience and corporate brand name.

Suppliers with ESG risks, as their partner, when ESG public opinion incidents break out, such as supplier corruption, product quality issues, etc. It will also affect the company's own ESG image, and may even affect the company's stock price and future development.

Response Measures

During the procurement process of the Group, the quality, price, delivery time, reliability, geographical location, environmental and social risks of the supplied products, and other factors are considered. Suppliers are selected through a bidding process and "sunshine procurement" is implemented.

Regularly evaluate the risk of suppliers, establish a supplier environmental and social risk assessment mechanism to monitor the environmental and social performance of supplier operations to reduce supply. Suppliers voting relevant laws and regulations, and regularly review the supplier list.

5.9 Seizing ESG Opportunities

To further promote the corporate ESG development process, seize ESG opportunities, and enhance corporate competitiveness, during the reporting period, the Group implemented several measures to comply with ESG development trends and improve the overall ESG governance level. Please see the table below for details:

Business Cost Reduction

Opportunity Description

Introducing energy-saving products and equipment can reduce corporate operating costs in the long run; improving corporate ESG management can reduce the probability of violations of laws and regulations to a certain extent, thereby avoiding fines; and can also avoid the consequences of negative public opinion incidents, stock prices fluctuate; respond to policy calls, develop innovative low-carbon products, conduct evaluations and awards, and have the opportunity to receive government financial support and bonuses.

Seize Opportunities

In response to current industry policies and future industry development trends, the Group upgrades production capacity and updates equipment to establish industry benchmarks, which can reduce unit product costs in the long run.

Actively participated in various awards and evaluation activities, and received many honorary commendations and bonuses during the reporting period, creating a good corporate brand name.

Asset Layout Optimization

Opportunity Description

A strong ESG proposition can lead to a more sustainable asset layout, thereby increasing investment returns and avoiding corporate asset stranding due to policy reasons.

Good ESG corporate image performance attracts the attention of more investors.

Seize Opportunities

The Group laid the foundation for the subsequent clean energy transformation through the layout of waste heat power generation facilities in the factory area, and the layout of renewable energy assets has initially taken shape.

06

DEEPENING GREEN DEVELOPMENT AND SAFEGUARDING NATURAL RESOURCES



6. DEEPENING GREEN DEVELOPMENT AND SAFEGUARDING NATURAL RESOURCES

6.1 Environmental Management

The Group strictly abides by the environmental protection-related laws, regulations, industry standards and other formative rules applicable to the regions we operates or run business, such as the Environmental Protection Law of the People's Republic of China (PRC), the Air Pollution Prevention and Control Law of PRC, the Water Pollution Prevention and Control Law of the PRC, the Solid Waste Pollution Prevention and Control Law of PRC, Emission Standards of Air Pollutants for the Cement Industry, Management Measures for Wastewater Discharge Permit (trial), and Management Measures for Legally Disclosing Enterprise's Environmental Information.

The Group applies the environmental protection and energy use measures throughout the entire process of production and operations, complying with the requirements of ISO 14040/44 and GB/32161-2015 standards, LCA lifecycle assessment is conducted on cement products to reduce the negative impact on the ecological environment, to support the goal of achieving harmonious coexistence between man and nature. The Group divides environmental management objectives to specific execution requirements for the specific subsidiaries, businesses and production units, fully implements environmental management assessment work, and facilitate our environmental protection development in a systematic way.

Environmental Protection Technology Investment

In response to the State Council, the Ministry of Ecology and Environment and local governments' laws and regulations on the continuous improvement of air quality, air pollution prevention and control, and ultra-low emissions in the cement industry, and in line with the requirements and calls of industry standards, the Group seeks breakthroughs in environmental protection technology reform, pays close attention to relevant scientific and technological trends, and reserves environmental protection technology research expenses. During the reporting period, the Group invested approximately RMB61.74 million in environmental protection technology improvements throughout the year, accounting for approximately 0.78% of the 2023 operating income.

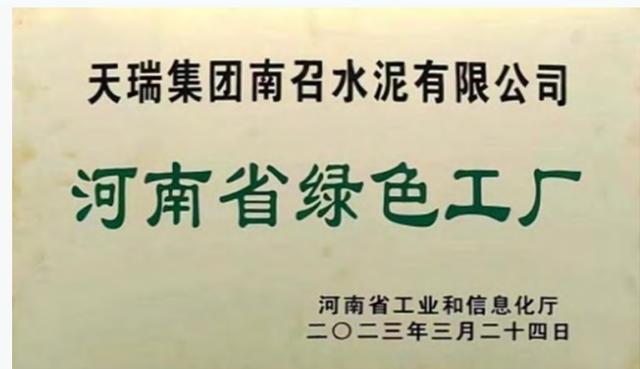
Environmental Certification

In order to improve the overall environmental management level of the Group and establish a corporate environmental image, the Group encourage all subsidiaries to carry out environmental protection-related technical certification and system certification. Efforts will be made to promote ecological and environmental protection. As of the end of reporting period, the Goup had 8 national-level green factories and 3 provincial and municipal-level green factories. There are 6 mines, 8 provincial and municipal green mines, and 19 green mining management projections.

The Group also attaches great importance to the adverse impact of corporate production and operations on the environment, upgrades independent emission reduction measures for heavy pollution weather, and collaboratively promotes corporate ecological environment high-level protection and high-quality development. As of the end of the reporting period, the Group has obtained the enterprise performance rating in key industries recognized by the Henan Department of Ecology and Environment. We have 4 A-level enterprises, 7 B-level enterprises and 6 performance-leading enterprises.

Case: Henan Province Green Factory Certification

On March 24, 2023, Tianrui Group Nanzhao Cement Co., Ltd. was certified the Green Factory, by the Henan Provincial Department of Industry and Information Technology.



119 Sessions

Environmental protection-related training

6,446 People

Total number of people trained

154 Hours

Environmental protection training duration

Environmental investment and certification		
Indicators	Unit	2023
Environmental protection-related training sessions	Sessions	119
Number of people trained	People	6,446
Total hours of environmental protection-related training provided	Hours	154
Environmental protection investment	Million RMB	61.74
Environmental protection investment as a percentage of operating income	%	0.78%
Number of national green factories	Factory	8
Number of provincial and municipal green factories	Factory	3
Number of national green mines	Mine	6
Number of provincial and municipal green mines	Mine	8
Number of green mining management projects approved	Project	19
Green mine restoration area	Square Meter	1,850,000
Trees planted in green mines	Tree	142,713
A-level enterprises, heavy pollution weather performance	Enterprise	4
Level enterprises, heavy pollution weather performance	Enterprise	7
Leading enterprises, heavy pollution weather performance	Enterprise	6

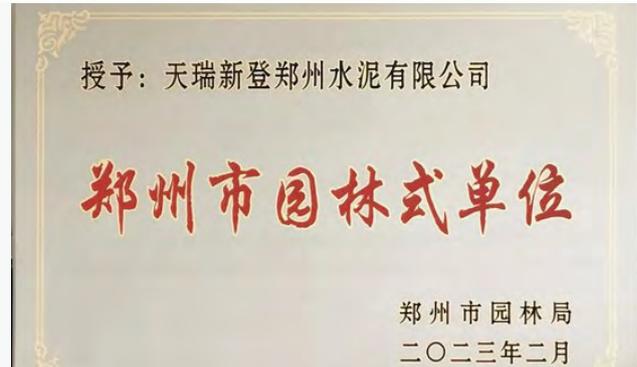
Factory Environmental Construction

The Group is committed to building a beautiful factory environment and continuously improving production and living environment, providing a better comfortable and healthy living environment to enhance the overall aesthetics of the factory area to our employees and surrounding residents. Reversing the public's negative impression on a cement factory. The Group selects appropriate plant varieties with strong adaptability and strong survivability and carries out large-scale green planting in the factory area, and assigns dedicated personnel to cultivate the plants, maintaining and managing greening to ensure the green plants grow well within the factories. The Group also digs decorative ponds and pools to enhance our ecosystem richness, provides places for birds, insects and other creatures to inhabit and breed in our factory areas, promoting biodiversity. The Group also organize factory environment photography film competition to encourage employees to record beautiful living environments and improve employee happiness and team cohesion.



Case: Zhengzhou City Garden-style Unit Award

Zhengzhou Cement Co., Ltd., in February 2023, was awarded the Zhengzhou Garden-style Unit Award by the Zhengzhou Garden Bureau.



6.2 Low-carbon Production

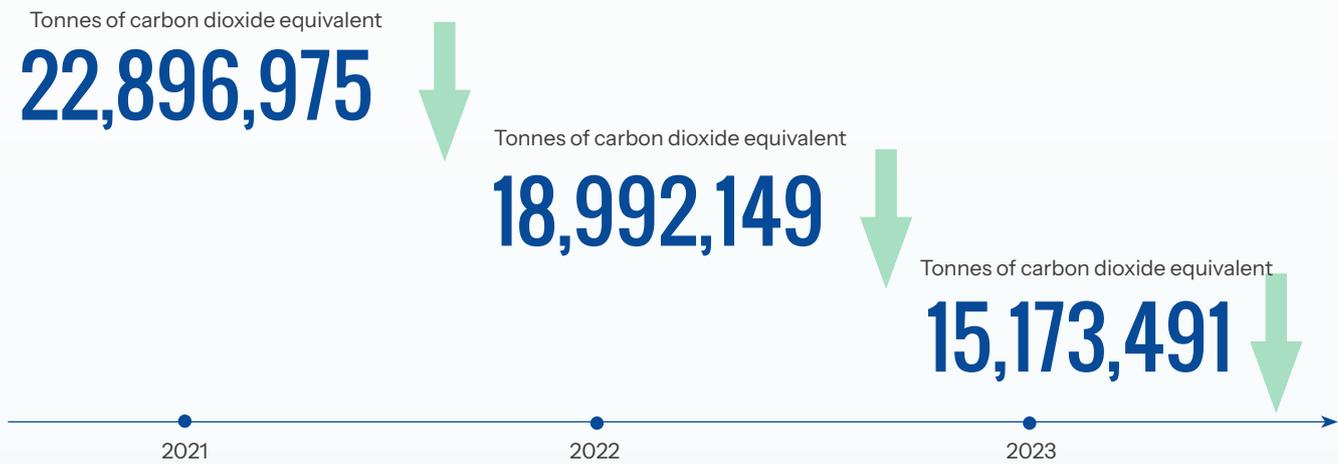
Greenhouse Gas Emission

The Group is well aware that the green and high-quality development of the cement industry plays an important role in the country's green development process. The Group strictly implements the requirements of the "14th Five-Year Plan" and continuously implements the deployment of the Party Central Committee and the State Council, proceeds from the optimization of cement production technology and operational reduction, continues to innovate, and promotes the low-carbon development of green cement products. The Group actively responds to the national strategic goal of "carbon peaking and carbon neutrality" and follows the "Action Proposal to Promote Carbon Peaking and Carbon Neutralization in the Building Materials Industry" and the "Building Materials Industry Action Plan", "Implementation Plan for Carbon Peaking in Materials Industry", "Implementation Plan for Carbon Peaking in Building Materials Industry", "Implementation Plan for Energy Saving and Carbon Reduction Renovation and Upgrading of Cement Industry (2022 edition)", and other normative documents.

The Group complies with the "Guidelines for Accounting and Reporting of Greenhouse Gas Emission by Chinese Cement Production Enterprise (Trial)", "Greenhouse Gas Emission Accounting and Reporting Requirement Part 8: Cement Production Enterprises (GB/T 32151.8-2015)", "Cement Products Units Product Energy Consumption Limits", the HKEX's "Environmental and Social and Governance Reporting Guidelines" to conduct greenhouse gas verification, and actively promote low-carbon product certification in each factory.

The Group’s greenhouse gas emission data in the past three years is shown in the table below. During the reporting period, the Group purchased 1,610,851 thousand kilowatt-hours of electricity, and its indirect greenhouse gas emissions were 979,397 tonnes of carbon dioxide equivalent.

Total Greenhouse Gas Emissions



Greenhouse gas emissions				
Indicators	Unit	2023	2022	2021
Direct greenhouse gas emission (scope 1)	Tonnes of carbon dioxide equivalent	15,167,736	17,965,086	21,765,544
Energy indirect greenhouse gas emissions (scope 2)	Tonnes of carbon dioxide equivalent	979,397	1,027,063	1,131,431
Total greenhouse gas emissions	Tonnes of carbon dioxide equivalent	16,152,889	18,992,149	22,896,975
Greenhouse gas emission intensity	Tonnes of carbon dioxide equivalent/tonne of cement output	0.64	0.69	0.63

Indicators	Unit	2023
Total remaining indirect greenhouse gas emission (scope 3)	Tonnes of carbon dioxide equivalent	5,756
Total greenhouse gas emissions per million revenue	Tonnes of carbon dioxide equivalent/million RMB	2,047.57

Note: The electricity emission factor used in the calculation is 0.608kg/kW.h, and the data comes from the “China Regional Power Grid Carbon Dioxide Emission Factor Research Report 2023” by the Ministry of Ecology and Environment.

Scope 3 only includes greenhouse gas emissions caused by the treatment of drinking water and sewage.

Raw Material Optimization

Since the clinker production stage in the cement production process is the largest source of carbon emissions, the Group actively explores sustainable solutions and incorporate substitute waste steel slag into the cement grinding stage. This innovative approach aims to reduce clinker production, thereby reducing total greenhouse gas emissions. Moreover, this process can make full use of waste steel slag, reduce waste emissions, and achieve resource utilization of waste.

Alternative Fuels

The Group has always adhered to the concept of sustainable development and actively responded to the national policy call on energy conservation, emission reduction and environmental protection. Faced with today’s serious challenge of global climate change, we know that reducing the use of fossil fuels such as coal is crucial. The Group proactively adjusts its energy structure, vigorously promotes the development and utilization of alternative fuels, and reduces greenhouse gas emissions caused by the combustion of fossil fuels. As a renewable energy source, biomass fuel has the characteristics of wide sources, low carbon and environmental protection. The Group adopts this alternative energy to reduce the proportion of fossil energy use, improve energy utilization efficiency, and inject new vitality into the sustainable development of the enterprise.

Case: First Prize In Technical Innovation Category Issued By Liaoning Provincial Building Materials Industry Association

The Group continues to promote alternative fuel research and development. In June 2023, the energy-saving alternative fuel combustion system independently developed by Liaoning Tianrui Cement Co., Ltd. won the first prize in the technological innovation category issued by the Liaoning Provincial Building Materials Industry Association.



Closed Belt Corridor Transportation Technology

In order to reduce the total amount of carbon emissions in the production process, the Group started with the transformation of raw material transportation technology and invested in the construction of belt corridor transportation facilities in multiple factories. By building a belt corridor transmission path from the raw material end to the production end, the original large-scale use of raw material transport vehicles has been replaced, thereby reducing the use of fossil fuels and reducing total greenhouse gas emission.

During the reporting period, a total of 47.84 million tonnes of ore were transported through belt corridor transmission facilities, accounting for approximately 72% of the total ore transportation. Based on calculation on the distance between the mine and the production site, ore transportation volume, unit transportation volume of mining trucks and mining trucks fuel consumption, greenhouse gas emission reduced through belt corridor transportation technology during the reporting period totaled approximately 0.62 million tonnes of carbon dioxide equivalent. In the future, the Group will continue to develop and improve this transportation technology, expand the scope of use of this technology, improve the transmission efficiency of belt corridors, reduce energy consumption, and build a factory that is more in line with the concept of green reduction.



Mine-factory Belt Transmission Facility

Case: Tianrui Yuzhou Qianjing Cement Products Passed Low-Carbon Product Certification

During the reporting period, the low-carbon product audit team of the professional certification company went to Tianrui Yuzhou Qianjing Cement Co., Ltd. of the Group to conduct annual supervision and evaluation of cement clinker and ordinary Portland cement PO42.5 low-carbon products. Following the low-carbon product certification rules, the audit team inspected the production process, collected energy consumption data and other information, verified the authenticity of the data, thereafter calculated the carbon emission of the products. After review, the audit team determined that the product meets the requirements for low-carbon products.



Tianrui Yuzhou Qianjing Cement Co., Ltd.'s products passed low-carbon product certification.

