

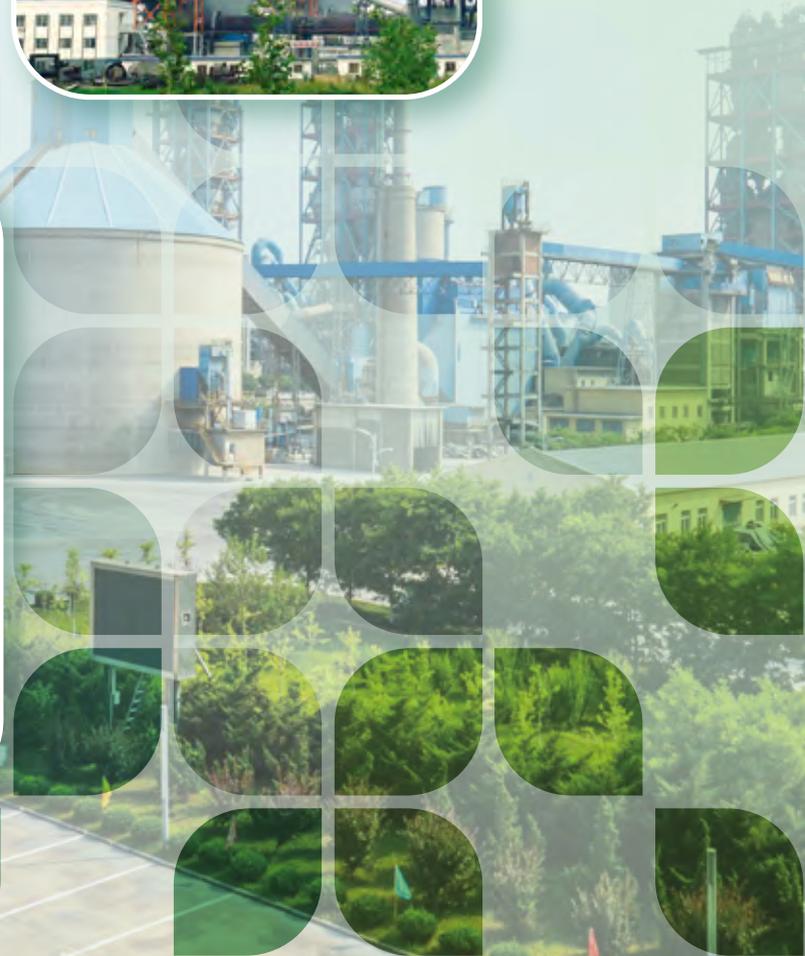


CHINA TIANRUI GROUP CEMENT COMPANY LIMITED
中國天瑞集團水泥有限公司

(Incorporated in the Cayman Islands with limited liability)
Stock Code: 1252

2022

Environmental, Social and
Governance Report



CONTENTS

1	ABOUT THE COMPANY	2
2	ABOUT THIS REPORT	3
2.1	BASIS OF PREPARATION OF REPORT AND SCOPE OF REPORTING	3
2.2	CONTACT INFORMATION	3
3	MESSAGE FROM THE BOARD OF DIRECTORS	4
4	STAKEHOLDER PARTICIPATION AND MATERIALITY ASSESSMENT	7
5	OVERVIEW OF THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE PERFORMANCE	10
6	ENVIRONMENT	12
6.1	EMISSION CONTROL MANAGEMENT	13
6.2	EFFICIENT USE OF RESOURCES	16
6.3	ENVIRONMENT AND NATURAL RESOURCES	18
6.4	CLIMATE CHANGE	19
7	PRODUCT RESPONSIBILITY	20
7.1	SUPPLY CHAIN MANAGEMENT	21
7.2	QUALITY AND COMPLIANCE MANAGEMENT	23
8	MANPOWER	25
8.1	EMPLOYMENT AND RESPECT FOR LABOUR RIGHTS	26
8.2	SAFETY AND HEALTH	29
8.3	EDUCATION, TRAINING AND CAREER DEVELOPMENT	32
9	SOCIETY	34
9.1	ETHICS, INTEGRITY AND ANTI-CORRUPTION	35
9.2	COMMUNITY PARTICIPATION	35
10	AWARDS AND RECOGNITION	38
11	VISION	43
12	HKEX ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDE INDEX	44

1 ABOUT THE COMPANY

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 production, sales and export of cement, clinker, fly ash, slag powder, concrete, aggregates and other cement products. The Group has 20 clinker production lines and 58 cement grinders for the year ended 31 December 2022. The annual production capacity of clinker, cement and aggregates is approximately 28.4 million tonnes, 56.4 million tonnes and 30.2 million tonnes respectively.

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



2 ABOUT THIS REPORT

2.1 BASIS OF PREPARATION OF REPORT AND SCOPE OF REPORTING

This Environmental, Social and Governance Report (the “Report”) is prepared in accordance with Appendix 27 *Environmental, Social and Governance Reporting Guide of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited*, and 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 is based on the principle of “Materiality”, “Quantitative”, “Balance” and “Consistency”.

Materiality:

In order to identify and assess the material concerns of our stakeholders, the Group determines the factors that have material impacts on our sustainable growth through engaging and communicating with stakeholders.

Quantitative:

The quantitative principle applies to all information in this Report. All performance indicators are provided with clear definition and unit measurement is clearly stated.

Balance:

The source of information and cases of this Report was mainly obtained from the Company’s statistical reports, relevant documents and internal communication documents. The Group undertakes that this Report does not contain any false information or misleading statement, and accept responsibility for the contents of this Report as to its authenticity, accuracy and completeness.

Consistency:

We prepared this Report in accordance with the Guidelines. Should there be any changes in the future that may affect the comparison with previous reports, footnotes will be added by the Group in the corresponding sections of the Report.

This Report has fulfilled the “Comply or Explain” requirements set out in the Guidelines. It has also provided the performance of key performance indicators in regard to the Group’s social aspect, following the “recommended disclosure” requirements in the Guidelines.

The Report covers environmental, social and governance related activities from 1 January 2022 to 31 December 2022 (the “Reporting Period”).

This Report covers the main production areas of the Group that include its cement, clinker and aggregates production businesses in Henan, Liaoning, Tianjin and Anhui Province, among them, Henan and Liaoning account for the largest proportions.

2.2 CONTACT INFORMATION

The Group welcomes comments and suggestions related to the Report. Please feel free to send us your feedback to larryli@ctrcement.com or ir@ctrcement.com.

3 MESSAGE FROM THE BOARD OF DIRECTORS

WE ARE PLEASED TO SHARE THE GROUP'S SIGNIFICANT
ACHIEVEMENTS IN PROMOTING SUSTAINABLE DEVELOPMENT
IN THIS REPORT.

The Group has been ranked among the top 10 high clinker production capacity companies worldwide and the top 20 high cement production capacity companies globally. It has repeatedly been ranked among the top 10 Chinese listed cement companies in terms of overall capabilities, and has won the honor of “Craftsman of the Century” being a quality materials supplier and a distinctive brand enterprise in the Chinese construction industry. It has also been nominated as the leading company in the manufacturing industry by the officials in Henan Province.

The board of directors (the “Board”) of the Company assumes the overall responsibility for the sustainable development, and leads the Group to fulfil social responsibility. We will also ensure its development direction is in line with the stakeholders’ expectations by ongoing sustainability risk management and stakeholder communication.

The Board has implemented measures such as reducing emissions, prudent use of resources, enhancing occupational safety and health, as well as focusing on development and training. We are convinced that the measures can help the Group achieve the established mission and goals of the group. The Board believes that emphasizing ESG management has lots of benefits, including increasing the group’s income and enhancing the corporate brand image, reducing operating costs and improving corporate competitiveness. It can also enhance the group’s ability to comply with relevant laws & regulations, and promote community development, in order to give back to society.

The Board has actively participated in relevant training, in order to understand the latest developments in ESG issues. When circumstances arise, the Board will consider inviting relevant experts to join the Board to upgrade the relevant expertise of existing Board. Our main operating units have set up a working group to set ESG targets, and to regularly reviews the effectiveness of the plans. The Board establishes strategies to allow the operating units to have a clear direction when formulating plans and goals. The Board also regularly review the effectiveness of the plan. The working group will collect ESG data, and report to the Board every six months to one year. The Board regularly reviews strategies and plans, and reviews ESG reports to ensure that the group's development direction and level of disclosure of the group are in line with the expectations of stakeholders.

