

China National Building Material Group Co.,Ltd.

1700

NH H RING

## sustainability report 2022

ANALT T

## **Report Norms**

This Report is the fourteenth sustainability report issued by China National Building Material Group Co., Ltd. (CNBM), truly reflecting CNBM's pursuit of sustainable development and fulfillment of social responsibilities.

## Entities Covered by the Report

CNBM and its wholly-owned and controlled (including absolutely controlled and relatively controlled) member enterprises. For brevity, the terms "CNBM", the "Group" and "we" are used in the Report to refer to China National Building Material Group Co., Ltd. (unless otherwise specified in the text).

## Period Covered by the Report

January 1<sup>st</sup> to December 31<sup>st</sup>, 2022. Some of the content goes beyond the above period.

## Reporting Cycle

This Report is an annual report.

## **Basis for Preparation**

2030 Agenda for Sustainable Development Goals (SDGs) issued by the United Nations Standards for Sustainable Development Reporting (GRI Standards) of the Global Reporting Initiative (GRI)

ISO 26000 Guidance on Social Responsibility (2010) issued by the International Standard Organization

Guidance on Social Responsibility Reporting issued by the Standardization Administration of China (GB/T36001-2015) Guiding Opinions on the Implementation of Social Responsibility by Central Enterprises issued by the State-owned Assets Supervision and Administration Commission of the State Council

Guiding Opinions on the Better Implementation of Social Responsibility by State-owned Enterprises issued by State-owned Assets Supervision and Administration Commission of the State Council

Corporate Social Responsibility Reports in China for Nonmetal Mineral Products (CASS-CSR 4.0) issued by the Research Center for Corporate Social Responsibility, Chinese Academy of Social Sciences

## Data Sources

The information and data used herein come from the Headquarters and member enterprises of CNBM. Notes have been made in the Report to indicate information from external references. Unless otherwise stated, all monetary amounts are expressed in RMB.

## Quality Assurance

We strive to ensure the authenticity, integrity and balance of the contents of the Report, and make breakthroughs in innovation and readability. There are no false records, misleading statements or major omissions in this Report.

## Report Availability

This Report is available in printed and electronic versions, and is mainly released to stakeholders and the public in the form of a PDF electronic document. You can request the printed version via the contact information on the back cover or log onto www.cnbm.com.cn to download the electronic version.









Q











## **CONTENTS**

ſ	Part I	
L	Smart Use of Resources	

## Building the Pillar of the Country

22

34

Promoting **Prosperity and** Development

Energizing

Innovation

Technological



Chairman's Address

Contribution of Building Materials to Sustainable Development

Responsibility Featured Story: Creating ESG Building Materials

24

28

30

32

Proud Results

Precision Management

Guidance by Party Building

Deepening Reform

to Facilitate the Chinese Path to Modernization

About Us

4

6

12

14

- Optimizing the Innovation 36 Ecosystem
- 38 Deepening Collaboration on Innovation 39 Promoting Digital Transformation
- Fostering Achievements of 41 Technological Innovation



- Strengthening Green 44 Management
- 45 Practicing Green Production
- Providing Green Services 49 50
- Enabling a Low-carbon Future

- 56 Safety and Prudence 60 Employee Rights and
- Interests
- Employee Development 61 Employee Care 62



- 66 Open Cooperation 70 Rural Revitalization
  - 72 Good Deeds
- - Concept of Responsibility
- 76 76 Responsibility Governance
- 78 Responsibility Integration
- Responsibility 79
- Communication
- Responsibility Sharing 82 84
  - Honor of Responsibility



Future Prospects 86 88 Appendix

Protecting **Green Ecology** 

## Keeping the "Top Priorities of the . Country" in Mind

## Sharing Development Results



Part II

Services for Construction



## Marching **Towards a Better Future**

64



**Talking about** Responsibility Management 74

## Chairman's Address



General Secretary Xi Jinping pointed out that "we should accelerate the construction of a number of world-class enterprises with excellent products, outstanding brands, innovation leadership and modern governance, and achieve greater development and play a greater role in the process of building a modern socialist country in all respects and achieving the Second Century Goal." This has pointed out the direction for central enterprises to move forward bravely, and has also set a clear goal for CNBM to better cope with changes, make fresh progress and serve the overall interests. In 2022, the 20<sup>th</sup> CPC National Congress was successfully held. Guided by the new journey of building a modern socialist country in all respects, CNBM has adhered to the mission of "creating a better world with materials", bravely shouldered the responsibility of building the "Pillar of the Country", gathered the majestic strength of unity and hard work, and started a new voyage towards a worldclass industrial investment group specializing in the material industry.

**Building a World-Class Group Moving Towards a Powerful Country in Materials** 

## Those who can succeed must be strong, and those who are self-reliant must be able to succeed. Promoting our ambition with technology, we are committed to enhancing our technological innovation capacity.

In a year when the old growth drivers are transforming into new ones at a faster pace, innovation is playing a stronger role as the primary driver. We have accelerated efforts to create sources of original technologies and innovated and implemented eight reform measures such as the "open competition mechanism" and the "seed" fund. We have actively declared as a leader of the modern industrial chain of low-carbon inorganic nonmetallic materials. Technological breakthroughs have been achieved in high-efficiency grinding of cement raw material, oxygen-fuel combustion coupled with carbon capture, ultra-fine electronic fiberglass, and one-time forming of flexible glass. Remarkable results have been achieved in the joint research on domestic large aircraft and aero-engines. Many new materials have been applied to major national tasks such as aerospace. In 2022, five innovations of the Group were listed in the Catalogue of Recommended Achievements of Technological Innovation of Central Enterprises, and 72 new high-tech enterprises were added, with a total of 22,000 effective patents, accelerating the realization of high-level technological self-reliance.

## Great truths are always simple, and hard work is the key. Strengthening our confidence through development, we steadily enhance our ability to create value.

In an extremely grim and complicated situation, we have kept a close eye on the target, mobilized the efforts of the Group to improve quality, increase efficiency and stabilize growth, and achieved steady progress and quality improvement. The main business structure of the Group has become more optimized, and the basic building materials sector has unswervingly promoted the supply-side structural reform and consolidated the benefit foundation. The new materials sector bucked the trend, and its revenue exceeded RMB 100 billion for the first time, greatly enhancing the support for benefits. The engineering and

technical services sector continued to develop, and its business performance was consolidated and improved. Revenue from nonprincipal business trade has declined for three years, facilitating transformation. In 2022, the Group achieved revenue of RMB 380.16 billion, total profit of RMB 26.58 billion and net profit of RMB 22.11 billion. The Group was awarded "Double A" in the business performance appraisal of SASAC, and was rated as an enterprise with excellent performance, moving forward firmly on the road of high-quality development.

## To achieve success, one should let others succeed and enjoy the benefits. Building righteousness with responsibility, we continuously improve brand leadership.

As the only central enterprise in the building material industry in China, we have always fulfilled our responsibility as "the backbone of a big country". As the vanguard of the "dual carbon" action in the building material industry, we have cooperated with 26 units to build the first dual carbon public service platform in the national raw materials industry, and carried out joint research on the dual carbon key & core technologies in building materials and other industries. We have continuously optimized the energy consumption structure and accelerated the planning of green and low-carbon demonstration projects and green energy projects. As a practitioner of promoting common prosperity, in accordance with the "Four No-Picks" requirements of the CPC Central Committee, focusing on the objectives and tasks of the "Five Revitalizations", we have constantly innovated the assistance mode, implemented more than 600 assistance projects in total, and sent 94 assistance cadres successively to effectively link the achievements of poverty alleviation with rural revitalization. In 2022, the brand image of the Group became more distinct, rising to 249th place in the Top 500 Most Valuable Global Brands, and fifth place among Chinese enterprises in the Social Responsibility Development Index. It will be selected into the ESG Alliance of Central Enterprises in the first batch, fully demonstrating the new image of central enterprises in the new era

## We practice earnestly and strive for perfection. Building our strengthen through hard work, we comprehensively improve our ability to integrate resources.

Focusing on the goal of building a "CNBM" overseas, we have strengthened the integration of global resources, striving to realize the internationalization of all services, processes and factors. In 2022, adhering to the concept of a community with shared future for mankind, we deepened international markets such as the Belt and Road Initiative, and strengthened the integration of the Group's international business and business model innovation. Relying on overseas engineering projects and funds, we promoted the coordinated export of superior technologies and products such as cement, plasterboards, fiberglass and wind turbine blades, and boosted the coordinated development of local diversified projects and lightweight building materials, green energy and environmental protection, import and export trade, cross-border e-commerce,

overseas warehouses and other businesses. A total of nearly 500 cement and glass projects have been built at a high level around the world, effectively enhancing our ability to allocate and integrate resources globally and truly practicing the corporate mission of "creating a better world with materials".

## Adherence to the right path and perseverance lead to success. Emboldened by reform, we deepen and improve our corporate governance capacity.

In the year of the victory of the 20<sup>th</sup> CPC National Congress, we promoted and deepened the Party's leadership and Party building, conscientiously implemented the system of "the first issue" and "the top issue", carried out in-depth activities on the theme of re-learning, re-implementing and re-upgrading the spirit of General Secretary Xi Jinping's important instructions, and won the outstanding theoretical achievement of "Studying and Implementing General Secretary Xi Jinping's Important Exposition on Developing State-owned Economy" by SASAC. At the end of the three-year reform of state-owned enterprises, we pushed forward the reform in depth, and formed more than 100 institutional reform achievements, more than 40 of which were selected as reform cases of SASAC and professional institutions, successfully completing the three-year reform task. In the year of forging ahead with heavy burden, we worked out the implementation plan of accelerating the construction of a world-class enterprise. The overall completion rate of the "Improvement Action to Align with World-class Management" was 100%. The Group was awarded Grade A in the assessment of key tasks of the three-year action of central enterprise reform in 2022, and its confidence in high-quality development was firmer.

We march forward with confidence and conviction. The year 2023 is a key link in the 14<sup>th</sup> Five-Year Plan period, as well as a crucial period for CNBM to seize strategic opportunities and promote high-quality development. On the new journey, under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, we will fully implement the spirit of the 20<sup>th</sup> CPC National Congress, forge ahead with firm confidence, speed up the construction of a world-class industrial investment group specializing in the material industry with global competitiveness, and make new and greater contributions to building a socialist modern country in all respects and comprehensively promoting the great rejuvenation of the Chinese nation!

Party Secretary and Chairman

Zhou Yuxian

## **About Us**

## **Company Profile**

China National Building Material Group Co., Ltd. ("CNBM") was founded through the merger of China National Building Materials Group Corporation and China National Materials Group Corporation with the approval of the State Council, and is a central enterprise under the direct management of the State-owned Assets Supervision and Administration Commission of the State Council.

CNBM is the world's largest comprehensive building materials group, and a worldleading new materials developer and integrated service provider. It has been listed on the Fortune Global 500 for

## As of the end of 2022



Annual revenue



Total number of employees





Scan the QR code to learn about CNBM

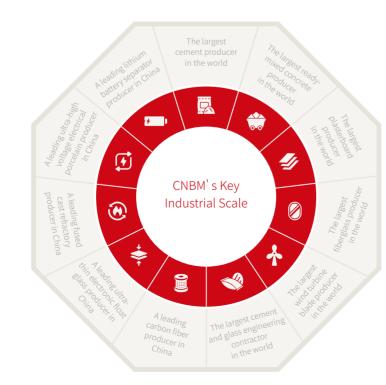
in 2023. As of the end of 2022, CNBM's total assets amounted to RMB 702.96 billion, with annual revenue of RMB 380.16 billion, and a total number of employees of 209,000. CNBM holds 14 listed companies, two of which are abroad. The Group is the largest supplier of cement, ready-mixed concrete, plasterboards, fiberglass, wind turbine blades, cement & glass and engineering technical services. It is also one of the leading producers of many new materials, such as ultra-thin electronic glass, high-performance carbon fibers, lithium battery separators and ultra-high voltage electrical porcelain.