6.3 Resource Usage

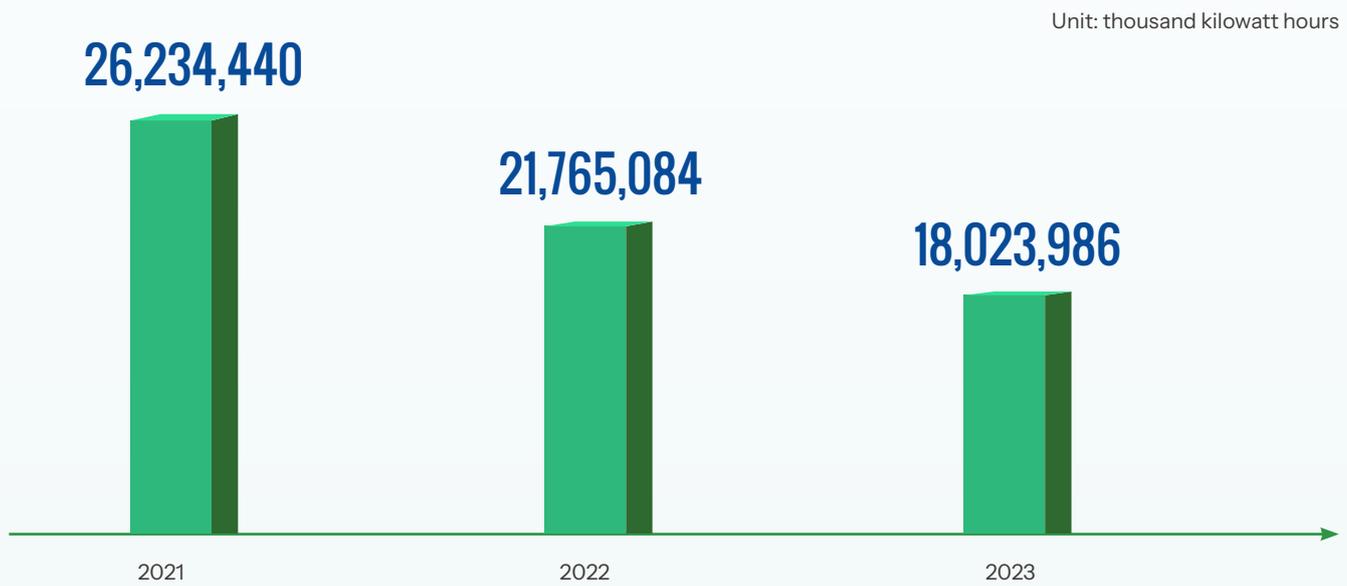
Energy Management

The Group strives to improve energy efficiency and reduce energy consumption, and strictly abides by the “Energy Consumption Limits for Cement Unit Products” and “High Energy-Consumption and Outdated Mechanical and Electrical Equipment”. Standards such as “Produce Phaseout Catalog” (First to Fourth Batch), “Implementation Guidelines for Energy Saving and Carbon Reduction Renovation and upgrading in Key Ayeas of High Energy Consumption Industries (2022 Edition)”. According to the requirements of the document, carry out energy management and energy-saving technical transformation work. Under the Group’s energy management system, Tianrui Group Xiaoxian Cement Co., Ltd. In October 2023, it was selected as a typical case pf advanced enterprises in energy efficiency improvement in Anhui Province.

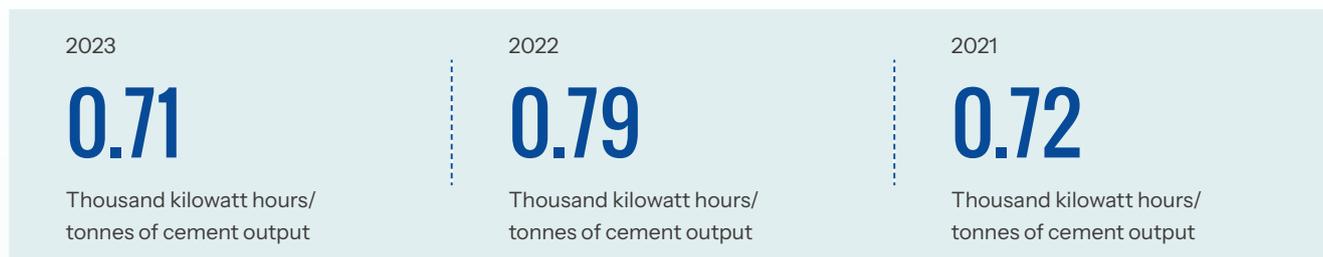
The Group is equipped with an online energy consumption monitoring system to collect raw energy data in the production process based on the energy consumption monitoring system of industrial enterprises to achieve energy conservation. The centralized real-time monitoring, statistics, analysis and in-depth management of data can realize multi-dimensional data statistics, comprehensive comparison and macro analysis of major energy consumption categories. It is conducive to the timely identification of abnormal conditions in the factory and discovery and improvement of high energy consumption nodes; and real-time upgrading through the security isolation and information exchange system (isolation gate). To the platform of the Provincial Energy Bureau, we fully support relevant departments in formulating energy-saving plans, deploying and supervising energy-saving work.

During the reporting period, the Group's energy intensity significantly compared with the previous two reporting periods. Compared with the reporting period of the previous year, the energy intensity has decreased by up to 9.75%.

Total Energy Consumption



Energy Intensity



Energy use overview				
Indicators	Unit	2023	2022	2021
Direct energy power consumption	Thousand kilowatt hours	16,413,135	19,997,334	24,368,386
Indirect energy power consumption	Thousand kilowatt hours	1,610,851	1,767,750	1,866,054
Total energy consumption	Thousand kilowatt hours	18,023,986	21,765,084	26,234,440
Energy intensity	Thousand kilowatt hours/ tonnes of cement output	0.71	0.79	0.72

Clean Energy Construction

During the reporting period, the Group continued to invest in clean energy construction and independently developed waste heat power generation technology for energy supply. The wasted heat power generation efficiency has reached 30,875 degree/tonne of clinker.; a total of 591,584 thousand kilowatt hours of electricity generated. Most of the Group's production lines has been equipped with waste heat recovery system, and the clinker production process. The waste heat generated is recovered by the heat recovery system and reused in cement production, reducing the overall energy demand in the production process. The production line also improves energy usage due to use efficiency to reduce the amount of coal burned, and collect waste heat from production for domestic water heating. During the reporting period, a total of 13,300 tonnes of heat were heated, reducing the production and life of employees in the factory. The total amount of energy required, waste heat power generation technology not only supports cleaner production, but also significantly saves production costs and improves the group's overall competitiveness. During the reporting period, the Group's annual clean energy power generation usage is equivalent to saving 82,400 tonnes of standard coal and reducing carbon dioxide emissions by 189,500 tonnes.



Tianrui Group Zhengzhou Cement CO., Ltd. Xinyang Factory Rotary Kiln



Tianrui Group Zhengzhou Cement Co., Ltd. Rotary Kiln Waste Heat Power Generation Control Station

The Group also explores the possibility of other clean energy and is committed to improving the Group's energy structure and increasing the proportion of clean energy. During the reporting period, the Group has been selecting the factory sites for photovoltaic power station which will be carried out in suitable area. Currently , 4 photovoltaic power generation projects have been approved, with a planned investment amount of 70 million in the future. With the completion of the projects, the annual power generation is expected to reach 210,000 thousand kilowatt hours.

Water Resource Management

The Group's production and operation activities are inseparable from the use of water resources. Reasonable and effective management of water resources can reduce the impact of its risks on production and operations. The Group draws water sources in strict accordance with the "Water Law of the People's Republic of China", "Regulations on the Administration of Water Licensing and Water Resource Fee Collection" and other regulations, and strengthens water demand and water process management strive to reduce water consumption. And through wastewater treatment facilities and water recycling facilities to improve water resource utilization efficiency and reduce low total water consumption. The Group continues to track water consumption intensity and strengthen water resources management. During the reporting period, the Group's water consumption intensity per unit product and per unit of operational income has reached the industry leading level. Our 2023 water consumption intensity per unit of operational income is 50 thousand cubic meters / 100 million RMB.

Water use overview				
Indicators	Unit	2023	2022	2021
Total water consumption	Cubic meter	3,944,895	584,183	647,562
Water consumption intensity per unit product	Thousand cubic meters/million tonnes of cement output	156	21	18

Case: Municipal Water-saving Enterprise Award

Tianrui Group Ruzhou Cement Co., Ltd in May 2023, obtained the Municipal Water-saving Enterprise Award issued by Pingdingshan Water Conservancy Bureau and Pingdingsha Industry Municipal water-saving enterprise award jointly issued by the Bureau of Information and Chemical Industry.



Packaging Materials Used

The Group strictly abides by the green recycling requirements for packaging in GB/T9774-2020 “Cement Packaging Bags” and strictly manages the classification, specifications and standards of cement packaging bags. Notes and layout printing, bag making materials, etc. At the same time, the Group strongly supports the recycling of packaging materials, while reducing the consumption of cement packaging materials. It has achieved many benefits such as improvement of social environment, elimination of safety risks, and reduction of employee labor intensity. During the reporting period, the Group’s unit product packaging material consumption and unit operating income has reached the industry-leading level. The packaging material volume intensity per unit operating revenue in 2023 was 82.05 tonnes/100 million RMB.

Overview of packaging material usage				
Indicators	Unit	2023	2022	2021
Total consumption of packaging materials	Tonnes	6,473	1,076	2,394
Packaging material usage intensity per unit product	Thousand tonnes/million tonnes of cement output	0.26	0.04	0.07

6.4 Emissions Management

Exhaust Gas Management

The Group attaches great importance to air pollutant emission management and strictly abides by laws and regulations, group standards and normative documents such as the “Atmospheric Pollution Prevention and Control Law of the People’s Republic of China”, “Emission Standards for Air Pollutants in the Cement Industry” and “Ultra-low Emission Standards for Air Pollutants in the Cement Industry”. The Group’s production and transportation strict management and control of air pollutants generated during the operation process, mainly including nitrogen oxides, sulfur dioxide and solid particulate matter, leading the industry in practise. It has ultra-low emissions and the emission standards are better than national and industry standards.

The Group’s emission data in the past three years are shown in table below.

Emission overview					
Type of exhaust gas	Unit	2024 target	2023	2022	2021
Nitrogen oxide (NO _x) emissions	Tonnes	4,984	4,497	4,873	6,150
Sulfur dioxide (SO ₂) emissions	Tonnes	284	261	230	353
Particulate matter(PM) emissions	Tonnes	453	426	1,336	1,670

Emission intensity overview			
Type of exhaust gas	Unit	2024 target	2023
Clinker production	Tonnes	22,650,000	19,247,400
Nitrogen oxide (NO _x) emissions emission intensity	kg/tonne of clinker	0.22	0.23
Sulfur dioxide (SO ₂) emissions intensity	kg/tonne of clinker	0.01	0.01
Particulate matter(PM) emissions intensity	kg/tonne of clinker	0.02	0.02

During the reporting period, the Group's nitrogen oxide NO_x emissions have declined for two consecutive years. Compared with the previous reporting period, the No_x emission dropped by 7.72%. Compared with the 2021 reporting period, the NO_x emissions dropped by 26.88%; compared with the 2021 reporting period, the Group's sulfur dioxide SO₂ emission. The Group's particulate matter PM emissions have declined for two consecutive years. Compared with the previous reporting period, PM emissions dropped by 68.11%. Compared with the 2021 reporting period, PM emissions dropped by 74.49%. Through a series of technical improvements and strict production emission management measures, the Group's current gas emission intensity is already at the leading level in the cement manufacturing industry.

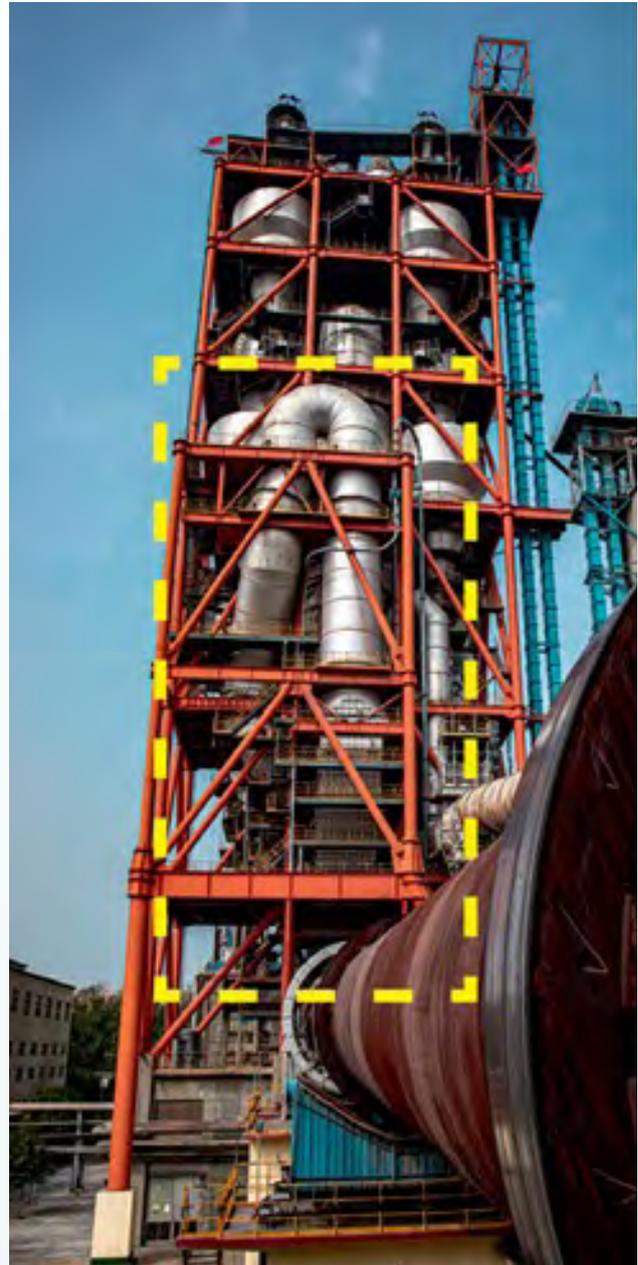
Based on the Group's emissions management status in the past three years and future production and operation plans, the Group has formulated emission targets for fiscal year 2024. In the future, the Group will conduct strict emission management and process optimization in alignment with the goals, and regularly check the completion of the goals to ensure that the goals are achieved.

Cement Kiln Wet Desulfurization Technology

The sulfur discharged by the Group mainly comes from the cement clinker production process. The raw materials are calcined. During the reporting period, we continued to explore wet desulfurization technology improvements. Striving to continuously improve desulfurization efficiency, Dalian Tianrui Cement Co., Ltd. of the Group adopt cement kiln wet desulfurization technology, which is the latest technology in the world today. The most mature and most reliable thermal power plant limestone-gypsum desulfurization process. It can meet the current environmental protection index requirements of the cement industry. Cement kiln wet removal sulfur can be produced by utilizing from humidification towers or waste heat boilers in the cement clinker production process. As a desulfurizer, it can strictly control the exhaust gas emission level and reduce business costs. The ash from the humidification tower and waste heat boilers is made into slurry and then transported to the absorption tower. The internal slurry is sent to the spray device for spraying through a circulating pump; the flue gas is mixed with the absorber in the absorption tower. Contact with the sprayed limestone slurry to remove SO₂ in the flue gas, and the desulfurized. After the flue gas removes liquid droplets through the demister, it enters the chimney and is discharged inside the absorption tower. The calcium sulfite generated after absorbing SO₂ is oxidized to form calcium sulfate. The calcium sulfate discharged from the absorption tower is separated tower is separated by cyclone, vacuum dehydrated and returned to be collected and used.

PROCLON@REDOX Cement Kiln Denitrification Technology

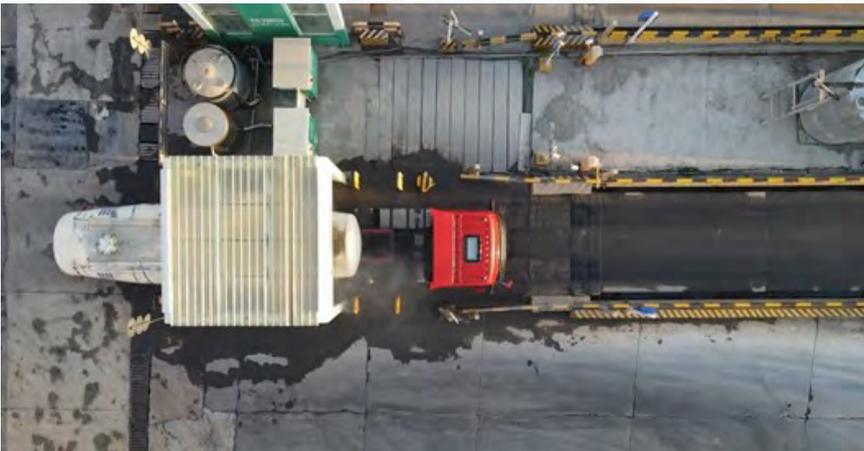
During the reporting period, the Group adopted PYROCLON@REDOX cement kiln denitrification technology to reduce the concentration of nitrogen oxides and achieve ultra-low emissions of nitrogen oxides. The technology is theoretically researched by the German Humboldt (KHD) Company and Tianrui Group Cement Co., Ltd. Implements applications and jointly develops new low-consumption, high-efficiency, low-cost cement kiln denitrification and environmental protection technology. PYROCLON@REDOX water. The mud kiln denitrification technology is to add a gas chamber between the original kiln tail smoke chamber and the decomposition furnace. Fuel gasification and NO_x reduction device. Most of the kiln tail fuel (pulverized coal) directly fed into the PYROCLON@REDOX reaction device, the pulverized coal is first gasified inside, and the gasified coal powder and a large amount of coke powder are processed at low temperature. Incomplete combustion reaction occur in an oxygen enviroment, immediately generating a large amount of CO: $2C+O_2 \rightarrow 2CO$; $C+CO_2 \rightarrow 2CO$ forming a strong reducing atmosphere at the moment. The kiln tail flue gas is brought into the reaction device, and NO_x is reduced under a strong reducing atmosphere. Original N₂: $2NO+2CO \rightarrow N_2+2CO_2$, finally achieving reduction without external addition. The NO_x source control of the agent is harmless.



