



  
**2022**

**WCC Environmental Social  
Responsibility Report**

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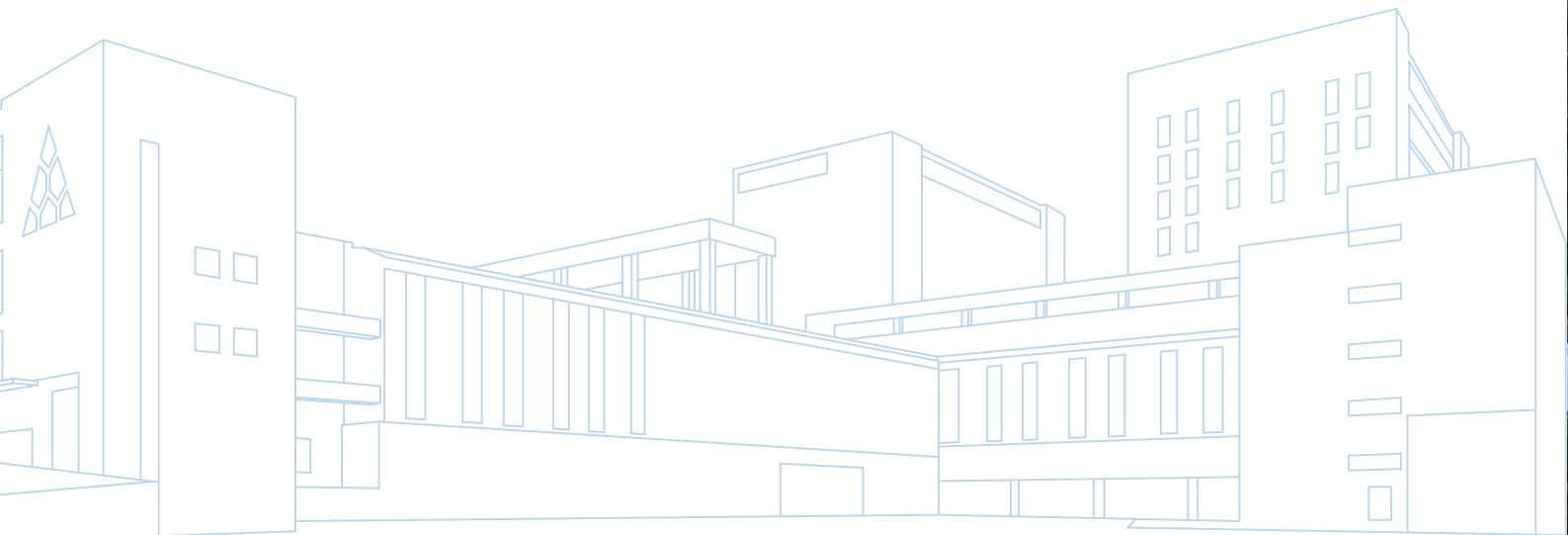
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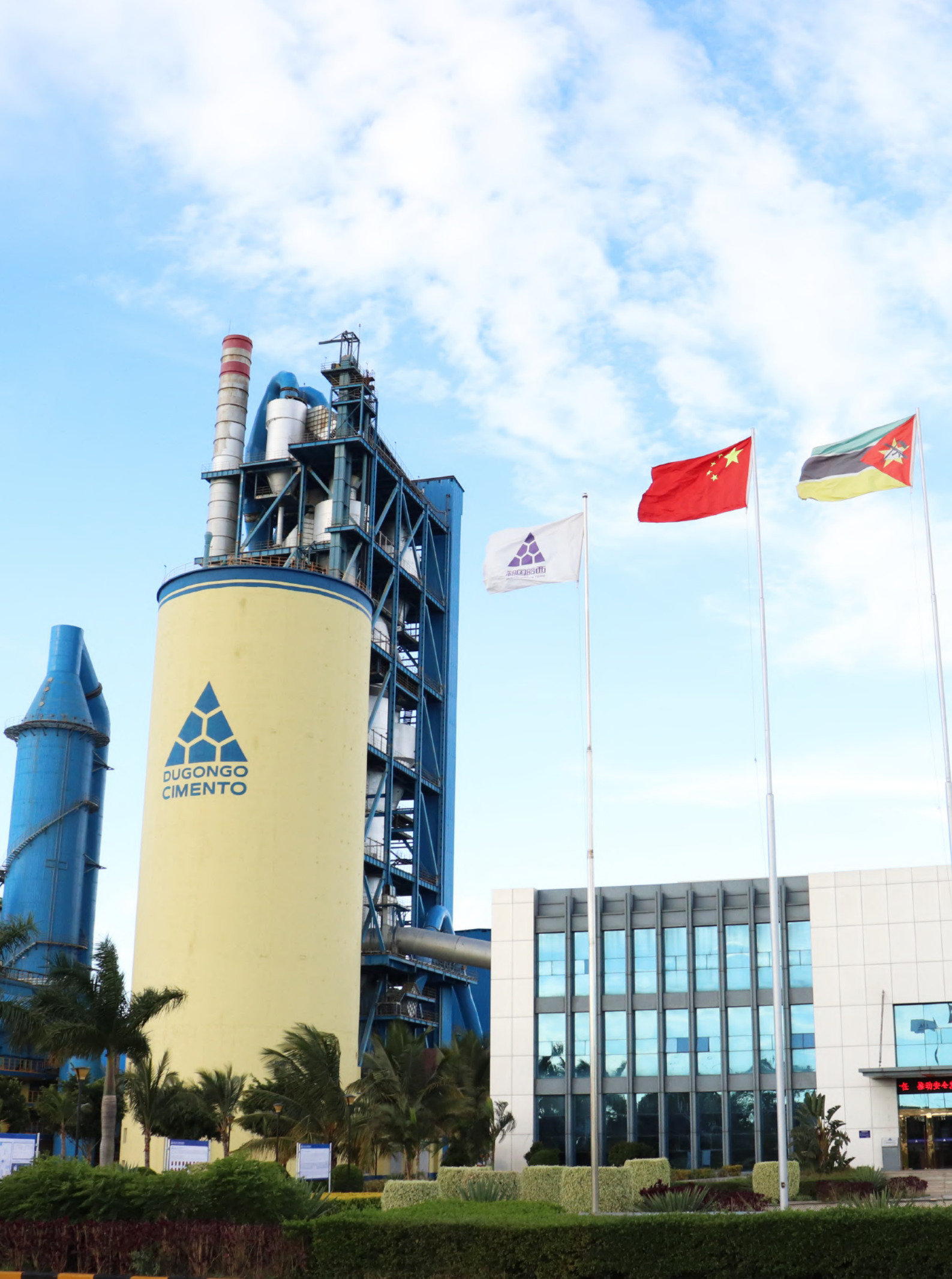
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# Introduction of the Report

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## ● Reporting Cycle

This report is an annual report, and also the seventh report of West China Cement Limited since the first Social Responsibility Report was published in 2017.

## ● Time Frame

The Reporting Period is from 1 January 2022 to 31 December 2022 (hereinafter referred to as the "Reporting Period"), for certain contents, the relevant timeframe was moderately extended to that before 2022.

## ● Scope of the Report

The performance of West China Cement Limited and its affiliated companies in environmental and social responsibility.

## ● Reporting Principles

**Materiality** : In order to identify and evaluate essential issues have an impact on business stakeholders, we determine the factors that have a significant impact on the company's sustainable development by communicating with business stakeholders through multiple channels

**Quantitative**: all information from this report is applicable to the principle of quantitative, unless otherwise stated, all amounts in this report are expressed in RMB.

**Balance**: The data used in this report are obtained from official documents and relevant statistics of the Company, the content of which has been reviewed by the management of the Company. The Board of Directors and all directors of the Company guarantee that the content of this report does not contain any false records, misleading statements or material omissions.

**Consistency**: Our company follows the guidelines for reporting. Our company will add annotations to the corresponding content of the report for if there are any changes that may affect the comparison with previous report in future.

## ● Title Description

For convenience and readability, "West China Cement Limited and its subsidiaries" is also referred to in this report as "West China Cement", "the Company", "the Group" or "we". "Yaobai Special Cement Group Co., Ltd" and "West Holding Group Limited" are both indirect wholly-owned subsidiaries of the Company and are referred to in this report as "Yaobai Group" and "West Holding Group", respectively.

## ● Reference Basis

Appendix 27 Environmental, Social and Governance Reporting Guide to the Main Board Listing Rules by the Stock Exchange of Hong Kong  
Guidelines for the Preparation of Social Responsibility Report of Cement Enterprises (T/CCAS 002-2018) by China Cement Association  
Social Responsibility (ISO 26000:2010) by the International Organization for Standardization  
G4 Guidelines on Sustainability Reporting by Global Reporting Initiative  
AA1000 Series of Standards by Social and Ethical Responsibilities Institute (UK)

## ● Introduction of the Report

This report is available as an electronic document in both Chinese and English. You can view the electronic version of this report on the websites of West Cement, Yaobai Group or the Stock Exchange of Hong Kong at [www.westchinacement.com](http://www.westchinacement.com), [www.yaobo.com.cn](http://www.yaobo.com.cn) or [www.hkexnews.hk](http://www.hkexnews.hk), respectively.

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# 01 A Letter to Stakeholders

## Distinguished stakeholders:

In a season as breezy as this when swallows are dancing and warblers singing, West China Cement's Environmental Social Responsibility Report for 2022 has arrived as scheduled. We are very grateful for your attention and support for West China Cement Limited and are pleased to share with you our efforts in fulfilling green development and social responsibilities in the past year.

2022 was an extraordinary year in West China Cement's more than 30-year history of development. During the year, we gradually saw through the pandemic haze, and witnessed the accelerated evolution of some major changes unseen in a century, the measures adopted by countries around the world to promote economic recovery, and the triumphant convening of the 20th Party Congress in China, which drew up a grand blueprint for the comprehensive construction of a modern socialist country and sounded the trumpet of the times for a new journey. At the same time, the cement industry as a whole is facing a severe test in terms of production and operation due to weak demand and declining profits. In the face of opportunities and challenges, West China Cement put forward the general keynote of "working hard without empty promises and keeping a low profile with pragmatic approaches," and all the cadres and staff at home and abroad united in a concerted effort to overcome difficulties, pushing forward the annual tasks and objectives, and generally maintaining a steady momentum of development amid adversity.

During the year, we restructured and expanded our business into a new phase, creating an unprecedented two-pronged business model. We adjusted and optimised the organisational structure of West China Cement, gave full play to the centralised management function of the headquarters, took advantage of our earlier steps into the international arena and accelerated the pace of international development. For the domestic segment, we continued to optimise its industrial structure and actively promoted chain strengthening and expansion; for the international segment, we advanced with a number of projects and reached a new level in production and operation as well as basic management. The pattern of two industrial clusters at home and abroad advancing in tandem has taken initial shape.

## A LETTER TO STAKEHOLDERS



During the year, we refined our management, improved our indicators and enhanced efficiency with innovation. In the face of weak industry demand and increasing costs, we promoted the concept of "refined management and low-cost operation" and carried out activities with the theme of "increasing efficiency by quality improvement, cost reduction and innovation". We organised an "innovation-driven exchange meeting" to showcase and promote a number of innovative achievements, which led to a new level of energy consumption control and a new record of continuous high-quality operation of the hosting equipment, thus laying a solid foundation for the sustainable development of the enterprise.

During the year, we held firm to the bottom line, were aware of our boundaries and comprehensively promoted green development. We upheld the concept of "Lucid waters and lush mountains are invaluable assets", took ecology, environmental protection, safety and intensive development as the lifeline, implemented energy saving and emission reduction requirements, launched a comprehensive battle for safe production and clean production, and vigorously promoted green and low-carbon industrial transformation and upgrading. The Group's coal consumption and energy consumption per tonne of clinker achieved the best results in its history, and the Tongchuan intelligent green ultra-low emission 10,000-tonne line achieved record energy consumption and carbon emissions, while Shifeng Company and Danfeng Company passed the environmental protection A-level performance and safety level 1 standardization certifications respectively, demonstrating that the Group's green and safe development has reached a new level and achieved synergy between enterprise development and environmental protection.

During the year, we strengthened our quality, protected our rights and interests, and grew stronger as a people-oriented company. We have always believed that talent is the cornerstone of West China Cement's continuous development, and we insisted on building a harmonious atmosphere with a "people-oriented" philosophy, protecting the rights and interests of our employees by improving rules and regulations, creating a cultural atmosphere and improving welfare benefits. At the same time, we have placed the growth and progression of our employees in a strategic position, and relying on the management training institute platform, we promoted online and offline learning and improved the overall quality of our employees from all angles through accurate recruitment, professional training, echelon cultivation and performance appraisal, so as to facilitate the personal growth of our employees and the rapid development of the Company.

During the year, we invested in public welfare and assisted in revitalization, shouldering our corporate responsibility. We acknowledged that corporate development must resonate with social development, and we have been actively carrying out social welfare activities, continuing to increase our efforts to help the poor in education, building a public welfare education alliance, and continuing to carry out the Golden Autumn Scholarship Programme to help more children enjoy quality education resources. We upheld the concept of win-win cooperation, established friendly cooperation with local governments, distributors, suppliers, customers and other partners from all walks of life, actively participated in the rural revitalization strategy, strongly supported the economic and social development of local communities, and fulfilled our corporate social responsibility.

Moving forward, we will maintain the momentum and forge ahead to start a new chapter. In 2023, challenges and opportunities will coexist. We will continue to implement the general keynote of "working hard without empty promises and keeping a low profile with pragmatic approaches", adhering to the corporate spirit of "becoming stronger with self-independence and exceeding ourselves relentlessly", comprehensively promoting green development, insisting on innovation, strengthening refined management, focusing on people-oriented, fulfilling corporate responsibility, and move ahead with a fuller mental outlook and higher quality management level, striving unremittingly towards the vision of "becoming a leading company in the cement industry with excellent performance, rapid growth and social responsibility."

# 02

## About West China Cement

### Company Profile

China West Cement Limited (stock code: 2233.HK) is a large-scale group enterprise integrating cement, new building materials production, research and development and industrial investment. It is the holding company of two groups, namely, Yaobai Special Cement Group Company Limited (Yaobai Group) and West International Holding Limited (West Holding Group). Headquartered in Xi'an, Shaanxi Province, Yaobai Group has more than 50 subsidiaries in Shaanxi, Xinjiang, Guizhou, Sichuan and other provinces/autonomous regions, while West Holding Group is headquartered in Addis Ababa, Ethiopia, with more than 20 subsidiaries in more than 10 countries in Africa and Central Asia. In 2022, China West Cement was ranked 27th among the world's cement companies in terms of production capacity and 12th in China in terms of cement clinker production capacity. It is the largest building materials company in western China.

The Company's business involves cement manufacturing, chemical building materials, intelligent logistics, international trade and other fields. With a complete marketing network and sound after-sales service system, its products are widely used in key projects such as highways, railways, airports, bridges, tunnels, water conservancy facilities, oil wells, gas wells and other urban and rural construction markets.

### Cultural Philosophy

#### Corporate Spirit

Become stronger with self-independence, make every effort on exploration and innovation, and exceed ourselves relentlessly

#### Management Philosophy

Adhere to people-oriented principle with high-quality manufacturing, continuous innovation and first-class mindset

#### Core Competitiveness

Carry out an honest operation, provide inexpensive good-quality products, serve people with utmost sincerity and take the lead in the industry

#### Core Values

Make wealth for all, achieve win-win outcomes, represent life values and serve the society

### Vision

To become a leading company in the cement industry with excellent performance, rapid growth and social responsibility.

### Main Products

42.5 grade and 52.5 grade ordinary silicate cement, and special cements such as medium and low heat cement, road cement, oil well cement, nuclear power cement, sulphate resistant cement, ordinary sulphate aluminate cement and offshore sulphate aluminate, as well as building materials such as aggregates, commercial concrete, prefabricated buildings, cement and concrete admixtures, ordinary flat glass and coated glass.



## Engineering Project Cases

Xi'an-Chengdu high-speed railway, Xi'an-Yan'an high-speed railway, Beijing-Kunming expressway, Xi'an-Hanzhong expressway, Xi'an Xianyang International Airport Phase III Expansion Project, Xi'an Lantian General Airport, China (Yanliang) Flight Test Institute, Xi'an Metro, Longmen Yellow River Bridge, Hanjiang River to Weihe River Water Transfer Project Sanhekou Water Resources Hub, Huangjinxia Reservoir Water Resources Hub, etc.



< Xi'an-Chengdu high-speed Railway >



< Beijing-Kunming Expressway >



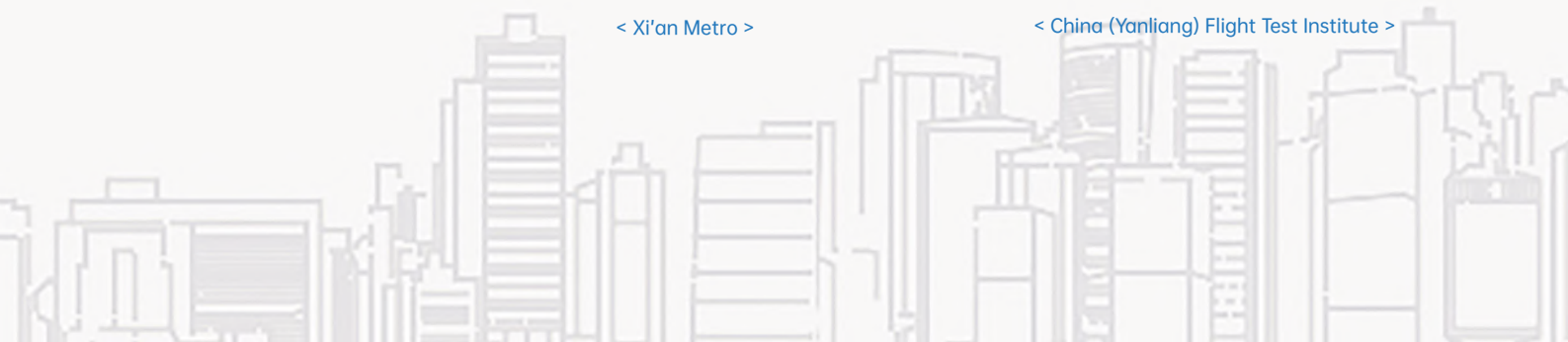
< Longmen Yellow River Bridge >



< Xi'an Metro >



< China (Yanliang) Flight Test Institute >



## 2020-2022 Key Economic Indicators

### Economic indicators

Indicators	Unit	2020	2021	2022
Revenue	RMB' 000	7,131,052	8,002,791	8,489,135
Profit before tax	RMB' 000	1,847,456	2,083,591	1,513,299
Profit for the year	RMB' 000	1,582,962	1,782,952	1,344,115
Total assets	RMB' 000	18,906,232	26,648,351	30,239,253

### Human resources indicators

Indicators	Unit	2020	2021	2022
Total number of employees	Person	6213	7469	6364
Social insurance coverage	%	Above 96	100	100
Staff training coverage	%	100	100	100
Total female managers	Person	71	86	82
Number of R&D personnel	Person	33	30	26

### Client and partner indicators

Indicators	Unit	2020	2021	2022
Customer complaint handling rate	%	100	100	100
Product qualification rate	%	100	100	100

### Safety indicators

Indicators	Unit	2020	2021	2022
Safety training coverage	%	100	100	100
Number of safety emergency drills	Times	268	234	203
Number of safety management personnel with certificates	Person	186	233	301

### Environment indicators

Indicators	Unit	2020	2021	2022
Integrated energy consumption	Ten thousand tonnes of standard coal	163.8	163.55	159.4
Packaging materials consumption	Tonnes	8622	7905	7300
Comprehensive energy consumption of comparable clinker	kgce / t	108.52	107.43	106.6