Risk management in ESG-related areas is of crucial importance to the Board. The Board communicates with different stakeholders and utilised their broad understanding of the business to assess each relevant risk and incorporated relevant risks into our risk management and internal control system. As a result, this can promote comprehensive risk management within the Group. The Group pays particular attention to the environmental risks regarding exhaust and greenhouse gas emissions and the related regulations.

Six companies affiliated with the Group have been selected as "energy and carbon management role model enterprises" in Henan Province, among which Tianrui Zhengzhou Cement was selected as a "peak carbon trial enterprise" in Henan Province. During the Reporting Period, Tianrui Xindeng Cement's first phase of photovoltaic power generation was connected to the grid. The Group has added one A-level, three B-level, and two performance-leading companies, bringing the total number of A-level, B-level, and performance-leading companies to 23.

The Board believes that, by focusing on reducing exhaust and greenhouse gas emissions and properly managing their associated risks, and ensuring occupational health and safety, we can help the Group achieve its goal of establishing an excellent corporate image. Therefore, the Group will set targets to regularly review our emissions data and occupational safety statistics as these targets and assessments are indicators of effective operational control.

The cement industry continues to implement government supply-side reforms and a series of policies such as environmental protection and energy conservation, implementation of energy conservation and emission reduction, off-peak production, comprehensive mine renovation, which leading the improvement of self-regulation in the industry. The Group actively planned and strictly implemented off-peak production. It actively optimizes the product structure to promote digital and intelligent innovation and efficiency, so that the Group can save energy and reduce costs. Remarkable results have been achieved in terms of energy consumption and green environmental protection.

3 MESSAGE FROM THE BOARD OF DIRECTORS

The Group attaches great importance to corporate social responsibility and is committed to promoting business development and bringing greater returns to stakeholders. The Group endeavored to fulfill its corporate social responsibility during the year. The management focused on staff professional skills training and team building, and won numerous provincial and municipal quality awards. In the Kangnuofu Cup cement chemical analysis competition, all 27 companies of this group won awards. The Group is committed to fulfilling its own environmental responsibilities, continuously optimizing its production process, and building a smart manufacturing role model enterprise. Its “smart process manufacturing solution” won the Outstanding Application Award for Smart Manufacturing in China. Tianrui Ningling Cement was included in the project list of 2022 Provincial High-Quality Manufacturing Development Support Fund and was awarded the title of “Smart Factory” in Henan Province. Liaoyang Tianrui Cement was awarded the title of “Smart Role Model Factory” in Liaoning Province and was nominated as a “digitalized role model enterprise” in Liaoning Province in 2022. Another three subsidiaries of the Group were recognized as “high-tech enterprise” this year, as a result, there were totally 18 high-tech enterprises under the Group.

The Group saved water and energy, took preventive measures to environmental pollution, and established management systems in relation to quality, environment, energy, and occupational health and safety, as well as obtained the “Five in One” Certification. Many branches also obtained a number of provincial-level and municipal-level honors such as the Green Mine, the Green Factory, the Green Supply Chain. Tianrui Xindeng Cement and Liaoyang Tianrui Cement were awarded the title of “National Green Factory”, and at the end of the Reporting Period, Tianrui Cement had a total of 9 green factories, including 3 national-level ones. The Henan Provincial Department of Natural Resources also released the “Henan Province Green Mine Directory”, which includes 13 green mines affiliated with Tianrui Cement, including 6 national-level ones. The Group also participated in public welfare activities such as helping the underprivileged, volunteering in the community, and creating a stable and harmonious community environment.

The purpose of this Report is to disclose the Group’s environmental, social and governance management methods and the overall performance achieved by each measure. We strive to play an important role in the circular economy, sparing no effort in the sustainable management of raw materials and by-products to continue to provide high quality products. We would like to thank all departments and teams for their dedication and contribution to the Group’s sustainable development.

4 STAKEHOLDER PARTICIPATION AND MATERIALITY ASSESSMENT

A high quality environmental, social and governance report must include a review on stakeholders' involvement, as well as a materiality assessment. Therefore, the Group determines which issues are of crucial importance to our business by reviewing the degree of involvement of various stakeholders and their opinions on the development of the Group. Accordingly, the Group decides which issues are to be prioritized and dealt with first.

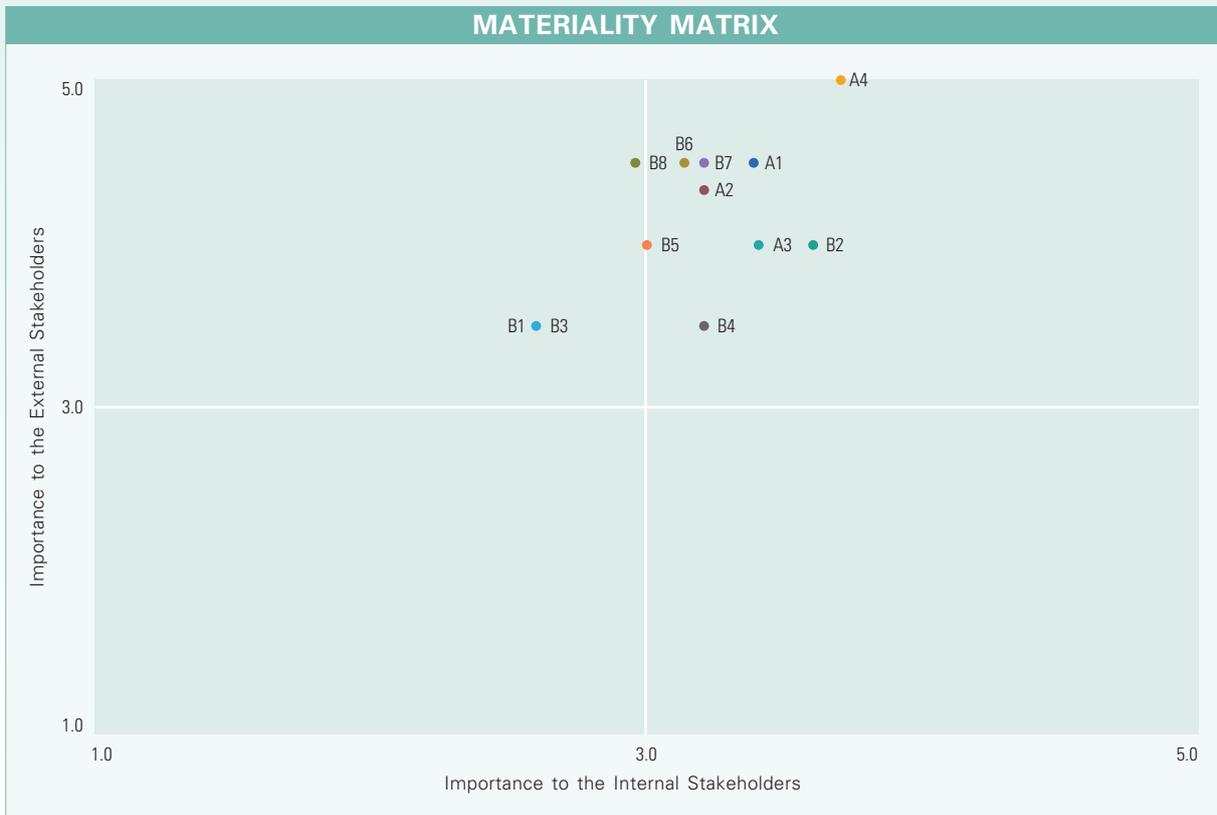
The Group therefore invited all stakeholders to participate in an online survey. Both external stakeholders, such as customers and suppliers, and internal stakeholders such as directors and employees (including management level staff and general staff) are invited to participate in our survey. Based on their opinions on the importance of different issues to the Group and their respective communities, the Group rated the importance of each issue specified in ESG guideline.

We can decide on the importance of each issue that is to be reported after all participant giving their opinions. The importance of each issue to be reported is determined by taking the average of the level of importance rated by the respondents of that stakeholder group in the survey. The overall importance rating across multiple stakeholder groups is the average of the importance ratings for each group.

To illustrate our findings clearly, the materiality matrix below illustrates the importance of each issue rated by internal and external stakeholders respectively. The materiality matrix classifies the concerns the directors of the Group and other stakeholders by the rating of each issue (i.e. ranking 1-5). The issues situated in the top right corner of the materiality matrix are viewed as the most important by all stakeholders.