Denitrification facilities of Wehui Tianrui Cement Co., Ltd.

Particulate Matter Emission Reduction Technology Improvements

With the gradual launch of ultra-low emission transformation work in my country's cement industry, in order to further reduce particulate matter emissions, the Group has taken measures to reduce particulate matter emissions in production throughout the entire process, raw materials are transported by sealed conveyor belts and sealed batching scales to avoid dust during transportation. Electric bag composite technology combines the electric dust collection and the bag dust collection mechanisms. The comprehensive promotion of such technology help efficiently collect large particle dust and PM10, PM2.5 of tiny dust, greatly improving the particle removal efficiency and meeting ultra-low emission requirements. All transportation vehicles in the factory area must go through flushing facilities before leaving the factories to avoid the dust sprayed outside the factory area. At the same time, the roads in the factory area are hardened and sprayed regularly to comprehensively reduce the concentration of particulate matter in the production and living environment of the factory area. Automatic bagging system of the packaging machine is used for packaging. The machines replace manual work to complete the automation of cement packaging machine bagging, reducing dust during the packaging process and reducing worker inhalation risks.



Tianrui Xindeng Zhengzhou Cement Co., Ltd. Spraying to remove dust from transport vehicles before leaving the factory

Wastewater Management

During the reporting period, the Group achieved zero discharge of industrial wastewater and domestic sewage, as well as zero discharge of ammonia nitrogen and chemical oxygen demand. The Group strives to reduce water consumption and improve high water resource utilization efficiency. The Group has formulated wastewater management rules and regulations based on the production process and actual conditions of the factory, and installed wastewater and sewage treatment facilities in factory, system and circulating water system to realize the recycling of water resources in production line, and use recycled water to cool down the water cooler of the production equipment after treatment. The water can be used as water for greening irrigation and sprinkler trucks, and for dust control in the factory area. During the reporting period, the Group processed a total of 53,000 tonnes of power generation wastewater. The domestic water treatment capacity is 21,000 tonnes, and the goal of not discharging waste water is finally achieved.

Solid Waste Management

The Group attaches great importance to the standardization of the harmless disposal process of solid waste and hazardous waste, and strictly abides by the Solid Waste Pollution Environmental Protection Regulations of the People’s Republic of China, Environmental Protection Law, Environmental Protection Technical Specifications for Collaborative Disposal of Solid Waste in Cement Kilns and other laws, regulations and normative documents applicable to the place of operation. During the reporting period, the Group achieved 100% recycling of non-hazardous waste and 100% disposal of hazardous waste.

The hazardous waste generated by the Group is mainly chemical substances used to machinery maintenance, and the non-hazardous waste is mainly general production and domestic waste. The Group follows the national environmental protection requirements, waste should be processed in accordance with the principles of classified collection, storage in partitioned warehouses, and recycling. In some cases, the production process produces raw and valuable chemical waste which is collected and reused as lubricating materials for on-site equipment and machinery. The Group ensure harmless treatment of solid waste through independently developed cement rotary kiln-temperature treatment technology. During the reporting period, the Group has achieved zero solid waste leakage.

Solid waste discharge overview				
Indicators	Unit	2023	2022	2021
Non-hazardous waste emissions	Tonnes	0	0	0
Hazardous waste emissions	Tonnes	0	289	32

While ensuring that the solid waste generated during its own production and operations is strictly treated, the Group also has a understanding of social responsibility and giving back to the community. To fulfil this mission, we are committed to maximize the effectiveness of our rotary kiln wasted treatment technology. During the reporting period, the Group assumed municipal waste disposal responsibility, helping local government deal with hazardous waste such as municipal waste and discharged medical waste, reducing the burden on local governments.



Cement kiln co-processing solid waste center

6.5 Addressing Climate Change

In recent years, problems such as frequent climate events and rising global temperatures have become increasingly severe. Climate change on a global scale has had a major impact on economic and social development. The importance of global climate governance has become increasingly prominent. In 2015, the 21st United Nations Climate Change Conference unanimously agreed to adopt the Paris Agreement to “limit the increase in global average temperature to well below 2 degree Celsius compared with pre-industrial times, strive to reduce temperature rise, limit the range to 1.5 degree Celsius as the long-term goal and reach a landmark climate change agreement.”

The Group has been committed to responding to global initiatives and actively fulfilling corporate social responsibilities to support global climate governance. Addressing and mitigating climate change. As a social responsibility that enterprises should bear, climate change management systems and systems should be established within the enterprise to monitor, record and analyze relevant data. It also benchmarks against the goal of the Paris Agreement to “strive to limit the temperature increase to less than 1.5 Celsius” and analyzes the specific production and production factors that affect the achievement of this goal. The operation link is divided into smaller goals for each production link of climate change management. The Group strictly follows the requirements of the climate change management system to implement mitigation actions. Implement and advance. We start from every tiny link and continuously optimize and improve production technology and processes to play our positive role in mitigating climate change. We play a positive role and make unremitting efforts to achieve corporate climate goals and the goals of the Paris Agreement.

During the reporting period, the Group identified and assessed climate change risk issues with reference to the recommendations of Task Force on Climate-related Financial Disclosure (TCFD), proposed corresponding response strategies, and integrated climate change response measures into the production and operation of the Group. The Group continues to improve its ability to cope with climate change risks.

Transition risk

Regulations and Laws

Risk description

Government carbon emission-related policies, laws and regulations are becoming increasingly strict, and the industry is subject to carbon emission management policies. With the advancement of the construction of the national carbon market and emissions trading market, carbon prices, etc. will bring additional cost pressures to enterprises.

Response measures

The Group pays attention to the latest changes in national environmental protection and carbon emission laws and regulations, industry policies, etc., and takes timely response measures. The Group has strengthened its corporate carbon emission management system, tracked and recorded emission sources and emission data in production operations, set corresponding goals, and corresponding goals, and regularly checked the completion of goals.

Technology

Risk description

The introduction of national energy-saving and low-carbon policies has prompted the cement industry to accelerate low-carbon transformation, optimize energy-using equipment, and develop low-carbon production technologies.

Response measures

The Group continues to promote energy-saving and emission-reducing technological reforms, implements the construction of clean energy projects, technological reforms, implements the construction of clean energy projects, during production and operations, and continues to explore low-carbon production technologies to enhance its emission reduction potential

Reputation

Risk description

Failure to management energy conservation and carbon reduction may have leave a potentially negative reputational impression on customers and the public.

Response measures

Continue to promote the research and development and innovation of low-carbon products, actively promote the company's low-carbon production technology and and related honorary awards, and shape the corporate image of sustainable development.

Physical risk

Acute Risks

Risk description

The collection and transportation of cement raw materials are affected by extreme weather, which increase company operating costs, extreme by extreme weather, which increase company operating costs,

Extreme weather can cause safety hazards in outdoor operations and downstream construction operations are easily suspended due to extreme weather, which indirectly affects product sales.

Response measures

Establish a regular tracking mechanism for meteorological information, and formulate early warning, management processes and disaster response plans extreme weather to effectively prevent and respond to sudden natural disasters such as natural disasters such as typhoons, heavy rains, and floods.

In view of the special circumstances of extreme weather, communicate with downstream construction units to promptly adjust the concrete mix ration and production process to meet the needs of the construction site.

Chronic Risks

Risk description

The rise in average temperatures will inevitably worsen cement product production conditions and increase operating costs in the long run.

Response measures

Strengthen temperature monitoring in daily operations, identify potential risks of strengthen temperature monitoring in daily operations, identify potential risks of the environment, and enhance the ability to adapt to rising temperature.

6.6 Green Mine

Mining and Environmental Remediation

The Group's mining operations adhere to the concept of green and harmonious development, carry our green mine construction in accordance with local conditions, and strive to minimize the impact of mining activities on the mine and the surrounding ecological environment. During the mining process, we strictly follow the "Environmental Protection Law of PRC", "Mining Geological Environmental Protection Regulations", "Land Reclamation Regulations", "Cement Limestone Green Mine Construction Specifications (DZ/T 0318-2018) etc. Relevant national laws, regulations and normative documents.

The Group has established a series of mine management systems internally, covering the specifications for mining procedures, management requirements for construction teams, standards for green mine construction, and assessment methods for mine resource management etc. to ensure that all work is carried out in an orderly manner. We have always adhere to the development concept of "lucid waters and lush mountains are valuable assets", and adhere to the principle of "mining, managing and restoring" during the mining process. We strive to develop while protecting, protect during development, and continuously promote the ecological restoration of mines work. The Group insists on combining the development of mineral resources with the protection of the ecological environment, ensuring that every aspect of mine management embodies the concept of green development, and strives to achieve the protection and restoration of the ecologic environment while ensuring the benefits of resource development, and promote the development of mines and harmonious symbiosis in the construction of ecological civilization.

As of the end of the reporting period, the Group has achieved remarkable results in the construction of green mines, with a total of 6 national-level green mines and 8 provincial and municipal-level green mines. It has successfully established 19 green mine management projects. During the reporting period, the Group actively carried out ecological restoration work, restoring a total of 1,850,000 square meters of pasture area and planting 142,713 trees, marking the Group's substantial progress in improving the regional ecological environment. In the future, the Group will continue to adhere to the concept of green development, increase investment in green management of mines, promote the coordinated mine development and ecological environment protection, and make greater contributions to the realization of sustainable development.



Real photo of green mines

Resource Utilization

The Group actively promotes comprehensive resource utilization strategies during the mining process. The main raw material ores mined are produced, processed and sold by the Group. At the same time, we also value the by-product aggregates and convert them into products with economic value for the sale through recycling and reuse. For those soil that have no direct economic value, we use them as raw materials for mine over soil restoration to promote the restoration of the ecological environment. Through the implementation of this series of measures, the Group achieved a comprehensive resource utilization rate of 100% during the reporting period.

6.7 Smart Mine Construction

The Group actively responds to national policy calls and adhere to the principle of “mechanized replacement”. The concept of “automation and reduction of people” reduces the number of workers in high-risk workplaces and greatly improves the safety production level of enterprises. The group continues to build smart mines and transforms and upgrades to carry out construction of smart mines. Smart mines are the specific application of “Digital Earth” technology in mine exploration, development and mine management.

Zhengzhou Cement Co., Ltd. of the Group is one of the first five enterprises in Henan Province and the first enterprise in Zhengzhou City to implement smart mines. It completed the acceptance inspection of smart mines during the reporting period. The construction of smart mines includes digital intelligent management and control, intelligent dispatching and driverless driving. All data is monitored and processed through the data center, and mining operations are carried out relying on the 5G network communication system, intelligent truck dispatching system, driveless system, quality control system and monitoring and control system, ultimately through digital mining software platform production execution. The mobile system platform and three-dimensional visualization management and control platform realize remote unmanned autonomous operations and ensure safe, economical, efficient and low-carbon production of mines.

The Group's smart mining project is a successful application of “5G+ new technology” in open-pit mines. It combines the specific mining operations and introduces “5G+ smart cockpit”, “5G+ remote control” and “5G+ platform monitoring” solutions. Through the construction of smart mines, the operating efficiency of mine cars has been improved by 15%, and the efficiency of whole process has been improved by more than 10%. On-site operations have been unmanned under extreme working conditions, and the probability of safety production accidents has been reduced by 100%, achieving “zero accidents” in mine production. The perfect acceptance of the Group's smart mines is successful practice in the intelligent transformation of mines. It marks that Tianrui Cement is developing in the direction of “digitization, high-end, intelligence, and “green” and realizes digital and intelligent construction of open-pit mines in the overall cement industry. It provides technical and product support, which is conducive to promoting the construction and development of digital mines, green mines, and smart mines in the entire industry.

Unmanned Driving System and Remote Control of Excavator

The unmanned driving system consists of an unmanned pure electric mining truck, a dispatching platform, a remote cockpit, vehicle-road collaboration, etc. The autonomous driving system controls the vehicle to complete automatic starting, automatic tracking, etc. according to the dispatching instructions and through core algorithm such as perception, decision-making, and planning. Automatic parking, automatic obstacle avoidance, etc.; at the same time combined with excavator remote control technology, the crushing station can complete automatic unloading and dynamic coordinated ore loading, thereby realizing the entire process of “loading, transportation, unloading, parking, and charging in the mine transportation process. Completely unmanned and autonomous operations reduce the incidence of dangerous operating accidents and improve the efficiency of the entire process.



Driverless Mine Cart



Smart mine real-time monitoring screen

Digital Mine Intelligent Management and Control System

The digital mine intelligent management and control system built by the Group conducts real-time monitoring of mining volume, mining area operations, mining area air quality, noise pollution, mining area operating equipment, etc., comprehensively controls the overall situation of the mining area, and plans future mining plans and mines in advance governance. Through the three dimensional visual management and control platform, we integrate 3DS, VR and to IoT technologies to build a visual virtual mine that is parallel to the real mine; with the help of the digital mining software platform, we can plan production plans, automatic ore allocation, simulated blasting, three-dimensional reserves; relying on the production execution system platform is input on the WEB side and APP side, automatically generates reports, automatically analyzes, guides production and optimizes indicators; the safety monitoring surveillance system provides 24-hour all weather protection, and perform slope displacement monitoring, rainfall monitoring, video monitoring, and risk monitoring, classification and hidden danger investigation and management.



3D visualization of smart mine



Intelligent mine real-time monitoring screen

6.8 Green Culture Construction

The Group attaches great importance to the implementation of environmental protection systems and measures during production and operation activities, and also focus on the cultivation of corporate environmental protection culture. The Group is aware of the necessity of promoting environment protection concepts and regularly conducts environmental protection training for employees to help employees better understand the importance of environmental protection actions, how to implement environment protection concepts in the production and operation process, and implement environmental protection into specific businesses. During the reporting period, the Group conducted a total 119 environmental training sessions, covering topic such as low-carbon production, energy conservation and consumption reduction, and efficient use of resources, with a total 6,446 participants and a total training of 154 hours.

Case: Group Green and Low Carbon Knowledge Training Seminar

On March 25, 2023, the Group organized a green and low-carbon knowledge training meeting. Tianrui Zhengzhou Cement Co., Ltd. set up the main venue, and Tianrui Cement headquarters and various subsidiaries set up branch venues. During the training meeting, an in-depth analysis of the national low-carbon high-quality development plan, cement industry carbon peak planning, low-carbon product development and promotion mechanism, etc. was conducted, and low-carbon products certification, green building product certification, green design product evaluation, etc. were explained in detail. Knowledge and relevant standards requirements. Comprehensively improve employees' low-carbon production concepts and professional knowledge, promote the entire group to actively apply for green factory and other certifications, and promote the continuous improvement of the group's green development level.



On-site picture of green and low-carbon knowledge training meeting

The Group not only active promotes the deepening of environmental protection concepts and the cultivation of green culture within the Company, but also hopes to spread this concept to society and improve the environmental protection level of the entire society. During the reporting period, the Group practiced this concept by organizing various employees activities, spreading green culture, and guiding everyone to participate in the protection and construction of the ecological environment. We firmly believe that only by working together as a whole society can we create a better ecological environment and leave a beautiful home with blue sky, green land and clear water for future generations.

Case: World Environment Day Environmental Protection Activities

June 5th is the "World Environment Day". The Group's Dalian Tianruijin Coastal Cement Co., Ltd., will carry out the "World Environment Day" garbage picking activity on June 5, 2023 to practice the "Building People and Human Resources" with practical actions. The modern concept of harmony and symbiosis with nature" actively creates a good ecological environment. During the activity, employees used gloves, garbage bag and other tools to carefull clean up one open-air garbage such as plastic bags, shredded paper, cigarette butts, domestic garbage, etc., effectively improving environmental pollution caused by human activities.



Dallian Tianrui Coastal Cement Co., Ltd. Launches "World Environment Day" garbage picking activity

07

ENGAGEMENT WITH PEOPLE-ORIENTED CULTURE TO SEEK COMMON DEVELOPMENT



7. ENGAGEMENT WITH PEOPLE-ORIENTED CULTURE TO SEEK COMMON DEVELOPMENT

The Group's success lies in our engagement with the people-oriented culture, respecting the value of employees, protecting their legitimate rights and interests, and providing employees safe jobs and healthy, comfortable and convenient environment. In addition, the Group pays attention to the rights and interests of our employees, take multiple measures to introduce and cultivate talents, and actively builds a broad environment for employees. We are committed to provide a broad career development platform and establish a sound salary incentive mechanism to all all employees to share the results of our growing business.

7.1 Employment of Employees

The Group regards its employees as the Company's most valuable assets, create a fair and just employment mechanism, continues to improve the scientific talent retention, promotion and development system. We have built a established welfare system running through the entire employment life cycle in workplace, comprehensively support our employees' career development and workplace experience, which enhance our employees' sense of happiness and belonging.

Employment Policy

The Group strictly abides by relevant regulations on employment, remuneration and firing, recruitment and promotion, working hours, holidays, equal opportunities, diversity, anti-discrimination, anti-harassment and other provisions on welfare benefits, including but not limited to the Labor Law of PRC, the Labor Contract Law of PRC, and the Employment Promotion Law of PRC, Social Insurance Law of PRC, Provision on the Prohibition of Child Labor and Occupational Diseases of PRC, Prevention and Control Law and laws, regulations and normative rules.