## West China Cement in 2022

# 2022

January

7th

The flat glass produced by West Holding Group's Hongxing Glass Company was officially launched into the market

25th

Yaobai Group's Shifeng Company and Xunyang Company were awarded the national "Green Factory" title

February

27th

West China Cement released its annual results of 2021

March

April

12th

Yaobai Group held the Innovation-driven Experience Sharing Meeting 2022

May

August

5th

A number of companies under the Yaobai Group won the Shaanxi Building Materials Industry Technical Innovation Award

September

14th

The "cement kiln flue gas DDN® deep denitrification technology" of Yaobai Group's Industry Technology Company passed the validation of provincial expert group

October

2th

The gypsum board production line of West Holding Group's Angola Company with an annual capacity of 30 million square metres was tested and put into operation

November

December

15th

The 6000t/d clinker cement production line of West Holding Group's Andijan Company was put into operation

26th

Yaobai Group's Jianghua Company was rated as a "Green Factory" among cement grinding enterprises nationwide  
Yaobai Group's Xunyang Company and Mianxian Company were recognized as "Water-saving Enterprise in Shaanxi Province"

12th

Yaobai Group held a meeting for brand building and quality promotion

29th

West China Cement held the 2nd Labour Award Ceremony

24th

Yaobai Group's oil well cement was successfully applied in CNPC offshore projects

18th

Yaobai Group held a special study session on the spirit of the 20th Party Congress

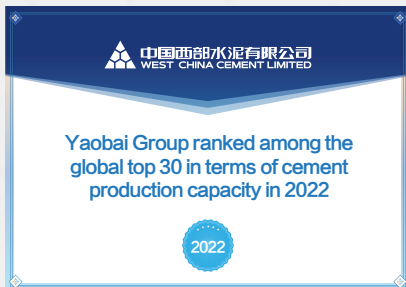
30th

Yaobai Group's Fuping Company and Danfeng Company were awarded "Green Factory" in Shaanxi Province (Third Batch)

3th

The 3500t/d cement clinker production line of West Holding Group's Congo-Kinshasa Dahu Company was successfully put into trial production

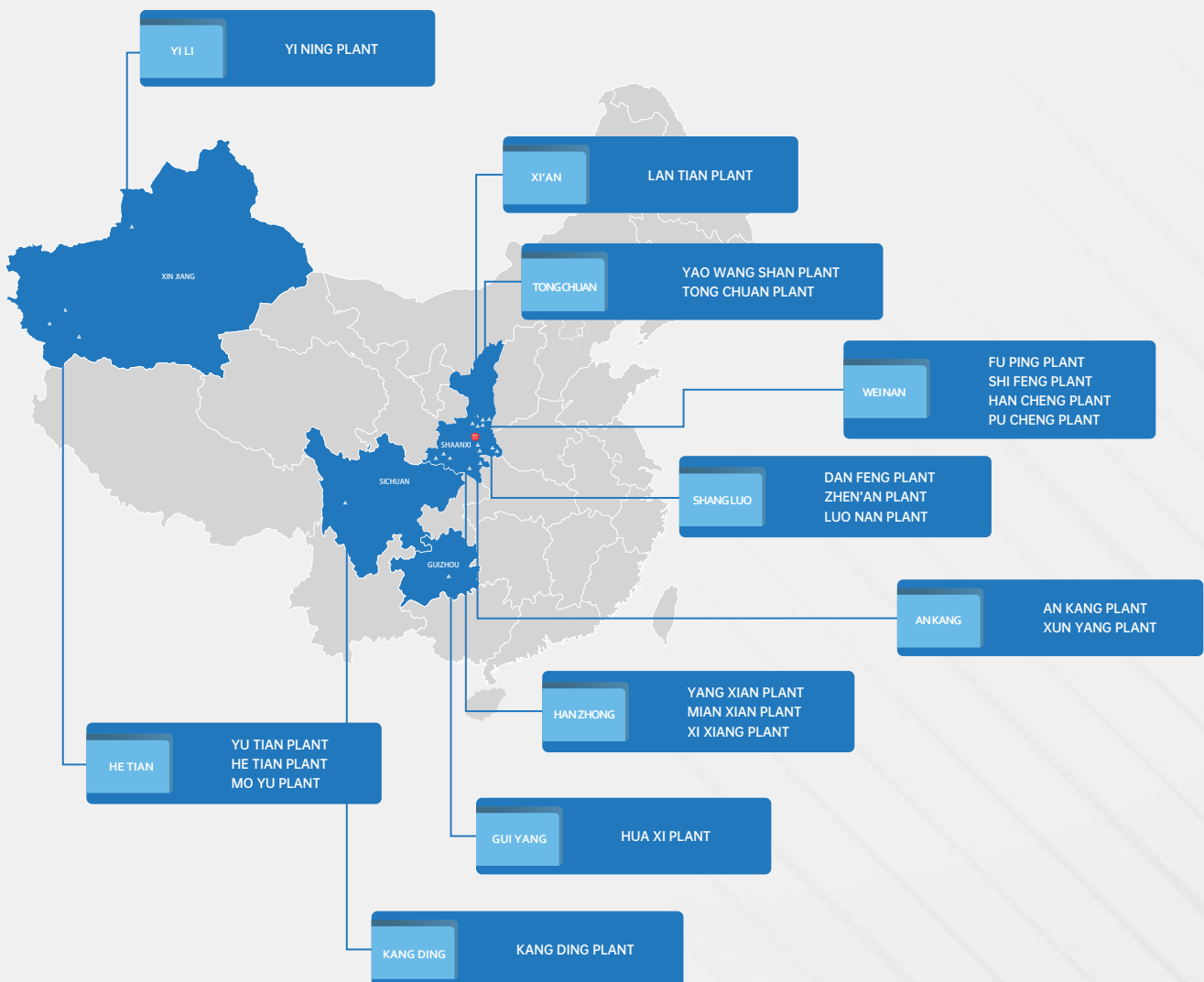
# Annual Awards



## Business Layout

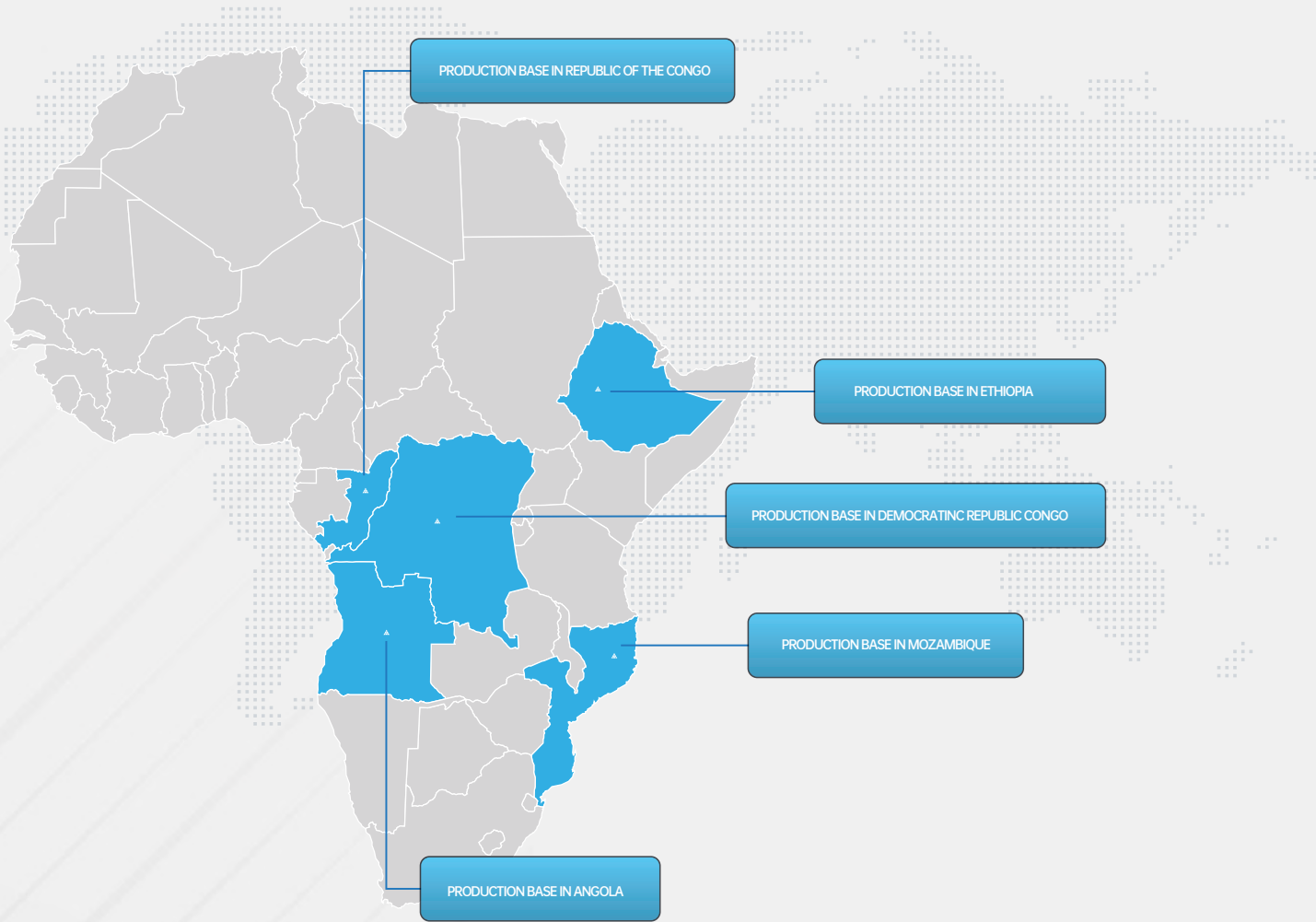
Relying on a complete production system and marketing and logistics network, we sell products mainly in Shaanxi, Xinjiang, Guizhou and Sichuan in China, as well as in Africa.

By the end of 2022, the Company had a total of 38 production bases, 30 new dry-process cement production lines, 21 commercial concrete production bases, 10 prefabricated building manufacturing R&D centers, with an annual production capacity of 22.8 million tonnes of clinker, 33.6 million tonnes of cement, 8 million tonnes of aggregate, 18 million cubic meters of concrete, 40,000 tonnes of glass, and 60 million square metres of gypsum board, respectively.



# Business Layout

## Africa



## Management Team

Board of Directors of West China Cement	
Zhang Jimin	Executive Director, Chairman of the Board
Ma Weiping	Executive Director, CEO
Ma Chaoyang	Non-Executive Director
Fan Changhong	Non-Executive Director
Wang Jingqian	Non-Executive Director
Lee Kong Wai Conway	Independent Non-Executive Director
Zhu Dong	Independent Non-Executive Director
Tam King Ching Kenny	Independent Non-Executive Director

## Contributions to the Industry

Organization Name	Position
World Cement Association	Founding Member
World Concrete and Cement Association	Member
Cement Sustainability Initiative	Member
China Cement Association	Vice President (Unit)
China Cement Association Special Cement Branch	Vice President of Council (Unit)
China Cement Association Supply Chain Branch	Vice President of Council (Unit)
China Building Materials Enterprise Management Association	Co-organizer (Unit)
China Concrete & Cement-based Products Association	Member
China Concrete & Cement-based Products Association Special Cement & Concrete Engineering Materials Branch	Rotating President of Council (Unit)
China Concrete & Cement-based Products Association 3D Printing Branch	Vice President of Council (Unit)
National Technical Committee for Cement Standardization	Member (Unit)
Shaanxi Federation of Industry and Commerce	Member
Shaanxi Building Materials Federation	Honorary President (Unit)
Shaanxi Cement Association	President (Unit)
Shaanxi Association of Enterprise with Foreign Investment	Vice President (Unit)
Shaanxi Building Energy Efficient Association	Executive Director (Unit)
Shaanxi Emergency Management Council	Executive Director (Unit)



## 03 Reinforcing Responsibility Governance

West China Cement actively develops its core businesses and creates economic value, while accurately grasping the pulse of the times, continuously deepening the concept of sustainable development. We commit to improving corporate governance, fully integrating environmental and social responsibility governance into corporate strategy, business decisions and daily operation, and strive to achieve a balance between its own development, environmental protection and social benefits, so as to permanently enhance the "soft power" of the Company.



## Statement of the Board

The Board of West China Cement is accountable to the Shareholder Meeting, and operates in accordance with the Company Law of the People's Republic of China and other relevant laws and regulations in the place of operation and the Group's Articles of Association and Rules of Procedure of the Board.

The Board is the highest decision-making body for the Company's environmental, social and governance (ESG) efforts and is ultimately responsible for the Company's ESG management policy, policies, objectives and implementation.

Board members have extensive experience in corporate strategy, production processes, marketing, risk management, financial management and other areas. They understand the responsibilities of companies in ESG management and are committed to integrating ESG management into the daily corporate operation and administration, with a focus on promoting ESG risk assessment, policy improvement and mechanism refinement. They constantly supervise the implementation and improvement of relevant work to continuously enhance the Company's sustainable development performance and effectively protect the interests of stakeholders.

During the Reporting Period, in response to the guidance of national regulations and policies and the concerns of the community on ESG issues, West China Cement continued to optimize the Company's ESG management system and improve the relevant management policies. We organized multi-level trainings, strengthened ESG risk identification, and proactively promoted ESG measures to further enhance ESG work performance.

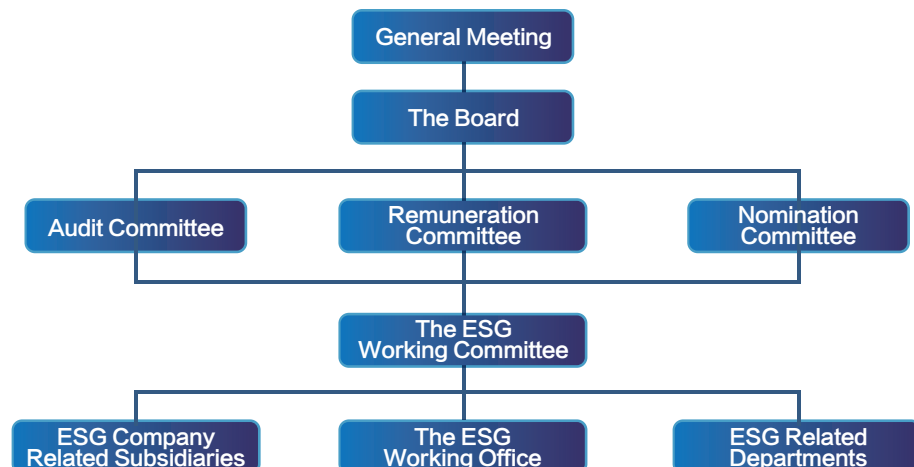
## Responsibility Governance

The Company has established an ESG Working Committee headed by senior management and composed of middle-level management, which reports to the Board and serves as the overall management and coordination body for ESG functions.

In order to strengthen the structural strength of ESG work, the Company has established the ESG Working Office headed by the Secretary of the Board and designated several ESG supervisors and liaison officers, who are responsible for organizing and carrying out various ESG management tasks, including communication and coordination, policy drafting, data collection, follow-up and supervision, as well as the daily work of the ESG Working Committee.

At the same time, in order to give full play to the advantages of professional strength, the Company has continuously improved its internal management system and given the departments and subsidiaries closely related to ESG work the corresponding organizational and management functions, and shared the work and cooperated with the ESG Working Office for the effective implementation of ESG efforts in all aspects and at all levels.

## Organizational Framework



## Job Duties

### The Board

1. Determine the vision and objectives, overall direction, strategic planning and organizational structure of ESG management;
2. Review and approve significant ESG management matters, including rating ESG risk levels and approving annual ESG reports, etc.;
3. Discuss and determine other recommendations made by the ESG Working Committee.

### The ESG Working Committee

1. Formulate the vision, objectives and strategies of ESG management and submit them to the Board for approval;
2. Coordinate and manage ESG work, integrate management resources, establish management system, discuss other significant ESG matters and submit them to the Board for approval;
3. Review ESG-related policies, annual reports and other disclosure matters;
4. Approve ESG work plans at each stage and important work arrangements;
5. Coordinate and supervise the implementation of ESG-related work.

### The ESG Working Office

1. Formulate ESG work system and process, and review and update on a regular basis;
2. Prepare ESG work planning, plans and budgets, and keep track of the implementation status;
3. Lead the organization of ESG key special projects;
4. Statistics and analysis of ESG-related data, identification of major ESG issues;
5. Organize the preparation of annual ESG reports;
6. Organize ESG work promotion and training, and maintain ESG-related sections on the company website.

## Responsibility Strategy

West China Cement always upholds the cultural philosophy of "people-oriented, high-quality manufacturing, continuous innovation, and first-class mindset", and regards the fulfillment of environmental and social responsibilities as an important issue in corporate development. We commit to making progress together with the environment and our stakeholders such as employees, customers, partners and communities. We actively promote the transformation and upgrading of the cement industry with an innovative spirit and pragmatic attitude, and strive to achieve the vision of "becoming a leading enterprise in the cement industry with excellent performance, rapid growth and social responsibility".

## Institutional System

In 2022, West China Cement's ESG management bodies at all levels carefully studied the "Environmental, Social and Governance Reporting Guidelines" as well as the "E-training and Publishes Guidance Materials" of the Stock Exchange of Hong Kong, and made full reference to domestic and international standardization materials, such as the "Guidance on Social Responsibility" of the International Organization for Standardization and the "Guide to the Preparation of Corporate Social Responsibility Reports for the Cement Industry of China" of the China Cement Association, to revise and improve the West China Cement Environmental, Social Responsibility and Governance Management Measures and promote the Company's ESG management towards a more systematic and standardized direction.

## Risk Control

### Risk Management

West China Cement attaches great importance to risk management. Specifically, the Board has set up an internal audit committee, which focuses on strengthening the leadership of internal control and audit work, and is responsible for identifying, monitoring and controlling various risks such as strategic, financial, management and legal risks, and providing risk analysis and decision support to the Board. The ESG Management Committee focuses on identifying, monitoring and controlling critical ESG risks, and taking timely and targeted preventive measures.

The Company strictly abides by the relevant laws and regulations of the countries where it operates, continuously improves the internal control audit mechanism, and taking into account of the Company's business focus, weak links and risk potential, annually revises and improves the management system of internal audit, legal affairs and supervision. It establishes multiple risk prevention measures such as comprehensive audit, special audit, comprehensive management inspection and legal physical examination, to identify, analyze and rectify issues from different perspectives, thereby improving the Company's ability to prevent and resolve major risks, and safeguarding healthy and sustainable corporate growth.

During the Reporting Period, West China Cement conducted comprehensive internal control audits on 70 subordinate units, and carried out special audits on management risks targeting 12 aspects, effectively identifying and closing risk loopholes and improving corporate governance.

### Information Disclosure

West China Cement is fully aware of the concerns of its shareholders and other investors regarding its operations and is committed to continuously improving its transparency through constant, consistent, clear and efficient communication so that investors understand the Company's operating results, policies, outlook and market environment.