4 STAKEHOLDER PARTICIPATION AND MATERIALITY ASSESSMENT



Indicators

A1 Emissions	B1 Employment
A2 Use of Resources	B2 Health and Safety
A3 Environment and Natural Resources	B3 Development and Training
A4 Climate Change	B4 Labour Standards
	B5 Supply Chain Management
	B6 Product Responsibility
	B7 Anti-Corruption
	B8 Community Investment

We have received responses from all stakeholders who are invited to give opinions in the survey. Issue A4 “Climate Change” is identified as the most important issue in the topic of Stakeholder Participation and Materiality Matrix. Issue B1 “Employment” and B3 “Development and Training” are rated as the least important issues. However, most issues are being positioned above the threshold of the materiality (i.e. its importance to the Group and various stakeholders is rated at 3.0 or above).

4 STAKEHOLDER PARTICIPATION AND MATERIALITY ASSESSMENT

The table below summarizes the top material ESG issues concerned by different stakeholders.

Stakeholder Groups	Top Material Issues
 Employee	A4 Climate Change B7 Anti-Corruption
 Client	A4 Climate Change
 Supplier	A4 Climate Change B5 Supply Chain Management

In response to the concerns of relevant stakeholders, the corresponding chapters of this Report have disclosed the relevant policies and measures implemented by the Group. The Group firmly believes that understanding stakeholders' expectations is critical to the direction of company development. It values the comments and feedback of each stakeholder. The Group has carried out intermittent contact with stakeholders through various channels, including clients, employees, government organizations and community organizations, with a view to building consensus on corporate social responsibility. The Group proposed a corporate social responsibility framework that covers four main areas, namely the environment, product responsibility, manpower and society, for the sustainable development goals of itself and its stakeholders based on a mutual understanding.

5 OVERVIEW OF THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE PERFORMANCE



Environment

- Obtained the Environmental Management and Energy Management System Certification
- Conducted carbon emissions accounting
- Introduced modern techniques to improve the “ammonia-free denitrification” of rotary kilns to reduce nitrogen oxide emission
- Used denitrification system and high quality coal with low sulfur content to reduce the discharge of pollutants
- Installed electrostatic bag composite dust remover to increase dust removal efficiency in exhaust
- Used enclosed belt conveyors and storage sheds and installed vehicle cleaning equipment and dust collectors in loading lane to reduce dust
- Used advanced NSP technology and waste heat recovery system in production line to increase energy efficiency during production
- Installed water recycling system, implemented the recycling of water resources at the production lines to achieve zero industrial wastewater discharge
- Used industrial by-products of other industries as production resources to build a cross- industry circular economy industry chain
- Many branches obtained a number of provincial-level and municipal-level honours such as the Green Mine, the Green Factory, the Green Supply Chain



Product Responsibility

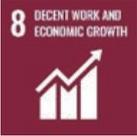
- Obtained Quality Management System Certification
- Self-built laboratory obtained Cement Industry Laboratory Certification
- Regularly appointed testing organizations at provincial-level or above to test product quality
- Committed to completing investigations regarding complaints received by the relevant department within 24 hours. Held supplier exchange conferences to promote communication between parties

5 OVERVIEW OF THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE PERFORMANCE



Manpower

- Valued multiculturalism, advocated gender equality
- Obtained Occupational Health and Safety Management System Certification
- Organized monthly comprehensive safety inspections
- Hired a third-party agency to conduct occupational health status assessments every three years
- Provided employees with personal protection equipment



Society

- Published the whistle-blowing telephone number, e-mail address and instant messenger number to ensure the confidentiality of reporting of incidents
- Set up a prevention education division to educate the staff by using corruption and bribery cases
- Organized exchange visits with the local auditing and judiciary department
- Come out in full force to volunteer for anti-pandemic work in the community
- Actively volunteered for tree planting activities and visits to underprivileged and needy families
- Actively participated in charitable projects such as local road repairs and building water conservancy projects

06

ENVIRONMENT



6 ENVIRONMENT

6.1 EMISSION CONTROL MANAGEMENT

The Group continues to adopt new management measures and new facilities to improve environmental quality, eliminates old production models, strives to improve environmental performance, and proactively react to the concerns of different stakeholders on the emissions in the cement industry.

The clinker production process in the cement industry is one of the main sources of atmospheric pollutant emission. Burning coal in the kiln is the main source that causes atmospheric pollutant emissions. Emissions include contaminants such as nitrogen oxide, sulphur dioxide and suspended particulate matter. The Group has always adhered to high environmental protection standards by adopting various measures to reconstruct the production flows as below:

- Used denitrification systems and introduced modern techniques to improve the “ammonia-free denitrification” of rotary kilns to reduce emissions of nitrogen oxide;
- High quality coals with low sulphur content were used to reduce sulphur oxides production;
- Electrostatic bag composite dust removers were installed to increase efficiency of removing exhaust air dust;
- Enclosed belt conveyors and sealed ingredients scale were used;
- Retrofitted fast curtain doors and set up enclosed sheds;
- Hardened roads and retrofitted sprinklers devices;
- Retrofitted dust collectors in loading lane; and
- Vehicles are washed before they leave factories to reduce dust.

The particulate matter emission concentration of all production lines of the Group are below the threshold of 10mg. The Group has installed flue gas treatment facilities such as denitrification systems and bag composite dust removers for all clinker production lines. The emission concentrations of sulfur dioxide, nitrogen oxides and particulate matter have been lower than the national pollutant emissions standard limits. The Group aims to meet the best practices of emission control in the cement industry. We have set up a central control room to track and monitor production in real time, and installed an online pollutant monitoring system at the kiln head and kiln tail to ensure stable emission.

6 ENVIRONMENT

During the Reporting Period, the Group has complied with laws and regulations related to particulate matter, nitrogen oxide and sulfur dioxide emissions, such as:

- the Law of the People’s Republic of China on the Prevention and Control of Atmospheric Pollution;
- the Emission Standard of Air Pollutants for Cement Industry;
- the Standard for Pollution Control on Co-processing of Solid;
- the Technical Specifications for Environmental Protection in Collaborative Disposal of the Solid Waste of Cement Kilns;
- the Measures for the Administration of Automatic Monitoring of Pollution Sources;
- the Specifications and Test Procedures for Continuous Emission Monitoring Systems Flue Gas Emitted from Stationary Sources.

Overview of Atmospheric Pollutant Emissions	
Pollutant Emissions ¹	Total Amount
Nitrogen oxide (Tonnes)	4,873
Particulate matter (Tonnes)	230
Sulfur dioxide (Tonnes)	1,336

As burning coal in the kiln directly and other energy consuming equipment generates direct and indirect greenhouse gas emissions respectively, the Group uses calcined calcareous raw materials and reduces annual coal consumption to reduce carbon emissions. The Group has identified carbon emission sources according to the requirements of the national and provincial development and reform commission policy and subcontractors’ verification agencies. For the incomplete projects and imperfect practices, the Group would carry out analysis and remedy, calculate the carbon emission amount according to the relevant carbon emission policy and calculating method, evaluate the effectiveness of carbon reduction regularly and implement quantifiable carbon reduction targets in its production and operation. Our subsidiaries would set energy-saving and carbon-reduction targets in the light of their own circumstances according to the “Norm of Energy Consumption per Unit Products of Cement” (GB16780), assess energy-consumption intensity monthly, analyze the performance of energy-saving and carbon reduction, and enable appropriate measures to be implemented.

During the Reporting Period, six subsidiaries of the Group such as Tianrui Zhengzhou Cement (天瑞鄭州水泥), Tianrui Xindeng Cement (天瑞新登水泥), Tianrui Yongan Cement (天瑞永安水泥), Weihui Tianrui Cement (衛輝天瑞水泥), Yuzhou Qianjing Cement (禹州淺井水泥), Tianrui Nanzhao Cement (天瑞南召水泥) were announced on a list of the enterprises to be qualified as Exemplary Enterprise for Energy and Carbon Management in Henan Province. Six enterprises passed the assessment of Exemplary Enterprise for Energy and Carbon Management in Henan Province, which would help the Group to further develop the “digitalized energy consumption” and carbon emission management system.

¹ Pollutant emissions amount is based on the actual measurement of the on-site monitoring system at the factory. Amount of particulate matter includes the total amount of smoke and dust from main ventilation outlet and the total amount of industrial dust from general ventilation outlet.