13 consecutive years, and ranked 247<sup>th</sup>

As a scientific and technological group, CNBM possesses the strongest strength in building materials and new inorganic nonmetallic new materials in China. CNBM takes possession of 38,000 scientific researchers and engineering technicians, 26 national-level scientific research and design institutes, 22,000 valid patents, 55 national and industrial guality inspection centers and the most authoritative inspection and certification bodies in the industry, 11 national key laboratories and engineering (technical) research centers, 17 national standardization technical committees, 7 first prizes of the National Awards for Scientific and Technological Progress and 4 prizes of China Grand Awards for Industry

As an international company, CNBM has been at the forefront of "going global" and the Belt and Road Initiative of the Chinese building material industry. It holds a 65% share in the international market of cement and glass engineering projects, and has invested in Germany, India, Mongolia and African countries, moving towards the center of the world's stage of building materials.

CNBM has been officially converted into a state-owned capital investment company. Currently, it is speeding up the "three major changes" from enterprise management to capital management, from building materials to comprehensive materials, and from the local market to the global stage according to the "4335" guiding principles. We work to continuously enhance our competitiveness, innovation capacity, power of control, influence and risk resistance and develop into a world-class industrial investment group specializing in the material industry with global competitiveness.



## **Corporate Culture**

With its profound cultural deposits and high sense of responsibility as a stateowned enterprise. CNBM has created a unique cultural system., paving a road to strengthen enterprises by culture. In the process of development, adhering to the corporate mission of "creating a better world with materials", we have created the concept of "keeping the 'top priorities of the country' and building the 'pillar of the country'" and "smart use of resources, services for construction". We have formed the "4335" guiding principles, the core values of "innovation, performance, harmony and responsibility", the standard of conduct of "being reverent, grateful, humble and appropriate", and other value concept systems with CNBM characteristics.

**Corporate vision** Build a world-class

> Service path Basic building materials, new materials, and engineering & technical service

## **Development Strategy**

CNBM adheres to high-quality development driven by innovation, empowered by reform, facilitated by internationalization and guided by Party building, committed to building a world-class industrial investment group specializing in the material industry with global competitiveness.

Bv 2025

By 2035

By 2050

#### Values

Innovation, perform

specializing in the material industry with global

### Concept

Keeping the "top priorities of the country" in mind Building the "pillar of the services for construction

**Corporate mission** 

**Creating a better** 

world

with materials

**Cultural environment** 

and life;

employees and

enterprises grow together

#### Code of conduct

Be reverent, grateful, humble and appropriate

### **Guiding principles**

State-owned capital "4335" guiding principles

## **Management principles**

Precision Management Alignment and

The Group will achieve a total profit of RMB 40 billion and a net profit of RMB 30 billion.

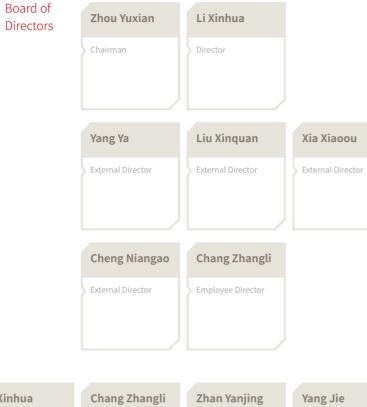
The Group will achieve a net profit of over RMB 100 billion, building itself into a world-class, respected and great enterprise.

of Strategy and Development Department

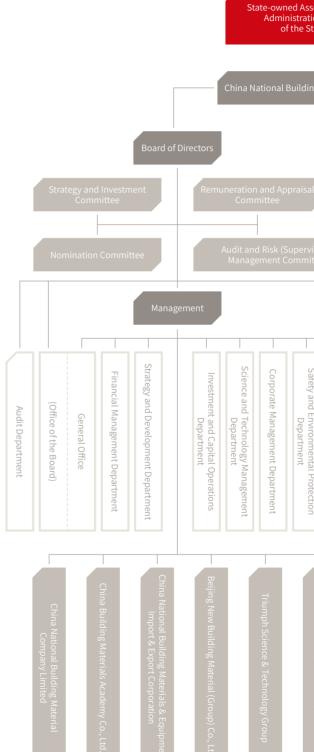
## Management Team

According to the Company Law, the requirements for standard operation of the Board of Directors, the needs of the work and the expertise of external directors, the Board of Directors has 4 special committees, of which the Remuneration and Appraisal Committee and Audit and Risk (Supervision) Management Committee consist solely of external directors.

Management	Zhou Yuxian	Li Xinhua	Chang Zhangli	Zhan Yanjing	Yang Jie
	Party Secretary Chairman	Party Committee Deputy Secretary Director General Manager	Party Committee Deputy Secretary	Party Committee Standing Committee Chief Accountant	Party Committee Standing Committee Secretary of Discipline Inspection Commission
	WengVumang	Wei Duchen	Dang Chau	Coo Zohuoi	Ou Viseli
	Wang Yumeng	Wei Rushan	Peng Shou	Gao Zehuai	Qu Xiaoli
	Party Committee StandingCommittee Deputy General Manager	Party Committee StandingCommittee Deputy General Manager	Chief Engineer	Deputy Chief Economist	General Manager Assistant Deputy Chief Accountant
	Zhi Xiao				
	General Manager Assistant Director of Science and Technology Management Department General Manager				



## CNBM Governance Structure



ation State	Supervi Commis Counci	ission l		J	Party	Committ	ee	
isal ervisio mittee								
			Trade U	nion				pline Inspection Commission
Safety and Environmental Protection	– Legal Affairs & Compliance Department		Organization Department of Party Committee	Party-Masses Relations Department	(General Office of Party Committee)	Publicity Department of Party Committee	<ul> <li>Circuit Office of Party Committee</li> </ul>	Case Handling Office of Discipline Inspection Commission Supervision & Enforcement Office of Discipline Inspection Commission General Office of Discipline Inspection Commission
CNBM Assets Operation Corporation		CNBM United Investment Co., Ltd.		China National Geological Exploration Center of Building Materials Industry	Hinance Co., Ltd.	China National Building Material Group	Sinoma Energy Conservation Limited	China National Materials Industry Import & Export Corporation

## Main Lines of Business



Basic Building Materials

## Cement, Cement +



The production scale of cement and commercial concrete ranks first in the world, with 379 new dry process cement production lines, clinker capacity of about 300 million tons, cement capacity of over 500 million tons and commercial concrete capacity of about 400 million cubic meters. As the standard configuration for the city, 51 cement kiln cooperative disposal production lines have been built. The total annual disposal scale is 5.33 million tons, and the landfills are reduced by 1,333 mu. The installed capacity of waste heat power generation of cement sheeting is 1971.3 MW.

### Key enterprises

Xinjiang Tianshan Cement Co., Ltd., North Cement Co., Ltd., Gansu Qilianshan Cement Group Co., Ltd., Ningxia Building Materials Group Co., Ltd.



### Plasterboards and Waterproof Materials



Focusing on plasterboard business, we develop the business of "plasterboard+" supporting systems, and serve national key projects such as the Great Hall of the People, the Olympic Games and the Winter Olympics. We promote the global original "Luban" universal board whole house assembly system, and actively develop waterproof materials and coatings that can be installed and brushed immediately and allow immediate occupancy, creating a low-carbon, environment-friendly and healthy indoor environment. Taking plasterboards as the leading product, we have gradually developed the global layout of the whole product lines.

### Key enterprises

Beijing New Building Material Public Limited Company, Taishan Gypsum Co., Ltd., and BNBM Waterproofing Co., Ltd.

### **F** Fiberglass



The production capacity is 3.5 million tons, ranking first in the world. The fiberglass tank furnace wiredrawing technology won the second prize of National Awards for Scientific and Technological Progress. We have created the first large-scale tank furnace wiredrawing production line in China, the first 10,000-ton fiberglass production line in China and the first large-scale fiberglass production line overseas, with a global market share of over 30%.

Key enterprises China Jushi Co., Ltd., and Taishan Fiberglass Inc.

## ▼▼ Wind Turbine Blade



The production capacity is 30 GW, and the products cover the series from 1.0 MW to 12.0 MW, with more than 100 models, which are sold to the United States, Thailand, Pakistan, South Korea and other countries. We have developed the longest 90 m 6 MW carbon fiber girder composite blade in China and the largest 102 m 11 MW all-fiberglass offshore blade in China, creating many of the best in China.

#### Key enterprises

Sinoma Wind Power Blade Co., Ltd. and Lianyungang Zhongfu Lianzhong Composites Group Co., Ltd.

#### **FF** Carbon Fiber



The autonomous and controllable high-end carbon fiber complete technology won the first prize of 2017 National Awards for Scientific and Technological Progress. The first Xining 10,000-ton carbon fiber production base in China was put into use, marking the industrialization of domestic carbon fiber. We participated in the formulation of the first international standard for measuring carbon fiber density in China.

## Key enterprises

Zhongfu Shenying Carbon Fiber Co., Ltd.

### **FF** Lithium Battery Separator



With internationally advanced wet separator manufacturing equipment and leading technology R&D capabilities, we have realized the domestic production of the last key material in lithium battery materials. We have 5-20 μm wet separator and various coated separator products, which are used in new energy vehicle power batteries, 3C consumer batteries, energy storage batteries and other fields, helping China achieve the goals of carbon peaking and carbon neutrality at an early date.

We have the National Key Laboratory of New Technology of Float Glass. We

have created the largest single contract amount and the largest production

capacity of China's float glass production technology and complete

equipment export projects, and built the most advanced float glass

#### Key enterprises

Sinoma Lithium Battery Separator Co., Ltd.

✓ High-quality Float Glass

production line in Central Asia.

Triumph Science & Technology Group

Key enterprises

### New Glass Materials



We have achieved a series of industrialization achievements that are "the first in China and the best in the world". We have independently built the world's largest single-unit oxygen-fuel combustion photovoltaic glass production line, and the first thin and high-transmittance photovoltaic glass intelligent production line in China. We have successfully rolled out the world's first large-area cadmium telluride power glass. The photoelectric conversion rate of copper indium gallium selenium power glass has set a new world record. The world's largest single-unit thin film BIPV application demonstration project has been built and applied in multiple scenarios. We have independently developed China's first neutral borosilicate pharmaceutical glass tubes for vaccines and achieved stable mass production. We have completed the layout of high-end platforms such as the only national new glass material innovation center in the industry, and achieved a stable market share of over 90% in the global high-end glass engineering.

## Key enterprises

Triumph Science & Technology Group

### Advanced Ceramics and Artificial Crystals



Advanced Ceramics is the third enterprise in the world after CoorsTek of the United States and Toshiba of Japan, and the first and only enterprise in China to form mass production of hot isostatic pressing silicon nitride ceramic materials. The successfully developed G3 bearing balls have been applied in aerospace and aviation engineering, and have been supplied in large quantities in many domestic bearing enterprises. The preparation technology of nonlinear optical crystals, infrared optical materials and microcrystalline materials has generally reached the international advanced and domestic leading levels. The nonlinear optical crystal KTP has helped realize the core functions of the "Mozi" quantum communication satellite, providing crystal material support for China to lead the world in quantum communication development.

Key enterprises Sinoma Advanced Materials Co., Ltd.

## Engineering and Technical Services

## **FF** Engineering and Technical Services



With nearly 500 cement and glass engineering projects built at a high level in the world, we are the largest Chinese-funded photovoltaic EPC general contractor in Europe, one of the few enterprises with complete industrial chain in the international cement technology and equipment engineering market, and the largest cement technology and equipment engineering system integration service provider in the world.

#### Key enterprises

China Sinoma International Engineering Co., Ltd., China Triumph International Engineering Co., Ltd., Sinoma Energy Conservation Limited, Hefei Cement Research & Design Institute Co., Ltd., and Qinhuangdao Glass Industry Research and Design Institute Co., Ltd.

Eliminating poverty is the common ideal of mankind. CNBM has devoted itself to the great cause of poverty alleviation. In 2022, it invested 79.4 million yuan in assistance funds, implemented 27 assistance projects, introduced assistance funds of 2.718 million yuan, trained 856 grassroots officials, entrepreneurial leaders and various technical personnel, and purchased and helped sell 20.3734 million yuan of agricultural products in poverty-stricken areas, helping poverty alleviation from various aspects such as industry, consumption, education and governance.