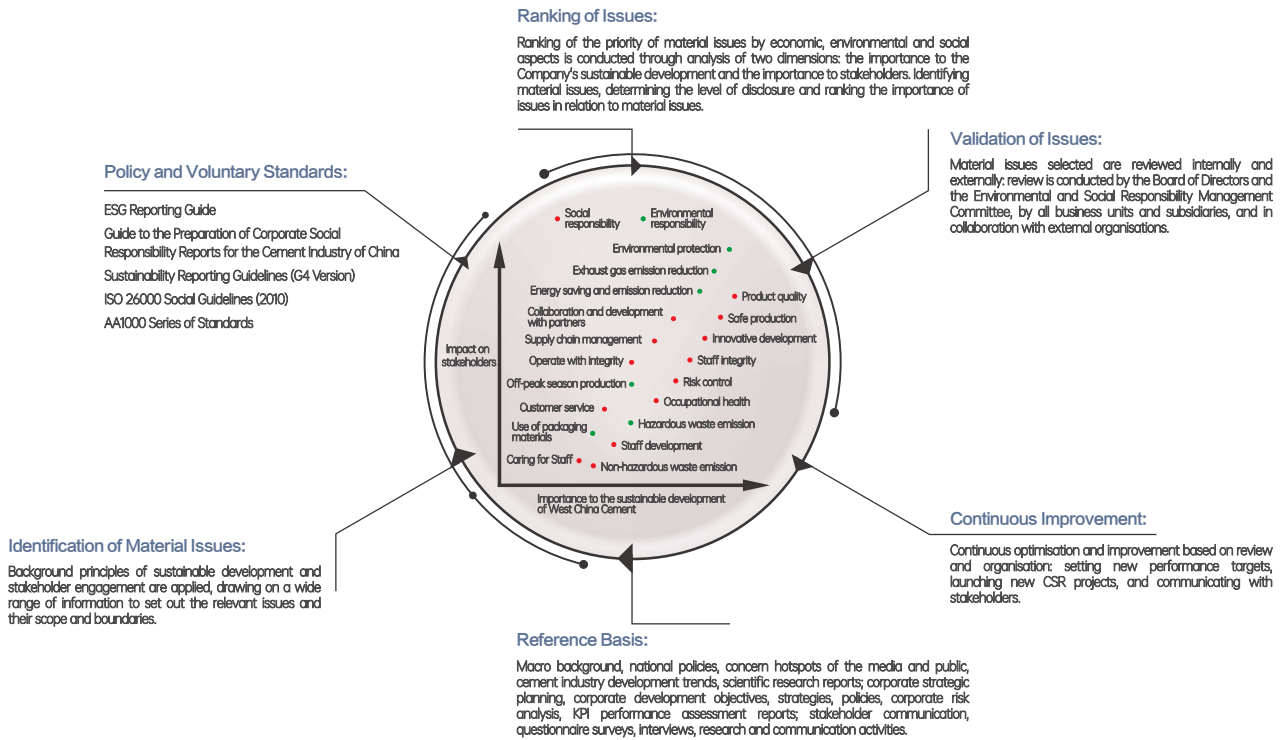
In order to ensure that investors fully exercise their legitimate rights and interests, the Company has set up a special investor relations department and established various contact methods such as telephone, letter, fax and e-mail to receive inquiries or comments from investors at any time. The Company releases important information in a timely manner through its official website and the website of the Stock Exchange of Hong Kong, so that all investors can obtain information in a timely and equal manner.

In addition, the Company organizes regular investor meetings, two non-trading related roadshows each year, as well as actively organizes and participates in engagement activities among investors and other market participants to increase access to the Company for shareholders and investors.

## Materiality Assessment

In order to further understand the expectations and demands of our stakeholders, we actively communicate with our stakeholders on the basis of analysis and research on the domestic and international development situation, national policies, industry conditions and our own characteristics. We have sorted out and identified environmental and social responsibility material issues that have a significant impact on the Company's sustainable development, both from the Company's and the stakeholder's perspectives, so as to provide a fundamental basis for continuous improvement in environmental and social responsibility management practices and improve social communication. During the Reporting Period, the following issues were identified as having a significant impact on the Company's sustainable development. These areas have been listed as key areas of concern for the Company's sustainable development.

## West China Cement's Matrix Analysis on Material Issues in Environmental and Social Responsibility Report in 2022



## Stakeholder Communication

As an international enterprise listed in Hong Kong, West China Cement always pays great attention to the demands and expectations of global stakeholders, and continues to explore and practice effective communication. We rigorously, timely and accurately publicize and release the Company's ESG work philosophy and fulfillment of responsibilities through various channels or mediums, such as media publicity, information disclosure, performance roadshows, shareholders' meetings, special reports, site visits, charity activities and team building. In addition to enhancing stakeholders' understanding and support of the Company, we also actively embrace reasonable opinions and advice from all parties to continuously improve our operation, management and ESG work and continuously enhance our overall competitiveness. During the Reporting Period, engagement between the Company and stakeholders was as follows:

Stakeholder	Expectations and requirements	Communication method	Responsibility fulfillment actions
<b>Government</b>	<ul style="list-style-type: none"> <li>Compliance with the law</li> <li>Pay taxes according to the law</li> <li>Promote local employment</li> <li>Promote the economic and social development of the area where it operates</li> </ul>	<ul style="list-style-type: none"> <li>Regular reporting of work</li> <li>Relevant meetings</li> <li>Information reporting</li> </ul>	<ul style="list-style-type: none"> <li>Strictly implement guidelines and policies</li> <li>Operate in compliance with the law</li> <li>Contribute to tax revenue</li> <li>Provide employment opportunities</li> <li>Promote local development</li> </ul>
<b>Competent authorities in the industry</b>	<ul style="list-style-type: none"> <li>Participate in the development of industry standards</li> <li>Promote the healthy and sustainable development of the industry</li> <li>Promote the technological advancement and transformation and upgrading of the industry</li> </ul>	<ul style="list-style-type: none"> <li>Participate in the development of industry standards</li> <li>Promote the healthy and sustainable development of the industry</li> <li>Promote the technological advancement and transformation and upgrading of the industry</li> </ul>	<ul style="list-style-type: none"> <li>Stable operation</li> <li>Accept supervision</li> <li>Enhance technological innovation</li> <li>Promote industrial optimization</li> <li>Implement a new production model for the industry</li> </ul>
<b>Shareholders and Investors</b>	<ul style="list-style-type: none"> <li>Honor credibility and keep promise</li> <li>Standardized operation</li> <li>Profit level</li> </ul>	<ul style="list-style-type: none"> <li>General meeting</li> <li>Investor referral meeting</li> <li>Results presentation</li> <li>Company announcements</li> <li>Regular reports</li> </ul>	<ul style="list-style-type: none"> <li>Strict compliance with listed company standards</li> <li>Protection of rights and interests</li> <li>Establish diverse communication channels</li> <li>Standardize the dissemination of all information</li> </ul>
<b>Customer</b>	<ul style="list-style-type: none"> <li>Provide quality products</li> <li>Provide high quality services</li> <li>Protection of rights and interests</li> </ul>	<ul style="list-style-type: none"> <li>Seek customer feedback</li> <li>Disclosure of relevant information</li> </ul>	<ul style="list-style-type: none"> <li>Guarantee quality raw materials</li> <li>Technology innovation</li> <li>Customer service system development</li> <li>Customer satisfaction survey</li> </ul>
<b>Supplier</b>	<ul style="list-style-type: none"> <li>Provide quality products and services</li> <li>Operate fairly</li> <li>Operate with integrity</li> <li>Fulfilling contracts on time</li> <li>Win-win cooperation</li> </ul>	<ul style="list-style-type: none"> <li>Regular meetings</li> <li>Visits and exchanges</li> <li>Mutual visits among senior levels</li> <li>Contractual agreements</li> <li>Disclosure of relevant information</li> </ul>	<ul style="list-style-type: none"> <li>Regular meetings</li> <li>Visits and exchanges</li> <li>Mutual visits among senior levels</li> <li>Contractual agreements</li> <li>Disclosure of relevant information</li> </ul>
<b>Staff</b>	<ul style="list-style-type: none"> <li>Protect basic rights</li> <li>Facilitate capacity enhancement</li> <li>Broaden career development</li> <li>Sense of belonging and identity</li> <li>Share the achievement of corporate development</li> </ul>	<ul style="list-style-type: none"> <li>Labour unions at all levels</li> <li>Staff congress</li> <li>Staff communication platform</li> <li>Disclosure of relevant information</li> </ul>	<ul style="list-style-type: none"> <li>Protect the legal rights of staff</li> <li>Provide fair opportunities and platform for work, learning and advancement</li> <li>Career planning</li> <li>Realize personal values</li> <li>Create a happy environment</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>Energy saving and emission reduction</li> <li>Resource conservation</li> <li>Ecological conservation and restoration</li> </ul>	<ul style="list-style-type: none"> <li>Regular reporting on energy saving</li> <li>Emission reduction work</li> <li>Enhanced information disclosure</li> </ul>	<ul style="list-style-type: none"> <li>Off-season production</li> <li>Waste recycling</li> <li>Restoration of mines</li> <li>Waste heat power generation</li> </ul>
<b>Community, Public and NGOs</b>	<ul style="list-style-type: none"> <li>Participate in community building</li> <li>Maintain social stability</li> <li>Provide employment opportunities</li> <li>Support public welfare and charity</li> <li>Support poor areas and disadvantaged groups</li> </ul>	<ul style="list-style-type: none"> <li>The Company's official website</li> <li>Social responsibility reports</li> <li>Visits and exchanges</li> <li>Cooperation</li> <li>Public welfare activities</li> <li>Disclosure of relevant information</li> </ul>	<ul style="list-style-type: none"> <li>Poverty alleviation and disaster relief</li> <li>Voluntary action</li> <li>Support for education</li> <li>Enhance the community environment</li> </ul>

## Compliance Management

### Compliance Management

West China Cement upholds the building of work style as a fundamental project for the healthy development of the Company, and continues to promote and adhere to the "Four Remarks and Four Strengthening Code of Conduct". We carry out special rectification activities of work style building every year, and go to the front line to carry out comprehensive work style supervision, to rectify any kind of bad work style. We also urge management staff at all levels to continuously enhance quality and conviction, and to set an example and lead the team well, so as to build an excellent style of loyalty to duty, pragmatism and efficiency, unity and cooperation, and integrity and self-discipline, and enhance the Company's unity and execution.

During the Reporting Period, West China Cement, in response to the risks and dangers facing the development of the enterprise, proposed the "Take actual action, no empty talks; Be humble and pragmatic, no showing off" general principle and carried out extensive study and practice activities. At the group level, it organized more than 80 senior management cadres to conduct cross-checking, and carried out comprehensive work style monitoring towards 56 companies. At the subsidiary level, all companies conducted special rectification activities, with a total of over 800 activities organized, such as education, training and inspection, creating a healthy working atmosphere with integrity.



### Anti-corruption

Corruption violates business ethics, is not conducive to creating a fair and competitive market environment, and damages the corporate image. West China Cement takes a firm stance on the issue of anti-corruption, strictly complies with the "Anti-Unfair Competition Law of the People's Republic of China", "Anti-Money Laundering Law", "Criminal Law" and other laws and regulations of the countries where it operates, and insists on operating in compliance with the laws and vigorously maintains a fair and just market and business order.

The Company has set up a special supervision department, and formulated the "Regulations on the Management Staff's Integrity and Self-discipline" and "Management Measures on Disciplinary Punishment for Management Staff". It organizes directors and all management staff to sign the "Commitment of Integrity and Self-discipline", vigorously promotes education on integrity and self-discipline, while continuously optimizing internal complaint and whistle-blowing channels, and improving reporting methods including mail, telephone, e-mail and WeChat. We adopt a "zero-tolerance" approach in investigating and punishing corruption, and urge directors and the management at all levels to respect the law and exercise power with integrity.

During the Reporting Period, the Company received a total of 22 reports in relation to the work style of management, ineffective performance of duties and abuse of power, etc., with a 100% completion rate during the period. There was no serious corruption issue or litigation case relating to embezzlement, bribery, extortion, fraud and money laundering occurred.

### Whistle-blower Protection

West China Cement insists on constantly improving the supervision system and strengthening the comprehensive monitoring of all economic operations. The "Regulations on the Management Staff's Integrity and Self-discipline" and "Management Measures on Disciplinary Punishment for Management Staff" clearly stipulate the methods and investigation and processing procedures for complaints and whistle-blowing. An investigation and verification mechanism has also been established, pursuant to which responsibilities are designated based on levels, matters are managed by respective departments, and which is handled by special officers, to ensure that every reporting is properly resolved and effectively utilized.

We are committed to protecting the privacy of each whistleblower and information security. We strictly prohibit any person or any unit from disclosing whistleblower's information in any form and any retaliation against whistleblowers and their close family as well as any parties providing aid in the reporting and investigation. Once found, there will be serious investigation and punishment.

Through our whistleblower protection mechanism, we encourage all employees, customers, suppliers and contractors to report non-compliant business practices to the Company.

# 04

## Promoting Green Development

Lucid waters and lush mountains are invaluable assets. West China Cement has been adhering to the green and low-carbon development with ecology, environmental protection, safety, recycling as the main line of work, established a sound environmental management system, and actively participated in energy saving and emission reduction with a view to developing into an energy-efficient and environmentally friendly enterprise, facilitating the harmonious coexistence between man and nature, and promoting the sustainable development of the cement industry.



## Enhancing Environmental Management in Compliance with Laws

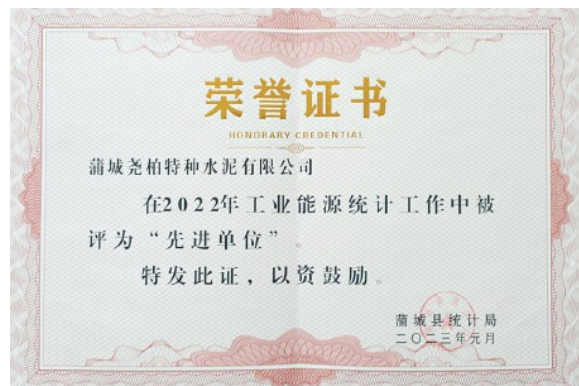
Having always been guided by Xi Jinping's thought on ecological civilization, West China Cement strictly implemented the philosophy of "lucid waters and lush mountains are invaluable assets", strictly followed the Environmental Protection Law of the People's Republic of China, Air Pollution Prevention and Control Law, Solid Waste Pollution Prevention and Control Law, Water Pollution Prevention and Control Law, Noise Pollution Prevention and Control Law, Air Pollutant Emission Standards for Cement Industry, Measures for the Administration of Pollutant Discharge Permits, "14th Five-Year Plan" Environmental Impact Assessment and Implementation Plan for Pollution Discharge Permits and other relevant laws and regulations and industrial standards in respect of environmental protection in the countries where we operate, and adhered to the development path of ecological priority as well as green and low-carbon.

We continued to carry out education on laws and regulations in respect of environmental protection to enhance the awareness of environmental protection and the concept of legal system among all staff, and continuously improved the environmental management system and process system by consolidating the responsibility of environmental protection management at the "Group-Subsidiary" level, enhanced the prevention at source, strictly implemented the "three simultaneous" system for project construction to strictly regulate production management, strictly control and eliminate pollutant emissions, as well as actively carried out comprehensive utilization of waste and energy saving and carbon reduction management in order to improve environmental protection management.

During the Reporting Period, the Group as a whole has invested a total of RMB149.69 million in environmental protection. Shifeng and Xunyang companies were newly listed on the national "Green Factories" while Fuping and Danfeng companies were newly listed on the provincial "Green Factories", and Huaxi company was awarded A-grade certification for the credit rating of environmental protection at the provincial level for the third consecutive year.

As at the end of the Reporting Period, a total of 20 production enterprises of the Group obtained certification of the ISO14001 Environmental Management System, and a total of 3 subsidiaries were listed on the national "Green Factories" and 5 subsidiaries were listed on the provincial and municipal "Green Factories".

## Green Honors





## Green Honors in 2022

January 2022	Shifeng Company	Awarded the national "Green Factory" title
	Xunyang Company	
May 2022	Shifeng Company	Obtained certifications for the quality, environment, occupational health and safety, energy management systems (the "Four Systems") and low-carbon products
	Hengzhong Company	Obtained Green Building Material 3-star Product Certification
June 2022	Moyu Company	Obtained certifications for the quality, environment, occupational health and safety, energy management systems (the "Four Systems") and hazardous substances in cement and low carbon products
	Pucheng Company	Obtained certifications for the quality, environment, occupational health and safety, energy management systems (the "Four Systems") and cement, dry-mix mortar products
July 2022	Lantian Company	Obtained certifications for the quality, environment, and occupational health and safety management systems (the "Three Systems")
	Weinan Yaobai Company	
	Fuping Company	Awarded "2021 Advanced Unit of Safety Production and Hidden Dangers Investigation and Management" in Fuping County
September 2022	Yangxian Company	Obtained certifications for the quality, environment, occupational health and safety, energy management systems (the "Four Systems") and low carbon products
	Jianghua Company	Awarded "Excellent Cement Grinding Enterprise in Shaanxi Province"
	Shifeng Company	Certified for clean production
October 2022	Lantian Company	Obtained certification for the energy management system
November 2022	Xixiang Company	Obtained certifications for the quality, environment, occupational health and safety, energy management systems (the "Four Systems") and low carbon products
December 2022	Mianxian Company	Obtained certifications for the quality, environment, occupational health and safety, energy management systems (the "Four Systems") and low carbon products
	Hancheng Company	Awarded "Municipal Garden Unit" in Hancheng City
	Pucheng Company	Awarded "Advanced Unit of Industrial Energy Statistics" in Pucheng County
	Mianxian Company	Passed the Heavy Pollution Weather Performance Assessment for B-class Enterprises in Shaanxi Province
	Huaxi Company	Awarded A grade in environmental credit evaluation in Guizhou Province for three consecutive years



## Green and Low-carbon Development

### "3060" Action Path

Focusing closely on China's 14th Five-Year Plan and 2035 Vision, West China Cement has steadfastly followed the path of ecological priority and green and low-carbon quality development, planned the "3060" action path, set goals for energy efficiency and reduction in greenhouse gas emissions, increased research and application of green and low-carbon technologies, set up a dedicated organisation, brought in professionals, established systems and working mechanisms, and strengthened carbon emission management on all fronts, striving to achieve a dominant position in the field of carbon peaking and carbon neutrality.

	<b>Reducing the proportion of carbonate in raw materials</b>	Reduce the carbonate content of raw materials by increasing the proportion of calcium carbide slag, steel slag, copper slag, sulphuric acid slag, coal slag, sludge, coal slag and fly ash, while ensuring product quality.
	<b>Promote clean energy</b>	Actively promote biomass fuels and fuel substitution in rotary kilns for solid waste such as tyres, rubber pellets and courier packaging waste.
	<b>Phase out high energy-consuming electrical and mechanical equipment</b>	Formulate a phasing-out plan based on the power of the motors from large to small and in line with the Catalogue for the Elimination of High Energy-Consuming and Outdated Electrical Equipment (Products) (the first to the fourth batches) issued by the Ministry of Industry and Information Technology.
	<b>Phase out backward production capacity</b>	Eliminate backward production capacity through capacity replacement and use new process technologies to reduce unit energy consumption and CO <sub>2</sub> emissions.
	<b>Carry out research and development on low calcium cements</b>	Low-calcium cements based on high-belite sulphate aluminate cements have similar properties to silicate cements, while CO <sub>2</sub> emissions are reduced by around 25%, therefore, research and development and promotion of applications are being stepped up.
	<b>Improve the quality of cement clinker</b>	Adopt advanced homogenization batching (raw materials and fuels) control technical scheme and measures to regulate and control the content of trace elements influencing the mineral crystal structure of the cement clinker, improve the quality of the cement clinker and reduce energy consumption per unit.
	<b>Build intelligent cement factories</b>	Gradually realise resource integration and optimisation, minimise manual intervention in production lines, reduce energy consumption and losses in abnormal production processes, and improve product quality and production efficiency.
	<b>Explore oxygen-enriched combustion technology in kilns</b>	Increase the use of high oxygen content combustion aids to shorten the burning time of coal and improve the combustion temperature and efficiency of the firing system.
	<b>Explore carbon capture, usage and storage (CCUS) technologies</b>	Actively carry out research on and application of cutting-edge carbon capture, usage and storage technologies for carbon dioxide.
	<b>Explore new energy technologies</b>	Make use of the vacant land of factories for photovoltaic power generation and energy storage to achieve power self-sufficiency.
	<b>Explore solar calcined clinker</b>	Use advanced concentrated solar thermal power (CST) technologies to provide heat up to 1,500°C for thermochemical and industrial heating, and gradually increase the proportion of solar energy utilised.