6 ENVIRONMENT

Overview of Greenhouse Gas Emissions	
Greenhouse Gas Emissions ²	Total Amount
Scope 1: Direct emissions (from production line) (Tonnes of carbon dioxide equivalent)	17,965,086
Scope 2: Indirect emissions (from electricity consumption) (Tonnes of carbon dioxide equivalent)	1,027,063
Total amount of greenhouse gas emissions (Tonnes of carbon dioxide equivalent)	18,992,149
Intensity of greenhouse gas emissions (Tonnes of carbon dioxide equivalent/tonnes of cement production)	0.69

The Group insists on recycling waste generated in the production process, and disposes of hazardous and non-hazardous waste in separation approach. Hazardous waste generated at the production site mainly came from chemicals used for machinery maintenance. Under certain circumstances, chemical waste produced from large production processes would be used again as lubricating material for on-site equipment and machinery. Other chemical wastes that could not be reused would be appropriately stored and handled according to local laws and regulations. The Group classified waste rock and soil from mining and sold to construction sites to be reused. Other recyclable waste material such as steel scrap produced from equipment replacement would be regularly collected and handled by recycling companies. As the Group focuses its production of cement in synergy, there is no significant amount of non-hazardous waste discharged.

Xiaoxian branch set hazardous waste reduction targets to recycle all hazardous waste. Liaoyang Branch is committed to taking a variety of measures to reduce hazardous waste, and setting a goal to reduce the amount of hazardous waste generated by 5% with compared to 2022 by the year 2024. Liaota branch is committed to taking a variety of measures to reduce hazardous waste, with the goal of reducing hazardous waste generation by 10% as compared with 2020 by the year 2025. The Environmental Protection Committee collects information on hazardous waste on a quarterly basis to monitor and evaluate the effectiveness of the measures.

During the Reporting Period, the Group complied with relevant laws and regulations, including:

- the Law of the People’s Republic of China on the Prevention and Control of Environmental Pollution of Solid Waste;
- the Standard for Pollution on the Storage and Disposal Site for General Industrial Solid Wastes

Waste Data Overview	
Hazardous waste (Tonnes)	289

² Being calculated according to the Greenhouse Gas Emissions Calculation Method and Reporting Guide for China’s Cement Production Companies (Trial) and based on grid emission factor. According to historical data, the greenhouse gas emissions caused by fuel and gas consumption only accounted for about 0.1% of the total amount of Scope 1 and Scope 2, which were not included in the data in this table based on the principle of materiality. The calculation of indirect electricity emissions of all regions during the Reporting Period was based on the national power grid emission factor of 0.581 tonnes of carbon dioxide/MWh announced by the Ministry of Ecology and Environment in March 2022.

6.2 EFFICIENT USE OF RESOURCES

The cement industry plays a key role in building a cross-industry economic cycle, and continues to make good use of the uniqueness of the industry to recycle and make good use of industrial by-products or waste from other industries as production resources. As one of the environmental protection pioneers in the industry, the Group also helps to further improve the environmental protection performance of different industrial.

The Group used its production line to absorb fly ash from power plants, slag from steel plants, sulfuric acid slag and industrial by-products such as limestone tailings from chemical plants to use as production resources. The Group obtained necessary licenses for limestone mining, and satisfied the mining conditions and procedural requirements of paying mine resource compensation and taxes. This allows the Group to carry out mining work in a manner that was compliant to the existing laws and regulations in the PRC. The Group has set up factories near the main raw material, limestone, mining source and sales channels to reduce resources used for transportation of raw materials and finished products.

All clinker production lines have been equipped with advanced NSP technology to reduce energy consumption and atmospheric pollutant emissions. The Group has equipped most production lines with residual heat recovery system, so that the heat generated from the clinker production process would be captured and recycled through the heat recovery system for cement production, to reduce the overall energy required for production, in order to further reduce the resources consumed during production. Moreover, the Group contributed to a cleaner production and saved a substantial amount of cost by improving efficiency and reducing coal consumption of production line, to improve its competitiveness.

The subsidiaries would set energy-saving and carbon-reduction targets in the light of their own circumstances according to the “Norm of Energy Consumption per Unit Products of Cement” (GB16780), assess energy-consumption intensity monthly, analyze the performance of energy-saving and carbon reduction, and enable appropriate measures to be implemented.

Xiaoxian branch aims to save 0.5 kWh of electricity per tonne of clinker and 0.5 kWh of electricity per tonne of cement. Liaoyang Branch set an electricity saving target — reducing use of electricity by 200,000 kilowatt-hours. The targets was accomplished during the Reporting Period with compared with the previous Reporting Period that reduced electricity by 210,000 kWh.

During the Reporting Period, energy consumption mainly includes from coal consumption and electricity usage during the production process. The table below shows the energy consumption of the Group during the Reporting Period.

Overview of Energy Consumption of the Group ³	
Direct energy	
Coal (MWh)	19,997,334
Indirect energy	
Electricity (MWh)	1,767,750
Total energy consumption (MWh)	21,765,084
Energy intensity (MWh/tonnes production of cement)	0.79

³ According to historical data, solar power, fuel and gas consumption accounted to less than 0.5% of the total energy consumption, which is not included in the data in this table based on the principle of materiality.

6 ENVIRONMENT

In view of the extremely precious water resource, in order to improve water efficiency, the Group has formulated a water-saving management system and adopted the following measures:

- Installed water recycling systems, water resources at the production line would be treated and reused;
- Recycled water was used as cooling agent for production facilities;
- Discharged water treated by sewage treatment station was used for greenery irrigation; and
- Recycled water was used for watering and dust control.

The Group achieved zero industrial wastewater discharge so as to reduce water consumption. For common domestic sewage, the Group put the sewage into sewage treatment station for treatment in accordance with the requirements of the sewage discharge permit.

The Group aims to reduce water consumption in the long run. Through a series of water-saving measures, Nanzhao Branch won the title of water-saving enterprise during the Reporting Period.

Overview of Water Consumption	
Total water consumption (m ³)	584,183
Water consumption intensity ('000 m ³ /Million tonnes production of cement)	21

The Group mainly uses internal recycled water for industrial water use, reducing the pressure on external water sources caused by production activities to a lower level. The amount of recycled water is not included in the above water consumption data because no external water sources were used.

During the Reporting Period, the amount of material used for product packaging is as follows:

Overview of Amount of Packaging Material Used	
Total amount of packaging material (tonnes)	1,076
Intensity of packaging material usage ('000 tonnes/Million tonnes production of cement)	0.04

6.3 ENVIRONMENT AND NATURAL RESOURCES

The Group accomplished energy saving, carbon reduction and ultra-low emissions through transformation and upgrading. The Group is committed to improving its environmental performance in the industry from various aspects, by upgrading and transforming the hardware to enhance production efficiency, promoting and strengthening awareness of environmental protection by means of software application. The Group's headquarters and all subsidiaries of the Group have passed the four-in-one certifications for quality, environment, occupational health and safety management systems and products. All clinker production lines have passed the Energy Management System Certification. The Group has established coal, energy, water and gas conservation management policies and measures, and have set incentives to encourage repair and reuse, and to conserve energy as well as enhance productivity by technological transformation. The Group has placed great importance on enhancing the environmental awareness of the employees in regards to daily work tasks and production by providing seminars and training on environmental protection periodically.

As the 51st World Environment Day is approaching, Tianrui Yuzhou Qianjing Cement (天瑞禹州淺井水泥) organized a publicity campaign for World Environment Day with a theme "Building a Clean and Beautiful World Together", which highlighted the priorities of the reporting of Grade A performance and the green factory project, and required all employees to support environmental protection management, improve the areas on environmental protection that need to be improved, and save water and electricity.



The Group vigorously carried out mine restoration and greening work in the process of mining, which effectively reduced the soil erosion in and around the mine. The Group actively carried out the construction and planting of green mines, that started to yield results and being included in the National Green Mine List by the Ministry of Natural Resources.

During the Reporting Period, Tianrui Xindeng Cement and Liaoyang Tianrui Cement were awarded the title of "National Green Factory", and at the end of the Reporting Period, Tianrui Cement had a total of 9 green factories, including 3 national-level ones. The Henan Provincial Department of Natural Resources also released the "Henan Province Green Mine Directory", which includes 13 green mines affiliated with Tianrui Cement, including 6 national-level ones.



6 ENVIRONMENT

6.4 CLIMATE CHANGE

The Group understands that climate change is an indisputable fact. The Group is concerned about the implication of climate change and it has already identified and assessed the risks of it. The Group formulated measures to mitigate the impact of the physical risks brought by the climate change on the Company's operations, which include ensuring the infrastructure of the Company having a design capacity to withstand extreme weather and strictly following the relevant extreme weather guidelines issued by the government, in order to protect its employees. Various measures include publishing timely extreme weather warning, emergency drills, strengthening plant facilities, installing flood protection barriers that can withstand higher water level, installing more emergency power supply and water supply facilities, and backup power generators. When dealing with emergencies, the emergency procurement plan is activated, where the safety reserve is established according to the production demand to maintain production. Each of business unit regularly clears the drainage channels and stores emergency supplies to deal with extreme weather. The mine is prohibited to accumulate soil and waste in order to prevent the damage of landslips arising from extreme weather. In the light of the transitional risk of climate change, the Group adheres to "The Norm of Energy Consumption per Unit Products of Cement" (GB16780) to ensure the energy consumption per unit of production keeps up with market standard. The Group strives to improve its own performance, and pays close attention to the development of domestic carbon emission trading platforms, with a view to ensuring a smooth transition when the Group or its operating divisions are included in the platform.