#### Zero hunger is the foundation and important issue to ensure global sustainable development, and food security is an important part of global governance. While actively connecting "targeted poverty alleviation" with "rural revitalization", CNBM carried out greenhouse characteristic planting industry in Xiaohunuke Village in 2022 to realize agricultural efficiency, increase farmers' income and help improve food security and living standards.

Ensuring healthy lifestyles and promoting wellbeing for all people at all ages is essential for sustainable development. In 2022, CNBM carried out special medical assistance according to local conditions, joined hands with Xi'an Fifth Hospital to carry out free clinic activities for endemic diseases in Jingyuan County; offered the consolation money of 11.105 million yuan to help 9370 special and difficult employees; and actively deployed the work of epidemic prevention to ensure the health and safety of

employees.

## 4

Education is the key to getting rid of poverty. CNBM has long carried out educational assistance such as donating money for education, volunteering to support education, scholarship support, etc. Through the "Smart Learning Program", it has organized "Smart Learning" summer camps, opened "Smart Learning" reading rooms in mountain schools, awarded "Smart Learning" scholarships, and carried out "Seven-color Classroom" voluntary activities to ensure inclusive and fair quality education.

Gender equality is the necessary foundation for world peace, prosperity and sustainable development. CNBM fully respects and protects women's rights and interests. While paying tribute to women's outstanding contributions, it takes active actions to fulfill a number of principles and strives for gender equality and women's empowerment in the workplace, market competition and community life. In 2022, the number of female managers in the Group was 2,795.

Sustained and inclusive economic growth is the

basic guarantee for people to get decent jobs.

CNBM adheres to the people-oriented principle,

organizes various special personnel trainings,

initially forms a special training system for

scientific and technological leading talents,

young scientific and technological talents and

skilled talents; continues to strengthen the

training of officials and talents, and actively

holds training courses for EMT, directors

and supervisors, and young and middle-

aged officials to promote people's all-round

development.

Access to clean drinking water and basic sanitation facilities is an important guarantee for people's health. CNBM strengthened the fine management of water resources, and the utilization rate of circulating water in 2022 was 95.6%; it also put forward the initiative of "smart use of every drop of water" to jointly protect the source of life.

## 7

12 CNBM

Energy is a common concern of the world today and lies at the core of every important challenge and opportunity. On the one hand, CNBM continues to carry out energy-saving technological transformation to improve energy efficiency and reduce energy consumption level continuously; On the other hand, it continues to optimize the energy consumption structure, speeds up the layout of green and low-carbon demonstration projects and green energy projects, deepens global photovoltaic power generation projects, continues to promote the construction of waste heat power generation projects and zero purchased electricity plants, and increases the proportion of photovoltaic and biomass applications.

Sustained investment in infrastructure and innovation is an important driving force for economic growth and social development. CNBM is committed to the research and development of key and core technologies and common technologies in the industry to promote the development of the building materials industry; implements innovative measures such as "3 +22" research tasks based on the "open competition mechanism" and special fund "331", and allocates the first batch of special "seed" funds of 114 million yuan, which are specially used for leading scientific research direction and encouraging scientific and technical personnel, and relying on technological innovation and connectivity to help industrial upgrading.



Contribution of

**Building Materials** 

to Sustainable

Development

3 GOOD HEALTH AND WELL-BEIN

**5** GENDER EQUALITY

 $\mathbf{r}$ 

6 CLEAN WATER AND SANITATIO

-0









## 16

A just and democratic society is a necessary condition for sustainable development. CNBM insists on managing enterprises according to law to comprehensively deepen the construction of the rule of law in central enterprises , formulates its 14<sup>th</sup> five-year plan for the construction of the rule of law, and issues the Implementation Plan for Further Deepening the Construction of the Rule of Law in China National Building Materials Group Co., Ltd.; Meanwhile, it optimizes the corporate governance mechanism, strengthens internal risk control management, practices anti-corruption and other sunshine codes of conduct, adheres to democratic management, and strives for fair operation and steady development of enterprises.

Climate change is a common challenge facing all mankind. CNBM has actively responded to climate change, established a low-carbon development strategy according to the national "14<sup>th</sup> Five-Year Plan", and followed the national environmental protection policies such as "carbon peaking" and "carbon neutrality" to conduct a comprehensive assessment of risks related to climate change, focusing on green and low-carbon transition and industrial upgrading, vigorously developing energy-saving and carbon-reducing technologies, and improving environmental management measures.

13

11

Reducing inequality is crucial to achieving sustainable development goals. CNBM implements the Measures for the Implementation of Staff Assistance in the "Smart Construction Non-profit Fund" of China National Building Materials Group Co., Ltd., and reviews the scope and conditions of objects of assistance step by step. In 2022, the Group participated in or supported 388 activities related to protecting the rights and interests of women, children or the disabled. Building inclusive, safe, disaster-resilient and sustainable cities and human settlements is the consensus of the global community. CNBM practices the philosophy of " smart use of resources and serving construction", sets up the "Smart Construction" non-profit fund, extensively carries out social welfare activities such as disaster relief, voluntary service, staff assistance, supporting education and helping students, and overseas aid construction, and deeply participates in the construction of " Belt and Road", providing high-quality basic building materials for infrastructure construction along " Belt and Road" and promoting common development.

## 17

Only by strengthening global partnership

and cooperation can the goals of sustainable

development be achieved. CNBM adheres to the

concept of "a community with a shared future

for mankind", actively fulfills its overseas social

responsibilities, implements its commitment to

long-term and stable cooperation with countries

along the "Belt and Road", promotes localized

operation, continuously practices corporate

social responsibilities, and works together to

build a prosperous and beautiful world.

Deforestation and desertification caused by human activities and climate change pose major challenges to sustainable development. CNBM has carried out mine reclamation and factory greening, promoted the construction of national green mines and garden-style ecological factories, and built a number of factories in gardens, grasslands and forests to effectively protect biodiversity; actively explored environmental protection service projects, and provided green mining and mine treatment services for more than 40 cement plants at home and abroad, thus restoring the natural environment to the maximum extent.

> 15 14

Protecting the ocean, an important global resource, is crucial to building a sustainable future. CNBM has continuously improved the ability of reclaimed water reuse, sewage treatment and rain and sewage diversion, and strived to achieve the goals of negative growth of water use and zero discharge of sewage; carried out activities such as proliferation and release to protect marine resources.

12

Changing production and consumption patterns and reducing carbon footprint are important measures to achieve economic growth and sustainable development. CNBM attaches importance to the coordinated development of economic growth and environmental protection, develops green technology, practices green manufacturing, uses green packaging and implements responsible procurement, so as to provide higher quality and more environmentally friendly green building materials for the society and continuously meet the people's needs for a better life. Responsibility Featured **Story** 

High-quality development is the primary task of building a modern socialist country in an allround way.

> -pointed out by General Secretary Xi Jinping in the report of the 20<sup>th</sup> National Congress of the **Communist Party of China**

**Creating ESG Building Material Strength to Help Chinese-style** Modernization

The 20<sup>th</sup> National Congress of the Communist Party of China drew up a grand blueprint for building a modern socialist country in an all-round way and promoting the great rejuvenation of the Chinese nation in an all-round way with Chinese-style modernization. Chinese-style modernization is the modernization of high-quality development, of common prosperity for all, of coordinated material and culturalethical advancement, and of harmonious coexistence between man and nature. which is highly consistent with ESG concept of advocating multiple value orientations and pursuing the maximization of comprehensive economic and social values. As the only central enterprise in the building materials industry and the first batch of member enterprises of "ESG Alliance of Central Enterprises", CNBM takes sustainable development as the guide and value creation as the goal, actively practices ESG path, further promotes ESG practice, and contributes building material strength to Chinese modernization.

## **Creating Value and Deeply Cultivating ESG**

As a state-owned capital investment company, CNBM has distinct functions of serving the national strategy and driving the industry. In the key industrial fields related to the national economy and people's livelihood, it is a benchmark for cultivating core competitiveness and innovation ability, and it is also a "leading model" for practicing ESG concept. In the process of accelerating the construction of a world-class material industry investment group with global competitiveness, it takes ESG as the anchor of value creation, strives to be the coordinator of marketoriented operation of state-owned capital and the cultivator of forwardlooking strategic emerging materials industry, and assists in the Chinese modernization with high-quality ESG practice.



Taking the "E" as the Gist to Assist in the Modernization of Harmonious Coexistence between Man and Nature

Lucid waters and lush mountains are invaluable assets. Environmental responsibility (E) requires enterprises to adopt sustainable development methods to reduce negative impacts on the environment as much as possible. Based on this, CNBM pays close attention to the indicators of energy and resource utilization efficiency, carbon emissions, clean energy, climate change and green building materials of enterprises, so as to promote the positive impact of enterprises on nature and environment.

## Actions by CNBM

practical actions.

Actively promoting energy conservation, pollution reduction and carbon reduction in the whole process, and building an environmentfriendly industry and standard configuration for modern cities.

Accelerating the construction of the only national public service platform of "dual carbon" goals in the material industry led by the Group to win the bidding, and contributing Chinese wisdom. Chinese solutions and Chinese standards to global carbon governance.



Environmental Indica of China National Bui Material Group Co., Li	ding	Indicator Hierarchy	20
Energy Use	Energy Recovery and Utilization	Comprehensive Utilization and Coordinated Disposal of Resources	Use of Water Resources
Pollutant Discharge	Response to Climate Change	Environmental Protection	Green Office
Investment in Energy Conservation and Environmental Protection	Shutdown of Production Facilities	Organization and Team Building	Management System and Management Mechanism
Intelligent Control of Energy	Environmental Emergency Management	Environmental Initiatives and Publicity	Green Manufacturing
Green Packaging	Green Building Materials	Clean Energy	Environmental Punishment

CNBM has formulated a low-carbon development strategy according to the national "14<sup>th</sup> Five-Year Plan", comprehensively assessed the risks related to climate change under the guidance of the national policies of "carbon peaking" and "carbon neutrality", focused on green and low-carbon transition and industrial upgrading, vigorously researched and developed energysaving and carbon-reducing technologies, improved environmental management measures, and contributed to the modernization of harmonious coexistence between man and nature with

> Increasing the proportion of new materials with low carbon and high added value, and vigorously developing products such as glass fiber, wind turbine blades, lithium battery separators, carbon fiber, photovoltaic glass, cadmium telluride (CdTe) thin film solar cells, graphite anode material, and high-pressure composite hydrogen storage bottles.

> Assisting in the green and lowcarbon process of the global building materials industry and accelerating the construction of a new development pattern of "dual circulation" with first-class technology, equipment, standards and services.

Taking the "S" as the Basis to Assist in the Modernization of **Common Prosperity** for All

People are the foundation of a state, and a state can enjoy peace only when its foundation is firm. Social responsibility (S) requires enterprises to pay attention to the performance of responsibilities of relevant parties such as government, employees, customers, suppliers and communities. Based on this, CNBM pays close attention to the employees' rights and benefits in enterprises, focuses on the indicators of scientific and technological innovation, rural revitalization and social welfare undertakings at home and abroad, and makes contributions to the Chinesestyle modernization of common prosperity for all by making balanced and effective contributions to the interests of all relevant parties and society.

Actions by CNBM

CNBM adheres to the core position of

innovation, has the "top priorities of the country" in mind, builds the "Pillar of the Country ", focuses on cutting-edge technology research in the industry, serves the major strategic needs of the country, actively responds to the call of the country, helps rural revitalization in multiple dimensions, devotes itself to

the construction of "Belt and Road", and

develops together with the communities

Social Indicators of China National Build Material Group Co., L	ing <b>218</b>	Indicator Hierarchy	31
Financial indicators	Production indicators	Quality control	Brand building
Customer service	Integrity management	Supply chain responsibility	Scientific research institution
Scientific researcher	Scientific and technological input	Scientific research achievement	Awards
Social service	Academic service	Employee diversity	Employment equality
Basic rights and interests	Democratic management	Compensation and benefits	Employee training
Occupational safety and health	Economic support and incentives	Work-life balance	Employee evaluation
External evaluation	Domestic community development	Overseas community development	Charitable donation
Support for science and education	Regional coordinated development	Volunteer activities	Charitable donation

The Group invested 2 million yuan to help Xinmin Community Village Collective Cooperatives implement the upgrading and transformation of market towns



BNBM PNG LTD launched community public welfare

Taking "G" as the Soul to Assist in the Coordinated Modernization of Material and Cultural-Ethical Advancement

Only by abiding by the rule of law and upholding fundamental principles can all go well without orders. Corporate governance (G) requires enterprises to establish responsible management mechanism and system, and its essence is to establish responsible and sustainable corporate culture. Based on this, CNBM attaches great importance to corporate governance and board building, and focuses on indicators including enterprise risk prevention and control, transparency, independence and integrity, etc., so as to help the coordinated development of material and culturalethical advancement within enterprises.





where it operates.