During the Reporting Period, we invested a total of RMB147 million in energy conservation and emission reduction, and vigorously promoted the implementation of the "3060" action path, which achieved fruitful results. In particular, we took Tongchuan Company as a pilot unit to establish a carbon emission management system and implementation rules to gradually regulate carbon emission management across the Group; applied a nitrogen oxide emission suppression system with artificial bionic technology in Tongchuan and Moyu Company and adopted a new dust collection design and blowing technology, which reached an industry-leading level; independently developed the denitrification technology for cement production process, namely the "cement kiln flue gas DDN<sup>®</sup> deep denitrification technology", which has been applied in Shifeng Company for one year with good results and has been fully applied in cement production bases such as Fuping, Dafeng and Xunyang successively; continuously strengthened the research on and development of new low-carbon environmental protection products such as high-belite ferroaluminate cement, high-efficiency environmentally-friendly coal-saving agent and ammonia escape treatment agent, etc., some of which have been applied and have brought about energy-saving and emission reduction effects.

## Green and Low-carbon Development Case

Yao Bai Group's Shifeng Company has continuously innovated and explored the development path of energy saving and consumption reduction, successively carried out the upgrading of grate cooler, roots fan, powder separator, coal mill and cement mill dust collector, built 9MW pure low temperature waste heat power generation system, introduced low nitrogen combustion technology plus kiln tail selective non-catalytic reduction (SNCR) plus cement kiln flue gas DDN® deep denitrification technology, and carried out full-process unorganised emission treatment for mining, clinker, cement production and shipment, etc. The Company has carried out a wide range of clean production activities, achieving a "double reduction" in energy consumption and pollutant emissions, and a "double improvement" in green development and management efficiency, and has been listed in the sixth batch of national green manufacturing factories by the Ministry of Industry and Information Technology.



In the future, we will strictly implement the "3060" action path of West China Cement, continue to increase green and low-carbon technology development and resource investment, increase the promotion and application of clean energy, increase the proportion of non-fossil energy use, improve the operation of waste heat and clean and low-carbon energy. We will invest in the layout of solar power generation and wind power generation, so as to gradually change to first-class energy-efficient equipment or high-efficiency energy-saving equipment. We will upgrade and replace our treatment equipment for particulate matter, sulfur dioxide and nitrogen oxide, improve carbon asset management, accelerate the pace of green factory construction, in an effort to achieving green and sustainable development.

## Saving Natural Resources

### Saving Natural Resources

In order to actively responds to the national call for a "resource-saving and environment-friendly" society, with the aim of comprehensive resource utilization, West China Cement implements the "reduce, reuse and recycle" policy into all aspects of production and operation, establishes a comprehensive resource management system, records resource consumption in the production process in real time, conducts regular statistical analysis, accurately evaluates the operational performance of each production base, and continuously optimizes total resource consumption and resource utilization.

## Energy Consumption Indicators

Energy consumption indicators	2022
Direct energy consumption (100 million kWh)	119.38
Total coal consumption (100 million kWh)	119.31
Indirect energy consumption (100 million kWh)	10.33
Total electrical energy consumption (100 million kWh)	10.33
Comprehensive energy consumption (100 million kWh)	129.71
Energy consumption per unit of clinker (Clinker process) (kWh/tonne of clinker)	915.90
Energy consumption per unit of operating revenue (100 million kWh/RMB 100 million)	1.53

**Energy efficiency target:** The company's energy consumption intensity in 2025 will decrease by 5% compared to 2020.

## Water Resource Management

In FY2022, West China Cement did not face any problems in sourcing water that is fit for purpose, the Group has always adhered to the concept of efficient water use and water conservation, formulated a water conservation management system, carried out extensive water conservation actions, proactively eliminated and improved high water-consuming processes, and formulated strict measures for water conservation, set up water conservation efficiency targets, incorporated water resources use in subsidiaries into target assessments, and actively promoted dual control of total water consumption and intensity so as to maximise sustainable use of water resources. Meanwhile, West China Cement promotes production line sewage treatment and production wastewater purification system, installation of cooling water circulation system and rainwater collection system, realize circulating water replenishment after wastewater purification, by effectively utilizing natural rain, each set of equipment can save about 50000 tons of water annually, reduce water resource consumption.

Use of Water Resource	2021	2022
Total water consumption (tonne)	2,339,880	2,858,424
Water consumption intensity per unit of clinker (Clinker process) (tonne of water consumption/tonne of clinker)	0.15	0.13
Water consumption intensity per unit of operating revenue (tonne of water consumption/RMB10,000)	3.06	3.37



Water saving efficiency target:

The Company's water use intensity will decrease by 6% in 2025 as compared to 2020.



## Use of Packaging Materials

All of West China Cement's bagged cement products are packaged in valve bags, effectively avoiding leaks and dust during packaging, handling, transportation and use, as well as problems such as bag stitching and paper edges entering the cement, which improves production efficiency and product quality while achieving clean production. We also use recycled plastic, old woven bags and other waste resources to produce valve bags, saving raw materials and achieving secondary use of resources, which helps to save resources and reduce environmental pollution.

During the Reporting Period, 3.78 kilograms of packaging materials were consumed per tonne of cement, with a cumulative consumption of 7,300 tonnes of packaging materials, a decrease of 7.7% compared to 2021.

## Use of Alternative Raw Materials and Fuels

West China Cement is fully aware that resource conservation begins in the detail. To this end, we have always made the use of alternative raw materials and fuels an important part of our production management. On the premise of ensuring product quality, we have been improving our production processes, optimising the ratio of raw materials and fuels and actively carrying out trials and promoting the use of alternative materials, starting with the three main aspects, namely fuels, raw material batching and cement batching.

In particular, we have promoted the use of gasification slag as an alternative fuel to reduce carbon emissions in the Guanzhong and Shangluo regions of Shaanxi, the use of yellow phosphorus slag to reduce coal consumption in the southern Shaanxi region and the Huaxi region of Guizhou, and the use of other industrial smelting waste slags in the more developed industrial production bases.

During the Reporting Period, a total of 5,421,800 tonnes of various tailings (including aluminium tailings, lead and zinc tailings, etc.) and industrial smelting slag (including water quenched slag, barium slag, steel slag, copper slag, fluorine gypsum and phosphogypsum, etc.) were used, representing a year-on-year increase of 5.6%, which reduced production costs while reducing the use of natural resources, achieving a "win-win" situation for both environmental protection and corporate efficiency.

## Co-disposal of Solid Waste and Hazardous Waste

We make use of the high temperature, large heat capacity, alkaline environment, long residence time in the high temperature zone and no waste residue of cement rotary kilns to actively promote cement kiln co-disposal of solid waste projects, solid and hazardous waste will be divided into solid and semi-solid waste with calorific value (excluding pollutants), liquid hazardous waste with calorific value, hazardous waste with calorific value pollutants, solid and semi-solid waste without calorific value, liquid hazardous waste without calorific value, and hazardous waste with non calorific value pollutants, according to its characteristic, and it will effectively reduce raw material and coal consumption by inorganic compound system, slurry residue system, contaminated soil system, with a view to realising the "harmless, reduced and resourceful" treatment of municipal solid waste and hazardous waste, and achieving resource recycling and reuse.

As at the end of the Reporting Period, three solid waste and hazardous waste disposal projects were completed in Fuping and Mianxian of Shaanxi and Yining of Xinjiang. During the Reporting Period, a total of 38907.28 tonnes of general solid waste and 31313.35 tonnes of hazardous waste were disposed of, and a total of 12,496.35 tonnes of inorganic cyanide and cyanide tailings were disposed of, which strongly alleviated the difficulties in the disposal of municipal hazardous waste.



## Waste Heat Power Generation

West China Cement has equipped all cement clinker production sites with pure low temperature waste heat power generation systems to efficiently recover waste heat dissipated in the cement production process and convert it into electricity to feed back into the cement product production process, effectively reducing the loss of unused energy in the form of waste heat, significantly reducing coal consumption and the greenhouse effect, and achieving satisfying economic, social and environmental benefits.

During the Reporting Period, the total installed capacity of waste heat power generation of West China Cement reached 97.5MW, generating a total of 331 million kWh of electricity for the entire year. Calculated on the same basis as thermal power generation, it can save 132,400 tonnes of standard coals, which is equivalent to the emission reduction of approximately 330,000 tonnes of CO<sub>2</sub>, 9,900 tonnes of SO<sub>2</sub> and 5,000 tonnes of NO<sub>x</sub>.

Waste heat power generation	2022
Power generated (100 million kWh)	3.31
Standard coals saved (10,000 tonne)	13.24
Reduction in CO <sub>2</sub> emissions (10,000 tonne)	33
Reduction in SO <sub>2</sub> emissions (10,000 tonne)	0.99
Reduction in NO <sub>x</sub> (10,000 tonne)	0.5

## Green Mine Construction

West China Cement has always adhered to the principle of "mining while treating, development in protection and protection in development", compiled green mine construction implementation plans in strict accordance with the requirements of laws and regulations, continuously improved the ecological mining environment, scientific mining methods, efficient resource utilization and digital management information, promoted mining and mine restoration and treatment simultaneously, and achieved coordinated development of resource development and environmental protection.

During the treatment process, the restoration concept of "human intervention as a supplement, natural restoration as the mainstay" was strictly upheld, and comprehensive restoration measures such as landform reshaping, soil reconstruction and vegetation rebuilding were implemented based on the situation of the mine. In terms of plant grouping, a combination of "trees, shrubs, grasses and vines" was used, and local native plants were selected as much as possible to build a multi-dimensional ecological plant community and form a good and stable ecosystem.

During the Reporting Period, a total of approximately RMB32,557,700 was invested in mine restoration and treatment, with a restoration and treatment area of approximately 250,000 square metres, of which 30,000 square metres were treated by wired lands seed spraying, more than 50,000 trees, shrubs and vines were planted, as well as ancillary works such as platform retaining walls, drainage ditches, high level ponds and sprinkler systems. At present, the Group has four mines that have passed the green mine expert group review to meet the requirements of green mines, among which the Xunyang mine has been selected for the provincial green mine creation list.

## Emissions Control

### Management Policies of Emissions Control

In strict accordance with the requirements of the Environmental Protection Law of the People's Republic of China, the Regulations on the Administration of Emission Permits and other relevant national laws and regulations in the place of operation, West China Cement continues to strengthen the management of pollutant emissions, giving priority to the use of clean energy, the adoption of processes and equipment with high resource utilisation and low pollutant emissions, as well as comprehensive waste utilisation technology and harmless treatment technology for pollutants, so as to reduce the generation of pollutants. We continue to strengthen scientific research and development on environmental protection, increase research on cutting-edge technologies, continuously improve the operation and management of environmental protection facilities, build an early warning mechanism, improve the level of informatization, strengthen the treatment of exhaust emissions and pollution testing, and eliminate excessive emissions and environmental accidents.

All production units of the Yaobai Group have strictly implemented the "one-permit management" of emission permits, and all of them have applied for the Emission Permits in accordance with the regulatory requirements, installed monitoring equipment at major emission outlets, and networked with provincial and national monitoring platforms to upload emission data in real time. During the Reporting Period, the emission concentrations of pollutants from all production lines met the required standards and successfully passed the post-provincial emission permit enforcement inspection.

## Gas Emissions Management

West China Cement actively responded to the national performance grading policy, independently developed the "cement kiln flue gas DDN® deep denitrification technology", which broke through the bottleneck of cement kiln SNcr denitrification technology and was unanimously approved by environmental protection departments and industry experts, and has been applied in four production bases of Yaobai Group, namely Shifeng, Fuping, Dafeng and Xunyang, and achieved good results. At the same time, according to the requirements of Technical Guidelines for Formulation of Emergency Emission Reduction Measures for Key Industries in Heavy Polluted Weather issued by the Ministry of Environmental Protection, we continuously deepen the control of unorganized particulate matter by carrying out desulfurization transformation, installed automatic rolling shutter doors at the entrances and exit of vehicles such as material shed and sprinkler facilities inside of storage shed, ensure the emission values of sulfur dioxide, nitrogen oxides, particulate matter and other pollutant from each production base meet the standard requirements by the way of working in closed environment.

During reporting period, West China Cement has conducted system optimization and detailed deployment regarding to future greenhouse gas emission, firstly, reduce the emissions of major pollutant indicators, upgrading of particulate matter, sulfur dioxide and nitrogen oxide governance equipment. Secondly, increase the promotion and application of clean energy, improve the proportion of non-fossil energy utilization in industrial field, promote alternative operation methods such as industrial waste heat and clean low-carbon energy, invest layout for solar power and wind power generation, development of forestry resources. Thirdly, gradually replace primary energy efficiency equipment or high-efficiency energy-saving equipment. Fourthly, continuously carry out the construction of green factories. Fifthly, carry out standardized management of carbon emissions, all coal related units have launched comprehensive carbon element monitoring that providing strong basis and preparation for carbon emission accounting and establishing carbon emission management system. Through five major measures, achieve management goals of greenhouse gas emission as early as possible while ensuring that pollutant emissions meet the control indicators.

### Comparative Table of Total Major Gas Emissions

Major gas emissions	2020	2021	2022
SO <sub>2</sub> (tonne)	631	598	658.11
NO <sub>x</sub> (tonne)	6578	6522	8492.21
Particulate matter (tonne)	1095	631	673.88
Greenhouse gas (tonne)	11052090	10690671.72	10588040.21

### Comparative Table of Unit Major Gas Emissions

Major gas emissions	2020	2021	2022
SO <sub>2</sub> (kg/tonne of clinker)	0.042	0.038	0.029
NO <sub>x</sub> (kg/tonne of clinker)	0.437	0.418	0.372
Particulate matter (kg/tonne of clinker)	0.072	0.040	0.030
Greenhouse gas (tonne of CO <sub>2</sub> equivalent/tonne of clinker)	0.8596	0.8541	0.8557

Greenhouse gas emissions management target: the Company's carbon emissions intensity will reduce by more than 3% in 2025 as compared to 2020.

## Waste Management

West China Cement has strictly abided by the laws and regulations of areas where it operates, such as "Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste" and "Water Pollution Prevention and Control Law of the People's Republic of China", actively take measures to ensure handle the hazardous waste safely and efficiently, promote the recycle of hazardous waste, ensure hazardous harmless, reduce and resource utilization.

Waste	2021	2022
Total amount of hazardous waste generated (tonnes)	112.2	88.77
Hazardous waste generated per unit of operating revenue (tonnes of hazardous waste / RMB10,000)	0.00015	0.00010
Total amount of non-hazardous waste generated (tonnes)	0	7,631.43
Non-hazardous waste generated per unit of operating revenue (tonnes of non-hazardous waste / RMB10,000)	0	89.90

West China Cement has established comprehensive management system for hazardous waste, such as establish a management ledger, faithfully record the information of waste such as type, quantity, flow direction, storage, utilization and disposal, adopt preventive measures for hazardous waste temporary facilities, prevent eliminate discharge of oil, acid, lye or toxic effluent to waterbodies. Utilizing water quality grading treatment, recycle sewage and strictly implement hazardous waste management requirements. During reporting period, hazardous wastes such as waste oil produced, liquid waste in laboratories, waste lead batteries, etc. are disposed by qualified third parties, and a total of 79.166 tons of hazardous wastes are entrusted for disposal throughout the year. During reporting period, industrial wastewater discharge management meets the standard requirements, hazardous waste management has achieved 100% compliance, safety, effectively disposal.

### Management objectives of industrial sewage discharge:



As the first cement production enterprise in Shaanxi province that use desulfurization gypsum and construction waste as part of its raw material for harmless waste, West China Cement actively promotes the comprehensive utilization technology of harmless waste, except for the waste generated by its own production, West China Cement regularly recycle waste such as volcanic ash, fly ash, tailings, industrial smelting waste as a material added to its cement products, which not only solved the enterprise waste disposal problem in power, steel and chemical but also effectively promoting resource recycling in reducing the pollutant emission. During reporting period, a total of 5.4218 million tons of various types of tailings and industrial smelting waste were used, effectively promoting the efficient utilization of harmless waste.

### Waste Management Objectives:





## Responding to Climate Change

Global climate change, triggered by increasing greenhouse gas emissions, is one of the biggest global issues in the 21st century. West China Cement is highly concerned about the issue of climate change and is actively identifying the risks and opportunities of climate change and formulating strategic initiatives to address climate change.

During the Reporting Period, we organised equipment maintenance, special training and drills, risk and hidden danger investigation and management in advance in accordance with seasonal characteristics and in response to severe weather conditions such as high temperature, thunderstorms, rainy season, high winds and sandstorms, etc. A total of 55 fire prevention and flood prevention drills were organised, and 2,488 safety hazards were investigated, with a rectification rate of 100%, which effectively enhanced our ability to cope with weather risks.

In the future, we will continue to focus on climate change issues, improve the use of green and low-carbon technologies, improve energy conservation and emission reduction, continue to enhance the capacity of carbon sinks, and continuously improve our efforts to address climate change while enhancing our ability to respond to the physical risks of extreme weather conditions.

### Climate Change Risks

Risk Category	Risk Description	Countermeasures
Transformation risk: Policies and laws	The government's carbon emission related policies, laws and regulations will become stricter, and the construction of a national carbon emission trading market is being actively promoted.	<ul style="list-style-type: none"> <li>Plan to study and formulate medium and long-term plans for reducing carbon emissions, and continue to make improvements.</li> <li>Plan to reduce greenhouse gas emissions by upgrading processes and reducing energy consumption, and to conduct technology research and development in alternative clinker, alternative fuels, carbon dioxide capture and low-carbon products.</li> <li>Actively prepare for the unification of the national carbon market for cement in the future.</li> </ul>
Physical risk: Extreme weather	Extreme weather (heavy rain, snow, flooding, high temperatures, severe cold, etc.)	<ul style="list-style-type: none"> <li>Strengthen risk analysis, organise and implement surveys for hidden danger in key areas, enhance the co-ordination of disaster prevention and control, formulate emergency plans and organise regular disaster safety drills to increase employees' awareness of prevention and resilience.</li> <li>Purchase insurance to protect personal injury and property damage caused by various disasters and accidents.</li> <li>Continue to develop multiple procurement channels and keep abreast of the power supply and coal supply situation in the operation area to ensure supply.</li> <li>According to the weather, arrange shipment of goods from factory, halt shipping in case of extreme weather, transfer employees in transit depots safely, fix loading and unloading equipment, and inform customers and transport companies in advance to arrange vehicles appropriately; assist shop customers in storing and transferring goods.</li> </ul>

### Climate Change Opportunities

Opportunity Category	Opportunity Description	Strategic initiatives
Policies and laws	The government is actively promoting the construction of green factories and green mines, and the environmental requirements for the cement industry are gradually rising.	Continuously promote energy conservation and emission reduction, enhance production and operational efficiency, promote comprehensive use of resources, reduce operating costs in the long run and further consolidate competitive advantage in the industry.
	Government is actively promoting the construction of national carbon emission trading market.	Actively follow up on the latest national policies, carry out carbon asset management in a timely manner, and make use of market-based means to help preserve and increase the value of the enterprise's carbon assets.
Products and services	Customers' needs for low carbon cement, green building materials product and service will rise with government is promoting green building.	Plan to develop low carbon cement and high carbon absorption concrete technologies. Supply reliable and stable green building materials according to customers' individual needs. Continue to promote low carbon product certification for cement and clinker products.
Market	The government has promoted the development of green buildings, with national and local governments successively launching various policies to support the development of prefabricated buildings and encourage the resourceful use of construction waste to improve the urban environment.	Compared with the cast-in-place housing construction method, prefabricated housing has environmental advantages such as material saving and energy saving, and is conducive to improving building quality and construction efficiency. The Company actively promotes the development of prefabricated construction projects. It also continues to carry out cement kiln co-disposal to dispose of solid waste such as construction waste and promote the green development of the industry.