During the recruitment and employment process, the Group adhere to the principles of fair competition and transparent selection procedure for the best, formulates and implements a scientific and standardized personnel management system. The Group has formulated the "Cement Group Employees Selection and Labor Relations Management Regulations", "Cement Group Management Regulations on Position and Staffing", Cement Group Enterprise Management and "Human Resources Daily Management Work Assessment Regulations" and other internal policies, respect and protect the legitimate rights and interests of employees, and create an equal and diverse workplace environment so that an employee can realize his or her self-worth, his or her potential to develop soundly together with the Group.

We resist all forms of Child labor and forced labor. During the reporting period, the Group has no incidents of Child labor and forced labor. The Group opposes all discriminatory behavior on gender, age, and other discrimination existing due to differences in region, education, religious beliefs, nationality, race, sexual orientation, disability, etc. We are committed to protect the legitimate rights and interests of female employees and of the qualified workers with disabilities, and provide

them appropriate working conditions in compliance with the applicable laws. At the same time, all workplace harassment is strictly prohibited. In the event of harassment or abuse, we will fully protect employee's legitimate rights and interests in terms of equal opportunities and diversity.

When an employee violated such rules and regulations of the Company while not serious enough to terminate his or her labor contract, the supervisor of the unit deems it necessary to suspend the employee as a warning for the violation. For those who slightly violate laws and regulations or those who cannot return to work and extend their sick leave beyond national regulations, their employment and their wages can be suspended.

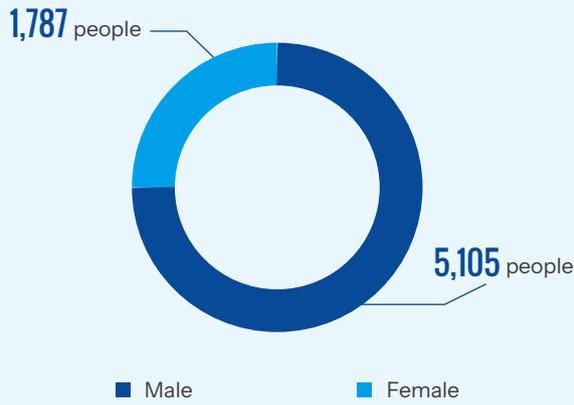
Recruitment Channels

The Group has always regarded the introduction of professional talents as an important way to maintain the Group's rapid development and talent strategy. The Group recruits new employees through various methods such as campus recruitment, internal selection, and social recruitment, and strive to ensure a high degree of matching and high-quality employment through a strict, fair, just and open standardized recruitment process. When there are vacancies due to the Group's new business development needs or the incumbent's demotion or resignation, etc, and it is necessary to replenish new hires, the positions are filled by first carrying out internal selection and the external recruitment next.

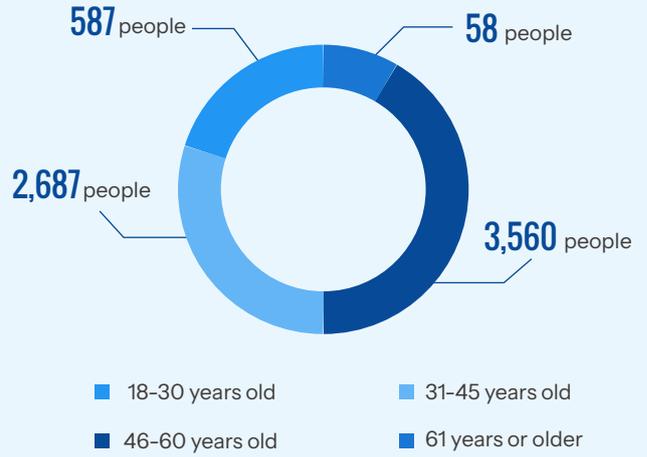
The Group adopts "online + on-site", "school-enterprise cooperation, university double selection fairs and other methods to carry out special job fairs for fresh graduates. The joining of new forces provide sufficient manpower supply and talents reserve for the sustainable development of the Group. At the same time, we have also opened up recruitment channels to select the best from the society and absorb all kinds of professional and technical talents and management talents, and through further training, will strengthen consolidate the backbone of group management.

During the reporting period, we fully implemented the requirements for digital and information management, innovated the recruitment model, and improved the interviewer and presentation system by optimizing the recruitment management system. The official recruitment system implements job posing, talent evaluation, written examination, interview, employment contract issuance and other recruitment links to further improve the matching between talents and positions. We must ensure that recruitment information, processes and results are disclosed. The human resources department is responsible for verifying the age of applicants, supervising employment matters and being responsible for background checks and periodic reviews. The administrative and human resources department conducts spot checks and interviews from time to time to strengthen internal supervision. At the same time, each unit has employee opinions collection box, accept real-name or anonymous opinions from employees, and hold timely meetings to research, process and respond.

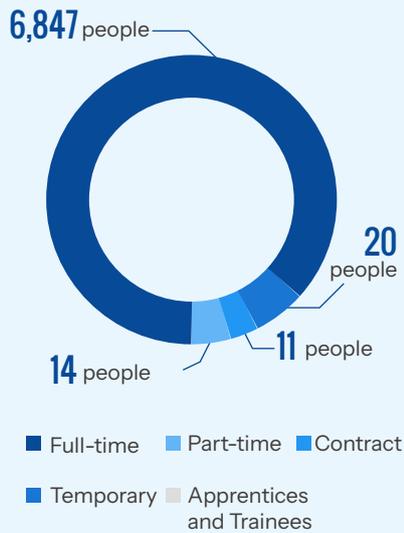
Number of employees by gender



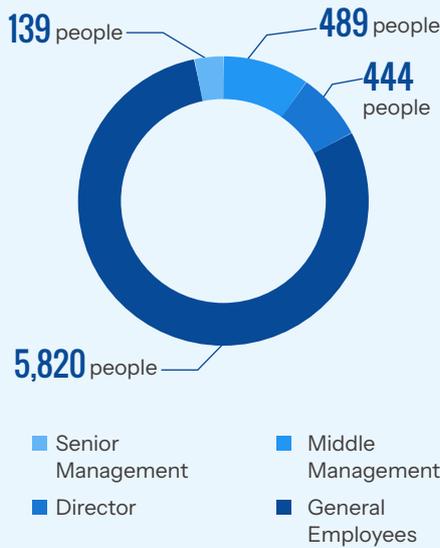
Number of employees by age



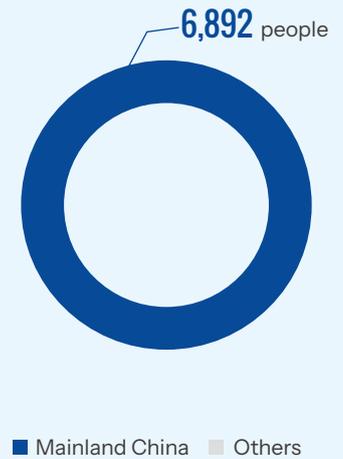
Number of employees by types



Number of employees by grade



Number of employees by regions



Employment status overview					
Indicators		Unit	2023	2022	2021
		Number of employees			
Total number of employees		People	6,892	7,299	7,353
Gender	Male	People	5,105	5,375	5,426
	Female	People	1,787	1,924	1,927
Employment types	Full-time	People	6,847	7,080	7,353
	Part-time	People	14	2	0
	Contract	People	11	0	0
	Temporary worker	People	20	217	0
	Apprentices and trainees	People	0	0	0
Age composition	18-30 years old	People	587	709	791
	31-45 years old	People	2,687	3,008	4,734
	46-60 years old	People	3,560	3,534	1,715
	61 years or older	People	58	48	113
Regions	Mainland China	People	6,892	7,299	7,353
	Other	People	0	0	0

Indicators		Unit	2023
		Number of employees	
Grade	Senior management	People	139
	Middle management	People	489
	Directors	People	444
	General employees	People	5,820

Indicators		Unit	2023	2022	2021
		Employee turnover rate			
Total employee turnover rate		%	14.57%	1.21%	1.20%
Gender	Male	%	14.57%	1.18%	1.39%
	Female	%	14.54%	1.32%	0.67%
Age composition	18-30 years old	%	21.52%	1.77%	6.13%
	31-45 years old	%	14.40%	0.86%	0.51%
	46-60 years old	%	13.15%	1.35%	0.82%
	61 years or older	%	28.29%	4.69%	1.62%
Regions	Mainland China	%	14.57%	1.21%	1.20%
	Other	%	Not applicable	Not applicable	Not applicable

7.2 Employee Training and Promotion

The Group has always insisted on creating a diverse and inclusive working environment, respecting the differences in employees' personalities, abilities and growth experiences, and cherishing employees with different backgrounds, talent, insights, experience and skills to promote the integration of employees from different backgrounds. Continuously deepen the promotion of strategic development and organizational talent training. Based on the characteristics of the position, by identifying the matching of people and positions, we will improve the dynamic management of talents, smooth career development channels, and improve the incentive mechanism to promote the common development of employees and the Group.

The Group attaches great importance to talent utilization and is also committed to cultivating talents. Combined with the Group's annual operation and management strategy, determine the annual training plan and establish multi-channel, multi-form, hierarchical development platform which is employee oriented, to help employees improve their professional skills and comprehensive abilities.

The Group formulates and improves the internal rules and regulations of the "Cement Group Training and Development Management Measures" and adopts a training method of "mainly internal training, supplemented by external training", make full use of internal and external resources to promote the development of employees through mentoring and mentoring programs, create a three-dimensional and multi-type training system, and encourage employees to participate training activities on various topics. The training content covers management capabilities, professional skills, production safety, general professional abilities, environmental protection, laws and regulations, social responsibilities, etc. The Group stipulates that all new employees are required to participate in uniformly organized pre-job training, and department-level and job-level training is organized for employees who transfer. Based on the group's development plan and the work needs of each department, current employees receive diversified and differential job knowledge and skills training according to professional categories.

As of the end of the reporting period, the Group's employee training coverage reached 100%, with an average training hours of 28.79 hours.

100%

Total average training hours of employees

28.79 Hours

Total employee training hours

28.79 Hours

Average training duration for male expeditors

28.80 Hours

Average training duration for female expeditors

Overview of employee training				
Indicators		2023	2022	2021
Employee training coverage				
Total employee training coverage		100%	100%	100%
Gender	Male	73.70%	74%	74%
	Female	26.30%	26%	26%
Grade	Senior management	2.01%	2%	5%
	Middle management	7.09%	7%	6%
	Directors	6.44%	7%	13%
	General employees	84.45%	83%	76%

Indicators		Unit	2023	2022	2021
Average hours of training for employees					
Total average training hours of employees		Hours	28.79	32	/
Gender	Male	Hours	28.79	32	22
	Female	Hours	28.80	33	21
Grade	Senior management	Hours	24.23	36	7
	Middle management	Hours	26.68	33	26
	Directors	Hours	28.54	33	8
	General employees	Hours	29.10	32	25

Note: Statistics at the end of 2021 disclosed the average number of hours of training for employees.

Talents and technology are inevitable requirements for the Group's industrial development and the extension of the entire industry chain. Strengthening technical training is to improve the Goup's labor performance and enhance its core competitiveness. An effective way to achieve high-quality development, the Group attaches great importance to the training and cultivation of technical talents, and hosts high-standard and high-quality technical training activities for employees every year.

The Group conducted in-depth research on training needs at each position, combined with technical difficulties and practical issues in daily work, from production, technology, 6S, quality, machinery to electrical equipment and other matters, and actively carried out professional skills training. The training class also includes discussions, exchanges, practical simulations and other links to help employees better understand the training content, so that the learning results can effected help improve the business at the production site, and cultivate a high-quality workforce that is knowledge-based and skill-based and innovative.

Case: "General Silicate Cement" New Standards Publicity and Implementation Training

Tianrui Zhengzhou Cement Co., Ltd. Organized and carried out the "General Silicate Brine Mud" new standards publicity and implementing training to enable employees to fully understand the new standards and product quality requirements.



The Group adheres to the principles of "fairness, impartiality and openness", attaches great importance to employees' career development planning, and strives to provide broad opportunities for employees to realize their self-worth with the Group's development platform. In line with the needs of strategic development, the Group formulated and issued the Cadre Management Measures (Trial), and continuously improved the dual-channel promotion mechanism, which not only encouraged employees to become leaders in management positions and assume more and more important management responsibilities. We also encourage employees to continuously improve their personal professional skills and accumulate professional experience to become an expert in technical and business areas. At the same time, we will strengthen the inspection and review process for cadre promotion, do a good job in special training for talents in key positions, and provide talents with support for advancement, retention and development.

7.3 Employee Welfare and Care

Salary and Benefits

In order to build a scientific and efficient remuneration system with internal fairness and market competitiveness, the Group has formulated the "Cement Group Remuneration and Welfare Management Measures", "Employee Benefits Management Measures" and "Regulations on Labor Rewards and Punishments", "Measures for Management of Performance Appraisal of Headquarters", "Measures for the Management of Performance Appraisal of Branch Companies" and other rules and regulations, and improve and enrich welfare. We have a benefits system to ensure that employees enjoy fair treatment in terms of salary, benefits, compensation, leave, etc. In terms of salary management, we use fair and reasonable salary management system to provide employees with market-competitive salary packages.

The Group follows the principles of internal fairness and external competitiveness, and continuously optimizes performance appraisal based on employees' job responsibilities, work abilities, work performance and other factors. The system uses assessment results as the main basis for employee appointment, removal, promotion, salary distribution and job adjustment, and provides incentive work such as floating wages and bonuses, such design of financial incentives provides employees with reasonable and substantial returns and stimulates their enthusiasm for work.

In addition, the Group provides employees with statutory benefits that comply with local laws and regulations in each location where it operates. In addition, it provides employees with health security benefits, life security benefits, incentive benefits, festival and cultural constructive benefits, etc. Diversified benefits include on-the-job allowance, summer heating subsidy, laundry subsidy, working environment subsidy and paid leave, etc. At the same time, we pay pension insurance, medical insurance, work-related injury insurance, unemployment insurance, maternity insurance for female workers and housing provident fund for all regular employees to further enhance employees' sense of belonging and cohesion.

Cultural Activities

The Group continues to carry out diversified employee care activities, focusing on employees' physical and mental health, daily life, spiritual culture and other aspects to enrich employees' entertainment life and actively establish positive employee relations. In order to continuously enhance employee happiness and sense of belonging, the Group carries out a number of employee cultural and entertainment activities, including speech contests, skills contests, knowledge contests, employee sports meetings, team lunches, cooking, leisure sports, festival cultural activities and family gatherings, etc., by creating warm focus on humanistic activities to enhance employees' sense of belonging and steadily enhance group cohesion.

Women Care

The Group respects and protects the special rights and interests of female employees in accordance with the law. During pregnancy, childbirth and breastfeeding, female employees can enjoy leave in accordance with the standards stipulated in relevant policies, and the labor relationship with them shall not be terminated during this period. The labor contract shall be automatically extended when it expires. Until the end of pregnancy, childbirth and lactation period. During the reporting period, the Group actively supported the spiritual and cultural life construction of female employees, organized female employee symposiums and expert psychological lectures, and cared for the physical health of female employees, carried out "two cancer" screening and physical examinations, and carried out comprehensive humanistic care and psychological counseling for female employees. During "Women's Day", exclusive holiday gift packs were distributed to female employees.

Case: "Women's Day" Holiday Gift Package Campaign

On "Women's Day", in order to enable all female employees to spend a warm and happy holiday, Tianjin Tianrui Cement Co., Ltd. sent out "Women's Day" holiday gift packs to female employees.



Employee Care

The Group continues to carry out solid employee care work, establishes a standardized employee assistance mechanism, regularly visits employees and their families in need, understands the actual difficulties and needs, and cares about and follows up on life improvement. Among them, in addition to charity fundraising for sick and needy employees, we also carry out loving education assistance activities for the education of employees' children to help children of employees from poor families realize their dreams of studying. The Group provides "warm benefits" to each employee and provides employees and their families with secure life security to reduce worries and improve happiness. By organizing and carrying out activities to send warmth and holiday benefits such as Spring Festival, Mid-Autumn Festival, Lantern Festival and other special festivals, condolence money, condolence materials and holiday blessings and greetings are sent to corporate employees and production front-line employees, so that employees can fully feel the care and welfare from the company.

Case: Dalian Tianrui Cement Co., Ltd. Launched The “Caring for Employees and Giving Warmth In Winter” Campaign

In the winter in Northeast China, the ground is frozen and the wind is bone-chilling. In order to thank all employees who are working on the front line of production, on December 23, 2023, General Labor Union in Changxing Island Economic Zone of Dalian Tianrui Cement Co., Ltd. launched the activity, “Caring for Employees and Giving Warmth in Winter”, to send employees who worked in cold winter hundreds of nutritional products and pure milk, conveying the union’s care and love from the Company’s front-line employees to the heart of employees.