## Actions by CNBM

As a central enterprise with a responsible mission, while firmly promoting the reform process of state-owned enterprises. CNBM further improves the sustainable development management structure, continuously accelerates the effective integration of ESG risk management strategy with the existing risk management system, and promotes systematic ESG practice in enterprise management and operation.

## Governance Indicators of China National Building Material Group Co., Ltd. China National Building Material Group Co., Ltd.

Indicator Hierarchy



Company Profile

Responsibility Management



**T** Zhongfu Shenying attached great importance to and strengthened investor relations management

## **Ecological** Construction **ESG Practices Hand** in Hand

Building material industry is an important material industry in China. Building materials products are widely used in various fields such as construction, environmental protection, high-tech industries and people's lives. For CNBM, ESG is not only an investment philosophy, but also a set of values and a systematic and longterm strategy, which needs constant exploration and practice, and even more needs to be practiced hand in hand.

## To the Future **ESG Goes Forward** with Honor



Supervision and Administration Commission of the State Council issued the Work Plan for Improving the Quality of Listed Companies Held by Central Enterprises, promoting more listed companies held by central enterprises to disclose ESG special reports, and striving for "full coverage" of relevant special reports by 2023.

On May 27, 2022, the State-owned Assets

CNBM actively promoted the ESG information disclosure of its holding listed companies. Thirteen listed companies, including China National Building Material Company Limited, Xinjiang Tianshan Cement Co., Ltd., Ningxia Building Materials Group Co., Ltd., Gansu Qilianshan Cement Group Co., Ltd., China Jushi Co., Ltd., Beijing New Building Material (Group) Co., Ltd., Sinoma Science & Technology Co., Ltd., Sinoma International Engineering Co., Ltd., China Certification and Inspection Group, Triumph Science & Technology Group Co., Ltd., Triumph New Energy Company Limited, Sinoma Energy Conservation Ltd. and Zhongfu Shenying Carbon Fiber Co., Ltd., released the 2022 ESG reports, striving for "full coverage" the 2023 ESG reports of holding listed companies.

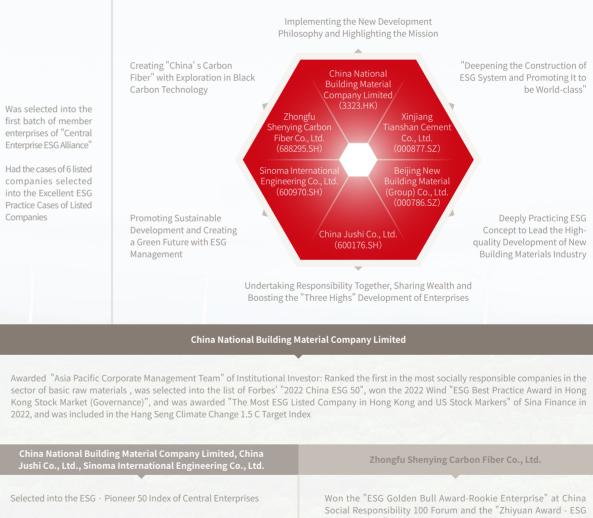


**ESG Standards** 

Standardization is one of the important measures to solve problems in the current ESG system construction. CNBM participated in the compilation of the first ESG reporting guide in the domestic building materials industry-Environmental, Social and Governance (ESG) Reporting Guide for Building Materials Enterprises, and joined hands with industry partners to promote the development of ESG management standards for building materials enterprises.



Reporting Guide for Building Materials ▲ Enterprises



Won the first "ESG Golden Bull Award-Governance Pioneer", won the Best Responsibility Advancement Prize of "Golden Responsibility Award", won the "ESG Golden Jasmine Award" at the Second Jiangsu Capital Market Summit, and was shortlisted for the "Best Employee Care Obligation and Responsibility Award" of the International SOS Foundation

As a large enterprise in the building materials industry, CNBM always keeps in mind the corporate mission of "materials create a better world", devotes itself to high end, intelligence, environmental protection and safety, continuously provides high-quality products and services to the society, integrates into the overall situation of national development, bravely shoulders the responsibility and mission of the times, and interprets the sustainable value of the enterprise with excellent ESG performance.

### Group

Pioneer Award" of Cailian Press in 2022

#### Sinoma International Engineering Co., Ltd.



22



02

TANTIK

Promoting **Prosperity and** Development

Innovation

Smart Use of Resources

Part I

Building the "Pillar of the Country"

1.1.1

Response to the United Nations Sustainable Development Goals (SDGs)



Energizing



# Technological

## Protecting Green Ecology



Zhongfu Shenying T700 Class Carbon Fiber Kiloton Production Line 🧕 🤗



01



## Promoting Prosperity and Development

For a tree to grow tall, a strong and solid root is essential; for a river to reach far, an unimpeded source is necessary. As the only central enterprise in the field of building materials in China, CNBM has always had the "top priorities of the country" in mind, strived to build the "Pillar of the Country", combined the study and implementation of the spirit of the 20<sup>th</sup> National Congress of the Communist Party of China with the task of promoting high-quality development of the Group and the goal of accelerating the construction of a world-class enterprise, promoted all the work of business reform and development under the guidance of "six adherences", focused on and undertaken the heavy tasks, exerted efforts in the research, and delivered a report satisfactory to the times and the people In the opening year of the second centenary goal.



The total profit was 26.58 billio

140.7

# 380.16

The operating income was 380.16 billion yuan

yuan



The net profit was 22.11 billion yuan

Blade Storage Yard of Sinoma Science & Technology Co., Ltd.

**Common Prosperity and** Development

Prospering Scientific and Technological Innovation Together

Protecting Green Ecology

Sharing Development Achievements

## Outstanding Performance

Faced with the turbulent external environment and arduous reform and development tasks, CNBM gives full play to the role of "pillar" and "ballast stone" of the central enterprises, carries out special actions to improve quality and efficiency in depth, and makes every effort to overcome the overlapping effects of repeated epidemics, low demand and high costs, etc., achieving steady progress in business performance, improving quality in progress, optimizing the main business structure, continuously enhancing the core competitiveness of the industry, and ranking first among global building materials enterprises, global brand value rankings, social responsibility development index, etc. In 2022, CNBM achieved an operating income of 380.16 billion yuan, a net profit of 22.11 billion yuan and a total profit of 26.58 billion yuan, won the "Double A" grade in the operating performance assessment of the State-owned Assets Supervision and Administration Commission, and was rated as the excellent performance enterprise.



RMB 100 million

As of the end of 2022

## Optimization and Upgrading of **Basic Building Materials**

CNBM focuses on the development of "High-end, Intelligent and Green", continues to lead the supply-side structural reform of the industry, accelerates the implementation of the "three tail-raising factors", improves the "Cement +" layout, and steadily enhances the operation quality, striving to exceed the plateau period to achieve higher quality development. In 2022, CNBM actively and steadily promoted the second stage of business integration, promoted Ningxia Building Materials Group Co., Ltd. to absorb and merge the CNBM Technology Corporation Limited, and built a digital service platform for the Group; promoted

Gansu Qilianshan Cement Group Co., Ltd. to be placed in the assets of highquality design institutes of China **Communications Construction Group** (Ltd.), and established the first model of market-oriented restructuring and listing cooperation among central enterprises. At the same time, the "Cement +" strategy was comprehensively deepened, and the construction aggregate production capacity was added by 50 million tons. Six intelligent environmental protection production lines were built through reduction and replacement, 17 inefficient production lines were eliminated, and the overcapacity was cut by 10.91 million tons.

### Ningxia Building Materials Group Co., Ltd.: **Revitalizing Traditional Cement Plants**

Ningxia Building Materials Group Co., Ltd. has always adhered to the new development concept, carried out ecological environmental protection throughout the whole process of production and operation, carried out environmental protection technological transformation in all directions, and continued to promote the construction of green mines and green factories, actively creating "Electric Yinchuan, Zero Carbon Logistics" in combination with the company's digital logistics business; thoroughly implemented the strategic thought of "Dual Carbon" goals, speeded up industrial adjustment, eliminated backward production capacity, improved the energy conservation and environmental protection of cement production lines year by year, and reduced the energy consumption, realizing the coordinated promotion of carbon reduction, pollution reduction and green expansion; actively explored intelligent construction and empowered traditional industries with digital technology. At present, kiln-mill expert system, digital intelligent storage system, e-security system, intelligent logistics system, intelligent loading and shipping system, etc. have been built. On the basis of deeply liberation of productivity, the Group helps production to realize production automation, management visualization and fault pre-control in one fell swoop, running out of "acceleration" on the road of building "National Great Talent", and writing a new chapter in the journey of "New Story of Cement".



## **Optimizing and Strengthening New Materials**

CNBM aims at the development of "High-end. Mass Production and Globalization", focusing on innovation chain to intensify key technology research, industrial chain to accelerate the popularization and application of product technology, and businesses with wide application prospects and huge growth space for structural optimization and stepped layout. In 2022, the Advanced Materials Industry Fund invested 5.15 billion vuan to lav out new materials such as new energy and semiconductors, and the graphite new materials companies entered substantive operations; China Jushi Tongxiang Intelligent Manufacturing Base was fully completed, the new line in Egypt was started, and the new bases in Jiujiang and Huai'an were steadily advanced; Beijing New Building Materials Co., Ltd. won the "Gypsum Industry

Leading Award" exclusively; Beixin Waterproof Co., Ltd. launched a series of new products for civil construction, and won the influential brand of waterproof materials for three consecutive years; The Taiyuan Base of Taishan Fiberglass Inc. accelerated to land; The Brazil, Yiwu, Yulin and Yangjiang projects of Sinoma Wind Power Blade Co., Ltd. were promoted in an orderly manner; Sinoma Lithium Battery Separator Co., Ltd. has added 2 billion square meters of planned production capacity, and Pingxiang and Yibin Bases have accelerated to land: The 14.000-ton high-performance carbon fiber project of Xining Phase II of Zhongfu Shenying Carbon Fiber Co., Ltd. was put into production in stages; China Building Materials Academy and Sinoma Advanced Materials Co., Ltd. completed the reorganization to consolidate the development foundation

## The Group: Chairman Zhou Yuxian visited CCTV's "Dialogue" and selected three industrial coordinates to tell how to build a "National Great Talent"

The decade of the new era is a decade of innovation and endeavor in China's new materials industry, and it is also a decade in which China's new materials industry has made great progress in terms of industrial scale, system construction and cluster effect. In 2022, CCTV's "Dialogue" took ten years as the scale, focused on pillar industries, brought together heavyweight enterprises, and specially planned to launch a series of interviews with China Industrial Coordinates. Zhou Yuxian, Party Secretary and Chairman of China National Building Material Group Co., Ltd., visited "Dialogue", focusing on Qinghai's 10,000-ton carbon fiber production base, China's largest overseas glass fiber production base, and the world's largest single wind power blade production base to tell the wonderful story of gathering force to create "National Great Talent" and bravely taking on the mission of material power.



265.8

Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

of advanced ceramics and intraocular lens materials: Maoming Phase I of Geological Prospecting Center has been put into trial operation with an annual output of 600,000 tons of kaolin. The operating income of the new materials sector exceeded 100 billion yuan for the first time, and the total profit and net profit accounted for more than 50%.