## Green Culture Cultivation

### Green Culture Cultivation

West China Cement takes practical action to consciously implement the development concept of "lucid waters and lush mountains are invaluable assets" and always actively fulfils the social responsibility of large enterprises. In addition to the production and operation of its factories, the Company has been improving the environment of its factories. Since 2018, we have carried out the construction of garden-style factories for five consecutive years, and with the goal of "factory in sight, garden in mind", we hired a professional landscaping team, organised experts to carry out overall planning for the greening of factories, optimised the configuration of garden plants adapted to the local climate, unified and standardised the visual image design of the enterprise, and made efforts to create a beautiful working and living environment where there are "gardens in factories, groves in gardens, and a view in groves," with "flowers at the low end, fruits at the high end, new scenery at every step, and green mountains and water at all times".

During the Reporting Period, a total of RMB11.0079 million was invested in greening, with the area of greenery increased by 993,000 m<sup>2</sup>. As at the end of the Reporting Period, the average greenery coverage of each production unit reached over 20%.



### Construction of Star-rated Dormitories and Canteens

In order to create a hospitable environment, West China Cement put forward the idea of building "star-rated dormitories" and "star-rated canteens" in 2019, and by drawing on the guest room and catering management experience of its Xinbai Hotel, the Company refurbished old houses, carried out plumbing and heating renovations, upgraded dormitory and canteen ancillary facilities and standardised its daily management, which greatly improved the living conditions of employees and enhanced their satisfaction.

As at the end of the Reporting Period, the Group had 6 five-star dormitories and 8 five-star canteens, with a 100% up-to-standard rate.



## Environmental Responsibility Practice Case

The 10,000t/d clinker second generation new dry process cement production line of Yaobai Group's Tongchuan Company, with a 15MW pure low temperature waste heat power generation system and an annual disposal of 200,000 tonnes of solid waste and hazardous waste, is a project located in Yaozhou District, Tongchuan City, Shaanxi Province. It is an intelligent, green and ultra-low emission clinker cement production line invested by West China Cement in the form of capacity swap, which was put into operation in 2021 and achieved full capacity and efficient operation in 2022.

### Green Manufacturing and Circular Development

The Tongchuan 10,000-tonne line is a vivid practice of green and low-carbon development of West China Cement. The project follows the concept of green and circular development throughout its life cycle, adopts the world's most advanced second-generation intelligent new dry process pre-decomposition production process, and carries out systematic and integrated innovation in terms of process optimisation, equipment upgrading, energy saving and emission reduction, and low-carbon technology development, etc. The environmental performance of the project has reached the A-grade rating standard, and the energy consumption index has reached the industry leading level.

The project can consume 628,000 tonnes of industrial waste slag such as smelting slag, furnace slag and desulphurisation gypsum each year and treat 200,000 tonnes of hazardous waste, which can partially solve the environmental pollution and land occupation problems caused by industrial waste and urban sludge, effectively achieving the circular economy development model and boosting the sustainable development of the national economy.

The 15MW pure low-temperature waste heat generator set built in conjunction with the project will save 24,200 tonnes of standard coal and reduce CO<sub>2</sub> emissions by nearly 66,000 tonnes based on an annual power generation capacity of 76.17 million kWh, making a positive contribution to the mitigation of climate warming while improving energy efficiency and reducing pollutant emissions.

The project has built a sewage treatment and production wastewater purification system, a cooling water recycling system and a rainwater collection system, which can realize the reuse of recycled rechargeable water after wastewater purification and effectively use natural rainwater, saving 50,000 tonnes of water each year and reducing the consumption of water resources.



## Leading Energy Conservation and Emission Reduction

The Tongchuan 10,000-tonne line uses a combination of self-denitrification of pre-decomposition system and SNCR as low NO<sub>x</sub> emission control technology, and, together with the use of low NO<sub>x</sub> burners, can effectively reduce the generation of thermal NO<sub>x</sub> and achieve clean production.

Since the project was put into operation, the emission indicators of various pollutants are significantly better than the emission control requirements stipulated in the national standard GB4915-2013, with NO<sub>x</sub> below 50mg/m<sup>3</sup>, SO<sub>2</sub> below 35mg/m<sup>3</sup> and particulate matter below 10mg/m<sup>3</sup>, reaching the A-level performance standard. Compared with the original production line replaced by the project, the annual standard coal consumption can be reduced by 68,000 tonnes, and the SO<sub>2</sub> and NO<sub>x</sub> emissions can be reduced by 882 tonnes and 1,035 tonnes respectively, with significant emission reduction effect.

The project is designed with advanced production process, and since it was put into production, the standard coal consumption per tonne of clinker is 91kg, and the comprehensive electricity consumption of comparable cement is 64 degrees, which is significantly higher than the energy utilization rate of traditional cement enterprises and reaches the advanced level of the same industry.

All kinds of materials in the whole plant are conveyed by highly-efficient, energy saving and low-consumption process equipment, so as to save power consumption to the maximum extent. The six-stage cyclone preheater is designed with low pressure loss technology. The cyclone cylinder is a large worm shell with a short column body structure, deflector, and rectifier, which greatly reduces system resistance, and compared with the traditional technology preheater, the preheater fan electricity consumption can be reduced by 15 to 20%.

## Smart Manufacturing and Management Innovation

The Tongchuan 10,000-tonne project line used industrial Internet, big data and other means to realize intelligent ultra-low emission production control, adopted industrial digital monitoring platform, remote service control platform, intelligent equipment management, intelligent logistics and other systems, with intelligent perception, decision-making, control and execution functions, and realized functional cement production through big data acquisition, analysis and application.

The project used nine functional modules, such as unmanned inspection, robotic packaging and unmanned guarding, to achieve automation and intelligence in raw material batching, production control and equipment operation and maintenance, which improved product quality, reduced product energy consumption and enhance management efficiency, while minimizing manual intervention in production lines and significantly improving employees' working conditions.

Advanced production processes and equipment require advanced management to be effective. Tongchuan firmly established the concept of green and low-carbon development, constantly improved the management system for energy conservation and consumption reduction, set resource and energy management targets, built a clean and low-carbon energy supply system, controlled total energy consumption and greenhouse gas emissions within a reasonable range, accelerated the construction of "garden-style factories", advocated a simple and moderate lifestyle, and helped consolidate the concept of green and low-carbon development, making a positive contribution to the continuous promotion of ecological civilization.





## 05 "Re"- consolidating Safety Foundations

Safety is important in life, and it is a huge responsibility for us to bear. West China Cement has always upheld the basic principle of "establishing a bottom line for safety measures". We prompt our corporate development and fulfill our responsibilities in a scientific manner, continuously developing a safe culture. By thoroughly constructing a safety barrier, we address and deal with all safety concerns. With our concerned efforts, we continue to improve our safety management level.

## Safety Management System

West China Cement strictly adheres to the relevant national laws and regulations in relation to the safety production, including Work Safety Law of the People's Republic of China, Fire Protection Law, Public Security Administration Punishments Law, Criminal Law, Non-coal Mining Production Safety Permit Implementation Measures, etc. We insist on the management principle of safety first and prevention over intervention so as to deal with all safety issues at source.

The Company has established the Safe Production Management System and the Measures for the Implementation of Pre-Production Safety Accountability, while making amendments on a yearly basis in accordance with the requirements of laws and regulations and management. Under the guidance of the Board's ESG committee, we set up a safety production management department in the Group and its subsidiaries, while establishing a sound safety production accountability system according to the requirements of the Safety Production Laws, namely the principle that "safety is of paramount importance in the management of industry, business and production operation". As such, we have built a system that on the one hand, classifies and controls different levels of risks and, on the other, inspects, tackles and prevents hidden dangers. Finally, we have normalized the education, training and practice of employees in relation to safety production so as to continuously improve our safety production standards.

During the Reporting Period, the total investment on safety production amounted to RMB24.63 million, and there was no occurrence of fatal accidents at work in relation to safety production, cease of operation or other more significant incidents due to safety issues.

### Safety Indicators

Safety Indicators	2020	2021	2022
Number of fatal accidents	0	0	0
Percentage of fatal accident occurrence	0	0	0
Loss of working day(s) due to work injuries	1129	981	938

Amount of safety production investment **RMB24.62 million**

Number of safety training(s) organized **880 (15,443 trainees)**

Number of supplier(s) with safety qualification **168**

Number of first-class standard expert corporation(s) **1**

Number of second-class safety standard corporation(s) **14**

Number of second-class standard mine(s) **5**

### Safety Awards



## Safety Education and Training

West China Cement always believes that “inadequate training is the biggest threat to safety”, which is also our teaching philosophy regarding safety education and training. Therefore, by combining online and offline methods, we extensively promote safety education, including theories and skill training. We organize trainings for all safety positions, assembling expert teams to provide “point to point” instructions regarding safety production projects. Such expert teams can spot and rectify any mistakes quickly, which help to better convey the knowledge of problem solving and post-accident management measures, building a “firewall” on the very foundation of safety production.

During the Reporting Period, we carried out 1,785 times of safety inspections by way of “project inspection + weekly inspection + night inspection + random inspection + quarterly cross inspection”. We also organized 880 sets of safety and operation trainings, with 15,000 trainees. Lastly, we had 88 sets of safety mini videos, effectively improving the safety awareness of our employees.

## Safety Supervision from a Third Party

West China Cement regards our contractor as a main contributor to our safety management. Therefore, as a starting point, we make sure to prevent work accidents from happening to the contractors, which are held accountable in this accord. We thoroughly assess every aspect of our contractor, including but not limited to their safety quality, identity, insurance and risk security deposit. We take the initiative to organize safety training and enhance the inspection in the plant to ensure that all safety violations are duly inspected, reported and investigated, which guarantees the safety of our contractor’s business and the third parties.

During the Reporting Period, we inspected and managed 168 contractors, of which 13 were disqualified, with an accumulated safety violation fine of RMB176,000.



14 production units rated as second-class safety standardized enterprises



5 mines rated as second-class standardized mines

## Establishment of Safety Standardization

West China Cement deems the establishment of safety standardization as a great way to improve our safety production management standards. We continuously perfect our work on measure implementation and assessment standards by addressing issues including but not limited to onsite management, emergency management, accident management, safety risk management and control and potential danger inspection. We continuously increase the expenditure of safety production to proactively improve our hardware facilities and working conditions of our safety production. We also invite external experts to provide special trainings, which vigorously promote our safety standardization establishment.

During the Reporting Period, among all entities under West China Cement, 14 production units were rated as second-class safety standardization corporations, 5 mines were rated as second class safety standardization mines, while Danfeng Company was rated as a first class standardization onsite inspector.

## Occupational Health Security

West China Cement strictly adheres to the relevant national laws and regulations of areas where it operates, including the Work Safety Law of the People's Republic of China, the Occupational Disease Prevention and Control Law and the Measures for the Administration of Occupational Health Examination. We establish the management system of occupational disease prevention and control of the Company and combine it with the industry's practices, which help us to recognize the list of occupational health inspection matters, formulate the issuance of the Occupational Hazard Notification and establish the Personal Occupational Health Inspection File of Employees.

Meanwhile, we strictly perform the duties of the "three simultaneities" of occupational disease prevention, proactively report hazardous occupational factors, while formulating the occupational disease prevention and control training plan at the beginning of the year. We organized training on all employees in relation to knowledge of occupational disease, and carried out body check for employees susceptible to occupational disease in accordance with their positions and occupations, which are classified with different hazardous factors. We also revealed the results of our occupational hazardous factor inspection, and based on the results we distributed protective labor protection products that meet the required standards in compliance with the relevant laws and regulations so as to safeguard the health and well-being of all employees.

As of the end of the Reporting Period, the Group had 23 production units that have a certified occupational health system, and have already passed all required assessments.



## Building Safety Culture

West China Cement incorporated the principle of "people first" into our safety management. Like the slogan "protect yourself, protect the unit", we cultivated a united set of values, including our safety values, safe action standards, safe mindset and safe working habits.

By continuously improving our working standards and regulation system, enhancing the standardization, procedures and regulations of our management, we infuse in our employees the mindset of continuous self-inspection, self-scrutiny and self-improvement. We always promote barrier-free safety communication and immediately report our safety operation conditions and any signs of risk and danger. By establishing the system of reporting potential safety hazards and rewarding employees, we encourage our employees to give constructive feedback in relation to our safety management. As for any repeated violations of safety conduct that lead or may lead to accidents with severe impact or irresponsible safety units, we will make a personal appointment and organize legal training to the relevant individuals, so as to teach a lesson and close any loopholes. We also organize "family safety help" events so that our employees can feel the care of the Company and as such become more willing to fulfill their duties, which is beneficial to the Company's safety development. Last but not least, we are developing digital application softwares, which utilized information technology as an aid to our safety hazards inspection and handling solutions, making our safety management more transparent and efficient.







## 06 Quality Service Scales New Heights

West China Cement takes "honest business dealings, high quality at low price, excellent services in sincerity and leadership in the industry" as its core competitiveness, firmly establishes its ethics standards and legal boundaries, adheres to honesty and trustworthiness, operates in compliance with the law, thinks what customers think and makes their expectations a top priority, and is always favoured by its customers because of its quality products and invaluable services.

## Quality Guarantee

### Product Quality Management

The Group strictly abides by the Product Quality Law of the People's Republic of China and other relevant laws and regulations on product quality in the countries where it operates, and has established more stringent internal control standards for the Group with "stable components, stable strength and stable performance" as the quality management target. In combination with national and industry quality standards for products, it also has a complete quality management system and a production process management system, covering the whole life cycle including raw material procurement, production process control, product shipment inspection and after-sales technical services.

We have established a quality management team led by the general manager at group level and at each production site, continuously organised the optimisation of batching solutions, calibration of measuring equipment, production site management, comparison of quality standards, analysis of competitive products and calibration of inspection data to continuously optimise product indicators and improve product performance, so that the quality of similar products is better than that of competitive products or at the forefront of the industry.

During the Reporting Period, a variety of the Group's products were used in the construction of projects such airports, high-speed railways and reservoirs with excellent performance indicators and were fully recognised by customers and quality inspection agencies. As at the end of the Reporting Period, all cement production enterprises of West China Cement have passed the Quality Management System (ISO9001) certificate, and there were not any product quality incidents during the years.



### Raw Material Quality Control

The Group takes the quality of raw materials as the basis for ensuring the quality of finished products, insists on lifting production standards and supervising the whole production process, strengthens the sampling and testing of various raw materials such as limestone and raw coal at source, inspects them during transportation and re-tests samples upon arrival at the plant, and adjusts and replaces defected materials in a timely manner. During each process, quality control index will be verified and optimised through small mill tests, and the best ratio of each type of material is determined through orthogonal tests. The homogenisation chain in the field is continuously optimised and the concept of homogenisation index has been introduced to scientifically evaluate the quality stability of raw materials.

## Improvement of Product Performance

The Group has always been customer-oriented, and in response to customers' quality and technical requirements, we look to the characteristics of local raw materials and scientifically formulate production plans, select the best raw materials, reasonably plan the clinker rate value, strengthen the calcination, cooling and other process adjustments, and continuously optimise the clinker initial setting time, mineral composition, water requirement and other key indicators. At the same time, through small grinding tests, we select suitable blending materials, adjust mill parameters to broaden the distribution of cement particles, and carry out cement paste fluidity tests to determine the variety and proportion of gypsum, so as to improve the technical performance of cement in multiple ways.

## Laboratory Construction

Over the years, the Group has been promoting the construction of standardised laboratories, continuously increased investment in hardware and facilities for testing instruments, upgraded and replaced testing methods, actively participated in national cement quality inspection training, updated operating instructions in accordance with national and industry standards, and conducted high frequency sampling inspections of laboratory work quality, so that all laboratories have been improved to varying degrees in terms of hardware facilities, testing environment and personnel capabilities, which have played an important role in improving product quality and performance.

During the Reporting Period, 12 units of the Group were awarded "Excellent Standardized Laboratory", and the intelligent laboratories of Tongchuan Company and Moyu Company were running well, starting a new mode of intelligent laboratory testing. In the 18th "Meinolf Cup" National Comparison of Cement Chemical Analysis, 13 companies of Yaobai Group won the "Overall Merit Award" and 6 companies won the "Excellent Award", with a winning rate of 100%.



1,202 quality inspection agencies and cement companies across China participated  
All 21 companies of our Group were shortlisted for the awards

13 companies, namely R&D, Moyu, Huaxi, Xixiang, Danfeng, Lantian, Xunyang, Zhen'an, Yangxian, Mianxian, Hancheng, Shifeng and Fuping, won the "Overall Merit Award"

6 companies, namely Pucheng, Tongchuan, Jianghua, Luonan, Hetian and Yining, won the "Excellence Award"

## Quality Management Case

P·O52.5 cement is mainly used in municipal and highway beam-making and super high-rise high-grade concrete, with a clinker mixing ratio of about 90% and a high hydration heat of cement, and users have extremely high requirements for its performance. In order to enhance the market competitiveness of its products, Yaobai Group focused on improving the performance of P·O52.5 cement in 2022, and set up a professional team to study and tackle key problems, starting from the selection and proportion of production raw materials to the optimisation of clinker calcination process, control of key indicators, etc. Aimed at adapting to the worst additives that users may use, tests and improvements were repeatedly conducted so that the product performance could be greatly improved. There were no complaints about the performance of P·O52.5 cement throughout the year, and customers' return visits reflected that the key projects had yielded satisfactory results.



## Sincere Service

### Customer Service Management

The Group has put in place a unified management system on cement marketing, and on this basis created a unified customer service system. The sales head office performs responsibilities of unified marketing management and customer service, being responsible for the sales service and daily management of cement products and providing standardized service for customers before, during and after sales. Each sales customer service centre is responsible for carrying out specific selling service work to the cement customers at the operation site, including cement delivery, settlement, receipts, reconciliation, etc.

Sales customer service centres draw a networked tree map of the channels of the unit according to regional market conditions respectively, covering all end customers, with the channel maintained within three levels and keeping the sales channel flat, in order to reach to customers timely and accurately. We adhere to the market visits of "horizontal and vertical coverage", giving every village and every household access to the channels, provide professional customer service with targeted strategies for every household, organize professional technology personnel to visit customers regularly, help them to solve difficult problems during production, to reduce the operation cost of customers. Meanwhile, through measures such as committing to the delivery time and encouraging customer supervision, we increase the delivery efficiency of products, ensure normal supply, and reduce the time costs of customers.



## Guaranteeing Customers' Rights and Interests

The Group provides customized services with the customers' demand as the direction, accurately analyze customers' demand, and customize service for customers effectively. We divide customers into civilian customers, commercial customers and key project customers, and adopt different service model and sales mode targeted at different customers. We also carry out the spot-to-spot and one-on-one visit model, making in-depth visits to the field, in order to understand the customers' needs, communicate with customers in details, formulate effective solutions in accordance with their demands as well as seek their opinions and suggestions, make appropriate adjustments and help customers to solve the problems in a timely manner; meanwhile, we adopt the monthly award and annual award policy to stimulate customers' desire to purchase which is of mutual benefit and truly achieves the win-win situation for the Company and customers.

To protect customers' rights and interests and avoid various risks of customers, the Company especially formulated Information for Customers, ensuring that every customer understands the business operation process, cautions and relevant benefits. To ensure the safety of funds, customers can remit the payment directly to the designated bank accounts of the Group. All business between customers and the Group cannot be entrusted to relevant business personnel of the Company. The pick-up price of pre-payment and sales in cash are executed at the price listed on the window of the service center of the Company's various customers. The Company ensures that the username of the invoice is consistent with the name for the payment, while ensuring that cargo pick-up and receipt are in the same month, to facilitate customer financial reconciliation.