7.4 Occupational Health and Safety

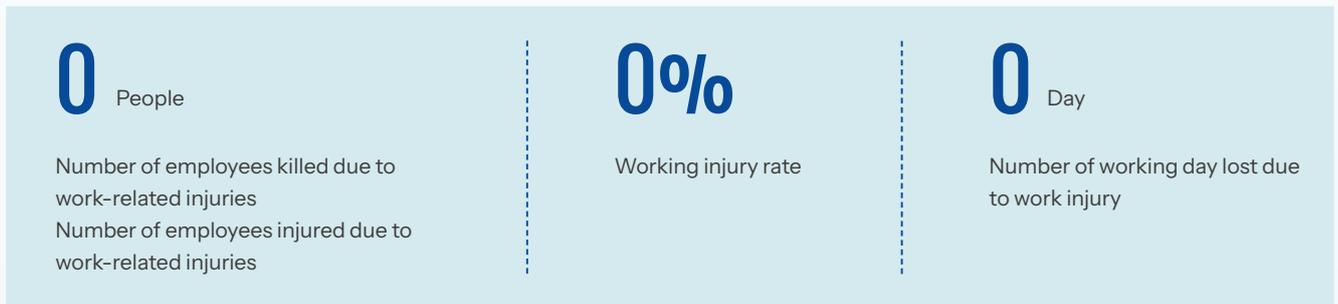
The Group continues to optimize the construction of its occupational health and safety management system, comprehensively promotes the implementation of safety responsibility standards, strengthens the prevention and management of occupational diseases, promotes the construction of a safety concept culture for all employees, and comprehensively improves the Group's health and safety management standards.

Safety Management System

The Group is committed to providing a safe and healthy working environment for its employees, responding to the “14th Five-Year Plan for National Work Safety Plan” and strictly abiding by the “Work Safety Law of the People’s Republic of China”, the “Law of the People’s Republic of China on the Prevention and Control of Occupational Diseases”, and the “Occupational Diseases in Employers” “Prevention and Control Guidelines”, “Employer Occupational Health Supervision and Management Measures” and other laws, regulations and normative documents, and formulate corresponding internal rules and regulations within the enterprise to further clarify occupational health management work and effectively protect the health rights and interests of all employees.

Safe Production

The Group implements the requirements of the "Production Safety Law of the People's Republic of China" that "safety must be managed in the management of the industry, safety must be managed in the management of the business, and safety must be managed in the management of the production and operation", and the "6S On-site Management Measures" have been formulated to establish and improve the safety production responsibility system for all employees, promote the construction of safety production standardization, and build safety risk analysis. We have a dual prevention mechanism of grade-level control and hidden danger investigation and management, and implement the safety production policy of "safety first, prevention first, and comprehensive management". Set up occupational health and safety production emergency plan; according to the production process and technology, break down the specific links and hidden danger points that have safety hazards in the production process, and set up safety hazards in high-risk areas. Install warning notices to remind employees to maintain safe working behaviors and pay attention to potential safety hazards. Each subsidiary organizes comprehensive safety inspection activities every month to conduct inspections. Various safety hazards in the production process will be rectified within a time limit.



During the reporting period, there were no work safety accidents and no loss of working hours due to work-related injuries.

Overview of workplace injuries				
Indicators	Unit	2023	2022	2021
Number of employees killed due to work-related injuries	People	0	0	0
Number of working days lost due to work injury	Day	0	2,243	223

Indicators	Unit	2023
Number of employees injured due to work-related injuries	People	0
Work injury rate	%	0

Note: The calculation method of work injury data is in accordance with "GRI 403: Occupational Safety and Health 2018", work injury rate (recordable occupational injury rate, calculated based on 1,000,000 working hours) = number of recordable occupational injuries / number of working hours * 1,000,000; number of working days lost due to work injuries = Σ(number of recordable occupational injury days * number of occupational injuries).

Occupational Disease Prevention and Control

The Group is fully aware of the hazards of pneumoconiosis and other related occupational diseases caused by noise and dust in the cement production process. Warnings are set up in conspicuous places in places and working positions to inform people of occupational disease hazards, and the Group is actively exploring more effective ways to prevent and control occupational diseases. Efforts should be made to replace, eliminate and control occupational hazards.

Case: Quality, Environment, Energy, Occupational Health and Safety Management System and Product Certification.

From September 20 to 22, 2023, after third-party certification audited by experts from the audit team of the Certification Group, Tianrui's new listing in Zhengzhou Cement Co., Ltd., passed quality, environment, energy, occupational health and safety management system and product certification.



The Group complies with the "Equipment Standards for Labor Protection Supplies", "Respiratory Protection—Self-priming Filtering Anti-Particulate Respirators", and "Dust and Virus Prevention for Cement Production Enterprises" "Technical Specifications" and other standards, based on the actual production process, covering respiratory protection, ear protection, eye protection, body protection, etc., and providing employees with regular different types of protective equipment. According to the nature of occupational hazards in different positions at the work site, different types of protective equipment with different filtration efficiencies are configured, including KN100, KN95, KN90 masks, anti-noise earplugs, safety helmets, protective shoes, etc. and conduct protective user training for employees so that employees can follow. The rules are to be worn and used correctly to effectively play a protective role. Special personnel are arranged at the production site to conduct irregular inspections to check the wearing status of protective equipment in each workshop. Overall protection efficiency is improved.

In order to protect the health of employees, the Group conducts regular occupational disease examinations for employees and establishes employee occupational health files to promptly identify and avoid occupational health problems. Intervention and treatment. In accordance with national occupational health-related regulations and policies, the Group hires third-party organizations to conduct occupational health status assessments every three years. At work, occupational hazard inspections are conducted once a year.

During the reporting period, the Group invested a total of RMB 3.65 million in occupational disease prevention and control measures, and no occupational diseases occurred.

Overview of occupational diseases P&C		
Occupational disease prevention and control indicators	Unit	2023
Number of people suffering from occupational diseases	People	0
Investment in occupational disease p&c	Million RMB	3.65

Safety Culture Construction

The Group regards the construction of safety culture as an important means to implement the health and safety awareness of all employees, continues to establish and improve the health and safety education and training system, and regularly carries out "Safety Production Month", "Fire Drills", special safety inspections, safety knowledge and regulations training, safety knowledge contests, safety speech contests, safety skills contests and other forms of cultural construction activities to cultivate employees' health and safety awareness, strengthen employees' safety production skills, and thereby improve the overall safety production level of the enterprise.

Case: Dalian Tianruijin Coastal Cement Co., Ltd. launched the "Safety Production Month" launching ceremony

On June 1, 2023, Dalian Tianruijin Coastal Cement Co., Ltd. organized the launching ceremony of the "Safety Production Month". The theme of this "Safety Production Month" activity is "Everyone pays attention to safety and everyone knows how to respond to emergencies." At the launching ceremony, the "2023 Golden Coast Company "Safety Production Month" Activity Plan" was read out, highlighting the theme of "always putting safety production at the top of all work". The launching ceremony ended successfully with the safety oath and safety commitment signed by all cadres and employees. It also kicked off various activities of the Golden Coast Company's "Safety Production Month".



Case: Tianrui Group Xiaoxian Cement Co., Ltd. Carries Out "Ten Precautions" Training On Production Safety In Winter

On December 19, 2023, Tianrui Group Xiaoxian Cement Co., Ltd. organized two winter production safety "Ten Precautions" training sessions in the morning and evening, with a total of 209 people participating. Use production safety education videos to explain production safety knowledge, focusing on the "Ten Precautions" for production safety in winter: fire and explosion prevention, antiskid, lightning protection, electric shock prevention, collapse prevention, falling from heights, poisoning, freezing and condensation prevention, and drowning prevention. Carry out anti-smog training. Safety production is everyone's responsibility. Through this training, employees' awareness of production safety prevention and self-protection will be strengthened, and safety production in winter will be strengthened.



08

ADHERE TO THE ORIGINAL INTENTION OF QUALITY AND LEAD THE WAY FORWARD WITH INNOVATION



8. ADHERE TO THE ORIGINAL INTENTION OF QUALITY AND LEAD THE WAY FORWARD WITH INNOVATION

8.1 Innovation Awards

Innovation Management

The Group actively responds to the "14th Five-Year Plan Development Guidelines for the Concrete and Cement Products Industry" and continues to strengthen technological innovation and promote independent research and development. The Group attaches great importance to the construction of the R&D team and has formed a high-quality cement R&D team internally to ensure that the company has the innovation power for sustainable development. As of the end of the reporting period, the Group currently has 599 R&D employees, accounting for approximately 9% of the total number of the Group.

The Group has long practiced the concept of innovative development and adhered to high-quality development. It has established two provincial-level technology R&D centers in Henan and Liaoning and multiple municipal-level R&D centers, and continues to carry out R&D, innovation, and technological transformation of process equipment. During the reporting period, the Group's annual R&D investment was RMB 364.36 million, accounting for approximately 4.62% of the 2023 operating income.

The Group continues to improve its innovation management mechanism, sets standards for R&D projects, classifies the importance of R&D projects, clarifies R&D expense rights and responsibilities and R&D processes, and provides necessary resource support for R&D projects to ensure the speed and efficiency of various R&D innovation activities. carry out. Many companies of the Group have won honors in national quality and technology competitions, realizing the transformation of traditional industries into high-tech enterprises. As of the end of the reporting period, the Group owned 19 high-tech enterprises.

Case: Won the second prize in the first "Zero Carbon Zhongyuan Cup" Green Manufacturing Technology Application Innovation Competition in Henan Province

Tianrui's new appointment with Zhengzhou Cement Co., Ltd. won the second prize in Henan Province's first "Zero Carbon Zhongyuan Cup" Green Manufacturing Technology Application Innovation Competition; awarding organization: Henan Provincial Department of Industry and Information Technology, Henan Provincial Green Manufacturing Alliance, Henan Provincial Energy Efficiency Technology Association and Centaline Bank Co., Ltd.



Case: Liaoyang Tianrui Cement Won Two Liaoning Province Building Materials Science and Technology Innovation Awards

Liaoyang Tianrui Cement Co., Ltd. won two scientific and technological innovation awards for building materials in Liaoning Province. The results of the Science and Technology Award organized by the Liaoning Provincial Building Materials Industry Association were announced. Liaoyang Tianrui Cement Co., Ltd.'s "Cement Clinker and Reinforced Slag Mixing System" and "Energy-saving Alternative Fuel Combustion System" both won the Technology Innovation Award First prize in category.



Intellectual Property Protection System

The Group strictly abides by laws and regulations such as the Intellectual Property Law of the People's Republic of China, the Patent Law of the People's Republic of China, the Trademark Law of the People's Republic of China, the Copyright Law of the People's Republic of China, etc., and focuses on the project establishment and implementation process and results management of science and technology projects, patent management and other clear requirements, through the combination of patents, trademarks, domain name registration and contract restrictions, establish an intellectual property protection system to promote innovation through management, and enable the results to be industrialized and applied as soon as possible. The Group sells products under the trademark "TIANRUI", which has been registered with the Trademark Office of the State Administration for Industry and Commerce of the People's Republic of China and has been awarded a nationally well-known trademark. The Group attaches great importance to the protection of intellectual property rights. The Group promises not to purchase or use pirated products. All copyright-related products are purchased from dealers authorized by the copyright holders. From 2020 to 2023, the Group has obtained 554 utility model patents, 56 software copyrights, and 10 invention patents, and has successfully implemented key technologies such as ultra-low emissions, efficiency improvement transformation of grate coolers, and high-temperature fans, technology research and development and transformation.

Intellectual Property Protection Culture Construction

Intellectual property rights are an important part of an enterprise's core competitiveness. Protecting intellectual property rights is the only way for enterprises to develop healthily and sustainably, and it is also an effective way to protect enterprise innovation achievements. In terms of intellectual property protection, the Group adheres to the concept of "promoting management through culture and promoting efficiency through management", and disseminates content related to intellectual property protection through intellectual property protection training, intellectual property promotional videos, etc., making the importance of intellectual property deeply rooted in the hearts of the people and creating the construction of intellectual property protection culture with the participation of all employees. During the reporting period, the Group conducted a total of 558 intellectual property protection training sessions, with a total of 13,004 participants and a total training time of 462 hours.



Industry Exchange

The Group firmly believes that an open and communicative industry atmosphere can promote technological progress and updated development in the entire industry. The Group actively responds to the call of the China Cement Association, adheres to the concept of open cooperation and win-win cooperation, strengthens technical exchanges and cooperation in the industry, promotes advanced production technology and equipment to improve the performance of cement products, support the low-carbon development of the cement industry, and promote high-quality development of the cement industry. The Group actively receives industry peers, government staff, and scientific researchers to conduct in-depth exchanges and discuss development together.

Case: Dalian Tianrui Cement and Conch Cement Launched Exchange Activities

On March 14, 2023, Dalian Tianrui Cement Co., Ltd. received personnel from the Zhejiang District Marketing Center of Conch Cement to carry out market exchange activities. At the symposium, the two parties discussed the production and operation conditions and corporate strategic planning of enterprises in the cement industry, conducted a detailed analysis of the market situation in the north and south as well as industry opportunities and challenges, and conducted in-depth exchanges on deepening cooperation and win-win development, working together to promote development and exert Taking advantage of their respective advantages, we will create a new situation in the development of the cement industry.



8.2 Intelligent Manufacturing

The Group actively responds to national and industry policies and conducts operations by policies such as the "State Council's Issuance of the Digital Economy Development Plan for the 14th Five-Year Plan", the "14th Five-Year Plan for Intelligent Manufacturing Development", and the "Implementation Opinions on Improving Manufacturing Reliability". The intelligent and digital transformation of factory production and enterprise operations will comprehensively enhance the intelligent level of R&D, production, management, and services. Use informatization to drive industrialization, use industrialization to promote informatization, achieve "integration of the two informatization", and take a new path to industrialization. The Group continues to enhance its corporate competitiveness and promote sustainable development through digital construction. As of the end of the reporting period, the Group owned 21 smart factories and 26 factories that had obtained the "Integration of Informatization and Informatization" certification.

1. Production automation system

Production automation system construction, including clinker DCS system, waste heat power generation DCS system, denitration automatic control system and packaging machine automatic bag insertion system;

2. Network data connection and hierarchical partition management

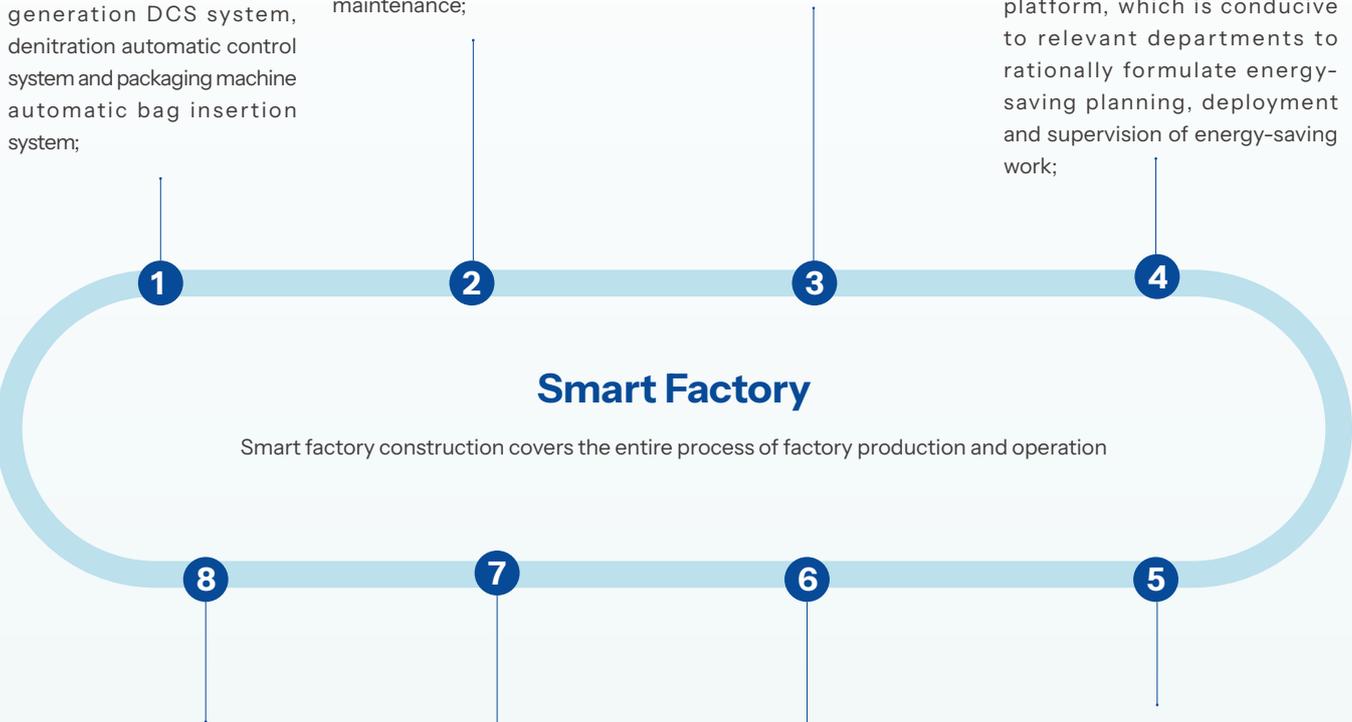
The company's network data connection and hierarchical partition management realize centralized management of multiple application functions, and have functions such as data backup and remote operation and maintenance;

3. Real-time upload of inspection equipment data

Inspection equipment data is uploaded in real time, and digital inspection equipment is applied to realize networked online monitoring and docking with quality personnel, which improves work efficiency and prevents data anomalies caused by manual intervention;

4. Energy management and energy consumption online monitoring system

Through the energy management and energy consumption online monitoring system, centralized real-time monitoring, statistics, analysis and in-depth management of energy-saving data are realized, and they are simultaneously uploaded to the Provincial Energy Bureau platform, which is conducive to relevant departments to rationally formulate energy-saving planning, deployment and supervision of energy-saving work;



8. MES system

The MES system collects and transmits production data, establishes a database, and realizes functions such as real-time access, historical query, and personalized alarming of production data by remote terminal devices through the APP;

7. Device management module

Apply the equipment management module to build a remote equipment operation and maintenance system on the Internet platform to achieve full life cycle management of equipment file basic information, usage, operation status, repair and maintenance, etc.;

6. Intelligent logistics system

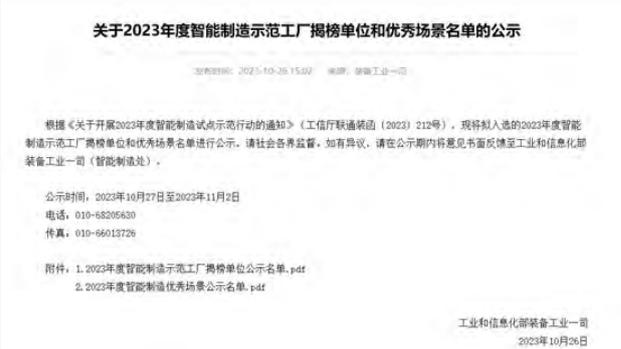
The application of intelligent logistics system enables unmanned operation on the online platform for the entire process of ordering, loading, weighing and leaving the factory, payment and settlement;

5. Smart office

Smart office is deployed and constructed uniformly by the group. Dual-system operation and data sharing improve office efficiency.