> The operating income of the new materials sector exceeded 100 billion for the first time and the proportion of total profit and net profit reached



Together

Common Prosperity and Development

Prospering Scientific and Technological Innovation

Protecting Green Ecology Together

Sharing Development Achievements

## Iterative Expansion of **Engineering Services**

CNBM actively cultivates "New Models, New Formats and New Kinetic Energy", and intensifies efforts to serve green production, energy conservation and consumption reduction, digitalization and intelligence, inspection and testing, etc., providing guarantee for the transformation and upgrading of the Group and its industries, green and low-carbon development, and expands the global influence of Made in China. In 2022, 150 overseas engineering projects of the Group were fulfilled on schedule, and 60 projects were successfully ignited and delivered. The equipment business integration plan between Sinoma International Engineering Co., Ltd. and Hefei Cement Research & Design Institute corporation Ltd. (HCRDI) was submitted to the China Securities Regulatory Commission for review, and the operation and maintenance business integration with the CNBM Smart Industry Technology Co., Ltd.

was successfully completed, with the newly signed operation and maintenance contracts increasing by 86% year-on-year. The newly signed overseas contracts of China Building Materials Engineering increased by 50% year-on-year.



 Columbia Haorui Independent Grinding Upgrade Project contracted by China National Building Material Group Co., Ltd.



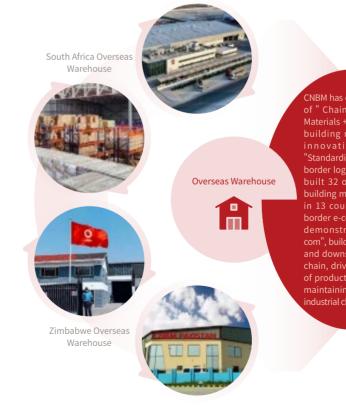
The 30 MW photovoltaic power station in Cura Brocero, Cordoba Province, Argentina, which was contracted by China National Building Materials Engineering, is the first photovoltaic power station project of China National Building Material Group Co., Ltd. in South America

## Orderly Integration of Trade Business

CNBM orderly promoted the integration of trade business, accelerated the settlement of historical problems, and ensured business continuity and shortened the integration period as much as possible in accordance with the principle of merging similar items. Integrate the overseas business of the Group with China National Building Material Investment Co., Ltd. as the main body, and integrate the domestic and foreign trade and supply chain business of the Group with Beijing New Building MATERIALS Co., Ltd. as the main body. In 2022, the Group's non-main business trade income was reduced by 7.78 billion yuan, a year-onyear decrease of 79.3%, completing the three-year reduction task, with more concentrated resources, and effectively strengthened synergies.



UAE Overseas Warehouse



Pakistan Overseas Warehouse

Part II Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management



The Group held a meeting of trade sector integration cadres

Papua New Guinea Chain Supermarket of Building Materials



IBM has established a business mode of " Chain Supermarket of Building building materials characteristics, "Standardization + Localization" crossborder logistics solution, invested and built 32 overseas warehouses and ouilding materials chain supermarkets border e-commerce integrated service com", building a link between upstream and downstream links of the product of products in China to go to sea and maintaining the stability of the global

**Overseas Building** Materials Chain Supermarket

> Zambia Chain Supermarket of **Building Materials**

PAFRIW

Vanuatu Chain Supermarket of Building Materials



**Common Prosperity and** Development

Prospering Scientific and Technological Innovation Together

Protecting Green Ecology

Sharing Development Achievements

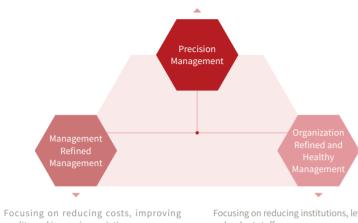
## Precision Management

The management principle is a strong guarantee to achieve the goal of highquality development and worldclass. By summarizing a series of effective management experiences, CNBM has formed a combination of "Three Fine Management" and "Benchmarking Optimization", which are paid attention to the external market capture and internal strong management, effectively improving the management level of the Group.

## Lean Management

CNBM fully maintains the industry ecology, does a good job in "Cement +", speeds up international expansion, and empowers technology innovation through data integration. In 2022, it strengthened cost control. The interest-bearing liabilities of more than 3.5% were reduced by 56.9 billion yuan, and the sales expenses, management expenses and financial expenses decreased by 17.3%, 7.2% and 14.9% respectively; Strictly control capital expenditures and reduce the annual investment plan by 19.255 billion yuan. The speed of the production line of Sinoma Lithium Battery Separator Co., Ltd. increased by 30% year-on-year, and the gross profit margin increased by 21% yearon-year.

Focusing on the price, cost and interest, zero inventory, and centralized collection and sales. Paving attention to the business refocusing, innovation effectiveness, market segmentation, and pricing rationalization to create an invisible champion.



quality and increasing varieties. Standardizing management, standardizing operations, standardizing quality, and minimizing the use of two funds to seek benefits from management.

Focusing on reducing institutions, levels and redundant staff. Paying attention to the standardized governance, hierarchical functions, specialized platforms and streamlined institutions to

ensure orderly exercise of power.

### Beijing New Building Materials Co., Ltd.: "One Cent" Cost Saving Plan

Beijing New Building Materials Co., Ltd. actively implements the "Three Fine Management", attaches great importance to the work of "Increasing Savings and Reducing Costs" in the production management side, and achieves "Earning Money and Saving Money" and "Increasing Revenue and Reducing Expenditure". While improving external competitiveness, it continuously strengthens internal management and enhances internal cost control ability and anti-risk ability. It also adheres to the concept of "Price, Cost and Interest", focuses on cost control, establishes cost benchmarks, strengthens cost management, plans expenses, and fully does the target dismantling and task inversion. On the production end, the "One Cent" cost saving plan is fully implemented, that is, the production cost of gypsum board per square meter is reduced by 10 cents year-on-year in the gypsum board business. On this basis, the "One Cent" cost saving plan is extended to other business areas. In 2022, the unit consumption of gypsum, face protection paper and energy of gypsum board products decreased year on year, and the production cost decreased by about 10 cents year on year. Beixin Waterproof's cost is reduced by 5.6%, Beixin Coating' s cost is reduced by 5.61%, and the annual cost of the company is saved by 332 million yuan.



## Management Refinement

CNBM effectively promotes digital transformation, refined operation and management, and business integration, and does a good job of empowering system process reconstruction to promote continuous improvement of efficiency and more robust operation. In 2022, the Group formulated an implementation plan to speed up the construction of worldclass enterprises, and made every effort to build a world-class enterprise with global competitiveness with excellent products, outstanding brands, leading innovation and modern governance. China Jushi Co., Ltd. through the implementation of "12350 Quality Management Method", continuously explores the whole process of the value chain such as production, supply, sales





## Streamlined organization

We have further innovated our organizational structure, improved the incentive mechanism, and strengthened corporate governance, stimulating and empower with potential and vitality.

130 legal entities were reduced throughout the year, and a total of 338

legal entities were reduced through inspection and rectification; 21 nonpublic economic organizations and non-listed enterprises were divested on schedule. The revenue of 43 enterprises in distress increased by RMB 1.25 billion year-on-year.

Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management

Huaikan Nanfang Cements Co., Ltd. won the first AAA-level integration management system certificate of the cement enterprises in China, becoming the first cement enterprise in China to pass

and research, leading the highguality development direction of the glass fiber industry; CNBM Research Institute for Advanced Glass Materials Group Co., Ltd. introduced excellent performance management mode, took the opportunity of developing

strategic emerging industries, and focused on the integration of innovation chain, industrial chain, capital chain and talent chain. forming a quality management mode of "Four-Chain" integration.

34 key loss-making enterprises reduced losses by RMB 2.13 billion compared with 2018. Inspection and rectification have revitalized a total of 5,923 mu of idle land. 2.59 million square meters of idle real estate, RMB 1.66 billion of idle equipment, and 24 inefficient and invalid equity rights were disposed of.

**Common Prosperity and** Development

Prospering Scientific and Technological Innovation Together

Protecting Green Ecology

Sharing Development Achievements

## Deepening Reform

Reform has always been the inherent gene of CNBM. We thoroughly studied and implemented the important statements of General Secretary Xi Jinping on the reform and development of state-owned enterprises, and resolutely implemented the decisions and deployments of the CPC Central Committee and the State Council. Under the guidance of SASAC, we made every effort to push forward the implementation of reform tasks. strengthened the implementation of "prescribed actions", and continued to explore "self-selected actions" to promote the continuous release of reform dividends.

- We have been awarded Grade A in the assessment of the three-year action of stateowned enterprise reform
- Science reform enterprises and double hundred enterprises have excellent performance in assessment
- More than 100 institutional reforms have been carried out
- More than 40 achievements were selected into the reform cases of SASAC and professional institutions

## In the three-year action of state-owned enterprise reform

we deeply promoted the reform, went all out to tackle the hardest tasks, fully completed the task of the three-year action of state-owned enterprise reform, carried out supervision and inspection on 16 important subsidiaries, ensuring that the reform effect can stand the test, and seriously summarized the experience. CNBM was selected as the third batch of advanced models of "Learning from the Advanced, Grasping Implementation and Promoting Reform" of the State Council Leading Group Office of State-owned Enterprise Reform, and exchanged experiences with SASAC six times.

### Notable results have been achieved in three institutional reforms

- With a rigid fulfillment of performance in 2021. Nine unqualified employees were withdrawn
- The proportion of managers competing for posts exceeded 60%, and the proportion of last-class adjustment and incompetent withdrawal reached 2.38%.
- New overseas investment projects were added, and the "toolbox" for mediumand long-term incentives was expanded to 5 categories and 9 types, and 9 new enterprises and 738 key employees were added to implement a full level contractbased management tenure system for medium- and long-term incentives.

### Governance effectiveness has been significantly improved

- Enterprises at the third level of the group and at least the third level of the joint-stock company are comprehensively promoting the establishment of the "three meetings' list of powers and responsibilities.
- We strengthened the team building and professional management of directors and supervisors, and made the management and control mode of sending directors to manage equity more mature.
- The Board of Directors at the third level of the Group and above the third level of the joint-stock company made every effort to differentiate and implement the functions and powers of the Board of Directors.
- The Group and Sinoma Energy Conservation Ltd. were selected as "Model Enterprises of Corporate Governance" by SASAC, and the Group was rated as "Excellent" in the construction evaluation of SASAC Board of Directors.

## Reform of state-owned capital investment companies

Taking the formal transformation of the Group into an investment company as an opportunity, we have accelerated the optimization of the layout and structural adjustment of state-owned capital, and made multi-directional efforts in the integration of basic building materials, new materials, engineering and technical services, logistics and trade, making the leading industries more elite.



We increased our holdings of five listed companies, namely China National Building Material Co., Ltd., Pingliang Qilianshan Cement Co., Ltd., Ningxia Building Materials Group Co., Ltd., China Testing & Certification Internationa Group Co., Ltd. and CNBM Triumph Mineral Resources Group Co., Ltd., to stabilize the stock prices, increase the market value and boost investor confidence.

authorization

We optimized resource allocation through income collection and redistribution, invested in new materials and other business sectors by means of capital increase and fund, and supported emerging industries with mature industries.

- Clarify the boundaries of power and responsibility
- Pre-check procedures of Party Committee Improve organizational mechanism and closed-loop
  - management





30

Marching Towards a Better Future

Responsibility Management



Zhongfu Shenying Carbon Fiber Co., Ltd. is listed on the Shanghai Stock Exchange

We established a new graphite material industry platform to promote the development and deep processing of graphite.

We made a real investment in China United Cement Group Corporation and built an investment portfolio around the Group's strategy. The New Materials Industry Fund invested RMB 5.15 billion in new energy materials, semiconductor materials and other fields, and Zhongfu Shenying Carbon Fiber Co., Ltd., which controls the shares. and SICC Co., Ltd., which shares the shares, became the first carbon fiber and silicon carbide enterprises on the science and technology innovation board respectively.

- standardized operation

## Reform the management mechanism

We strive to improve the governancebased management and control mode, build a strategic management and control headquarters, introduce non-state-owned strategic investors into state-owned wholly-owned enterprises, implement employee stock ownership, establish a new mechanism for differentiated management and control of Party building, powers and human rights in mixed-ownership enterprises, consolidate and upgrade the reform of the "three capabilities" mechanism, strengthen the withdrawal clause of "two books and one agreement", and strengthen the rigid fulfillment of the term of office.