## Customer Data Protection

The Group incorporates customer data protection into its comprehensive risk management system and continues to establish robust customer data protection systems, mechanisms, and procedures. Each sales customer service centre takes the lead in customer data protection and strictly follows the principle of "the one in charge takes on full responsibility", implementing an accountability system and clarifying responsibilities and authority for the attribution, use and protection of information. We refine working measures and continue to enhance the implementation of customer data protection.

We highly respect the privacy of our customers and conduct regular information security training through special meetings and weekly meetings to continuously raise the awareness of all staff on customer information protection and ensure that customer files, information and complaint contents are kept confidential and are not to be disclosed or added to or deleted at will. The Group has an extensive customer information system and has established a multi-dimensional customer information control system and regularly upgrades this system to enhance its reliability and security. It also raises the awareness of customers' own information security through communication.

## User Satisfaction Survey

Our marketing and sales departments are responsible for customer satisfaction surveys from different perspectives. Through questionnaires and customer visits, we collect a wide range of customer opinions and suggestions to understand customer satisfaction with our products and services, and respond to customer evaluations in a timely, objective and effective manner. The goal we have set for ourselves and always strive for in terms of customer satisfaction is: 100%.

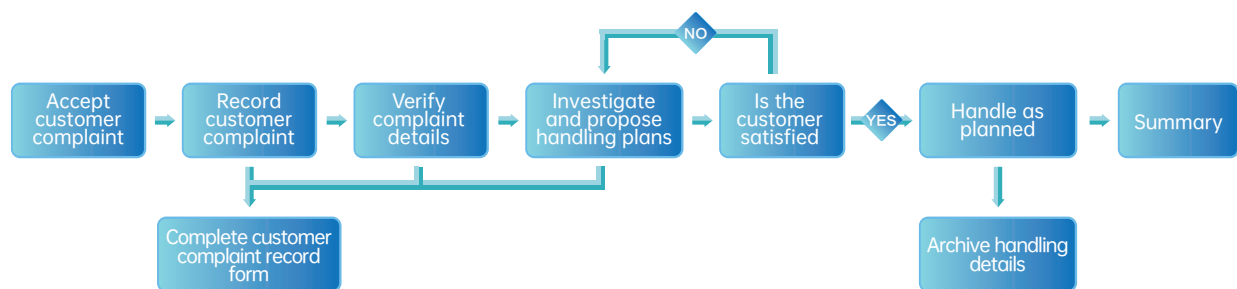


## Handling Product Complaints

West China Cement implements a "full process" service for all products sold, sets up a product quality and service complaint mailbox and hotline, and establishes a special division in the sales department to handle customer complaints. If a customer files a complaint, we will reach out to the customer within 24 hours to understand the details of the situation, and a joint team from the sales, marketing and process departments will be established to carry out an on-the-spot inspection, and immediately deal with it if the problem can be solved on site. If it cannot be solved on site, we will designate a person-in-charge to follow up and make sure that the problem is properly dealt with. At the same time, we formulate rectification plans based on customer feedback and continue to promote product and service improvement.

During the Reporting Period, the Group received a total of 12 customer complaints regarding services and products, with a complaint handling rate of 100%.

### Customer Complaint Handling Process:



## Product Recall

West China Cement establishes the management standard for quality incidents, makes judgement about the incidents according to the standard, and formulates the solution for treatment of unqualified products, the compensation standards, the recall mechanism and treatment procedures, etc. When the delivery of unqualified products are discovered and verified, or when serious quality problems occurs during the use of products, we immediately inform relative customers to stop using or separate the batch of products according to the standard, organize the recall of the unused products, identify and compensate customer's loss, organize the investigation and analysis of the quality incident, and formulate rectification measures and responsibility report, ensuring the rectification effect.

During the Reporting Period, there were no recalls of sold or delivered products of the Company due to safety and health reasons.

## Innovation-driven Development

### Technology Innovation

West China Cement is deeply aware that innovation, transformation and upgrading are the development trends of cement enterprises, so that we take market demand and the cutting-edge technology of the industry as our guidance, continuously increase investment in scientific and technological R&D in combination with the Company's business strategy, vigorously advocate the innovation awareness of all employees, accelerate the transformation of scientific research achievements, and rely on technological innovation to achieve internal development. We have set up a professional R&D team, equipped the Group with advanced research facilities and devices in the industry, continuously introduced high-level technical talents, and carried out strategic cooperation with famous universities and research institutes in China, and successfully achieved a series of research results.

During the Reporting Period, the Group organised a "technology innovation reward" competition and a press conference for QC results to guide all staff to carry out independent innovation in the fields of production, process, equipment and quality, with a focus on a number of researches on aluminated cement, sulphate-resistant cement, oil well cement, 3D printing construction materials, ultra-high performance concrete and the replacement of silica by white sandstone and the inclusion of coal sludge in raw material batching, some of which have been applied in production and put into the market.

## Management Innovation

West China Cement has been vigorously promoting a culture of innovation, and since 2020 has been carrying out group-wide innovation-driven activities aimed at "establishing an innovation-driven philosophy and stimulating innovation vitality and potential". All subsidiaries have been actively searching for innovative ideas in response to the shortcomings and weaknesses of production and management, setting up special groups, carrying out technical research and management innovation, and organising activities such as skills competitions, experience exchanges, results presentation and advice and suggestions, so as to continuously stimulate the enthusiasm of all staff to participate in innovation and comprehensively advance the high-quality development of all types of work.

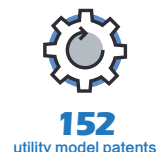
During the Reporting Period, a total of 301 mass innovation projects were completed, and the Group held an experience exchange conference with the theme of "Wise Change for Market Expansion, Innovation for Future Success", which showcased and promoted the results of 23 innovation projects and commended 11 excellent innovation projects and "golden ideas", setting off a new round of upsurge in innovation throughout the Group.



## Protecting Intellectual Property Rights

The Group attaches great importance to the protection of intellectual property rights, insists on protecting all types of intellectual property rights of the Company in accordance with the law and firmly safeguards the corporate brand image. In order to strengthen the creation, protection and application of intellectual property rights, the Company has formulated the Intellectual Property Management System, which includes trademarks, domain names, invention patents, utility model patents, computer software and written works into the management scope, and encouraged employees to actively participate in innovative activities and intellectual creation, so as to promote the Company's technological innovation and the formation of corporate intellectual property rights, and improve the Company's competitiveness and profitability.

As at the end of the Reporting Period, the Company held a total of 26 trademarks, 160 valid patents, including 8 invention patents, 152 utility model patents, and 108 other intellectual property rights. In addition, it has presided over and participated in the formulation of 5 national industry standards in the past three years.





## 07 Community Building Re-integrated

As a responsible listed enterprise, West China Cement always upholds a people-oriented management concept, caring for and treating employees well in all aspects of work, life and personal growth, creating a safe and healthy working environment for employees, building a platform for the realisation of personal values, and sharing the fruits of corporate development with employees.



## Employment with Equality

### Recruitment

West China Cement strictly abides by the Labor Law of the People's Republic of China, Labor Contract Law, Employment Promotion Law and other laws and regulations of the countries where it operates. Adhering to the philosophy of being people-oriented and achieving a win-win situation, it has established a sound and regulated human resources management system, covering compensation and dismissal, recruitment, training, promotion, working hours, rest period, equal opportunity, diversity, anti-discrimination, welfare and benefits.

Based on the principle of equal employment, West China Cement arranges recruitment through diversified channels such as campus recruitment, online recruitment and community recruitment. We strive to maintain a diversified and inclusive work environment, and prohibit employment discrimination. Employees with different nationalities, genders, ages, education levels, ethnicities, religions, and cultural backgrounds are treated with respect and fairness and provided with equal employment opportunities.

During the Reporting Period, we recruited a total of 628 employees through various channels, 497 of which were from social recruitment and 131 were fresh college graduates.

### Prohibiting Child Labour and Forced Labour

West China Cement strictly complies with the Law of the People's Republic of China on the Protection of Minors and related laws and regulations of the countries where it operates, prohibiting the use of child labour and forced labour, while a strict employment review system is in place to conduct regular reviews of the employment process and hiring information, ensuring employment compliance and legality. If any non-compliance is found, we will contact the relevant authorities to report the situation and cancel the contract immediately..

During the Reporting Period, there was no child labour and forced labour in West China Cement and its subsidiaries.

## Third-party Safety Supervision

### Number of Employees

West China Cement adheres to the talent management mechanism of "parting with the stale and taking in the fresh", and strives to upgrade labour resource management to human resource management which focuses on the governance of employee structure, aligning the composition of age, gender and education with industry specificities, and increasingly optimizing them.

As of the end of the Reporting Period, the number of West China Cement's existing employees was 6364, all of whom were full-time employees and none were part-time employees. In our overseas operations, we promote localization of management and employment in order to provide more employment opportunities for the locals, with a total of 702 overseas employees, 74% of whom were foreign nationals.

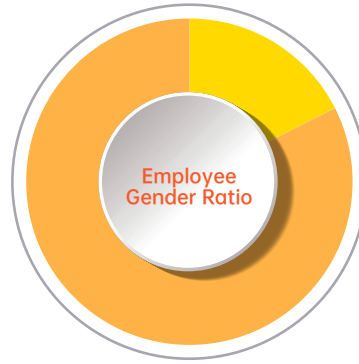
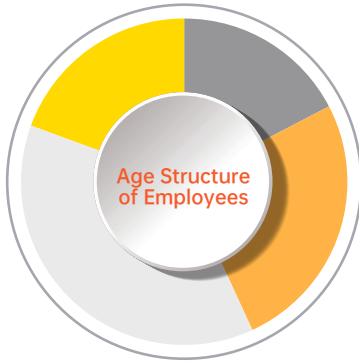
### Age Structure of Employees

As of the end of the Reporting Period, the number of West China Cement's employees aged 50 and above was 1112, representing 17.47% of the total number; the number of employees aged 40-49 was 1640, representing 25.77% of the total number; the number of employees aged 30-39 was 2375, representing 37.32% of the total number; and the number of employees aged 29 and below was 1237, representing 19.44% of the total number.



### Employee Gender Ratio

As of the end of the Reporting Period, West China Cement had 1119 female employees, representing 17.58% of the total number, and 5245 male employees, representing 82.42% of the total number.



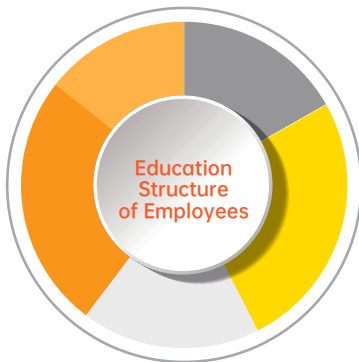
17.47% 1112 employees aged 50 and above 25.77% 1640 employees aged 40-49  
 37.32% 2375 employees aged 30-39 19.44% 1237 employees aged 29 and below  
 17.58% 1119 female employees 82.42% 5245 male employees

### Education Structure of Employees

As of the end of the Reporting Period, the number of West China Cement's employees with a bachelor's degree or higher was 1073, representing 16.86% of the total number; the number of employees with a college degree was 1645, representing 25.85% of the total number; the number of employees with a degree of technical secondary school was 904, representing 14.20% of the total number; the number of employees with a high school degree was 1125, representing 17.68% of the total number; and the number of employees with a junior high school degree or lower was 1617, representing 25.41% of the total number.

### Geographical Structure of Employees

As of the end of the Reporting Period, the number of West China Cement's Chinese employees was 5662, 4821 of which were from Shaanxi, representing 75.75% of the total number; 571 were from Xinjiang, representing 8.97% of the total number; 228 were from Guizhou, representing 3.58% of the total number; 42 were from Sichuan, representing 0.67% of the total number. The number of overseas employees was 702, representing 11.03% of the total number.



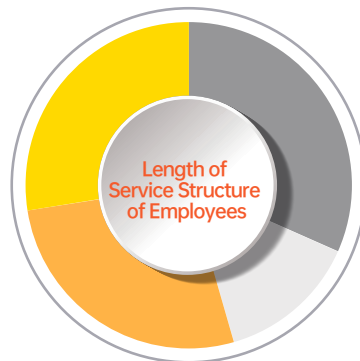
16.86% 1073 employees with a bachelor's degree or higher  
 17.68% 1125 employees with a high school degree  
 14.20% 904 employees with a degree of technical secondary school  
 25.85% 1645 employees with a college degree  
 25.41% 1617 employees with a junior high school degree or lower  
 75.75% 4821 employees from Shaanxi  
 3.58% 228 employees from Guizhou  
 11.03% 702 employees from overseas  
 8.97% 571 employees from Xinjiang  
 0.67% 42 employees from Sichuan

## Length of Service Structure of Employees

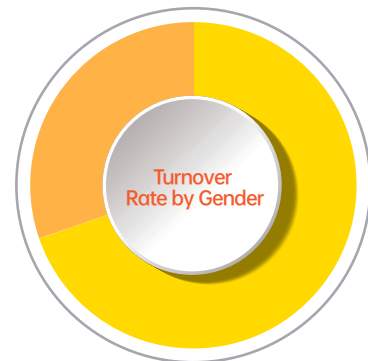
As of the end of the Reporting Period, the number of West China Cement's employees with a length of service of over 10 years was 2029, representing 31.88% of the total number; the number of employees with a length of service of 6-9 years was 875, representing 13.75% of the total number; the number of employees with a length of service of 3-5 years was 1710, representing 26.87% of the total number; and the number of employees with a length of service of less than 2 years was 1750, representing 27.50% of the total number.

## Employee Turnover

During the Reporting Period, the senior management team and employees of West China Cement remained relatively stable, while there were 628 new employees and 1050 resigned employees, with an employee turnover rate of 9.20%.



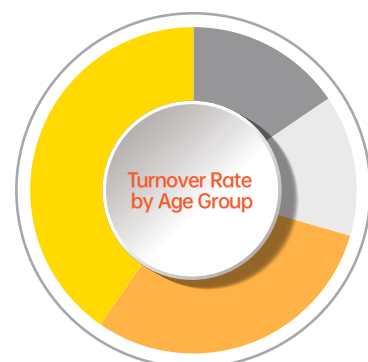
31.88%	2029 employees with over 10 years of service
13.75%	875 employees with 6-9 years of service
26.87%	1710 employees with 3-5 years of service
27.50%	1750 employees with less than 2 years of service



69.74%	861 male employees
30.26%	189 female employees



100%	1050 Chinese employees
0%	0 overseas employee



15.33%	161 employees aged 50 and above
14.19%	149 employees aged 40-49
30.38%	319 employees aged 30-39
40.10%	421 employees aged 29 and below

## Employee Training and Promotion

### Employee Training

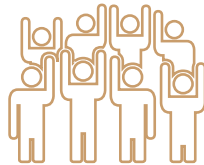
In order to meet the needs of the Company for strategic development and increase its core competitiveness, West China Cement highly values the building of talent teams and continues to enhance its talent building and training system. Thus, the Management and Training School of West China Cement was established as a professional training and research platform primarily to facilitate our corporate development strategies, accelerate the cultivation of talent echelons and enhance organizational performance. It also integrates internal and external training resources, and guides and manages training tasks for fellow subsidiaries.

In combination with the Company's development strategies and the competency requirements for key positions, a training course system was established and improved. In view of the impact of the pandemic in recent years, we have adopted various methods such as online + offline, live broadcast teaching + Elearning and others to enhance the effectiveness of the training. Those who received training include new college students, social recruits, general employees, and employees from middle and senior management levels. Each management level is further divided into new, current and echelon cadres, which are encompassing and target-oriented.

During the Reporting Period, we arranged online and offline training sessions for employee development, with a total of 86275 training hours. 2465 employees participated in the training sessions with an average of 35 training hours per person.



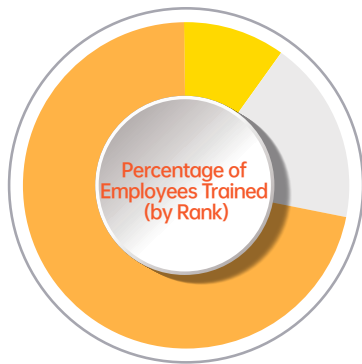
Total training hours approximately 86275 hours



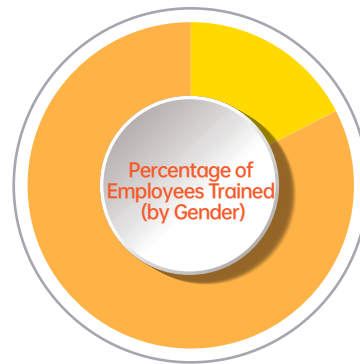
Number of employees trained 2465 persons



Average training hours per person 35 hours

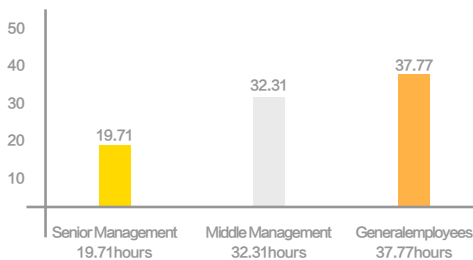


9.74% Senior Management  
18.54% Middle Management  
71.72% General employees

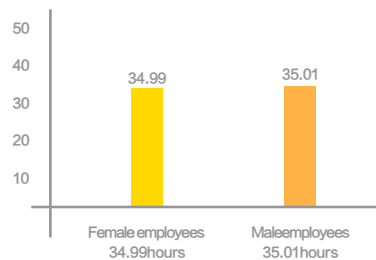


18.01% Female employees  
81.99% Male employees

Average training hours for staff (by rank)



Average training hours for staff (by gender)



## Echelon Talent-building

West China Cement continues its echelons talent-building by focusing on industrial upgrading, enterprise strategic expansion and the sustainable development of talents. In accordance with the principle of "focusing on work practice and highlighting personalised training", it determine the training objectives and selection criteria for echelon talents in two aspects: the Company's needs and personal growth. Candidates for training are selected through a combination of performance evaluations, employee assessments and technical examinations. Three major talent pools are established for management, technology and business with different training steps, such as offline training, online learning, book reading, learning exchange, work practice and reporting exchange. Through a mentor system, a points system and a tutor system, a large number of employees have been systematically trained.

West China Cement has elected and trained a total of 884 echelon talents, including 16 core managers, 38 senior managers, 107 middle managers, 496 general employees, 174 technical employees, 53 business employees, which has effectively expanded the backbone of cadres and laid a solid talent foundation for the Company's sustainable development.



## Protecting Employees' Rights and Interests

### Remuneration and Benefits

West China Cement establishes a comprehensive remuneration and benefits system, and formulates a remuneration management system based on the value of different functions and according to individual performance contribution and personal ability, so as to ensure the market competitiveness of the remuneration for core positions. It also shares the benefits of business operations with its employees to attract and retain the best talent and personnel in core positions.

The Company continues to optimize various benefit package for its employees. It makes social insurance contribution for employees on time according to relevant laws and regulations of the countries where it operates, provide heatstroke prevention and cooling appliances as well as various holiday benefits and gifts, and arrange annual health checks for employees, giving employees more care and protection. At the same time, the monthly operation performance bonus and annual operation performance bonus are established in the remuneration system and implemented in combination with performance evaluation, effectively realizing the positive motivational effect of remuneration.

During the Reporting Period, in order to further strengthen performance-oriented development, reflect the value of core positions and establish a more equitable remuneration system, remuneration research and analysis were carried out on general positions, and on this basis, the performance reward standards were comprehensively adjusted and improved to balance remuneration distribution at all levels. Meanwhile, we adjusted fresh college graduates' remuneration and benefits, which effectively improved employees' motivation and stability, and strengthened their corporate identity and sense of belonging.