07

PRODUCT RESPONSIBILITY



7 PRODUCT RESPONSIBILITY

7.1 SUPPLY CHAIN MANAGEMENT

The Group makes good use of its own industrial characteristics to aid various industries in improving their waste material management. Some materials required for production are derived from industrial by-products and waste. This sustainable procurement policy effectively solves corporate social responsibility problems in the supply chain. The Group's management committee, legal affairs department, control department, finance department, audit department and other professional management departments supervise, inspect and assess all material bidding of the Group. The control division of the Group is the main supervising body during the bidding procedures and is responsible for the Group's inspection work.

Number of active suppliers by geographical region	
Mainland China	1,487
Other regions	0

The supplier engaging practice of the Group is applicable to all existing suppliers. During the procurement process, the Group would make supplier selections through bidding procedures based on factors such as quality, pricing, delivery time, service quality, reliability, the geographical location, environmental and social risks. A closer proximity to the Group's operational site would enable better control on delivery time and reduce the environmental impacts caused by transportation, so suppliers which are located close to the production site would be considered with first priority after considering a wide range of matters.

The Group would regularly evaluate suppliers by assessing the quality of goods supplied, timeliness, after-sale service and other considerations such as suppliers' track record of compliance with relevant environmental and social laws. The evaluation of electronic platform suppliers will need to take account of the convenience and operability of the procurement platform, the reliability and stability of the procurement channel, and the traceability of material sources. To promote communication and enhance mutual trust, the Group regularly holds supplier exchange conferences to strengthen cooperation and reduce risks in the supply chain. During the Reporting Period, there were exchanges on topics such as rolling machine technology, hydraulic system training, permanent-magnet motor use training, domestic DCS system and domestic inverter replacement for imported technology exchange, high and low voltage cabinet standardisation training and exchange, and new environmentally friendly refractory material use exchange. The main purpose was to understand the direction of industry development and the application of new products.

The Group has also maintained a list of suppliers for sourcing. Based on the environmental and social risks that are associated with each supplier, we classify suppliers into categories of high, medium and low level of risks:

- develop a Supplier Code of Conduct, which suppliers are required to comply with;
- require suppliers to complete an ESG risk assessment questionnaire;and
- arrange our staff to conduct on-site inspections if necessary

7 PRODUCT RESPONSIBILITY

The Group has set up a policy on assessing the suppliers' environmental and social risks. With reference to the ESG questionnaire and the findings collected from on-site inspections, the Group regularly monitors ESG-related risk and the performance of our suppliers. The areas being assessed include personal protection gear, guidelines on safe working procedures, and regular assessment of risks and training. We monitor the performance of the suppliers in regard to the environmental risks of the projects they take part in. This includes assessing the air pollution and proper disposal of waste water in their operations. The purpose of this is to minimize the risk of the supplier violating certain environmental laws and regulations and review the Supplier List regularly. After assessing suppliers, we will learn about the implementation of their social responsibility system. The scope of assessment mainly includes the social responsibility targets made by such supplier, the availability of standards and reaction plans for determining and evaluating adverse impacts and beneficial impacts, checking its monitoring process, evaluation records, and measures and actions taken by suppliers for its social responsibility performance in terms of environment, safety, and major social disasters, etc.

To promote environmentally-friendly procurement, the Group adopts a digitalization and centralization approach in regard to procurement procedures. Staff can use our platform to order equipment, materials and office supplies. The whole process can be done online and paperless. The whole procedure, starting from application for purchasing an item to getting management approval, getting price quote and any other steps, is paperless.

The Group's "Material Supply Management Regulations" and "Material Purchasing Management Measures" specify the concepts and principles of green procurement — adhering to the concept of safe, timely, economical, and green supply, and upholding the principle of resource conservation, recycling, environmental protection, and friendly material procurement, to follow the national environmental protection and energy saving requirements. The Group has formulated a list of green product purchasing based on the principle of environmental procurement. From product design to the production and logistics of the product, we use recyclable, reusable materials and any other environmental materials, subject to our requirements being met, in order to minimize the negative impacts on the environment due to the materials we use. The Group regularly reviews the green materials which we use. For the materials that do not meet our requirement, we will communicate with the supplier and request them to improve the quality. If there is no improvement, the Group will remove such material the List for green materials.

In addition to supporting green products, the Group also supports green organizations. When selecting suppliers, if each supplier meets the basic requirements, the Group will give priority to those with outstanding performance in the field of environmental protection, such as obtaining certificates for environmental protection-related management systems issued by certification agencies, and environmental protection-related awards issued by environmental protection agencies and being the environmental protection institutions recognized by government departments. The suppliers in manufacturing field have to obtain ISO 14001 environmental management system and ISO 45001 occupational health and safety system certification.

7 PRODUCT RESPONSIBILITY

7.2 QUALITY AND COMPLIANCE MANAGEMENT

The Group has produced and sold high-quality products for many years, as well as always adheres to a unified, open and fair publicity strategy, and keeps up a high quality and good service, so that we have earned the “customer first and service first” reputation. The Group says no to monopoly and supports benign competition, so that it ensures that all aspects from raw material procurement to product sales are fair and lawful.

The Group’s quality control department is responsible for supervising the production process and inspecting the output quality of cement products in accordance with the GB175-2007 cement quality standard and the Group’s quality standard. To ensure that products comply with all relevant laws and customer requirements, the quality control department examines suppliers and reviews local requirements for product quality and health and safety. Our laboratory has been awarded the Cement Enterprise Laboratory Certificate and would test the quality safety of the products and raw materials according to various requirements. The finished products were inspected and tested in accordance with a variety of national standards, including compressive strength and cement chemical analysis. The Group has also appointed testing organizations at provincial-level or above to regularly carry out product quality tests to verify the accuracy of the test results performed by the laboratory, and to ensure that the product inspection information is reliable and effective.

Based on the ISO 9001 quality management international standards, the Group has established a comprehensive framework to manage quality of the products, and has obtained the Quality Management System Certification. The Group’s recall procedure requires that, once a product fails to meet standard, it must be recalled and the investigation will be carried out with a view to improving quality. The Group has strictly controlled the quality and remained committed to excellent after-sales service.

The Group’s Sales Customer Management Method explains what customers’ personal information and details is to be collected and which departments have the right to collect and use customers’ personal information. The level of customers’ information given to employees would correspond to the management level of the employee. Customers’ personal information would be used only for business development, internal analysis and customer relationship management and is strictly confidential.

The Group attaches great importance to the maintenance and protection of intellectual property rights, as well as undertakes not to purchase and use pirated products. All licensed products are purchased from distributors authorized by the copyright owners. The Group has a dedicated department responsible for monitoring intellectual property and customer information and has ensured that the Group abides to policies and laws related to information confidentiality and intellectual property. On the other hand, the Group proactively protects its intellectual property rights. The Group obtained more than 300 utility model patents and invention patents in cement production, operation management and technological transformation.

7 PRODUCT RESPONSIBILITY

Contact method for complaints have been posted at the place of sales, online promotion platforms, product manuals and product packaging labels. The Group has sought to improve the quality of its products and services through regular on-site visits, information exchange on the Internet, communicating with customers through telephone enquiries and carrying out customer satisfaction survey. The Group established emergency response plans for customer complaints at all levels to enable responsible departments would complete the investigation within 24 hours, and set up a customer service hotline, so that the professionals can be arranged immediately after receiving complaints to handle the complaints and to follow up, and relevant departments can be convened for consulting and resolving the issues. Responsible departments would collect customer feedback on a monthly basis, consolidate and analyze the information and follow up with any complaints.

During the Reporting Period, the Group recorded no recalled products due to health and safety issues and no substantiated complaints, and has not violated any laws and regulations relevant to health and safety, advertising, labeling and privacy issues.

08

MANPOWER



8 MANPOWER

8.1 EMPLOYMENT AND RESPECT FOR LABOUR RIGHTS

The Group has advocated a workplace that is inclusive and fair to all employees, in order to enhance employees' work satisfaction and the Group's competitiveness in the long run. The Group believes that diversity has effectively promoted innovative ideas and experience sharing within the Group. The Group's employment culture focused on creating a respectful and diverse work environment and the recruitment process focused on hiring suitable talents. It respects for gender, ethnicity, age, religion and other differences.