Common Prosperity and Development

Prospering Scientific and Technological Innovation Together

Protecting Green Ecology Together

Sharing Development Achievements

## Guidance by Party Building

We have always adhered to the principle of "One Account for Party Building and Management", unswervingly adhered to the leadership of the Party, continuously strengthened Party building, and created a "1345" Party building work system with building materials characteristics and an innovative "Smart Use" corporate culture system, created the spiritual core of "the great material of the country", cast the "Pillar of the Country" with Party building, promoted the great project of Party building in the new era. Under the leadership of the Party, we shoulder the mission of serving the country by industry and strengthening the country by materials.





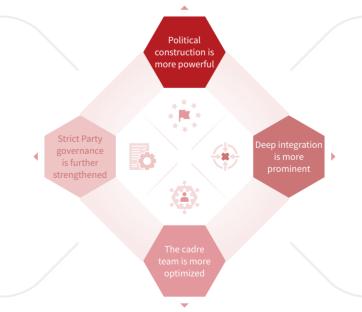
Chairman Zhou Yuxian leads all comrades to revisit the oath of joining the Party in the Party Day event with the theme of "Building a New Era and Welcoming the 20<sup>th</sup> CPC National Congress"



New Tianshan Cement Co., Ltd. and its affiliated enterprises watch the opening meeting of the 20<sup>th</sup> CPC National Congress

We conscientiously implemented the system of the "first issue" and "top issue"; carried out the theme activities of re-learning, implementing and upgrading the spirit of General Secretary Xi Jinping's important instructions, and won the outstanding theoretical achievements of "Studying and Implementing General Secretary Xi Jinping's Important Exposition on Developing the State-owned Economy" of the SASAC of the State Council; standardized the recommendation and nomination of candidates for the 20<sup>th</sup> CPC National Congress, quickly set off an upsurge of studying and publicizing the spirit of the 20<sup>th</sup> CPC National Congress, and organized 12 special lectures.

We carried out warning education and promoted the implementation of the spirit of the eight central regulations and their implementation rules; corrected the new trend of "four attitudes" and deepened the new attitude; formulated the Implementation Measures for Great Supervision; and solidly promoted the inspection and rectification of the SASAC Party Committee. The completion rate of the rectification task in three years is 99%.



We introduced the 14<sup>th</sup> Five-Year Plan for the construction of outstanding young cadres, and established a talent pool of 204 young cadres by hierarchical classification. We introduced 12 incentives for scientific and technological talents and 18 for the construction of young cadres; improved the assessment and incentive management system, and established the target annual salary model of the principal responsible persons of secondary enterprises. We held youth classes and EMT training classes, and achieved practical results in the construction of the closed-loop HR management system.

Part II Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management

We held special activities such as "The Party Flag Flutters and I Will Always Work Hard", "Beautiful China Action Month", and "Youth Spiritual Literacy Improvement Project". The Party building case of the Group's "1345" Party building work system was selected as a practical case of learning and training materials for cadres of state-owned enterprises. We practiced and explored research on constructing the "1239" integration model of Party's leadership and corporate governance, and the project won the first prize of outstanding achievements in Chinese enterprise reform and development in 2022.

02

## Energizing Technological Innovation

The report of the 20<sup>th</sup> CPC National Congress clearly points out that innovation is the core of China's modernization drive. As the leader of scientific and technological innovation in China's building material industry, CNBM has always adhered to the innovationdriven development strategy, focused on key & core technologies and bottleneck technologies, increased investment in R&D, improved scientific and technological innovation capabilities, and made every effort to create the source of original technologies of key materials and the modern industrial chain, enhancing the core advantages of the "Pillar of the Country" through and technological achievements have "flown into the homes of ordinary people", which has strongly supported the national industrial development and continuously met the people's needs for a better life.



## 14.9

06 14:19:28 星期五

Expenditure on research and experimental developmen is RMB 14.9 billion



A total of 22,425 valid patents have been held

5,926

Among them, there are 5,926 invention patents

The intelligent control center of China Jushi's fiberglass production base 💡





National Key Laboratory of New Technology of Float Glass

## Optimizing the Innovation Ecosystem

We adhere to the corporate mission of "creating a better world with materials", focus on the "Four Aspects", fully leverage the role of the "national team" of scientific and technological innovation, and form a strong synergy of high-level scientific and technological self-reliance by increasing investment in R&D, improving the system and mechanism of scientific and technological innovation, strengthening the training of scientific and technological talents, and gathering innovative resources.

## Improve Institutions and Mechanisms

We insist on opening the way for scientific and technological innovation and creating a good environment with perfect systems and mechanisms. In 2022, we continued to increase investment in technology R&D, implemented innovative measures such as the "3+22" research task, "the open competition mechanism" and special funding of "331", and allocated the first batch of special "seed" funds of RMB 114 million to guide scientific research and motivate scientific and technological personnel, driving enterprises to selfraise RMB 1.55 billion. At the same time, the Measures for Performance

Management of Scientific Research Project Management of the Group was formulated, and the guiding opinions on innovation and efficiency creation of scientific and technological talents were issued. China Building Materials Academy established a mechanism for team members to contact scientific and technological talents, promoting Sinoma Science & Technology and Sinoma International to further improve incentive and guarantee mechanisms and comprehensively stimulate the innovative vitality and motivation of scientific and technological talents.



## Strengthen platform construction

We actively align with international standards, focus on major national strategic needs, cutting-edge technologies and disruptive technologies in the industry, and strengthen the construction of innovation platforms, creating a new engine for innovation-driven development. In 2022, we established the Science and Technology Association of the Group, promoted the reorganization and integration of three national key laboratories of low-carbon silicate materials, high-performance fiber composite materials and advanced glass materials, led the establishment of the National Innovation Center for New Glass Materials, and accelerated the construction of the "dual carbon" technology laboratory. The Group has a total of 18 state-level enterprise technology centers and 18 individual champion enterprises (products), all ranking first among central enterprises.



Achievements

Part II

We trained, introduced and made good use of talents in all directions, and jointly carried out pilot projects for training high-level talents in new materials and engineering masters and doctors urgently needed by the country with Tsinghua University and Wuhan University of Technology, and accelerated the cultivation of young and middle-aged leading talents and innovative teams in science and technology, established





Carefully control by staff at Sinoma Lithium Battery Separator

Sharing Development

Marching Towards a Better Future

## Introduce and train innovative talents

a core scientific research talent pool, deepened the innovation culture, carried forward the spirit of scientists, and respected the initiative of employees, so that the young scientific and technological backbones who are truly innovative and honest can play a leading role. In 2022, the Group won two collective outstanding contribution awards and one individual outstanding contribution award from SASAC.

Together

Common Prosperity and

Prospering Scientific and Protecting Green Ecology Technological Innovation

Deepening Collaboration on Innovation

We think deeply about the integration between the national demand of the "Pillar of the Country" and the corporate mission of "creating a better world with materials", adhere to openness, sharing, collaboration integration and innovation, give full play to the scale advantages of the application scenarios of superlarge manufacturing enterprises within the Group among central enterprises and between production and research, promote the combination of production. education and research, connect the upper, middle and lower reaches, and cooperate with large, medium-sized and small enterprises, striving to build a joint innovation body for tackling key problems in science and technology. The Group has 3 national demonstration bases for international scientific and technological cooperation.

## Internal collaboration between production and research

Collaboration within the Group is the core productivity to continuously improve the resilience of the industrial chain, the vitality of the innovation chain and the influence of the value chain. The Group's affiliated enterprises give full play to their respective advantages in management, scientific research

and industries, deeply exploring cooperation opportunities and modes. China Building Materials Academy cooperated with the innovation forces within the Group to take the lead in implementing the construction tasks of low-carbon cement and special functional materials, striving to occupy the commanding heights of low-carbon cement science and technology, and making every effort to cultivate strategic products, industries and industrial chains of special functional materials.

## External Joint Research

We deepened our cooperation with Commercial Aircraft Corporation of China, Ltd., and aimed at the major strategic needs of large aircraft and other countries, promoting the special project of large aircraft composite materials, and obtaining the supplier qualification of three fuselage sections of CR929 large aircraft. We focused on hydrogen energy storage and transportation materials, carbon fiber composite materials and low carbon technology, carried out joint research with Chinese Academy of Sciences, China Petroleum & Chemical Corporation, China Aerospace Technology Group Co., Ltd., etc. to build a national "entrepreneurship and innovation" base for artificial crystals, and more than 20 upstream and downstream enterprises have settled in the base, forming a coordinated development system of the industrial chain. The National We cooperated with Shandong University Manufacturing Innovation Center for New Glass Materials has gathered 80 enterprises, colleges and universities and other innovation subjects and production enterprises, forming a "one-stop" market-oriented and industrialized chain from glass R&D to design to engineering.

Nanjing Fiberglass Research & Design Institute: The advantages of **F** school-enterprise cooperation are constantly highlighted.

In response to the needs of industry and national policies, Nanjing Fiberglass Research & Design Institute has actively cooperated with universities such as Tsinghua University and Donghua University in production, education and research. In recent years, it has undertaken seven scientific research projects such as national science and technology support plan, national key special projects and national defense supporting facilities. According to different working conditions, it has developed different surface modification formulations and treatment technologies, improved the temperature resistance, corrosion resistance and oxidation resistance of substrates, and formed a series of ultra-low emission technologies and products. The R&D project Collaborative Deep Treatment Technology and Application of Industrial Flue Gas Multi-pollutants in cooperation with universities won the first prize of national scientific and technological progress, and the Key Technology and Industrialization of Macro Preparation of High Curvature Liquid Level Electrostatic Spinning Nonwovens won the second prize of national technological invention.



## **Promoting Digital** Transformation

Driven by "Digital Leading Material Creation", we make every effort to build "Digital China Building Materials" which are "efficient, collaborative, shared, intelligent, green and ecological". In 2022, we issued guidelines on the principles of information construction and digital transformation, and built three special information systems for the Group's leadership cockpit, organization and bidding and procurement. We built the world's leading fiberglass "Future Factory" and release the 1.0 standard of intelligent cement plants. The first phase of the Group treasury management and control platform was completed and launched, and the visibility rate of domestic accounts was 100%. The data center of the Group's Internet Industrial Park started construction, the "No.1 Project" of New Tianshan Cement was steadily implemented, and the construction of the Internet data center of Ningxia Building Materials Group Co., Ltd. was promoted in an orderly manner. More than 1.2 million heavy trucks were settled in the "Vehicle Calling" platform, and the GMV reached RMB 43.3 billion.

## manufacturing base



Part II

Sharing Development Achievements

## Upgrading and Renovation Project of MK3 Cement Production Line in La Haute, France

Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management

In terms of digitalization of R&D and design. the upgrading and renovation project of MK3 cement production line in La Haute, France undertaken by Sinoma International is the first project to realize visual construction by means of remote collaborative digitalization.



## The world's largest fiberglass intelligent

In terms of intelligent production and manufacturing, we promoted the intelligent manufacturing of core equipment and used core equipment to form intelligent production lines. Sinoma International has built more than 20 intelligent cement production lines for New Tianshan Cement. The Group's intelligent fiberglass production line was completed and put into operation.

### Xining High-Performance Carbon Fiber **Intelligent Production Line**

In terms of digitalization of business management and agility of customer services, with digital transformation planning as the key, we actively promoted the added value of data by using huge application scenarios and massive data.

The first automatic precursor quality inspection system in the fiberglass industry independently developed by Taishan Fiberglass of Sinoma Science & Technology

Common Prosperity and

Prospering Scientific and Technological Innovation Together

Protecting Green Ecology

Sharing Development Achievements

We actively build the source of original technologies in the field of inorganic nonmetallic materials, organize the implementation of the Group's source of original technologies and "the open competition mechanism" for key & core technology research, focus on the lowcarbon development of basic building materials and bottleneck and cuttingedge technologies in the field of new materials, strengthen basic research and applied basic research, attach great importance to the creation, protection and application of intellectual property rights, vigorously implement the intellectual property strategy, strengthen the management and application of intellectual property rights of strategic new materials, and strive to serve the "Top Priorities of the country" with the "Pillar of the Country" and promote scientific and technological achievements from laboratories to the market to better support the needs of national industrial development.