Case: 2023 Intelligent Manufacturing Demonstration Factory 2023

Liaoyang Tianrui Cement Co., Ltd. was selected as the national "2023 Intelligent Manufacturing Demonstration Factory" evaluated by the Ministry of Industry and Information Technology of the People's Republic of China.



序号	揭榜项目	揭榜单位	项目典型场景	推荐单位
15	辽阳天瑞水泥智能制造示范工厂	辽阳天瑞水泥有限公司	1.智能在线检测; 2.工厂数字化设计; 3.车间智能排产; 4.工艺动态优化; 5.设备故障诊断与预测; 6.能耗数据监测; 7.物流仓储网络化协同; 8.移动端应用。	辽宁省工业和信息化厅、辽宁省发展和改革委员会

Case: Obtained "Assessment Certificate for the Integration of Informatization and Industrialization Management System"

On August 4, 2023, Tianrui Golden Coastal Cement Co., Ltd. successfully passed the national two-information integration management system certification, "Two Integration Management System A-level Assessment Certificate"



Tianrui Mall APP Realizes Unmanned Procurement and Delivery Process

Liaoyang Tianrui Cement Co., Ltd. was selected as the national "2023 Smart Manufacturing Demonstration Factory" evaluated by the Ministry of Industry and Information Technology of the People's Republic of China. By using the Group's Tianrui Mall APP, customers can check the inventory, prices, and product characteristics of various types of materials in real-time. The customer enters the pickup vehicle information (differentiated by license plate number) on the APP, and binds the company information and payment account. Place an order online on the APP and bind the corresponding pick-up vehicle. When the pick-up vehicle enters the factory to pick up the goods, the license plate number is recognized and released through the information processing system, and the vehicle enters the warehouse according to the instructions; the system puts the materials according to the order details, and achieves accurate placement through the automated control system; after the placement is completed, the goods are picked up. The vehicle is weighed and the amount of material discharged is verified again for double control. The vehicle passed the information identification system again and left the factory smoothly. At this point, the procurement and delivery process is completed through the online platform, making the entire process unmanned. The Group has significantly improved delivery efficiency and reduced energy consumption through smart factory construction and terminal APP development.



Tianrui Mall APP Operation Interface

8.3 Quality Assurance

Product Quality Management

The Group strictly implements the "Product Quality Law of the People's Republic of China", "Quality Management Regulations for Cement Production Enterprises", "General Silicate Cement (GB175-2007)" and other laws and regulations, and actively responds to the "Regulations on Improving the Quality of Cement Products in the Cement Market" "Opinions on Order", the Group has compiled and implemented a "Quality Control Manual" within the group, and established a complete product quality management system. The Group has obtained ISO 9001 quality management system certification.

The Group's quality control department is specifically responsible for supervising the production process and inspecting the output quality of cement products. The quality management system covers quality management target setting, raw material compliance management regulations, production process monitoring, product quality inspection before leaving the factory, and market product sampling inspection management system, quality accident management system, etc., run through the entire process of raw material procurement, production process, factory products, and after-sales service; we will resolutely crack down on counterfeit and infringing products and safeguard the legitimate rights and interests of users.

The Group's product recycling process stipulates that once products that do not meet the requirements must be recycled immediately, the reasons must be investigated, improvements must be made, quality must be actively and strictly controlled, and good after-sales service must be maintained. During the reporting period, the Group did not recall any sold or shipped products due to safety, health, or quality reasons.

The laboratories of our group have passed the relevant tests of the Cement Association and obtained certificates from the local cement association. Before the products are officially shipped out of the factory, the laboratories of our group have passed the relevant tests of the Cement Association. We conduct inspections according to national standards such as the Mud, Clay, and Sand Strength Test Method (GB/T 17671-2021) and Cement Chemical Analysis Method (GB/T 176-2008) to ensure the quality and stability of factory products. During the reporting period, the Group received recognition and honors from many parties for its excellent product performance, stable quality, and quality services, and honor.

Case: Tianrui Cement Group Co., Ltd. was selected as the "Henan Province Manufacturing Leading Enterprise in 2023".

Tianrui Cement Group Co., Ltd. was selected as the "Henan Province Manufacturing Leading Enterprise in 2023". This is the third consecutive year that the group has been selected, and it is also the only selected enterprise in the cement industry in Henan Province.

河南省制造强省建设领导小组办公室文件

豫制造强省办〔2023〕26号

河南省制造强省建设领导小组办公室
关于公布2023年河南省制造业头雁企业名单和
2023年河南省制造业重点培育头雁企业名单的
通 知

Case: Won the title of "Henan Province Quality and Integrity Brand Enterprise"

Weihui Tianrui Cement Co., Ltd. won the "Henan Province Quality Integrity Product" brand enterprise" title



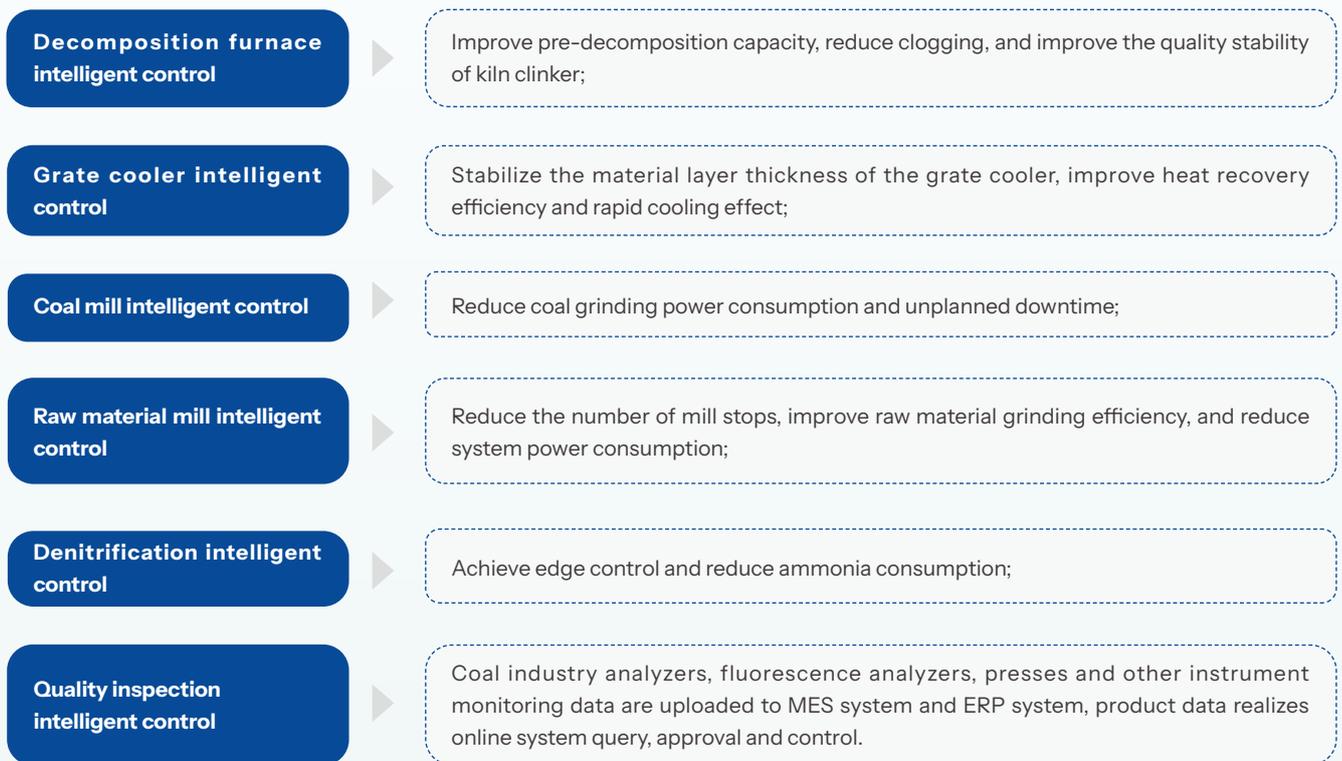
Case: Won the honorary title of "Anhui Province Quality Trustworthy Unit"

Tianrui Group Xiaoxian Cement Co., Ltd. won the "Anhui Province 2023.3.15 Honorary title "Quality Trustworthy Unit"



Digital Quality Control

The Group strives to promote digital construction and intelligent production, ensure product quality with intelligent manufacturing, and establish standardized and programmed quality management processes. Ensure product quality stability through intelligent control systems, timely identify and handle abnormal situations in each production link, improve the standardization and accuracy of operations in the production process, reduce production abnormalities caused by improper manual operations, improve resource utilization efficiency, and reduce unit products energy consumption. Record, cause analysis, and correction of production data to improve quality management efficiency and accuracy.



8.4 Customer First

Customer Service

The Group upholds the value of customer first, adheres to the spirit of integrity and pragmatism, puts customer experience at the core of corporate development, and is committed to providing products and services of excellent quality and fully protecting the rights and interests of customers. In the process of constantly pursuing high-quality products, we continue to improve our service experience to meet the diverse needs of customers.

During the reporting period, the Group refined and upgraded its customer service plan based on the original customer management system. It improved the customer management system in terms of customer type and business type, paid attention to details, paid attention to feedback, maintained close communication with customers, and continuously optimized products and services. At the same time, the company also invests manpower and material resources to strengthen training for employees, dealers, and related parties and conducts technical exchanges and quality return visits with dealers and customers regularly or irregularly to provide full-process services before, during, and after sales.

Customer Privacy Protection

The Group attaches great importance to the protection of customer privacy and strictly abides by the "Cybersecurity Law of the People's Republic of China", the "Personal Information Protection Law of the People's Republic of China" and other relevant laws and regulations as well as applicable laws and regulations in the places where it operates. It has established and abides by the "Sales Customers" within the group "Management Measures", which divides and explains the scope of collection and use of customer's personal information, conducts hierarchical control of customer privacy according to employee functions and management levels and establishes a series of data system access control and office equipment access control, etc. Internal measures protect customer privacy. Customer personal information will only be used for business development, internal analysis, and customer relations, and is strictly prohibited from being leaked out.

During the reporting period, the Group did not experience any customer information leakage or customer privacy-related complaints.

Complaint Handling

In terms of handling customer complaints, the Group has established a complete management system and process, as well as a complete after-sales service system to safeguard the rights and interests of customers. The Group has always adhered to a customer-centric approach and provided customers with convenient information feedback and complaint channels. Contact and complaint methods are clearly stated on the sales site, online promotion channels, product manuals, packaging labels, and other links. At the same time, the Group actively maintains close communication with customers through multiple channels, including regular on-site visits, real-time Internet information interaction, and

proactive telephone inquiries. We know that our customers' opinions and suggestions are crucial to the progress of our products and services, so we launch a customer satisfaction survey to comprehensively understand our customers' needs and expectations, to continuously optimize our products and services and ensure customer satisfaction continuous improvement.

The Group insists on starting from the needs of customers. Once the responsible department receives a customer complaint, we promise to initiate an investigation process and respond to the customer complaint within 24 hours. We focus on the accuracy and openness of the survey to ensure that the survey results truly reflect the nature of the problem. For complex issues, the Group actively mobilizes resources to promote multi-department collaboration to respond to customer needs. Analyze and integrate the collected customer complaints and needs to deeply understand customer expectations, and use this as an important source of information for future corporate operations to improve corporate service levels. The Group treats every customer complaint with an open, inclusive, and cherished attitude and strives to turn it into motivation to improve service quality. The Group firmly believes that through continuous efforts and improvements, we can win the trust and support of more customers and achieve sustainable development of the enterprise. During the reporting period, the Group received no complaints from customers.

Customer complaints overview		
Index	Unit	2023
Number of complaints about products and services	Piece	0
Number of customer complaints handled	Piece	0
Customer complaint handling percentage	%	Not applicable

8.5 Supply Chain Management

The Group firmly believes that by promoting the concepts of "green procurement" and "sunshine procurement" and continuing our efforts and innovation, we can make positive contributions to building a more sustainable industrial chain. The group management committee, legal affairs, supervision, finance, auditing and related professional management departments are responsible for supervising, inspecting and evaluating all material bidding of the group. As the supervisory body of bidding activities, the group supervision unit is responsible for coordinating all aspects of supervision work of the group.

Supplier Management

In terms of supply chain management, the Group strives to build a full life cycle management mechanism for suppliers, focusing on supplier access, evaluation, and approval, from supplier inspection, warehousing and shortlisting, procurement bidding, contract management, and contract performance. Closed-loop management of the entire process including evaluation and survival of the fittest. Adhere to a quantifiable evaluation system, and the evaluation indicators cover the entire life cycle of suppliers, making them assessable and traceable.

During the procurement process, the Group selects suppliers through a bidding process based on factors such as product quality, price, delivery time, service quality, reliability, geographical location, and environmental and social risks. In view that being close to the Group's operating locations will help to better control delivery times, ensure supply stability, and reduce the environmental impact caused by transportation, the Group will give priority to suppliers close to production locations after balancing multiple factors. For suppliers in the resource pool, the Group conducts regular assessments covering product quality, supplier stability, after-sales service, and corporate ESG performance.

Green Supply Chain

The Group formulates and implements the "Material Supply Management Regulations" and "Material Procurement Management Measures", clarifies the scope and principles of green supply chain management and green procurement, adheres to the concept of safe, timely, economical and green supply, and adheres to resource-saving and recycling. The principle of utilization-oriented and environment-friendly material procurement is in response to national environmental protection and energy conservation requirements.

To promote the healthy development of the supply chain, the Group integrates ESG risk factors into the supplier evaluation and cooperation process to achieve ESG risk management in all aspects of the supply chain, and through qualification review, on-site inspections, face-to-face communication, information collection, and background investigations. Through other methods, we identify, determine and evaluate the ESG risks of suppliers, and supervise the ESG risks of major suppliers. By the company's supplier evaluation system, during the reporting period, the Group conducted environmental, social, and governance evaluations on 327 suppliers, with a coverage rate of 100%.

When conducting supplier selection and public bidding, if all suppliers meet the basic requirements, the Group will give priority to environmental protection-related management system certifications, environmental awards, and environmental protection demonstration organizations recognized by government departments. For production suppliers, ISO 14001 environmental management system and ISO 45001 occupational health and safety system certifications are required.

At the same time, the Group takes environmental protection as its central concept. On the one hand, it continues to purchase energy-saving and consumption-reducing products. It has strict requirements on environmental pollution and does not prioritize price. Most of its products are purchased nearby, and it continues to achieve energy conservation and environmental protection at the transportation level. On the other hand, based on the characteristics of the cement industry, we actively consume solid waste materials and municipal solid waste from other industries to achieve a circular economy at the social level.

Sunshine Procurement

The Group has long adhered to transparent procurement. The Group adheres to the principles of openness, fairness, and impartiality in the procurement process, strengthens transparency, scientificity, and standardization in the procurement process, promotes healthy competition among suppliers, and promotes a healthy and healthy industry economy. To develop and improve procurement efficiency while avoiding corruption incidents, the Group provides supervision and reporting contact information and accepts supervision from all walks of life. The Group requires all suppliers to sign the "Integrity and Self-Discipline Agreement", and also attaches reporting email addresses and "Tianrui Group Audit" WeChat ID and other acceptance channels to ensure the creation of a clean supply chain.