The Group's recruitment and employment procedures strictly complied with local related laws and regulations to prevent child and forced labor within the Group's operational boundaries. The Human Resources Department had been responsible for checking the age of applicants, overseeing employment issues, performing background screening and regular checking. The Administrative and Human Resources Department controls the issues of forced labor, conducts random inspections, interviews and other measures to ensure strengthened internal supervision. Also, the employees can report to the Department if any suspicious cases found. Feedback collection boxes are provided in all working units that employees can express their real-name or anonymous opinions, and the meeting would be held in time for research, processing and reply.

With a view to giving full play to its role of retaining talents, making good use of talents, and motivating talents, the Group takes into account the changes in internal and external factors that affect the actual value of employees' salaries, personal performance and the overall financial performance of the Group in terms of salary management, and considers the comparable market standards of the cement industry and other operating companies, in order to activate the salary adjustment mechanism in timely manner. The Group's management position will be promoted or replaced by way of external recruitment or internal selection. In the event that a position is available due to an expansion of the Group's business, a demotion or a resignation, an internal selection would typically be carried out initially before performing an external recruitment.

If an employee violates the Company's rules and regulations, but the violation is not sufficient for the employment contract to be terminated, and the line manager believes it is necessary to suspend the employee as warning, or the employee has violated the law, or the employee's extended sick leave that exceeds the entitlement according to national regulations and not able to return to work, they could be suspended from work and all wages will be withheld during the suspension period.

The Group focused on providing employees with fair compensation and remuneration, reasonable working hours and rest periods, career development opportunities and a friendly working environment, to provide a variety of on-the-job training and external training, as well as a long-term career development for employees. The Group had also paid endowment insurance, medical insurance, work injury insurance, unemployment insurance, maternity insurance and housing provident funds for its employees.

To strengthen employees' sense of belonging and honor, in addition to salary, the Group would provide certain allowances and benefits to the employees based on the Group's financial situation, social responsibility and social customs. These allowances and benefits included on-the-job allowance, summer heat subsidy, washing subsidy, work environment subsidy, holiday welfare, social insurance and paid vacations. The Group would provide holiday subsidies in cash or equivalent to all employees at some festivals. The Group had organized a number of activities for employees, such as team lunches, cooking classes, recreational sports, cultural activities and family gatherings, to promote company culture and employees' interactions, and boost work-life balance and the physical and mental well-being of employees.

8 MANPOWER

The Group has strictly complied with relevant employment laws including the Labour Law of the People's Republic of China, and there have been no cases of prosecution for violation of the relevant employment laws during the Reporting Period.

Monthly average total number of employees in the Reporting Period	
By gender	
Male	5,375
Female	1,924
By employment type	
Full-time	7,080
Part-time	2
Temporary	217
By age group	
Age 18-30	709
Age 31-45	3,008
Age 46-60	3,534
Age 61 and above	48
By region	
Mainland China	7,299
Other regions	0

Average employee turnover rate per month	
By gender	
Male	1.18%
Female	1.32%
By age group	
Age 18-30	1.77%
Age 31-45	0.86%
Age 46-60	1.35%
Age 61 and above	4.69%
By region	
Mainland China	1.21%
Other regions	N/A



Guessing games gathering for lantern festival at Nanzhao branch



Activities on the Women's Day



Recreational activities on May Day



Mid-autumn gifts such as rice, cooking oil and moon cakes

8 MANPOWER

8.2 SAFETY AND HEALTH

The Group fulfills the responsibility of maintaining a safe working environment and promotes safety-first culture. The Group has implemented the health and safety performance management process to create a healthy and safe working environment for employees, so as to benefit the long-term development of the Group. The Group has established an occupational health and safety system and has obtained relevant certifications.

The production unit would put up a dangerous operation notification card in high-risk areas of the workplace, such as warning signs on noise and dust would be placed to remind employees of the highly risky work procedures and adopting preventive measures and facilities that could eliminate danger. The production unit has organized monthly comprehensive safety inspections and safety issues would be rectified within a certain time limit.



Nanzhao branch organized comprehensive emergency drill in mine

8 MANPOWER

The Group has provided protection equipment such as safety helmets, protective clothing, and safety boots for employees. Safety rope and other equipment and tools have been provided for work at high places. In the summer, heatstroke prevention, cooling medication and other first aid supplies would be given. The Group has a specialized unit that is responsible for occupational health and safety matters. The Group would regularly provide occupational health and safety educational training to raise employees' awareness and enhance their knowledge of operational procedures to minimize the risk of accidents and injuries. To ensure employees' health and identify potential problems early, the Group would carry out regular occupational disease examination. Based on relevant national occupational health laws and regulations, the Group has hired a third-party organization to carry out occupational health status assessments every three years, and conduct occupational hazard testing work every year.

The Group has regularly organized a variety of safety education activities, such as "Safe Production Month" and "Fire Drill" to effectively enhance employees' work safety and fire rescue awareness, in order to further strengthen employees' safety awareness. During the Reporting Period, the Emergency Management Bureau organized the publicity and education activities of "Safe Production Month" at Tianrui Zhengzhou Cement Company (天瑞鄭州水泥公司). With the guidance of provincial mine professor, relevant documents such as the State Mine Safety Supervision Bureau's notice on the issuance of the "Guiding Opinions on Strengthening Safety Production in Non-coal Mine", and the "Fifteen Articles" measures for safe production are presented, and the thematic trainings on safe production technology and management knowledge in open-pit mines. Besides, Dalian Tianrui Cement Company (大連天瑞水泥公司) organized a knowledge contest on the "Safety Production Law". The contest covers aspects of knowledge such as the Safety Production Law and emergency procedures. The contests are organized with an aim to enhance the knowledge of the employees and enable them to apply what they learnt, so as to improve their awareness of safety production.



Body check for occupational disease



"Safe Production Month" Publicity and Education Activities

8 MANPOWER

COVID-19 has continued to spread all around the world during the year. The Group stepped up action against threats of the spread of virus after the resumption of work and production. General emergency responses for COVID-19 mainly include:

- educating employees about the importance of good hygiene practices, encouraging employees to keep office and living place sanitary;
- controlling the flow of visitors, checking the health condition of visitors, all employees having to measure their body temperature before going to work and getting off work, any person being suspected of acute infectious diseases will be put in quarantine; establishing temperature checkpoints at the entrance and exit to measure the body temperature of persons entering and leaving the Company, especially to check visitors' body temperature, to provide them with masks, and to register their personal information;
- sanitizing working areas, staff quarters and meeting rooms, and opening doors and windows for natural ventilation at regular intervals to improve indoor air quality;
- strengthening the hygiene management in canteens, carrying out meal-taking system in shifts, providing hand-washing facilities at the canteen entrance, all service personnel must wear masks, utensils must be sanitized with disinfection cabinet, and the cupboards for staff to store utensils will be cleaned and sanitized regularly;and
- restrooms will be disinfected and kept ventilated after use, keeping hand-washing basins and hand dryers clean, refilling hand sanitizer to strengthen sanitation management; keeping restroom clean; cleaning frequently contacted surfaces every day, such as front desks, desks, door handles, restroom, fixtures, toilets, mobile phone, computers and tables; cleaning any surfaces that may be contaminated with blood, body fluids and secretions or excrement.



Free nucleic acid testing for all staff

8 MANPOWER

The Group is not aware of any work-related fatalities in the past three years (including the Reporting Period). During the Reporting Period, the Group recorded several minor injuries happened in the business premises, resulting in a loss of 2,243 working days in total.

The Group has complied with relevant safety laws and regulations such as the Law of the People's Republic of China on Work Safety and Law on the Prevention and Treatment of Occupational Diseases. There have been no cases of prosecution due to violation of laws related to occupational safety during the Reporting Period, thanks to trainings and strict compliance with health and safety laws and regulations.

8.3 EDUCATION, TRAINING AND CAREER DEVELOPMENT

The Group believes that the career development of employees is the key to the long-term development. The Group focuses on enhancing the capabilities of its employees and provides training covering all fields of work and various career development programs through a wide range of technical and management training courses.

Newly hired employees would attend pre-job training organized by the hiring unit regarding introduction of the Group and the units where the new employees will be working, company culture, management system, employee regulations, labor safety, policies, and job responsibilities. Training programs included direct purchase supervisor training, 5-in-1 comprehensive system training on product quality, environment, energy, occupational health and safety and product certification, as well as official document and reporting method training.