## 40 CNBM

- The "Vehicle Calling" smart logistics platform, big data platform for new glass material industry and big data platform for cement waste heat power generation were selected as pilot demonstration projects for big data industry of the Ministry of Industry and Information Technology
- Seventeen enterprises including Tianjin Cement Industry Design & Research Institute Co., Ltd. were selected into the list of typical cases of digital transformation of intelligent manufacturing in the building material industry in 2022 by the Ministry of Industry and Information Technology
- China Jushi Co., Ltd., Bengbu K&D Technology Co., Ltd., Sinoma Jiangxi Insulator and Electricity Co., Ltd. and Zhengzhou Ruitai Refractory Materials Technology Co., Ltd. were selected as the list-breaking units of the 2022 Intelligent Manufacturing Demonstration Factory of the Ministry of Industry and Information Technology
- Tianjin Cement Industry Design & Research Institute Co., Ltd. was selected into the publicity list of excellent scenes of intelligent manufacturing in 2022 by the Ministry of Industry and Information Technology, and was selected as the "Top Ten First Exhibition Achievements" of the Fifth Digital China Construction Achievements Exhibition, which is also the only selected enterprise in the building material industry.
- The Linli South "5G + Intelligent Mine" was accepted according to the Digital Mine Construction Guide

### China Jushi: The first in the industry and the world! China Jushi's **F** intelligent manufacturing base is fully completed

On November 2, 2022, the completion ceremony of China Jushi's intelligent manufacturing base was held in Tongxiang Development Zone, Zhejiang Province, marking that China Jushi's intelligent manufacturing base, which took 5 years to build, has been fully completed and achieved the expected output with high efficiency and quality. In 2017, China Jushi invested over RMB 14 billion to start the construction of intelligent manufacturing base of Tongxiang Headquarters. Nowadays, four superlarge reinforced fiberglass production lines and three super-large electronic fiberglass production lines have been completed in Tongxiang Headquarters, forming an annual production capacity of 600,000 tons of reinforced yarn and 800 million meters of electronic cloth. The strategy of "rebuilding a Jushi" has been completed perfectly. The operation of the base has also made China Jushi rank first in the industry and the world in various major production technology indicators such as capacity scale, production efficiency, production cost and quality control, becoming the "future factory" and "lighthouse factory" leading global fiberglass manufacturing.





Fostering

Innovation

**Achievements** 

of Technological

Scan code to watch The Imprint of Triumph and the Dimension of China

Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

In 2022, the Group built a composite materials digital simulation platform for civil aviation, and delivered the first batch of C919 passenger and cargo cabin floors. The 8-meter level fuselage panel of CR929 wide-body passenger aircraft was successfully developed, and the first flight installation parts of CJ1000A turbofan blades were delivered. It newly undertook 7 major research tasks such as large aircraft composite materials, high-performance carbon fiber and high-level radioactive nuclear waste liquid treatment, as well as 9 national key research and development projects during the 14<sup>th</sup> Five-Year Plan period. A large number of new materials were used in national major projects such as the Mengtian space lab module, Shenzhou-14 and Tianzhou-4. The construction of the low-carbon inorganic nonmetallic material industry chain of the Group is progressing smoothly, and China Jushi has won the China Gold Patent Award.

### Harbin FRP Institute: Support "Daoda Constellation" ► The "Anxi Tieguanyin-2" satellite was successfully launched

At 11:30 on April 30, 2022, China successfully launched the "Daoda Constellation" and "Anxi Tieguanyin-2" satellites (including five satellites in total) in the East China Sea with the Long March 11 sealaunched remote three carrier rocket. The satellites successfully entered the scheduled orbit and the launch mission was a complete success. Harbin FRP Institute participated in the development and production of composite components such as the main load-bearing structure and light shield of "Daoda Constellation" satellite, and also participated in the production of composite components. At the same time, Harbin FRP Institute participated in the design of all composite components in the "Anxi Tieguanyin-2" satellite camera and some composite components in the satellite, and provided a lot of development experience and schemes in the design of composite components. During the production, it optimized the molding process, broke through the technological difficulties, and finally realized the integrated molding of carbon fiber composite thin-walled special-shaped components, meeting the requirements of low weight, high load and high precision.



03



## Protecting Green Ecology

Ecological civilization construction is an important feature of socialism with Chinese characteristics for a new era, and it is also an important content of realizing the Chinese dream of the great rejuvenation of the Chinese nation. CNBM has always adhered to the development concept that "lucid waters and lush mountains are invaluable assets", seized the strategic opportunity of structural adjustment of building materials industry, focused on improving green management, practicing green production and optimizing green services, and made every effort to build a safe, reliable, economical, efficient, green and intelligent production and operation system, leading China's building materials industry to move towards green, lowcarbon and sustainable development, and promoting harmonious coexistence between industrial development and environmental protection.



75

There are 75 state-level green factories





Expenditure on environmental protection and ecological restoration was RMB 4.242 billion

## 43

There are 43 national-level green mines

Picturesque Sinoma Anhui Circular Economy Industrial Park

Together

Common Prosperity and

Prospering Scientific and Technological Innovation

Protecting Green Ecology Together

We effectively implemented

energy conservation and

ecological environmental

We completed the assessment

of energy conservation and

ecological environment pro-

According to the mechanism of

"one policy for one enterprise",

we signed the 2022 annual

assessment responsibility

statement, defined the qua-

litative, quantitative and veto

assessment indicators, and implemented the ecological

and environmental protection

We strictly dealt with envir-

onmental protection admi-

nistrative issues, rectified 12 environmental protection

administrative penalties, and

implemented environmental

protection responsibilities.

the responsibility of

protection

tection in 2021.

responsibility.

## Strengthening Green Management

Guided by Xi Jinping's ecological civilization thought, we have conscientiously implemented the decision-making arrangements of the CPC Central Committee and the State Council on ecological environmental protection and the work requirements of relevant ministries and local governments, and made continuous efforts in ecological environmental protection system construction, pollutant control and emission reduction, energy efficiency improvement of energyintensive and high-emissions projects, carbon dioxide emission control, environmental protection inspector rectification, green development of enterprises, etc., comprehensively investigated and eliminated all kinds of potential environmental risks, strictly controlled the risks of environmental emergencies, kept the bottom line of environmental quality, and shouldered the political responsibility for ecological environmental protection.

In 2022, we compiled the implementation plan of the Group for "Carbon Peaking and Carbon Neutrality", solidly promoted the "dual carbon" goals, and achieved phased results in the rectification of central ecological and environmental protection supervision issues. Among the 46 rectification tasks, 44 have been completed, and 2 tasks have reached the chronological progress. People's Daily carried out a series of reports on the rectification results of group inspection and rectification, among which the experience, results and excellent practices of the inspection and rectification of China United Cement Mine in Ju County were published as positive typical cases of "one-step rectification" and "thorough rectification".

## The ecological and environmental protection system and mechanism have been continuously improved

- All levels of the Group have continuously improved the eco-environmental protection system, and the eco-environmental protection management system has achieved full coverage and rapid linkage.
- The information reporting mechanism has been more perfect, forming an information monitoring and reporting mechanism that reports energy consumption and pollutant emissions on a monthly basis. investigates and rectifies ecological and environmental problems on a quarterly basis, and schedules the completion of pollution prevention and control tasks throughout the whole level.

### Training, education, supervision and inspection have been promoted simultaneously in various forms

- We continued to carry out annual training on energy conservation and ecological environment protection of CNBM, with more than 1,200 participants.
- We organized the first Energy Conservation and Environmental Protection Knowledge Competition of China National Building Materials Group, and created a strong atmosphere of "promoting learning by competition, promoting doing by learning, and having a competitive spirit".



Creating a better world with materials

## Practicing Green Production

We always adhere to the "Three Principles of Green Manufacturing", highlight green environmental protection in the whole life cycle of raw burning material selection and manufacturing, devote ourselves to providing reliable, safe and healthy building materials products, share effective energy-saving and environmental protection technologies and management experience, and continuously broaden new green roads for exploring the production mode of harmonious coexistence between industry and nature and realizing highquality development.

Achievements

On the premise of ensuring product quality, relying on scientific and technological innovation, we continue to increase the comprehensive utilization of solid waste resources. increase the proportion of industrial waste residues such as slag, steel slag and fly ash replacing natural mineral raw materials, and realize turning waste into wealth. The annual consumption of solid waste of the Group is 104 million tons. At the same

## China United Cement Linyi: Photovoltaic power contributes **T** to the green development of enterprises

Electricity is an important energy source for enterprises producing cement products. In the face of rising coal prices, increased costs, and reduced profits, China United Cement Linyi invested RMB 60 million to build a 6.5 MWp distributed photovoltaic gridconnected power station on the basis of the existing low-temperature waste heat power generation of cement kiln. This can generate 10 million kWh of electricity and reduce carbon dioxide emissions by about 5,703 tons throughout the year. In addition, investment has been made in the construction of photovoltaic power generation sheds with an annual power generation capacity of about 300,000 kWh in living areas and office areas, as well as the construction of a floating fishing and light complementary photovoltaic power generation system with an annual power generation of about 50,000 kWh was built in the pond of the factory. The method of "connecting to nearby power sources, generating electricity for oneself, and selling excess electricity to the power grid" was adopted, greatly reducing the cost of electricity purchased by enterprises, promoting clean production and low-carbon production, and producing great value in economic benefits and environmental protection.



Sharing Development

Marching Towards a Better Future

## Green material selection

time, we vigorously develop cement waste heat power generation from cement kilns, with a cumulative installed capacity of about 2,000 MW and an annual power generation of about 8 billion kWh, reducing carbon dioxide emissions by about 4.56 million tons. In 2022, BNBM used 367,000 tons of biomass fuel, and has become the largest biomass alternative fuel enterprise in the building material industry in China.

Common Prosperity and Prospering Scientific and Technological Innovation Together

Protecting Green Ecology Together

Sharing Development Achievements

## Green Manufacturing

Guided by "green development" and centering on the national strategic orientation, we have continuously developed green technologies, vigorously promoted complete sets of technical equipment suitable for comprehensive treatment of flue gas desulfurization and flue gas denitration in building materials kilns, ensured the completion of over-limit treatment, promoted the synergy of pollution reduction and carbon reduction, continuously reduced the intensity and total amount of

and made every effort to protect the blue sky, clear water and clean land. Sinoma International earnestly fulfilled its duties as the "main force", actively undertook the Group's "energy-intensive and high-emissions" technological transformation projects, and transformed 15 projects with high standards; Sinoma Pingxiang was successfully selected into the 2022 Green Manufacturing List of the Ministry of Industry and Information Technology. BNBM was awarded the "Green Design Demonstration Enterprise of Industrial Products" by the Ministry of Industry and

pollutants and carbon emissions,

Information Technology; the flue gas upgrading and transformation project of Triumph Science & Technology Longhao Company adopted ceramic filter pipe integrated desulfurization, denitration and dust removal system to meet the emission requirements of Class A enterprises; China Jushi adopted technologies such as reclaimed water reuse, MBR membrane treatment and reverse osmosis purification to achieve compliant discharge and recycling of sewage, and 51 plasterboard production lines have achieved "near zero emissions".







🔻 Hunan Linli Southern New Materials Technology Co., Ltd. adopts dust-free medium-deep hole millisecond blasting to achieve zero pollution and zero emission



Zhongfu Lianzhong: 123-meter super-long blade

## Green Products

We insist on integrating the concept of low-carbon and environmental protection into the whole process of product research and development, design, production, packaging, sales and recycling, manufacturing lowcarbon products with the lowest possible consumption and emissions, providing customers with reliable, safe, green and low-carbon cement products, guiding glass to "electronic, photovoltaic, intelligent and energysaving" transformation and upgrading, promoting the application such as high-end and serialized fan blades and solar thin film battery modules in the development of new energy industry, and actively promoting simplified packaging and using renewable packaging materials as much as possible to reduce packaging waste while ensuring product quality and transportation safety. In December 2022, BNBM, China Jushi, Sinoma Science & Technology and Tianjin Cement Industry Design & Research Institute Co., Ltd were selected into the fourth batch of "Green Design Demonstration Enterprises of Industrial Products" announced by the Ministry of Industry and Information Technology.