During the reporting period, the anti-corruption policies and procedures organized by the Group have been communicated to all suppliers, customers, engineering clients, and other business partners, with a coverage rate of 100%.

Dealer Cooperation

The Group has always adhered to the concept of symbiosis, win-win, and hand-in-hand progress. It regards every dealer as an important partner of the company. It empowers the dealers from multiple aspects such as product knowledge, marketing strategies, and daily management. It is market-oriented and adapts to the market together with the dealers. Changes, adjust marketing strategies promptly and establish long-term friendly, open, and honest cooperative relationships in product marketing, market expansion, etc.

100%

Percentage of suppliers that perform environmental, social and governance assessments under the company's supplier assessment system

100%

Percentage of suppliers signing supplier integrity agreements

Supplier situation overview		
Index	Unit	2023
Total number of suppliers	Count	327
Number of suppliers in Mainland China	Count	327
Number of suppliers overseas and in Hong Kong, Macao and Taiwan	Count	0
Percentage of suppliers that perform environmental, social and governance assessments under the company's supplier assessment system	%	100%
Percentage of suppliers signing supplier integrity agreements	%	100%

09

SHOULDER SOCIAL RESPONSIBILITY AND DRIVE REGIONAL GROWTH



9. SHOULDER SOCIAL RESPONSIBILITY AND DRIVE REGIONAL GROWTH

9.1 Give Back to the Community

The Group actively fulfills its corporate social responsibilities and civic obligations, focuses on the coordinated development of corporate development, the economy, society, resources, and the environment, solves community difficulties, and maintains community relations. The Group's external donations and sponsorship include donations and sponsorships to disaster-stricken areas, designated poverty alleviation areas, designated assistance areas, disadvantaged social groups in need, as well as social welfare undertakings such as science, education, culture and health, environmental protection, energy conservation, and emission reduction. During the reporting period, the Group participated in several charitable donation activities, with a total charitable donation amount of RMB 862,024.

0.86 Million RMB

Charitable donation investment

Overview of community and public welfare achievements

Indicators	Unit	2023
Total hours of volunteer service	Hour	5
Charitable donation investment	Million RMB	0.86

9.2 Public Welfare Undertakings

The Group has always adhered to the people-oriented modern management philosophy, strengthened corporate responsibility and responsibility, actively fulfilled social responsibilities, and continued to promote the steady progress of the Group. The Group actively participates in public welfare undertakings and provides guarantee and support for various public welfare volunteer activities in terms of personnel organization, working mechanism, time arrangement, financial support, and communication. The Group supports its employees to actively participate in various volunteer activities such as blood donation, material donation, environmental protection, and charitable donations to spread warmth.

Case: Unit with Outstanding Contributions to Love Donations

In January 2023, Ruzhou experienced a sudden epidemic. Tianrui Group headquarters and its affiliated companies traveled thousands of miles to help Ruzhou fight the epidemic, generously helped, and actively donated money and materials. The Ruzhou Municipal Party Committee and Municipal Government awarded Tianrui Group the honorary title of "Unit with Outstanding Contributions to Love Donations" and issued a banner and a letter of thanks.



9.3 Rural Revitalization

The Group actively responds to policy plans, comprehensively supports rural revitalization, carries out rural assistance activities, and helps promote the sustainable development of rural areas. During the reporting period, the Group continued to support rural revitalization and county economic development, and made active efforts in promoting the development of township education, donating student aid, caring for the next generation, and promoting local economic development, and has received a series of honors: The Group's Tianrui Xindeng Cement Co., Ltd. was awarded the title of "Advanced Unit for Respecting Teachers and Emphasizing Education", Tianrui Guangshan Cement Co., Ltd. was awarded the honorary title of "Xinyang Civilized Unit" and "Caring Enterprise", and Tianrui Xiaoshan Cement Co., Ltd. was awarded the title of "Care "Advanced Unit for the Next Generation of Caring Student Aid" and other honors.

9.4 Promote Local Development

While focusing on its development, the Group also hopes to promote the economic development of the local areas where its business is conducted. During the reporting period, the Group concentrated on operating its business, actively fulfilled its social responsibilities, operated by the law, paid taxes with integrity, created a good and harmonious tax-enterprise relationship with the places where it operates, and made contributions to drive local economic and social development, promote local employment, and build harmonious labor relations. made a positive contribution.

During the reporting period, the Group's Dalian Tianrui Cement Co., Ltd. was awarded the honorary title of "Advanced Unit for Tax Contribution", Tianrui Nanzhao Cement Co., Ltd. was awarded the title of "Tax Contribution Award Enterprise", and Liaoyang Tianrui Cement Co., Ltd. was awarded the title of "Liaoyang Private Enterprise Taxpayer". Tianrui Xiaoxian Cement Company won the honorary title of "Top Ten Taxpayers in 2022", Dalian Tianrui Cement Co., Ltd. won the honorary title of "Advanced Unit for Tax Contribution in 2022", etc.

For a long time, the Group has been actively building harmonious and stable labor relations, standardizing labor employment processes, and actively absorbing the local qualified labor force to promote local employment levels. At the same time, the Group has continuously improved the level of labor security management, continued to improve the salary system, and effectively protected the legitimate rights and interests of employees. And provide employees with multiple channels of career planning, skills training, labor protection, and collective care to improve employees' sense of gain and happiness.

10.LIST OF LAWS AND REGULATIONS

The laws and regulations that have a significant impact on the Group's business operations in Mainland China and Hong Kong are as follows:

ESG scope	Chinese Mainland	Hong Kong
Environment	The Environmental Protection Law of the People's Republic of China	Chapter 311, Air Pollution Control Ordinance
	The Environmental Impact Assessment Law of the People's Republic of China	Chapter 354, Waste Disposal Ordinance
	The Environmental Protection Tax Law of the People's Republic of China	
	Regulations on the Implementation of the Environmental Protection Tax Law of the People's Republic of China	
	The Law of the People's Republic of China on the Prevention and Control of Air Pollution:	
	The Law of the People's Republic of China on the Prevention and Control of Water Pollution,	
	Law of the People's Republic of China on the Prevention and Control of Environmental Pollution caused by Solid Waste	
	Measure for the Administration of Sewage Discharge Permits(for Trial Implementation)	
	Measures for the Administration of Enterprise Environmental Information Disclosure according to Law	
Employment and labor regulations	Law of the People's Republic of China on the Prevention and Control of Environmental Noise Pollution	
	The Energy Conservation Law of the People's Republic of China	
	The Water Law of the People's Republic of China,	
	The Labor Law of the People's Republic of China,	Chapter 57, Employment Ordinance
	The Labor Contract Law of the People's Republic of China	Chapter 480, Gender Discrimination Ordinance
	The Social Insurance Law of the People's Republic of China,	Chapter 487, Disability Discrimination Ordinance

ESG scope	Chinese Mainland	Hong Kong
Employment and labor regulations	The Law of the People's Republic of China on the Protection of Minors	Chapter 602, the Racial Discrimination Ordinance
	Regulations on the Prohibition of Child Labor	
Work health and safety	Law of the People's Republic of China on the Prevention and Control of Occupational Diseases	Employees' Compensation Ordinance, Chapter 282, Laws of Hong Kong
	Production Safety Law of the People's Republic of China	The Occupational Safety and Health Ordinance, Chapter 509, Laws of Hong Kong
	Fire Protection Law of the People's Republic of China	
	Regulations on the Safety Management of Hazardous Chemicals	
	Special Equipment Safety Supervision Regulations	
Product liability	Copyright Law of the People's Republic of China	The Trade Descriptions Ordinance, Chapter 362, Laws of Hong Kong
	Patent Law of the People's Republic of China	Personal Data (Privacy) Ordinance, Chapter 486, Laws of Hong Kong
	Trademark Law of the People's Republic of China	Trademarks Ordinance, Chapter 559, Laws of Hong Kong
	Intellectual Property Law of the People's Republic of China	Securities and Futures Ordinance, Chapter 571, Laws of Hong Kong
	Product Quality Law of the People's Republic of China	
	Civil Code of the People's Republic of China	
	Consumer Rights and Interests Protection Law of the People's Republic of China	
Advertising Law of the People's Republic of China		
Anti-corruption	Anti-Money Laundering Law of the People's Republic of China	Chapter 201, the Prevention of Bribery Ordinance
	The Anti-Unfair Competition Law of the People's Republic of China	Chapter 204, the ICAC Ordinance
	The Anti-Monopoly Law of the People's Republic of China	Chapter 615 Ordinance against Money Laundering and Terrorist Financing
	The State Administration for Industry and Commerce on the prohibition of Commerce Interim Provisions on Bribery Behavior	Chapter 622, Companies Ordinance

11. INDEX OF MATRIC

11.1 Index of HKEX ESG Guidelines

Aspects, general disclosures and key performance indicators	Description	Relevant chapters of this report
Main Categories A. Environment		
Level A1: Emissions		
General disclosure	Regarding waste gas and greenhouse gas emissions, discharge of pollutants to water and land, generation of hazardous and non-hazardous waste, etc.: (a) policy; and (b) Information on compliance with relevant laws and regulations that have a significant impact on the issuer.	6.1 Environmental management
KPI A1.1	Emission types and related emission data.	6.4 Emissions management
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, if applicable, intensity (e.g. per unit of production, per facility).	6.2 Low-carbon production
KPI A1.3	Total amount of hazardous waste generated (in tonnes) and, if applicable, density (e.g. per unit of output, per facility).	6.4 Emissions management
KPI A1.4	Total amount of non-hazardous waste generated (in tonnes) and, if applicable, density (e.g. per unit of output, per facility).	6.4 Emissions management
KPI A1.5	Describe the emissions targets established and the steps taken to achieve them.	6.1 Environmental management 6.2 Low-carbon production 6.4 Emissions management
KPI A1.6	Describe methods for handling hazardous and non-hazardous waste, and describe the waste reduction goals established and the steps taken to achieve these goals.	6.4 Emissions management
Level A2: Resource usage		
General disclosure	Policy for the effective use of resources (including energy, water, and other raw materials).	6.3 Resource usage
KPI A2.1	Total direct and/or indirect energy consumption (e.g. electricity, gas or oil) by type (in thousands of kilowatt hours) and intensity (e.g. per unit of production, per facility).	6.3 Resource usage
KPI A2.2	Total water consumption and density (e.g. per unit of production, per facility).	6.3 Resource usage
KPI A2.3	Describe the energy efficiency goals established and the steps taken to achieve these goals.	6.3 Resource usage
KPI A2.4	Describe any issues that may arise in sourcing suitable water sources, as well as the water efficiency targets set and the steps taken to achieve these targets.	6.3 Resource usage
KPI A2.5	The total amount of packaging materials used in finished goods (in tonnes) and, if applicable, per unit produced.	6.3 Resource usage

Aspects, general disclosures and key performance indicators	Description	Relevant chapters of this report
Level A3: Environment and natural resources		
General disclosure	Policies to reduce the issuer's significant impact on the environment and natural resources.	6.1 Environmental management 6.2 Low-carbon production 6.3 Resource usage
KPI A3.1	Describe the significant impacts of business activities on the environment and natural resources and the actions taken to manage the impacts.	6.2 Low-carbon production 6.3 Resource usage 6.4 Emissions management 6.6 Green mine
Level A4: Climate change		
General disclosure	Policies for identifying and responding to significant climate-related matters that have impacted and may impact the issuer.	6.5 Addressing climate change
KPI A4.1	Describe the major climate-related issues that have and may have an impact on the issuer, and the response actions.	6.5 Addressing climate change
Main Areas B. Social Employment and Labor Practices		
Level B1: Employment		
General disclosure	Regarding pay and dismissal, recruitment and promotion, working hours, holidays, equal opportunities, diversity, anti-discrimination and And other benefits and benefits: (a) policy; and (b) Information on compliance with relevant laws and regulations that have a significant impact on the issuer.	7.1 Employment of employees
KPI B1.1	Total number of employees by gender, employment type (such as full-time or part-time), age group and region.	7.1 Employment of employees
KPI B2.2	Employee turnover rates by gender, age group and region.	7.1 Employment of employees
Level B2: Health and safety		
General disclosure		
KPI B2.1	The number and rate of work-related fatalities in each of the past three years (including the reporting year).	7.4 Occupational health and security
KPI B2.2	Number of days lost due to work-related injury.	7.4 Occupational health and security
KPI B2.3	Describe the occupational health and safety measures adopted and how they are implemented and monitored.	7.4 Occupational health and security
Level B3: Development and training		
General disclosure	Policy on enhancing employees' knowledge and skills in performing their job duties. Describe the training activities.	7.2 Employee training and promotion

Aspects, general disclosures and key performance indicators	Description	Relevant chapters of this report
KPI B3.1	Percentage of trained employees by sex and category of employees (e.g. senior management, middle management, etc.)	7.2 Employee training and promotion
KPI B3.2	Average number of hours of training completed per employee by sex and type of employee.	7.2 Employee training and promotion
Level B4: Labour code		
General disclosure	Relating to the prevention of child or forced Labour: (a) Policy; and (b) Information on compliance with relevant laws and regulations which have a material impact on the issuer.	7.1 Employment of employees
KPI B4.1	Describe measures to review recruitment practices to avoid child and forced Labour.	7.1 Employment of employees
KPI B4.2	Describe the steps taken to eliminate a violation when it is discovered.	7.1 Employment of employees
Level B5: Supply chain management		
General disclosure	Policies to manage environmental and social risks in the supply chain.	8.5 Supply chain management
KPI B5.1	Number of suppliers by region.	8.5 Supply chain management
KPI B5.2	Describe the practices relating to the employment of suppliers, the number of suppliers to whom the practices are performed, and the methods of enforcement and monitoring of the practices.	8.5 Supply chain management
KPI B5.3	Describe the practices for identifying environmental and social risks at each stage of the supply chain, as well as the relevant enforcement and monitoring methods.	8.5 Supply chain management
KPI B5.4	Describe the practices that promote greater use of environmentally friendly products and services in the selection of suppliers, and the relevant enforcement and monitoring methods.	8.5 Supply chain management
Level B6: Product liability		
General disclosure	Regarding health and safety, advertising, labelling and privacy matters and remedies for the products and services provided: (a) Policy; and (b) Information on compliance with relevant laws and regulations which have a material impact on the issuer.	8.3 Quality assurance 8.4 Customer first
KPI B6.1	Percentage of total products sold or shipped that must be recalled for safety and health reasons.	8.3 Quality assurance

Aspects, general disclosures and key performance indicators	Description	Relevant chapters of this report
KPI B6.2	Number of complaints received about products and services and how to respond.	8.4 Customer first
KPI B6.3	Describe practices related to the maintenance and protection of intellectual property rights.	8.1 Innovation awards
KPI B6.4	Describe the quality verification process and product recovery procedures.	8.3 Quality assurance
KPI B6.5	Describe the consumer data protection and privacy policy, as well as the relevant enforcement and monitoring methods.	8.4 Customer first
Level B7: Anti-corruption		
General disclosure	Related to the prevention of bribery, extortion, fraud and money laundering: (a) Policy; and (b) Information on compliance with relevant laws and regulations which have a material impact on the issuer.	5.7 Steady operation
KPI B7.1	The number and outcome of corruption proceedings initiated and concluded against the issuer or its employees during the reporting period.	5.7 Steady operation
KPI B7.2	Describe preventive measures and reporting procedures, as well as relevant enforcement and monitoring methods.	5.7 Steady operation
KPI B7.3	Describe the anti-corruption training provided to directors and staff.	5.7 Steady operation
Level B8: Community investment		
General disclosure	A policy on community engagement to understand the needs of the community in which it operates and to ensure that its business activities take into account the interests of the community.	9. Shoulder social responsibility and drive regional growth
KPI B8.1	Focus on areas of contribution (e.g. education, environmental issues, Labour needs, health, culture, sports).	9. Shoulder social responsibility and drive regional growth
KPI B8.2	The use of resources (such as money or time) in the area of focus.	9. Shoulder social responsibility and drive regional growth

11.2 GRI Content Index

GRI content index			
Direction for use	China Tianrui Group Cement Co., Ltd. reported the information referenced in this GRI Content Index with reference to GRI standards between January 1, 2023 and December 31, 2023		
Using GRI 1	GRI 1: Foundation 2021		
GRI standard	Disclosure item	Position	Reason for omission
GRI 2: General disclosure 2021			
Organization and its reporting practices	2-1 Organization details	1. About this report	
	2-2 Entities included in organizational sustainability reporting	1. About this report	
	2-3 Reporting period, reporting frequency and contacts	1. About this report	
	2-4 Information restatement	Not applicable	This case is not involved
	2-5 External authentication	Not applicable	This case is not involved
Activities and workers	2-6 Activities, value chains and other business relationships	1. About this report; 3. Chairman's speech; 8.5 Supply chain management	
	2-7 Employees	7. Engagement with people-oriented culture to seek common development	
	2-8 Workers other than employees	7.1 Employment of employees	
Governance	2-9 Governance structure and composition	5.1 Corporate governance; Please refer to the 2023 Annual Report of the Company	
	2-10 Nomination and selection of the highest governing bodies	Please refer to the 2023 Annual Report of the Company	
	2-11 Chairman of the highest governing body	Please refer to the 2023 Annual Report of the Company	
	2-12 Oversight role of the Supreme governing body in terms of management impact	5.1 Corporate governance; 5.2 ESG governance structure	
	2-13 Delegating responsibility for managing impact	5.1 Corporate governance; 5.2 ESG governance structure	
	2-14 Role of supreme governing bodies in sustainable development reporting	5.1 Corporate governance; 5.2 ESG governance structure	
	2-15 Conflict of interest	Please refer to the 2023 Annual Report of the Company	
	2-16 Communication on issues of major concern	5.3 Stakeholder communication; 5.4 ESG materiality assessment	
	2-17 Common knowledge of the highest governing bodies	5.2 ESG governance structure; 5.3 Stakeholder communication; 5.4 ESG materiality assessment	