The Group's human resources strategy focused on identifying and developing high standard talents, and as such, managers would assess employees' performance and potential based on the Group's standards. The Group has also encouraged and supported employees to attend various academic training and would subsidize eligible applications. All employees at managerial level would have to provide on-the-job training, guidance, to their subordinates so that they know the required job skills and business quality. Managers would make reasonable arrangement on the training content and time, and to assist and supervise subordinates to share and apply their training knowledge and skills in practical work.

Percentage of employees that attended training ⁴	
By gender	
Male	74%
Female	26%
By rank	
Senior management	2%
Middle management	7%
Supervisor	7%
General staff	83%
Percentage of total employees being trained	
	100%

⁴ The percentage of employees trained by category is calculated with using the total number of employees participating in training as the denominator.

8 MANPOWER

Average number of training hours per employee	
By gender	
Male	32
Female	33
By rank	
Senior management	36
Middle management	33
Supervisor	33
General staff	32
Total employees	32

09

SOCIETY



9 SOCIETY

9.1 ETHICS, INTEGRITY AND ANTI-CORRUPTION

The Group upholds its moral and integrity, and considers that is the key to winning trust and success. Therefore, it has established anti-corruption policies to monitor business operations and prevent bribery and corruption.

The Group has developed a code of conduct for the employees, which specifies various job behaviors and anti-corruption and bribery work practices. Employees are not allowed to receive gifts from related parties. An internal case investigation division has been set up to review all reports and set punishments based on rules and regulations. By publishing a report phone number, e-mail and WeChat number, the Group has also set up a reporting policy that would allow employees to report any possible corruption cases internally through confidential and comfortable reporting channels.

The Group would appoint professional personnel to set up a unit specialized in audit and supervision whereby the supervisor would be appointed to be responsible for internal review. The Group has established a working collaboration mechanism with local auditing and judicial departments to observe and report crimes like bribery, extortion, fraud and money laundering. The Group has hired independent non- executive directors to supervise the company's operations.

The Supervisory Committee has also set up an Education and Prevention Division to educate directors and employees by sharing bad practices of corruption and bribery. The disciplinary supervision is under the centralized administration of the Group, that promotes integrity at all levels and organizes anti-corruption trainings, such as providing the up-to-dated relevant anti-fraud information. Employees are required to participate in the trainings and proactively apply what they learnt to real operations.

The Group has strictly complied with relevant anti-corruption and bribery laws, and there were no case of prosecution due to violation of relevant laws such as the People's Republic of China for Suppression of Corruption.

9.2 COMMUNITY PARTICIPATION

The Group strives to do its part as a corporate citizen well and contribute to the community by extending care to the community and assuming social responsibility, while expanding its business, so as to position all our businesses for sustained growth.

Prevention of Pandemic

The Group proactively coordinated road traffic and provided anti-epidemic materials and protection for customers who visiting the factory. A lot of our employees joined the volunteering anti-epidemic team and served on the front line. The headquarter of the Group and its affiliated companies demonstrated generosity and proactively donated money and supplies. During the Reporting Period, Tianrui was awarded the honorary title of "Outstanding Contribution Unit of Love Donation" by the Ruzhou Municipal Party Committee and Municipal Government.

All subsidiaries took active actions and acted proactively, quickly responded to the calls for actions coming from local governments, encouraged employees to join the volunteer team, assisted in compulsory testing, and worked together with medical staff to fight the pandemic and prevent the pandemic. We will fight to ensure the safety and health of the people. The volunteers of the Group log in to the collection software, scan the unpacking code and test tube code, collect information, hand over cotton swabs, seal test tubes according to the training and testing process requirements, and work closely with medical staff to make sure testing work is carried out smoothly and efficiently.

Other Community Services

The Group continues to participate in public welfare activities and support poverty alleviation, with the vision of creating a calm and harmonious community. During the Year, thanks to the provision of assistance of employees to each other, the Group participated in voluntary tree planting activities, and visited, sent greetings to and helped the needy people in the surrounding areas.



Nanzhao Company plans to plant over 100 tall roses in the green belt of the living area



The 20 apple trees donated by Zenxin were successfully transplanted in the factory area



Tianruixiao Cement strongly encourages employees to participate in tree planting and greening activities



The grass planting and greening activities organized by Tianrui Xindeng

9 SOCIETY



Let the elder receive a greater degree of respect

All business units of the Group provided strong support to the local streets, communities, and governmental departments in arranging employment, tax payment, and poverty alleviation. They also proactively participated in public welfare undertakings such as local road construction and water conservancy projects. It has established a good relationship with relevant departments and authorities. During the Reporting Period, the total volunteer service hours is more than 300,000 hours, and the total amount incurred for the volunteer services more than RMB 500,000.

10 AWARDS AND RECOGNITION

Award/Achievement	Issuing Authority
Model Worker in The City	Suzhou City Federation of Trade Unions
Honor of "Top Ten Taxpaying Enterprises" in Suzhou City in 2021	Suzhou Municipal People's Government
The honorary titles of "Top Ten Taxpayers" and "Top Ten Manufacturing Industries" in Xiao County	Xiaoxian County Party Committee, Xiaoxian People's Government
Title of Xiaoxian Labor Security Integrity Demonstration Unit (Grade A)	Xiao County Human Resources and Social Security Bureau
Honor of the 2022 March 15 Quality Service Integrity Commitment Demonstration Unit	Anhui Economic News Network
"Xiaoxian County Caring for the Next Generation Caring and Aiding Advanced Unit" Honor	Shaw County Cares for the Next Generation Committee
The Party Branch Won Honor of Advanced Grassroots Party Organization	Xiaoxian Economic Development Zone Working Committee of the Communist Party of China
Honor of Advanced Unit of Safety Production 2021	Anhui Xiaoxian Economic Development Zone Management Committee
Honored as an Advanced Unit of Respecting Teachers and Emphasizing Education	Yonggu Town People's Government
Suzhou Model Worker Innovation Studio	Suzhou City Federation of Trade Unions
Obtained The "High-tech Enterprise" Certificate	Department of Science and Technology, Department of Finance and Taxation Bureau of Anhui Province
Li Dongxi (李冬喜) Won The Honor of Model Worker in Anhui Province	Anhui Provincial Committee of the Communist Party of China, Anhui Provincial People's Government
Evaluation Certificate of The Integration of Industrialization And Industrialization Management System	Beijing Saisheng Technology Co., Ltd. (北京赛昇科技有限公司)
Third Prize of Science and Technology Award of China Occupational Safety and Health Association	China Occupational Safety and Health Association



10 AWARDS AND RECOGNITION

Award/Achievement	Issuing Authority
Top 100 Enterprises in Dalian	Dalian Enterprise Federation Dalian Entrepreneurs Association
Tax Contribution Advanced Unit	Dalian Changxing Island Economic and Technological Development Zone Management Committee
Top 10 Taxpayers in 2021	Wensheng District Committee of the Communist Party of China People's Government of Wensheng District
Liaoning Building Materials 13th Five-Year Excellent Member Unit	Liaoning Building Materials Association
"Two Highs and Two Lows" Ingredients Optimization Scheme by Liaoning Provincial Building Materials Science and Technology 2022- First Prize	Liaoning Building Materials Industry Association
Tianrui Cement Won The Famous Brand in Building Material Industry in Bohai	Building Materials Industry Association
	
Integrity Enterprise in Building Materials Industry in Bohai Rim	Building Materials Industry Association
National Green Factory	Liaoyang City Industry and Information Technology Bureau
Recognized as Smart Factory in Liaoning Province	Department of Industry and Information Technology of Liaoning Province
Selected as A Key Demonstration Enterprise for Digital Transformation in Liaoning Province in 2022	Department of Industry and Information Technology of Liaoning Province
Liaoning Building Materials 13th Five-Year Excellent Member Unit	Liaoning Building Materials Industry Association
Advanced Grassroots Party Organization	Mafan Town Government of the Communist Party of China