## Democratic Management

West China Cement follows the principles of fairness and consensus, and signs labour contracts with employees to clarify the rights and obligations of both employees and employers. We continue to improve timely and effective consultation and communication mechanisms and channels, actively promote democratic management, and open up feedback channels for employees' opinions. Employees can express their opinions and requests at any time through various channels such as telephone, email and OA. When formulating relevant systems and policies which are of immediate interest to employees, the Company pays great attention to collecting opinions and suggestions from employees.

During the Reporting Period, by taking into consideration the development situation of the industry and management needs, the Company carried out democratic surveys on general manager's performance, the "lying flat" phenomenon of cadres, employee satisfaction and the work evaluation of the Company's functional departments, so as to fully listen to the opinions and voices of employees, identify management problems, improve management ideas and improve the comprehensive quality of cadres and employees.

## Care for Female Employees

West China Cement pays great attention to and effectively protects the labour rights and interests of female employees, and safeguards their entitlements to of maternity leave, sick leave, personal leave, marriage leave, paid annual leave and legal holidays in accordance with the law. We provide equal development opportunities and non-differentiated salary and welfare for female employees, as well as diversified benefits for female employees, including the celebration of Women's Day on March 8th, and activities such as "Women's Image in the Workplace", "Make-up Techniques", "Flower Arrangement Art Training", "Health Talks", "Han Costume Shows", etc., to enhance their sense of belonging, happiness and achievement.



## Improving Living and Working Conditions

West China Cement regards improving employees' working and living conditions as an important part of implementing the "people-oriented" concept, takes the construction of "green factories, star-rated canteens and star-rated dormitories" as the starting point, constantly optimises the infrastructure of the factories, improves the working environment and living conditions, and actively promotes the renovation of workplaces, dormitories, canteens and bathrooms through reasonable layout, phased improvement on tidying and cleaning steps. It strives to create a clean, bright, pleasing, comfortable, decent and harmonious environment for its employees.

## Supporting Employees in Need

Relying on the Company's general security department and labour unions, West China Cement promotes the spirit of friendship and mutual assistance, and uses collective strength to resolve significant personal crisis of its employees and their families. The Company regularly visits and consoles employees and their families in difficult times, delivers holiday greetings and blessings during the Spring Festival, makes efforts to understand the actual difficulties and needs of its employees, and cares and follows up on the progress of improvement in their lives.. In 2018, the "Employee Mutual Fund" was set up on the basis of voluntary contributions from employees to help those who experienced major difficulties and changes in their families.

As of the end of the Reporting Period, the "Employee Mutual Fund" has audited and distributed a total of RMB2.24 million, which has helped 215 employees to sail through difficult times, creating a good trend for all employees to unite as one, help each other and tide over difficulties together.



## 08 Working Together to Move Further Forward

Success comes from cooperation, and cooperation wins the future. West China Cement always upholds the concept of win-win cooperation. We are committed to establishing friendly cooperation with partners from all walks of life, such as government, distributors, suppliers and customers, to achieve sharing, integration, co-development, progress and win-win in a harmonious and cordial atmosphere.

## Cooperation with the Government

West China Cement adheres to the principle of operating in compliance, strictly abides by the laws and regulations of the countries where it operates, proactively cooperates with the government, strictly abides by the bottom line especially in green and safe development, and consciously obeys government supervision and management. In recent years, West China Cement fully supports and participates in national strategies such as Promoting Poverty Alleviation and Boosting Rural Revitalization. Through measures such as "government-enterprise pairing" and building local industry parks, we strongly support local industries and economic development, thus implementing the social responsibilities of the corporate.

Since the outbreak of the COVID-19 pandemic in 2020, West China Cement has coordinated with its subsidiaries to strictly implement local pandemic prevention and control requirements. We deepen the implementation of subject responsibilities, set a sound pandemic prevention and control as well as emergency management system, and strictly implement enclosed management and comprehensive disinfection. We organize production and operation scientifically and orderly while guaranteeing pandemic prevention and control, and actively participate in the construction of public health centers in Shanxi, Guizhou and other regions, playing an active role in stabilizing growth and facilitating development with the determination to win the battle of pandemic prevention and control.

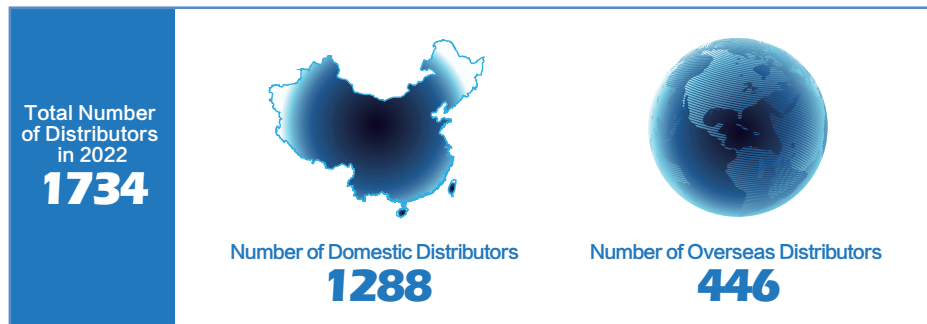
During the reporting period, domestic and foreign government leaders at all levels have visited the subsidiaries of West China Cement more than 100 times to inspect and guide their work, and highly affirmed the company's project construction, production and operation, as well as safety and environmental management.

## Cooperation with Distributors

It is difficult to be successful without others' help. The past achievements we obtained are inseparable from the strong support of our distributors. West China Cement always adheres to the concept of "join hands to co-develop and build a win-win cooperation", treats every distributor as an important partner of the Company, and empowers them in multiple aspects such as product knowledge, marketing strategy and daily management. With a market-oriented approach, we work with distributors to adapt to market changes and adjust marketing strategies in a timely manner, while establishing a friendly, open and honest long-term partnership in product marketing and market development, etc.

By the end of the Reporting Period, West China Cement had 1288 domestic distributors and agents, and 446 overseas distributors and agents.

### Number of Distributors and Agents by Region





# Cooperation with Suppliers and Pleasant Procurement

## Cooperation with Suppliers

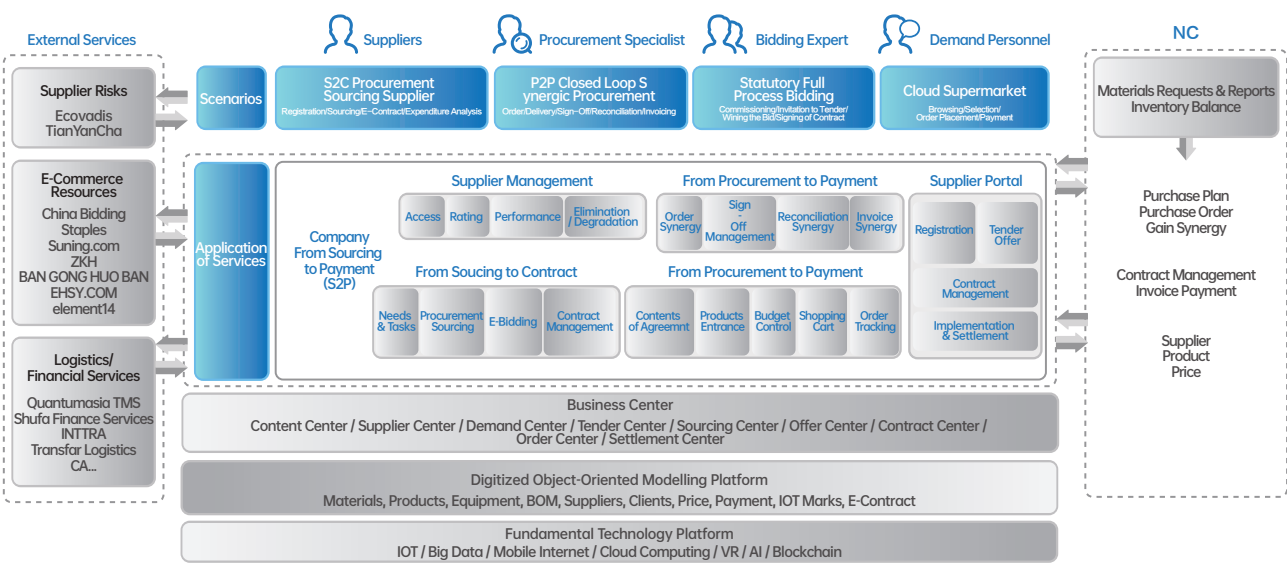
West China Cement always regards our supply chain as an important foundation for providing first-class products and services. We are committed to building a transparent, high-quality and efficient procurement management system, establishing honest and friendly cooperation with suppliers. In accordance with the management requirements of "strict management, strong execution and high efficiency", we have established an impeccable procurement and supplier management system, continuously optimized the procurement process to align with the actual business situation and have established a supplier management system that covers the entire lifecycle, including entry, collaboration, evaluation and exit. We remind and supervise our suppliers to comply with laws and regulations, protect the environment, conduct business with integrity and keep quality assured, etc. We evaluate suppliers' qualifications, business reputation, tax records and other credentials at least once a year. Under the premise of meeting the target cost, we give priority to purchasing from outstanding suppliers and promptly remove unqualified suppliers from the supplier pool.

By the end of the Reporting Period, West China Cement had a total of 1691 suppliers, 1679 are domestic, 12 overseas.

## Open and fair Competition

West China Cement implements unified and centralized management of material procurement through its material and trading subsidiaries, and continuously improves internal procurement mechanism in accordance with the relevant regulations on bidding in the countries where it operates. Through the self-developed supplier relationship management system - "Youyun Cloud" platform, the procurement information is made available to all suppliers, and the scope of public disclosure is further expanded through the Company's official website, WeChat official account, third-party professional platform and other channels. Through strict inspections of suppliers' associate relations, we eliminate bid rigging and colluded bidding, seamlessly connect the procurement management with the financial NC system, and continuously improve the transparency and standardization of material procurement for a "transparent, fair and honest" business environment.

## West China Cement Procurement and Supplier Management Procedures



## Green Procurement

West China Cement integrated the requirements of green development as well as environmental and social responsibility into selection of suppliers and procurement management. It reached agreement with its suppliers, requiring them to sign the Safety and Environmental Protection Agreement to develop and utilize new materials and new technologies for energy conservation and environmental protection. We strongly promoted the use of local industrial waste residue in replacement of resource-based raw materials to reduced industrial pollution while expanding local procurement. Suppliers must ensure that their vehicles have fully functional safety features and are equipped with tarps before leaving the factory. Materials should be completely covered during transport to eliminate any environmental pollution caused by spillage.

## Internal Control and Supervision of Procurement

West China Cement strengthens its supervision of procurement and maintains a fair and just procurement order by improving such system and process as well as strengthening internal control and supervision. We strictly follow the 5R procurement principles of right time, right quality, right quantity, right price and right place, require all procurement personnel to strictly abide by our work style and integrity regulations, implement the "Notes on Procurement Personnel's Contact with Suppliers" and signed the "Commitment of Integrity and Self-discipline". Through measures such as holding alerting educational conferences, sharing typical cases that violate regulations and rules, and making procurement complaint and reporting channels public, we remind our procurement personal to draw some lessons and take a warning.

## Cooperation with Contractors

When cooperating with contractors, West China Cement always adheres to the principle of equality, voluntariness, fairness, honesty, trustworthiness and mutual benefit for both parties. We build safety management system for contractors and establish inspection teams. We conduct monthly on-site inspections from time to time and promptly rectify problems found in the construction of projects. Project contractors and related parties must abide by the Group's management policies on safe production and occupational health. Project contractors are required to clearly define their construction schedule, liabilities for breach of contract and respective managing responsibilities. Meanwhile, they should enter into a safe production and occupational health agreement with the Group before proceeding into on-site construction. On-site operation personnel must attend safety educational training of the Group and are only allowed to enter the site to operate when they pass such training. The safety management department of the Group are responsible for conducting safety inspections for on-site operations of contractors, imposing penalties for behaviors in violation of regulations, and requiring constructors to rectify any non-compliance, thus truly achieve win-win cooperation with contractors.

In the Reporting Period, we maintained close cooperation with 17 main contractors such as Sinoma (Suzhou) Construction Co., Ltd., Hefei Cement Research & Design Institute corporation Ltd., Tianjin Cement Industry Design and Research Institute Co., Ltd., and Sinoma International Engineering Co., Ltd.

## Poverty Alleviation Through Education and Charitable Events

### Improving People's Living Conditions

West China Cement always remembers to be grateful, and adheres to the concept of "running a good enterprise to drive the local economy and benefit local people". It integrates friendliness between government and corporation, friendliness between villages and corporation, and sustainable development. While directly absorbing available manpower and easing unemployment problem, we leveraged on our own expertise to strongly support various infrastructure constructions in local counties, townships and villages, improving community infrastructure by donating cement products and construction materials, helping surrounding residents to build bridges and roads, repairing school dormitories, renovating old houses, and conducting sanitary remediation, etc., solidly improving the living condition of surrounding residents and enhancing their living qualities.

In response to the extremely backward living infrastructure in some overseas areas, West China Cement actively helps local people in those areas to build roads, drill wells, set up wires for electricity, and build hospitals as well as cultural and sports fields. Such efforts strongly improves the quality of life of the local people and creates a healthy and harmonious community environment.

In the Reporting Period, West China Cement overcame its own operational difficulties to actively fulfilled its social responsibility and carried out social welfare activities. The total expenditure exceeds RMB 7.26 million.



## Promoting the Development of Education

Hundred Years' Plan Based on Education. West China Cement always takes supporting local education as the main project in fulfilling its social responsibility. We have invested RMB 50 million to set up the "Shaanxi Yaobai Scholarship Foundation", which is the main platform for strengthening our support for education in less developed areas. We have donated funds to build 11 primary and secondary schools in Shaanxi, China, and Ethiopia and Mozambique in Africa, improving roads, fences, classrooms, teaching aids and other teaching facilities for many schools.

Every year, we organize the "Golden Autumn Scholarship" activity before the start of the new school year, and contribute RMB 5 million each year to support poor undergraduate students and for basic education; The company also signed a joint education agreement with the government of Pu Cheng County in Shaanxi, the birthplace of the company, and established an education fund to continuously support the development of local basic education.

In the Reporting Period, West China Cement supported Shaanxi Yaobai Scholarship Foundation and invested a total of RMB 4.54 million in various educational public welfare funds to support underprivileged students and reward more than 500 outstanding teachers and staff.





## 09 Looking Ahead to a New Journey

In 2023, as China optimises its pandemic prevention and control measures and introduces strategies to expand domestic demand, the macroeconomy gradually improves and the demand for infrastructure is expected to revive, which may bring in historic opportunities for the cement industry.

West China Cement will take the initiative to grasp development opportunities, actively seek business opportunities, continue to steadily improve its capacity to have the lowest system cost, become regional market leader, and achieve innovation-driven development, so as to further improve operational quality and efficiency, consolidate channel construction and brand promotion, strengthen the research and development of new products, new technologies and new materials, accelerate the development of information technology, digitalisation and intelligence, and strive to achieve the vision of "becoming a leading company in the cement industry with excellent performance, rapid growth and social responsibility!"

We will remain our original aspiration, uphold the "people-oriented" principle and the "green, low-carbon, safe and sustainable development" philosophy, continue to assume social responsibility, aim at the development direction of high-end manufacturing, intelligent manufacturing and green manufacturing, vigorously develop and promote the application of resource-saving, comprehensive utilisation, energy-saving and environmental protection, carbon reduction and other technologies, and strive to create a safe, healthy, and harmonious working and living environment for our employees. We will continue to seek mutually beneficial and trustworthy cooperation with domestic and international partners, and work together with colleagues around the world to achieve higher quality and sustainable development of the cement industry.

# 10 Report Evaluation

The Environmental Social Responsibility Report Review Committee of West China Cement Limited (the "Review Committee") evaluates the 2022 Environmental Social Responsibility Report of West China Cement Limited (hereinafter referred to as the Report). This evaluation is based on the requirements of T/CCAS 003 Verification Standard 2018 (hereinafter referred to as "T/CCAS 003-2018").

West China Cement Limited is responsible for data collection, analysis, summary and information disclosure in the Report. When the Review Committee performs this work, all evaluations shall be carried out according to the terms agreed by both parties. The stakeholders of West China Cement Limited are the expected readers of this evaluation. The evaluation process is based on the data provided by West China Cement Limited on the premise of completeness and credibility.

## Evaluation Methodology

The evaluation process is planned and implemented in strict accordance with T/CCAS 003-2018.

The Report is evaluated according to the following principles:

Inclusiveness, substantiveness and responsiveness specified in T/CCAS 003-2018;

Inspect and review documents, data and other information provided by West China Cement Limited to the Panel;

Conduct a sample evaluation of the implementation mechanism of environmental and social responsibility management described in the Report;

Sample and verify the production, collection and management process of qualitative, and quantitative data disclosed in the Report.

## Scope and Limitations of the Evaluation

The scope of work for the evaluation includes:

- ◆ Economic, environmental and social data of West China Cement Limited disclosed in the Report from January to December 2022;
- ◆ No external stakeholders were interviewed;
- ◆ The evaluation is carried out according to the principles of T/CCAS 003-2018 and the requirements of performance information review (Type 1), and the audit depth is moderate;
- ◆ Core indicators of GRI3.2 were disclosed in the Report;
- ◆ Financial data in the Report were not verified;

## Conclusion

The Review Committee is of the view that the description of the implementation of the environmental and social responsibility policy of West China Cement Limited in the Report is accurate and objective, and no systematic or substantive misrepresentation is found.

The Review Committee evaluates the Report adopting the principles of T/CCAS 003-2018.

## AA1000AS2008 Principles

### **Inclusiveness: Good.**

The Report comprehensively considers the expectations of important stakeholders such as the government, competent authorities in the industry, shareholders and investors, customers, suppliers, employees, partners, environment and communities, and identifies the main issues of responsibility fulfillment concerned by internal and external stakeholders through systematic communication.

### **Substantiveness: Good.**

Through the analysis of substantive issues, the Report establishes the substantive matrix of social responsibility issues, defines the substantive issues of sustainable development of the Company, discloses the internal management mechanism and performance standards of West China Cement Limited on how to implement these issues, and shows such key sustainable development performance information in a transparent form.

### **Responsiveness: Good.**

The Report presents the core values, missions, and social responsibility concepts, sustainable development strategies and performance indicators of West China Cement Limited, and demonstrates the performance of the Company in the process of achieving sustainable development goals with the annual data and detailed written description of 2022, and responds to the main core issues of sustainable development of enterprises concerned by the society and the specific performance issues concerned by internal and external stakeholders.

## What to Improve

More clearly disclose the screening methods and processes of substantive issues in the Report in accordance with GRI4.0 guidelines;

More openly set up the Report in accordance with the GRI4.0 Guidelines to disclose the measures taken and the performance achieved by the Company in scientific and technological innovation, achievement transformation, and the introduction and application of new technologies;

More comprehensively describe measures and performance in addressing excess cement capacity;

Improve the communication and feedback mechanism between the Company and stakeholders, actively listen to and respond to the demands of all parties, and improve the participation of stakeholders.