GRI standard	Disclosure item	Position	Reason for omission
Governance	2-18 Performance evaluation of the highest governing body	Please refer to the 2023 Annual Report of the Company	
	2-19 Remuneration policy	7.3 Employee welfare and care; Please refer to the 2023 Annual Report of the Company	
	2-20 Procedures for determining remuneration	7.3 Employee welfare and care; Please refer to the 2023 Annual Report of the Company	
	2-21 Total compensation ratio	Please refer to the 2023 Annual Report of the Company	
Strategy, policy and practice	2-22 Statement on sustainable development strategy	5.5 Core values of sustainable development; 5.6 Uphold un sustainable development goals	
	2-23 Policy Commitments	5.1 Corporate governance; 5.2 ESG governance structure; 5.7 Steady operation	
	2-24 Integration Policy Commitments	Please refer to the Policy and management section of each chapter for details	
	2-25 Procedures for remedying negative effects	6.4 Emission management; 6.6 Green mine; 7.4 Occupational health and safety; 8.4 Customer first	
	2-26 Mechanisms for seeking advice and raising concerns	5.3 Stakeholder communication; 5.7 Steady operation; 8.4 Customer first; 8.5 Supply chain management	
	2-27 Comply with laws and regulations	5.1 Corporate governance; 5.7 Steady operation; 10. List of laws and regulations; Please refer to the Policy and management section of each chapter for details	
	2-28 Membership of the association	4. Sustainability performance highlights	
Stakeholder participation	2-29 Approaches to stakeholder engagement	5.3 Stakeholder communication	
	2-30 Collective Bargaining Agreement	Not applicable	There is no formal collective bargaining agreement within the group, however employees are free to join unions.
Substantive issue			
GRI 3: Substantive Issues 2021	3-1 Process for determining substantive issues	5.3 Stakeholder communication; 5.4 ESG materiality assessment	
	3-2 List of substantive issues	5.4 ESG materiality assessment	
	3-3 Management of substantive issues	5.4 ESG materiality assessment	

GRI standard	Disclosure item	Position	Reason for omission
GRI 201: Economic performance 2016	201-1 Economic value directly generated and distributed	Please refer to the 2023 Annual Report of the Company	
	201-2 Financial impacts of climate change and other risks and opportunities	6.5 Addressing climate change	
	201-3 Mandatory defined benefit plans and other retirement plans	Please refer to the 2023 Annual Report of the Company	
	201-4 Financial subsidies granted by the Government	Please refer to the 2023 Annual Report of the Company	
GRI 202: Market performance 2016	202-1 By gender standard starting salary level wages with local Minimum wage ratio	Not applicable	Due to the differences between the starting salaries of different subsidiaries of the Group, it is not possible to obtain a uniform ratio, but the standard starting salary level of all subsidiaries is higher than the local minimum wage, and the competitive salary is raised above it.
	202-2 Percentage of executives hired from the local community	Not applicable	As group executives manage from multiple points of operation, it is not possible to clearly distinguish the communities to which they belong.
GRI 203: Indirect economic impact 2016	203-1 Infrastructure investment and support services	6.6 Green mine; 6.7 Smart mine construction; 9. Shoulder social responsibility and drive regional growth	
	203-2 Significant indirect economic impact	8.4 Customer first; 8.5 Supply chain management	
GRI 204: Procurement practice 2016	204-1 Proportion of procurement expenditure from local suppliers	Not applicable	The Group will preferentially select suppliers close to production locations.
GRI 205: Anti-corruption 2016	205-1 Operating points where corruption risk assessments have been conducted	5.7 Steady operation	
	205-2 Communication and training of anti-corruption policies and procedures	5.7 Steady operation	
	205-3 Confirmed incidents of corruption and actions taken	5.7 Steady operation	
GRI 206: Anti-competitive behavior 2016	206-1 Legal action for anti-competitive conduct, antitrust, and antitrust practices	5.7 Steady operation	

GRI standard	Disclosure item	Position	Reason for omission
GRI 207: Tax 2019	207-1 Tax policy	Please refer to the 2023 Annual Report of the Company	
	207-2 Tax governance, control and risk management	Please refer to the 2023 Annual Report of the Company	
	207-3 Stakeholder engagement and management in relation to tax concerns	Please refer to the 2023 Annual Report of the Company	
	207-4 Country reports	Not applicable	This case is not involved
GRI 301: Item 2016	301-1 Weight or volume of the material used	6.3 Resource usage	
	301-2 Feed used for recycling	6.3 Resource usage	
	301-3 Reclaimed products and their packaging materials	6.3 Resource usage	
GRI 302: Energy 2016	302-1 Energy consumption within the organization	6.3 Resource usage	
	302-2 Energy consumption outside of the organization	6.2 Low-carbon production; 6.3 Resource usage	
	302-3 Energy intensity	6.3 Resource usage	
	302-4 Reduce energy consumption	6.3 Resource usage	
	302-5 Reduce energy demand for products and services	6.3 Resource usage	
GRI 303: Water resources and sewage 2018	303-1 Tissue and water as a common resource interrelationship	6.3 Resource usage	
	303-2 Management of the impacts related to the drainage of the water	6.4 Emission management	
	303-3 Water intake	6.3 Resource usage	
	303-4 Drain	6.4 Emission management	
	303-5 Water consumption	6.3 Resource usage	
GRI 304: Biodiversity 2016	304-1 Organizations own, lease, manage operational points in biodiversity-rich areas located outside or near reserves and reserves	not applicable	The case is not involved
	304-2 Activities, products, and services for biodiversity enormous impact	6.4 Emission management; 6.6 Green mines	

GRI standard	Disclosure item	Position	Reason for omission
GRI 304: Biodiversity 2016	304-3 Protected or restored habitat	not applicable	The case is not involved
	304 -4 Operational impacted habitats have been listed in the (IUCN) Red List and national protection	not applicable	The case is not involved
GRI 305: Emissions 2016	305-1 Direct (Category 1) greenhouse gas emissions	6.2 Low-carbon production	
	305-2 Indirect (Category 2) GHG emissions from energy	6.2 Low-carbon production	
	305-3 Other indirect (category 3) greenhouse gas emissions	6.2 Low-carbon production	
	305-4 Greenhouse gas emission intensity	6.2 Low-carbon production	
	305-5 Greenhouse gas reduction	6.2 Low-carbon production	
	305 - 6 Emissions of ozone -depleting substances (ODS)	not applicable	The case is not involved
	305-7 Nitrogen oxide (NO _x), Sulfur oxide (SO _x), And other major gas emissions	6.2 Low-carbon production	
GRI 306: Waste product 2020	306-1 Waste generation and waste related enormous impact	6.4 Emission management	
	306-2 Management of significant impacts related to waste	6.4 Emission management	
	306-3 Waste products generated	6.4 Emission management	
	306-4 Waste transferred from the disposal	6.4 Emission management	
	306-5 Waste entering the disposal	6.4 Emission management	
GRI 308: Supplier environmental assessment 2016	308-1 New screening using environmental evaluation dimensions supplier	8.5 Supply chain management	
	308-2 Negative environmental impacts in the supply chain and the actions taken	8.5 Supply chain management	
GRI 401: Hire 2016	401-1 New hire and turnover	7.1 Employment of employees	

GRI standard	Disclosure item	Position	Reason for omission
GRI 401: Hire 2016	401-2 Benefits provided to full-time employees (excluding temporary or part-time employees)	7.3 Employee welfare and care.	The Group provides employees with appropriate benefits and protection in accordance with the law.
	401-3 Parental leave	not applicable	
GRI 402: Industrial relations 2016	402-1 Minimum notice period for operational changes	not applicable	Notices of major operational changes of the Group are subject to a publicity period.
GRI 403: Occupational health and safety 2018	403-1 Occupational health and safety management system	7.4 Occupational health and safety	
	403-2 Hazard identification, risk assessment and incident investigation	7.4 Occupational health and safety	
	403-3 Occupational health services	7.4 Occupational health and safety	
	403-4 Occupational health and safety matters: worker participation, consultation and communication	7.4 Occupational health and safety	
	403-5 Occupational health and safety training for workers	7.4 Occupational health and safety	
	403-6 Promoting worker health	7.4 Occupational health and safety	
	403-7 Prevention and mitigation are directly related to business relations related occupational health and safety implications	7.4 Occupational health and safety	
	403-8 Occupational health and safety management body covered worker	7.4 Occupational health and safety	
	403-9 Work-related injury	7.4 Occupational health and safety	
	403-10 Work-related health problems	7.4 Occupational health and safety	

GRI standard	Disclosure item	Position	Reason for omission
GRI 404: Training and education, 2016	404-1 Each employee is trained every year mean hours	7.2 Employee training and promotion	
	404-2 Employee skills upgrading programs and transitions assistance scheme	7.2 Employee training and promotion	
	404-3 Regular acceptance of performance and career development percentage of employees assessed	not applicable	The case is not involved
GRI 405: Diversity and equal opportunity 2016	405-1 Diversity of institutions and staff	5.1 Corporate governance; 7.1 Employment of employees	
	405-2 The ratio of basic wages and remuneration for men and women	not applicable	The Group adheres to equal pay for equal work and does not discriminate on the basis of gender.
GRI 406: Anti-discrimination 2016	406-1 Events of discrimination and corrective action taken	7.1 Employment of employees	
GRI 407: Freedom of association and collective bargaining 2016	407-1 Operating sites and suppliers where freedom of association and collective bargaining rights may be at risk	not applicable	The case is not involved
GRI 408: Child labor 2016	408-1 Operating points and suppliers with the risk of major child labor events	not applicable	The case is not involved
GRI 409: Forced or forced labor 2016	409-1 Operating points and suppliers with significant risk of forced or forced labor events	not applicable	The case is not involved
GRI 410: Security practice 2016	410-1 Security personnel who are trained in human rights policy or procedures	not applicable	The case is not involved
GRI 411: Aboriginal rights 2016	411-1 incidents involving violations of indigenous rights	not applicable	The case is not involved
GRI 413: Local community 2016	413-1 Operating points with local community engagement, impact assessment and development plans	9. Shoulder social responsibility and drive regional growth	
	413-2 Operating points with actual or potential significant negative impacts on the local community	not applicable	The case is not involved

GRI standard	Disclosure item	Position	Reason for omission
GRI 414: Supplier social assessment 2016	414-1 New suppliers screened using the social evaluation dimension	8.5 Supply chain management	
	414-2 Negative social impacts of supply chains and actions to be taken	8.5 Supply chain management	
GRI 415: Public policy 2016	415-1 Political contributions	not applicable	The case is not involved
GRI 416: Customer health and safety 2016	416-1 Assess the health and safety impacts of product and service categories	8.3 Quality assurance	
	416-2 Violations involving health and safety impacts of products and services	8.3 Quality assurance	
GRI 417: Marketing and logo 2016	417-1 Requirements for information and identification of products and services	8.3 Quality assurance	
	417-2 Violations involving product and service information and labeling	not applicable	The case is not involved
	417-3 Violations involving marketing communications	not applicable	The case is not involved
GRI 418: Customer privacy 2016	418-1 Substantiated complaints concerning violations of customer privacy and loss of customer data	8.4 Customer first	

12. EXPLANATION OF TERMS

Proper noun	Paraphrase
Greenhouse gases	Including carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride.
CCER	CCER(Chinese Certified Emission Reduction) refers to China's certified emission reduction. According to the Interim Measures for the Management of Voluntary Greenhouse Gas Emission Reduction Trading, the emission reduction participating in voluntary emission reduction shall be registered and filed in the national voluntary emission reduction trading register by the competent national authorities. The recorded emission reduction is called China Certified Emission Reduction CCER. After the voluntary emission reduction project has been filed, it shall be traded in the registered trading institution.
Nitrogen oxide	Including a variety of compounds, such as nitrous oxide (N ₂ O), nitric oxide (NO), nitrogen dioxide (NO ₂), nitrous oxide (N ₂ O ₃), nitrous oxide (N ₂ O ₄) and nitrous oxide pentoxide (N ₂ O ₅). In addition to nitrogen dioxide, other nitrogen oxides are extremely unstable, when exposed to light, humidity or heat into nitrogen dioxide and nitric oxide, nitric oxide into nitrogen dioxide. Therefore, the occupational environment is exposed to several gas mixtures, often called smoke (gas), mainly nitric oxide and nitrogen dioxide, and mainly nitrogen dioxide. Nitrogen oxides have varying degrees of toxicity.
Denitration technology	Technical measures to prevent excessive nitrogen oxides and NO _x from polluting the environment after coal combustion in cement kilns, reduce the production of NO _x and remove NO _x from flue gas.
Desulphur technique	Technical measures to prevent excessive SO ₂ from polluting the environment after coal combustion in cement kilns, reduce SO ₂ production and remove SO ₂ from flue gas.
Waste heat generation technology of cement kiln	Technology that uses waste heat generated during cement production to generate electricity. In the process of cement production, kiln head and kiln tail will discharge a lot of waste heat waste, the temperature of these waste is usually below 350 °C , cement kiln waste heat power generation technology refers to the recovery of heat in these waste gases, through the waste heat boiler to generate steam, drive turbine power generation. The technology helps to improve energy efficiency, reduce production costs, and reduce environmental impact.
Enclosed belt corridor transport	Enclosed belt corridor transport for long distance transport of ore bulk materials. The belt corridor will transport raw materials from the mine to the cement production plant, composed of conveyor belts, driving devices, brackets, etc., with simple structure, reliable operation, easy maintenance and other advantages, can reduce the carbon emissions generated by the vehicle transportation of raw materials in the cement plant, and also reduce the dust diffusion caused by the transportation of raw materials.
Cement kiln collaborative solid waste disposal	Cement kiln collaborative solid waste disposal is a kind of technology that puts solid waste into cement kiln, and realizes the harmless treatment of waste while producing cement. In the collaborative disposal of hazardous wastes in cement kilns, due to high temperature, large heat capacity and long residence time of waste, organic harmful substances can be burned more thoroughly and dioxins can be avoided. The alkaline environment of cement kiln can absorb acid gas in incineration and realize harmless treatment of hazardous waste.
Climate change	In its current common usage, climate change describes global warming and its effects on the Earth's climate system.
Climate adaptation	Climate adaptation refers to the process of adapting to the effects of climate change, which may be present or expected. Climate adaptation requires human actions to help adjust natural systems, to mitigate or avoid the harm of climate change to humans, and to take advantage of opportunities.
6S management	6S management refers to the six projects of sorting SEIRI, sorting SEITON, cleaning SEISO, cleaning SEIKETSU, literacy SHITSUKE and SECURITY, which all start with S and are referred to as 6S, aiming to improve the overall quality of work.

13 . READER FEEDBACK

Dear readers,

Hello! Thank you very much for taking time out of your busy schedule to read the China Tianrui Cement 2023 Environmental, Social and Governance Report. In order to continuously improve the level of report preparation and continuously enhance the ability to perform responsibilities, we look forward to your valuable comments or suggestions. Please help to complete the relevant questions in the feedback form, and choose the following ways to feedback to us:

Your comments on this report: (Please tick)

1. Please evaluate the significant impact of China Tianrui Cement on the economy, society and environment

Great Good General Poor Do not understand

2. Please comment on the response and disclosure of the concerns of stakeholders

Great Good General Poor Do not understand

3. Please evaluate the clarity, accuracy and completeness of the information, indicators and data disclosed in this report

Great Good General Poor Do not understand

4. Please evaluate the readability performance of this report

Great Good General Poor Do not understand

5. Please make a comprehensive evaluation of the Annual Environment, Society and Governance Report of China Tianrui Cement in 2023

Great Good General Poor Do not understand

6. What do you think is most satisfactory with this report?

7. What shortcomings do you think exist in this report?

8. What other suggestions do you have for our future environmental, social and governance reports?

Your Information: Which of the following stakeholders do you belong to?

Government Shareholders Customers Employees Regulators
 Suppliers and partners Community Public and media Other:

Thanks again for your participation!

The Group welcomes any comments or suggestions regarding this report, please email ir@tianrui.com or ir@ctr cement.com to provide your feedback



CHINA TIANRUI GROUP CEMENT COMPANY LIMITED

中國天瑞集團水泥有限公司

(Incorporated in the Cayman Islands with limited liability)

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