10 AWARDS AND RECOGNITION

Award/Achievement	Issuing Authority
Advanced Enterprise of Industrial Development in The County	Guangshan County Committee, Guangshan County People's Government
2021 Advanced Safety Production Enterprise	Ruzhou Municipal People's Government
Quality Management System Certification	China Quality Mark Certification Group
Environment Management System Certification	China Quality Mark Certification Group
Occupational Health and Safety Management System Certificate	China Quality Mark Certification Group
Energy Management System Certification	China Quality Mark Certification Group
2021 Tax Contribution Award	Nanzhao County Committee, Nanzhao County People's Government
2021 Advanced Investment Promotion Enterprise	Nanzhao County Committee, Nanzhao County People's Government
Excellent Enterprise Supporting Township Economic Development	Baitugang Town Committee, Baitugang Town People's Government
Nanyang Enterprise Technology Center	Nanyang City Development and Reform Commission
Water-saving Enterprise in Nanyang City	Nanyang City Industry and Information Technology Bureau, Nanyang City Water Conservancy Bureau
Title of Model Worker Demonstration Base for Rural Revitalization in Nanyang City	Nanyang City Federation of Trade Unions
Nanyang Model Worker And Craftsman Innovation Studio Title	Nanyang City Federation of Trade Unions
Won The "All Qualified Unit Award" in the 18th national cement chemical analysis comparison "Meinuofu Cup" in 2022	National Cement Quality Supervision and Inspection Center
Social Contribution Advanced Unit	Qianjing Town Government, Yuzhou City
Ruzhou 2021 Annual Investment Scale Advanced Enterprise	Ruzhou Municipal People's Government
Ruzhou 2021 Advanced Technology Investment Enterprise	Ruzhou Municipal People's Government

10 AWARDS AND RECOGNITION

Award/Achievement	Issuing Authority
Ruzhou City's 2021 Industrial Economic Transformation and Upgrading Advanced Enterprise	Ruzhou Municipal People's Government
2021 Advanced Collective of Safe Production	Zhanhe District Safety Production Committee
The second prize of the safety production knowledge competition in the industry and trade industry of Zhanhe District	Emergency Management Bureau of Zhanhe District, Pingdingshan City
2022 Henan Provincial Energy Carbon Management Demonstration Enterprise Announcement	Department of Industry and Information Technology of Henan Province
Xinxiang Engineering Technology Center	Xinxiang Science and Technology Bureau
Advanced Unit of Militia	Zhengzhou Municipal Committee of the Communist Party of China, Zhengzhou Municipal People's Government, Zhengzhou Police District
Demonstration Enterprise of Energy and Carbon Management in Henan Province	Released by the Department of Industry and Information Technology of Henan Province
The Second Place in The Green Development List of The Cement Industry	Department of Ecology and Environment of Henan Province
Zhengzhou Quality Benchmark in 2022	Zhengzhou Industry and Information Technology Bureau
Advanced Grassroots Party Organization	Cuimiao Township Committee of the Communist Party of China
Industrial Contribution Gold Cup	Xingyang Municipal Committee, Xingyang Municipal People's Government
Xingyang Enterprise Innovation Award	Xingyang Municipal Committee, Xingyang Municipal People's Government



10 AWARDS AND RECOGNITION

Award/Achievement	Issuing Authority
Selected As A Pilot enterprise for Carbon Peaking in Henan Province	Henan Provincial Development and Reform Commission
Tax Credit Class A Enterprise	Provincial Taxation Bureau
Cement Production Enterprise Standardization Laboratory Certificate	Henan Building Materials Industry Association
The 18th National Cement Chemical Analysis Competition Excellent Award "Meinuofu Cup"	National Cement Quality Inspection and Testing Center
Henan Province Cement Grinding Solid Waste Utilization Engineering Technology Research Center	Department of Science and Technology of Henan Province
Work Safety in 2021 (Daye Town)	Daye Town Committee of the Communist Party of China, People's Government of Daye Town
2021 National Green Factory	General Office of the Ministry of Industry and Information Technology
The Honorary Title of "Advanced Enterprise in Industrial Development" in Dengfeng City in 2021	Dengfeng Municipal Party Committee and Municipal Government
Advanced Collectives and Advanced Individuals of Water Conservation in Zhengzhou City	Zhengzhou Human Resources and Social Security Bureau, Zhengzhou Water Conservancy Bureau
2021 List of First-Class Enterprises for Safety Production Standardization in the Industry and Trade Industry	Department of Emergency Management
2022 Henan Provincial Energy Carbon Management Demonstration Enterprise	Department of Industry and Information Technology of Henan Province
Award-winning Individuals and Excellent Organizations in the Occupational Health Talent Event	Zhengzhou Health Commission, Zhengzhou Federation of Trade Unions
2022 Henan Province Service Manufacturing Demonstration List	Office of Henan Provincial Department of Industry and Information Technology
2021 National and Provincial Green Manufacturing List (National Green Factory)	Office of Henan Provincial Department of Industry and Information Technology
In 2022, the list of demonstration projects of the new model of integration and application of new generation information technology in Henan Province (the "new model of digital lean management in the whole process of cement product production" demonstration project)	Department of Industry and Information Technology of Henan Province, Department of Finance of Henan Province

11 VISION

As one of the national cement industry leaders receiving significant support from the government, the Group shall take advantage from the policies and its own strengths by enhancing internal structure, refining management quality, strictly complying with standards of environmental protection, strengthening water and soil pollution prevention, and strengthening ecological construction. The Group also utilize the support from the Chinese government such as tax incentives, special projects or financing approvals and optimize production process to increase production efficiency, so as to promote regional market integration and synergy effect, as well as promote the elimination of backward production capacity of the cement industry and raise industry barriers.



12 HKEX ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDE INDEX

A	Environment	Section
Aspect A.1	Emissions	6.1
KPI A.1.1	Types of emissions and relevant emissions data	6.1
KPI A.1.2	Total amount of greenhouse gas emissions and intensity	6.1
KPI A.1.3	Total amount of hazardous waste produced and intensity	6.1
KPI A.1.4	Total amount of non-hazardous waste produced and intensity	No significant non-hazardous waste is discharged due to the focus of its business model on working in synergy
KPI A.1.5	Description of emissions target(s) set and steps taken to achieve them	6.1
KPI A.1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them	6.1
Aspect A.2	Use of Resources	6.2
KPI A.2.1	Direct and/or indirect energy consumption and intensity by type	6.2
KPI A.2.2	Total amount of water consumption and intensity	6.2
KPI A.2.3	Description of energy use efficiency target(s) set and steps taken to achieve them	6.2
KPI A.2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them	6.2
KPI A.2.5	Total amount of packaging material used for finished products and per unit of production	6.2
Aspect A.3	Environment and Natural Resources	6.3
KPI A.3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	No activities that had major impact on the environment and natural resources during the Reporting Period
Aspect A.4	Climate Change	6.4
KPI A.4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them	6.4

12 HKEX ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDE INDEX

B	Society	Section
Aspect B.1	Employment	8.1
KPI B.1.1	Total number of employees by gender, employment type, age and geographical location	8.1
KPI B.1.2	Employee turnover rate by gender, age and geographical location	8.1
Aspect B.2	Health and Safety	8.2
KPI B.2.1	Number and rate of work-related fatalities occurred in each of the past three years including the Reporting Period	8.2
KPI B.2.2	Number of days lost caused by work injury	8.2
KPI B.2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored	8.2
Aspect B.3	Development and Training	8.3
KPI B.3.1	Percentage of employees that attended training by gender and employment type	8.3
KPI B.3.2	Average number of training hours per employee by gender and employment type	8.3
Aspect B.4	Child Labor or Labor Standards	8.1
KPI B.4.1	Description of measures taken to review recruitment practices to avoid child labour and forced labor	8.1
KPI B.4.2	Description of steps taken to eliminate the situation after discovery of a violation	No violation in the Reporting Period
Aspect B.5	Supply Chain Management	7.1
KPI B.5.1	Number of suppliers by geographical locations	7.1
KPI B.5.2	Description of practices for hiring suppliers, the number of suppliers, and the execution and monitoring methods of the relevant practices	7.1
KPI B.5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored	7.1
KPI B.5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored	7.1

B	Society	Section
Aspect B.6	Product Responsibility	7.2
KPI B.6.1	Percentage of sold or delivered products recalled because of safety and health reasons	7.2
KPI B.6.2	Number of complaints received regarding products and services, and solution	7.2
KPI B.6.3	Description of practices related to protecting and ensuring intellectual property	7.2
KPI B.6.4	Description of quality inspection process and product recall process	7.2
KPI B.6.5	Description of consumer data protection and privacy policy, and related execution and monitoring methods	7.2
Aspect B.7	Anti-corruption	9.1
KPI B.7.1	Number of corruption cases filed by the issuer or employees during the Reporting Period, and the outcome of the proceedings	No corruption lawsuit in the Reporting Period
KPI B.7.2	Description of preventive measures and reporting methods, and related execution and monitoring methods	9.1
KPI B.7.3	Description of anti-corruption training provided to directors and staff	9.1
Aspect B.8	Community Participation	9.2
KPI B.8.1	Focus on scope of contribution	9.2
KPI B.8.2	Resources used on focused area	9.2