# 11 Appendices

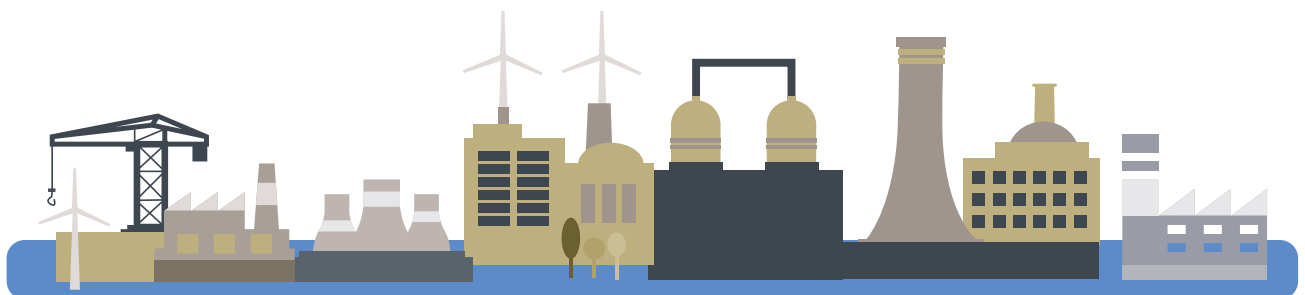
## Appendix I Name List of Companies of Yaobai Group

Abbreviated name of the company	Full name of the company
Yaobai Group	Yaobai Special Cement Group Co., Ltd
Pucheng Company	Pucheng Yaobai Special Cement Co., Ltd
Weinan Yaobai Company	Weinan Pucheng Yaobai Cement Co., Ltd
Hancheng Company	Hancheng Yaobai Yangshanzhuang Cement Co., Ltd
Fuping Company	Shaanxi Fuping Cement Co., Ltd
Shifeng Company	Shaanxi Shifeng Cement Co., Ltd
Lantian Company	Xi'an Lantian Yaobai Cement Co., Ltd
Yaowangshan Company	Tongchuan Yaowangshan Ecological Cement Co., Ltd
Tongchuan Company	Tongchuan Yaobai Special Cement Co., Ltd
Tongchuan Environmental Technology Company	Tongchuan Baihang Environmental Technology Cement Co., Ltd
New Materials Company	Shaanxi Yaobai New Materials Technology Co., Ltd
Baian Company	Shaanxi Bai'an Admixture Co., Ltd
Danfeng Company	Sangluo Yaobai Longqiao Cement Co., Ltd
Luonan Company	Sangluo Yaobai Longqiao Cement Co., Ltd Luonan Branch
Zhen'an Company	Shangluo Yaobai Xiushan Cement Co., Ltd
Xunyang Company	Anakng Yaobai Cement Co., Ltd
Jianghua Company	Ankang Yaobai Jianghua Cement Co., Ltd
Yangxian Company	Hanzhong Yaobai Cement Co., Ltd
Mianxian Company	Hanzhong Mianxian Yaobai Cement Co., Ltd
Xixiang Company	Hanzhong Xixiang Yaobai Cement Co., Ltd
Hucaoping Company	Shangnan Hucaoping Mining Development Co., Ltd
Luxin Company	Hetian Luxin Building Materials Co., Ltd
Hetian Company	Hetian Yaobai Cement Co., Ltd
Moyu Company	Moyu Yaobai Cement Co., Ltd
Yining Company	Yili Yaobai Cement Co., Ltd
Yili Environmental Technology Company	Xinjiang Baihang Environmental Technology Co., Ltd
Huaxi Company	Guizhou Linshan Cement Co., Ltd
Kangding Company	Kangding Paomashan Cement Co., Ltd
Yaobai Building Materials Head office	Shaanxi Yaobai Energy-saving and Environmental Building Materials Co., Ltd
Materials Company	Xi'an Yaobai Materials Co., Ltd
Logistics Company	Xi'an Kong Wisdom Logistics Co., Ltd
Construction and Installation Company	Xi'an Baitong Construction and Installation Engineering Co., Ltd
R&D Company	Yaobai Special Cement Technology R&D Co., Ltd
Guangxin Company	Guangxin International Financial Leasing Co., Ltd
Baihong Company	Shaanxi Baihong Ouli Plastic Products Co., Ltd
Industrial Technology Company	Shaanxi Baineng Industrial Technology Co., Ltd
Human Resource Company	Shaanxi Baiyuan Shengtong Human Resource Co., Ltd



## Appendix II Name List of Companies of West Holding Group

Abbreviated name of the company	Full name of the company
West Holding Group	West Holding Group Co., Ltd
Hainiu Company	Mozambique Hainiu Cement Co., Ltd
Dahu Cement Company	Dahu Cement Co., Ltd
Catana Company	Dahu Catana Cement Co., Ltd
Andijan company	Andijan West Holding Cement Co., Ltd
Angola Company	SLN- Benguela Cement and Clinker Production Plant Co., Ltd
Hongxing Glass Company	Congo-Brazzaville Hongxing Glass Co., Ltd
Makala Coal Company	Makala Coal Co., Ltd
Anjia Mozambique Company	Anjia Building (Mozambique) Co., Ltd
Anjia Congo- Kinshasa Company	Anjia Prefabricated Building (Congo- Kinshasa) Co., Ltd
Anjia Rwanda Company	Anjia Prefabricated Building Rwanda Co., Ltd
Anjia Nigeria Company	Anjia Prefabricated Building Nigeria Co., Ltd
Anda Mozambique Company	Anda International Logistics (Mozambique) Co., Ltd
Shuohai Trade Company	Shuohai (Xi'an) International Trade Co., Ltd



## Appendix III Environmental, Social and Governance Reporting Guide of the Stock Exchange

Subject Areas, Aspects, General Disclosures and KPIs			Chapter in the Report
<b>A. Environmental</b>			
Aspect A1: Emissions	General Disclosure	relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste. (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer	Promoting Green Development -Emissions Control
	KPI A1.1	The types of emissions and respective emissions data.	Promoting Green Development -Emissions Control
	KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Appendix V Summary of Indicator Data
	KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Promoting Green Development -Emissions Control
	KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Promoting Green Development -Emissions Control
	KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	Promoting Green Development -Emissions Control
	KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Promoting Green Development -Emissions Control
Aspect A2: Use of Resources	General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Promoting Green Development -Saving Natural Resources
	KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Promoting Green Development -Saving Natural Resources
	KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Promoting Green Development -Saving Natural Resources
	KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Promoting Green Development -Green Low-carbon Development
	KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Promoting Green Development -Saving Natural Resources
	KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Promoting Green Development -Saving Natural Resources
Aspect A3: The Environment and Natural Resources	General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	Promoting Green Development -Saving Natural Resources
	KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Promoting Green Development -Saving Natural Resources
Aspect A4: Climate Change	General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Promoting Green Development -Responding to Climate Change
	KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Promoting Green Development -Responding to Climate Change
<b>B. Social</b>			
Aspect B1: Employment	General Disclosure	relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare. (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer	Community Building Re-integrated
	KPI B1.1	Total workforce by gender, employment type (for example, full- or part-time), age group and geographical region.	Community Building Re-integrated - Number and Structure of Employees
	KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Community Building Re-integrated - Number and Structure of Employees

Aspect B2: Health and Safety	General Disclosure	relating to providing a safe working environment and protecting employees from occupational hazards. (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer	"Re"-consolidating Safety Foundations
	KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	"Re"-consolidating Safety Foundations - Safety Management System
	KPI B2.2	Lost days due to work injury.	"Re"-consolidating Safety Foundations - Safety Management System
	KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	"Re"-consolidating Safety Foundations - Occupational Health Security
Aspect B3: Development and Training	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Community Building Re-integrated - Employee Training and Promotion
	KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Community Building Re-integrated - Employee Training and Promotion
	KPI B3.2	The average training hours completed per employee by gender and employee category.	Community Building Re-integrated - Employee Training and Promotion
Aspect B4: Labour Standards	General Disclosure	relating to preventing child and forced labour. (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer	Community Building Re-integrated - Employment with Equality
	KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Community Building Re-integrated - Employment with Equality
	KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Community Building Re-integrated - Employment with Equality
Aspect B5: Supply Chain Management	General Disclosure	Policies on managing environmental and social risks of the supply chain.	Working Together to Move Further Forward
	KPI B5.1	Number of suppliers by geographical region.	Working Together to Move Further Forward - Cooperation with Suppliers and Pleasant Procurement
	KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Working Together to Move Further Forward - Cooperation with Suppliers and Pleasant Procurement
	KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Working Together to Move Further Forward - Cooperation with Suppliers and Pleasant Procurement
	KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Working Together to Move Further Forward - Cooperation with Suppliers and Pleasant Procurement
Aspect B6: Product Responsibility	General Disclosure	relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress. (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer	Quality Service Scales New Heights
	KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Quality Service Scales New Heights - Quality Guarantee
	KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Quality Service Scales New Heights - Sincere Service
	KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Quality Service Scales New Heights - Innovation-driven Development
	KPI B6.4	Description of quality assurance process and recall procedures.	Quality Service Scales New Heights - Quality Guarantee
	KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Quality Service Scales New Heights - Quality Guarantee
Aspect B7: Anti-corruption	General Disclosure	relating to bribery, extortion, fraud and money laundering. (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer.	Reinforcing Responsibility Governance
	KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the Reporting Period and the outcomes of the cases.	Reinforcing Responsibility Governance - Compliance Management
	KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	Reinforcing Responsibility Governance - Compliance Management
	KPI B7.3	Description of anti-corruption training provided to directors and staff.	Reinforcing Responsibility Governance - Compliance Management
Aspect B8: Community Investment	General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Working Together to Move Further Forward
	KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Working Together to Move Further Forward - Poverty Alleviation Through Education and Charitable Events
	KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Working Together to Move Further Forward - Poverty Alleviation Through Education and Charitable Events

## Appendix IV Glossary

Terms	Definitions
Greenhouse Gases	Includes carbon dioxide (CO <sub>2</sub> ), methane (CH <sub>4</sub> ), nitrous oxide (N <sub>2</sub> O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF <sub>6</sub> ).
Nitrogen Oxides (NOx)	Includes a number of compounds such as nitrous oxide (N <sub>2</sub> O), nitric oxide (NO), nitrogen dioxide (NO <sub>2</sub> ), dinitrogen trioxide (N <sub>2</sub> O <sub>3</sub> ), nitrogen tetroxide (N <sub>2</sub> O <sub>4</sub> ) and dinitrogen pentoxide (N <sub>2</sub> O <sub>5</sub> ), etc. Except for NO <sub>2</sub> , all other NOx variants are extremely unstable and, when exposed to light, moisture or heat, are liable to converting into NO <sub>2</sub> and NO, and then from NO into NO <sub>2</sub> . Therefore, the gas to which workers are exposed to in the working environment is usually a mixture of several types of gas, which is called smoke (gas) and is mainly comprised of nitric oxide and nitrogen dioxide, with nitrogen dioxide being the main component. Nitrogen Oxides are all toxic to a varying degree.
Pure low-temperature Residual Heat Power Generation	Power generation using the residual heat of medium-and-low temperature waste gas discharged from the emission ends of the kilns of the cooling machine, with no fuel consumed or pollutants produced.
Denitration Technology	A technical measure to prevent excessive emission of NO <sub>x</sub> from the combustion process within the cement kilns for the purpose of environmental protection by reducing the amount of NO <sub>x</sub> and eliminating the NO <sub>x</sub> in the flue gas.
Desulphurization Technology	A technical measure to prevent excessive emission of SO <sub>2</sub> from the combustion process within the cement kilns for the purpose of environmental protection by reducing the amount of SO <sub>2</sub> and eliminating the SO <sub>2</sub> in the flue gas.
Electric dust collector	A dust collecting device to separate particulates from flue gas by electrostatic force.
SNCR	Selective Non-catalytic Reduction, a process of converting nitrogen oxides in the flue gas to nonhazardous nitrogen gas and water by injecting reductants into the "temperature window" for denitration reactions without using a catalytic agent.
SCR	Selective Catalytic Reduction, a process of selective reaction of reducing agents such as ammonia with NO <sub>x</sub> under the action of a catalyst to generate N <sub>2</sub> and H <sub>2</sub> O.
Carbon Capture and Storage (CCS)	A process where the CO <sub>2</sub> captured is treated through desulphurisation, purification, compression, dehumidification and liquefaction and then sold to the market for reuse.
Domestic waste treatment technology with the use of cement kilns	A technology for treatment of urban domestic waste by using the high temperature of the cement kilns, and is an ideal alternative to traditional landfill treatment method that takes up large area of lands and results in environment pollution. This technology is the first of its kind in the world, which, without classification of wastes, enables degradation of dioxins without producing any undesirable odours and allows solidification of heavy metals and purification of sewage at the same time.
Cement grinding aid	A chemical admixture, the addition of a small amount of which in the cement grinding process can improve the grinding efficiency.
Ceramic ball	A cement grinding medium composed mainly of aluminium oxide and a small amount of microelements which improves performance and enhances toughness; lighter and harder compared with steel balls, capable of reducing mill load.
RDF	RDF is the abbreviation of Refuse Derived Fuel, which is characterised by high calorific value, stable combustion, easy transportation, easy storage, low secondary pollution and low dioxin emissions, and is widely used in drying, cement manufacturing, heat supply and power generation.

## Appendix V Summary of Indicator Data

### Environmental Goals Tracking

Indicators	Goals	Base Year Data	Data for 2022
Greenhouse gas Emissions	More than 3% reduction in carbon emissions (clinker process) intensity (tonne of CO <sub>2</sub> equivalent/tonne of clinker) in 2025 compared to 2020.	0.8596	0.8557
Energy Consumption	5% reduction in energy consumption (clinker process) intensity (kg of standard coal/tonne of clinker) in 2025 compared to 2020.	108.52	106.6
Water Resources	6% reduction in water resources (clinker process) use intensity (tonne of water consumption/tonne of clinker) in 2025 compared to 2020.	0.15	0.13
Waste	100% compliant disposal of hazardous waste and 100% recycling of non-hazardous waste.	0	100%

All Performance Indicators	Unit	Performance Indicator Data for 2022
Clinker capacity	10,000 tonnes	2,280
Cement capacity	10,000 tonnes	3,360
Aggregate capacity	10,000 tonnes	800
Commercial concrete capacity	10,000 m <sup>3</sup>	1,800
Business revenue	RMB 100 million	84.89
Total profit	RMB 100 million	15.13
Basic earnings per share	yuan	0.224
Net profit attributable to the parent	RMB 100 million	12.15
Tax payment	RMB 100 million	2.23
Total asset	RMB 100 million	302.39
Net asset attributable to the parent	RMB 100 million	120.31
Gearing ratio	%	56%
Investment in technological transformation for environmental protection	RMB 100 million	1.15
Investment in energy saving and emission reduction	RMB 100 million	1.47
Total SO <sub>2</sub> emissions	tonne	658.11
Average concentration of SO <sub>2</sub>	mg/m <sup>3</sup>	19.74
Total NO <sub>x</sub> emissions	tonne	8,492.21
Average concentration of NO <sub>x</sub>	mg/m <sup>3</sup>	172.58
Total particulate matter emissions	tonne	673.88
Average concentration of particulate matter	mg/m <sup>3</sup>	5.90
Direct greenhouse gas emissions (Aspect 1)	tonne of CO <sub>2</sub> equivalent	10,032,037.65
Indirect greenhouse gas emissions (Aspect 2)	tonne of CO <sub>2</sub> equivalent	556,002.56

## Appendix V Summary of Indicator Data

All Performance Indicators	Unit	Performance Indicator Data for 2022	
Total greenhouse gas emissions (Aspect 1 + Aspect 2)	tonne of CO2 equivalent	10,588,040.21	
Greenhouse gas emissions per unit of clinker produced (clinker process)	tonne of CO2 equivalent / tonne of clinker	0.8557	
Greenhouse gas emissions per unit of operating income	tonne of CO2 equivalent / RMB 100 million	238,050.139	
Direct energy consumption	100 million kWh	119.38	
Total coal consumption	100 million kWh	119.31	
Indirect energy consumption	100 million kWh	10.33	
Total electrical energy consumption	100 million kWh	10.33	
Comprehensive energy consumption	100 million kWh	129.71	
Energy consumption per unit of clinker (Clinker process)	kWh/tonne of clinker	915.90	
Energy consumption per unit of operating revenue	100 million kWh/RMB 100 million	1.53	
Total hazardous waste	Tonne	88.77	
Hazardous waste generated per unit of operating revenue	tonne of hazardous waste / RMB 100 million	1.05	
Total non-hazardous waste	Tonne	7631.43	
Non-hazardous waste generated per unit of operating revenue	tonne of non-hazardous waste / RMB 100 million	89.90	
Total water consumption	Tonne	2,858,424	
Water consumption per tonne of clinker produced (clinker process)	tonnes of water consumption / tonne of clinker	0.13	
Water consumption per unit of operating revenue	tonnes of water consumption / RMB 100 million	33,671.56	
Cement bag consumption	Tonne	7,300	
Cement bag consumption per unit of operating revenue	tonne / RMB 100 million	85.99	
Total cement kiln co-disposal	10,000 tonnes	7.20	
<b>Total Number of Employees</b>	<b>Person</b>	<b>6,364</b>	
<b>By gender</b>	Male	person	5,245
	Female	person	1,119
<b>By rank</b>	Senior management	person	318
	Middle management	person	636
	General employee	person	5,410
<b>By age</b>	Under 29	person	1,237
	30-39	person	2,375
	40-49	person	1,640
	Over 50	person	1,112

All Performance Indicators		Unit	Performance Indicator Data for 2022
By region	Shaanxi	person	4,821
	Xinjiang	person	571
	Guizhou	person	228
	Sichuan	person	42
	Overseas	person	702
By length of service	Less than 2 years	person	1,750
	3-5 years	person	1,710
	6-9 years	person	875
	More than 10 years	person	2,029
By education level	Bachelor's degree and higher	person	1,073
	College degree	person	1,645
	Lower than college degree	person	3,646
Employee Turnover Rate		%	9.20
By gender	Male	%	30.26
	Female	%	69.74
By age	Under 29	%	40.10
	30-39	%	30.38
	40-49	%	14.19
	Over 50	%	15.33
Number and rate of work-related fatalities	2020	person	2
		%	0.0421
	2021	person	0
		%	0
	2022	person	2
		%	0.0428
Lost days due to work injury		day	938

## Appendix V Summary of Indicator Data

All Performance Indicators		Unit	Performance Indicator Data for 2022
Total number of employees trained		person	2,465
Total training hours		hour	32,432
Percentage of employees trained		%	100
By gender	Male	%	81.99
	Female	%	18.01
By rank	Senior management	%	9.74
	Middle management	%	18.54
	General employee	%	71.72
Average training hours per employee		hour	35
By gender	Male	hour	35.01
	Female	hour	34.99
By rank	Senior management	hour	19.71
	Middle management	hour	32.31
	General employee	hour	37.77
Number of major partner suppliers		home	1,691
By region	Mainland China	home	1,679
	Overseas	home	12
Percentage of products recalled for safety and health reasons		%	0
Number of complaints about services and products		case	12
Handling rate of complaints about services and products		%	100
Number of corruption litigation cases		case	0
Investment in public welfare		yuan	1,067,957.2



# Readers' Comments and Feedback Forms

Dear Readers,  
Greetings!

Thank you for reading the 2022 Environmental and Social Responsibility Report of West China Cement Co., Ltd. We sincerely look forward to your evaluation of the environmental and social responsibility work of West China Cement Co., Ltd. and this environmental and social responsibility report. Your opinions and suggestions will help us to continuously promote environmental and social responsibility management and practice, as well as to improve the level of our environmental and social responsibility information disclosure. You can fill in the following content and feedback to us through mail or email. Thank you very much!

West China Cement Co., Ltd.  
April 2023

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## Your evaluation of the report: (Please tick "✓" at the corresponding place)

Which stakeholder do you belong to?

Employee  Client  Government  Public  Partner  Public Welfare Organization  Others

Your overall evaluation of the Report:

- |                        |                                    |                               |                                  |                               |                                    |
|------------------------|------------------------------------|-------------------------------|----------------------------------|-------------------------------|------------------------------------|
| 1. Report Content      | <input type="checkbox"/> Very Good | <input type="checkbox"/> Good | <input type="checkbox"/> General | <input type="checkbox"/> Poor | <input type="checkbox"/> Very Poor |
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Your evaluation of the significant economic, social, and environmental impacts of West China Cement embodied in the Report is:

Very Good  Good  General  Poor

Have you obtained the information you wish to know in the Report:

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What else do you want to know through the Environmental and Social Responsibility Report of West China Cement?

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