Part II Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management

▲ Sinoma Science & Technology Hydrogen Energy Bus

🔻 The world's longest wind turbine blade produced by 🧵 The world's first one-kiln eight-line photovoltaic glass production line with a daily melting capacity o 1,200 tons contracted by CNBM Engineering was successfully introduced in Tongcheng, Anhui Province

### Services for major national projects and key projects

Low alkali cement is widely applied in high-speed railway construction Low-heat cement is applied in national key projects such as Baihetan Hydropower Station

High-performance carbon fiber is applied in the aerospace field

Fiberglass composites are widely used in some fields such as new energy and new energy vehicles

Green building materials such as plasterboards are widely used in famous buildings such as the Great Hall of the People, Beijing Winter Olympics venues, China world Trade Center and Shanghai Lujiazui Complex

Phase change energy-saving plasterboard partition system can make full use of natural energy to realize automatic adjustment of indoor temperature, reduce building energy consumption and increase living comfort

Aldehyde-free plasterboards can quickly capture, strongly adsorb indoor formaldehyde and decompose it. Luban universal board realizes no construction waste and harmful substances on the construction site, and creates a green and healthy home

Together

Common Prosperity and

Prospering Scientific and Protecting Green Ecology Technological Innovation Together

Sharing Development Achievements

## Green Operation



Scan code to watch Animals Have Settled in Our Green Factory

We actively practice the concept of green operation, focus on mine reclamation and factory greening, promote the construction of national green mines and garden-style ecological factories, and build a number of factories in gardens, grasslands and forests. At the same time, we pay attention to biodiversity conservation, vigorously advocate green office, extensively carry out various environmental protection publicity and education and environmental protection public welfare activities, consolidate green consensus, and make saving energy and resources and protecting ecological environment become the mainstream way of production and life.

Tengzhou Company of Beijing Glass Research Institute: The factory is good **F** in ecology, and migratory birds fly here happily

Since its establishment in Tengzhou, Shandong in 2017, Tengzhou Company of Beijing Glass Research Institute has always placed safety and environmental protection in a prominent position. Within the company's park, you can see small bridges, flowing water, and households, as well as birds singing, flowers fragrant, and wild ducks. Xiaofeng River in Tengzhou flows through the company's park. The company actively protects river water, preventing a drop of oil from falling to the ground, integrating ensuring clean water source into daily inspections, turning it into normal work, and shouldering the responsibility of protecting clean water source of mother river. In the summer of 2022, Xiaofeng River attracted egrets to stay in the river for many days, and in autumn, more than 30 mallard ducks, national second-class protected animals, began to stay in the river for a long time, becoming a "birds' favorite place" in the company.

In 2023, the company continued to act and took a number of measures to effectively improve the river bank environment by pruning the hedges on both sides of the river; turn the company's waste channel steel into treasure, and lay a river bank walkway to attract a large number of employees to visit during lunch break; set up promotional slogans and wildlife introduction boards on both sides of the walkway to promote bird protection and protect the environment, and launch a proposal for river bank protection to drive the employees of the whole factory to protect the beautiful factory environment and wildlife



## Data Review 2022 The number of video conference replacing on-site conferences 41.525

## Providing **Green Services**

## Professional Technical Services

We use high-efficiency and energy-saving firing system, pollutant emission reduction technology, waste heat power generation, cooperative disposal and other technologies to continuously provide some energy-saving and environmental protection technical services, such as professional environmental monitoring and diagnosis, technical transformation and intelligent control. In 2022, "Infrared High Radiation Energy-saving Coatings for Glass Furnace" and "New Gradient Composite Thermal Insulation Technology" independently developed by Triumph Science & Technology Institute of Energy Conservation and Environmental Protection were selected into the Recommended Catalogue of Energy-saving Technology and Equipment in the Field of National Industry and Information Technology (2022 Edition).

## Integrated Consulting Services

Relying on China Certification and Inspection Group, the largest comprehensive third-party inspection and certification service organization in the field of construction materials inspection in China, we provide consulting, evaluation and certification services in energy assessment, energy management system certification, CDM project, green building materials evaluation and carbon verification. China Certification and Inspection Group has bravely served as a strong guardian of the indoor environment, providing indoor decoration and environmental control services for projects such as the Winter Olympics Project, the administrative office area of Beijing City Sub-center, Venues of Asian Games Hangzhou, Guangzhou Baiyun International Conference Center.

## **Ecological Value-added Services**

We purify the ecological environment with green services, cooperate with cities to turn waste into wealth, and utilize the high-temperature characteristics of cement kilns to carry out harmless disposal of waste. The number of cement kiln cooperative disposal production lines has increased to 51, with an annual disposal scale of 5.33 million tons, which strongly promotes cement industrialization as purifiers and scavengers, and becomes builders of beautiful cities, participants in environmental governance and sharers of ecological benefits.

## Comprehensive Service of Ecological Restoration

We actively explore environmental protection service projects, undertake environmental assessment, completion environmental protection acceptance and pollutant discharge permit of construction projects, expand slope optimization and geological environment restoration and treatment projects, and provide green mining and mine treatment services for more than 40 cement plants at home and abroad, restoring the natural environment to the maximum extent and reducing geological disasters caused by mineral development. In June 2022, the implementation plan for the ecological restoration demonstration project of abandoned mines in Baili Mining Area, Fuxin, Liaoning Province, undertaken by Liaoning Corps, passed the expert review organized by the Ministry of Finance and the Ministry of Natural Resources, and was publicized on the website of the Ministry of Natural Resources.

Marching Towards a Better Future

Responsibility Management

As the world's largest comprehensive building materials industry group, the world's leading new material developer and integrated service provider, we always uphold the corporate mission of "creating a better

world with materials" and strive to provide customers with various types of green products and services, and help the green industrial structure and service level to be continuously optimized and upgraded.



Guangxi Jinli Cement Plant collaborated on the disposal of industrial waste generated by surrounding thermal power plants, steel plants, etc.



 Waste Incineration Power Generation Boiler Project of Nantons Wanda City of Sinoma Energy Conservation



Sintering Machine Waste Heat Power Generation Boiler Project of Nantong Wanda Steel Plant of Sinoma Energy Conservation



▼ Ningxia Saima Mine Branch Factory ecological restoration area

Service for Construction Keeping the Top Priorities of the Country in Mind Part II

Part I Smart Use of Resources Building the National Great Talents

Common Prosperity and Prospering Scientific and Technological Innovation Together

Protecting Green Ecology Together

Sharing Develo Achievements

## Enabling a Low-carbon **Future**

the industry as our own responsibility, take the lead in practicing the "dual carbon" goals, focus on carbon reduction, carbon sequestration and carbon management, and strive to be the vanguard in implementing the plan and action for carbon peak in the industry. In 2022, we strengthened the strategic leadership and layout of the industry in the field of "dual carbon", and joined 26 central enterprises, universities and other "dual carbon" innovation alliances in the field of building materials to explore a new financial model of "dual carbon" transformation. In collaboration with the People's Bank of China, we have completed the Report on Low-

We take high-quality development of

carbon Transformation Standards of Building Material Industry, formed 83 lists of transformation technologies in five industries, including cement and glass, with a transformation support amount of RMB 350 billion, formulated and issued the CSTM group standard of the Guidelines for Compilation of ESG Reports of Building Material Enterprises, promoted the establishment of the Green Lowcarbon Transformation Standards of Building Material Industry, and compiled the Implementation Plan for the Chain Leader of Low-carbon Inorganic Nonmetallic Material Industry Chain, making every effort to achieve the "dual carbon" goals.



The world's first carbon capture and purification project in glass melting furnaces of Triumph Science & Technology has been put into production, with an annual output of 50,000 tons, creating a model for carbon reduction, carbon sequestration and carbon management in the global glass industry

has been further consolidated

 $\mathbf{T}$ 

#### Solidly promoting the dual carbon goals and tasks

We deliberated and approved the defined the Group's emission reduction goals, set up 12 key tasks, and established the Group's major green and low-carbon transformation

#### . The data foundation of carbon emissions ...... Creating a carbon emission reduction demonstration enterprise -

- We organized the investigation and rectification of carbon emission data quality problems of key emission enterprises and technical service institutions affiliated with the Group, strengthened the quality management of carbon emission data, and clarified the importance of basic carbon We compiled carbon emission data
- monitoring and accounting report specifications for cement enterprises, unified data monitoring and accounting methods, established a carbon emission and strengthened the carbon emission management team.
- All relevant enterprises and experts of the Group actively participated in the Implementation Plan for Carbon Peak in Building Material Industry and the special work of "Dissecting Sparrows" for Carbon Peak and Carbon Emission Reduction of Building Materials Federation. All the work was highly recognized by the Ministry of Industry and Information Technology, the National Development and Reform Commission, the Building Materials
- Federation and other departments and highly concerned by the industry,

and received a thank-you letter from

the Building Materials Federation.

- The Group was selected as a "leading" enterprise of China's industrial carbon peak
- CTIEC's "Practicing Dual carbon Action and Creating Green Project" was selected as a typical case of green and low-carbon development in the Blue Book of Corporate Social Responsibility
- CNBM built 6 intelligent environmental protection production lines, eliminated 17 inefficient production lines, and cut overcapacity by 10.91 million tons
- China Jushi's world's first fiberglass zero-carbon intelligent manufacturing base was officially established in Lianshui, Jiangsu

## Tianjin Cement Industry Design & Research Institute Co., Ltd.: The "dual carbon" digital public service platform adds intelligence to zero carbon emissions, empowers regional environmental protection

In line with the country's demand for green and high-quality development, Tianjin Cement Industry Design & Research Institute Co., Ltd. has independently developed a "dual carbon" digital public service platform, including carbon asset management platform, factory carbon emission digital accounting platform, equipment product carbon footprint accounting platform, green low-carbon building carbon platform and regional energy and carbon dual control platform, providing enterprises, parks and governments with one-stop services for management, accounting, evaluation and reform around the "dual carbon" goals, helping find out the carbon emission data with one click and realize carbon management on one screen. The achievements of the platform have won the third prize of the Leading Group of Raw Material Industry in the Third China Industrial Internet Contest, the the Ministry of Industry and Information Technology, the Excellent Case of the Fourth Global Industrial Internet Conference, and the Classical Case of the National Building Material Enterprises Modernization Innovation Achievements of the Year 2021~2022.



pme	nt	Marching Towards a Better Future	Responsibility Management
			$\nabla$
	•	The world's first carbon capture and melting furnaces of Triumph Science production	
	-	China Certification and Inspection G footprint accounting of 50 enterprise	
	•	The industry's first carbon dioxic metering system was put into ope South Cement Co., Ltd.	Ű
	-	Luoyang Longhao Glass was awar Building Material Industry Carbon Pe	



Marching Future



Services for Construction

# Keeping the "Top Priorities of the Country" in Mind



Sharing Development Results

**■** 54

04



**64** 



06



## **Towards a Better**

## Talking about Responsibility Management



▶ 74

Sinoma Cement °



04



## Sharing Development Results

Talent is the key factor to promote the high-quality development of enterprises. CNBM implements the people-oriented development concept, firmly ensures safety, always safeguards employees' rights and interests, cares for employees, pays attention to the all-round development of employees' morality, intelligence and physique, and builds a platform for employees to realize their life value, so that employees and enterprises can grow together.

加人在一切

# 208,857

The total number of employees is 208,857

1.6

中国建材案团美丽中国行动月活动

# 11.105

Expenditure on condolences and assistance to special and difficult employees amounted to RMB 11.105 million

NBM's "Beautiful China Action Mont

Common Prosperity and	Prospering Scientific and
Development	Technological Innovation
	Togothor

Protecting Green Ecology Together

Zhou Yuxian, Party Committee Secretary and Chairman of the Group, went to Jiujiang, Jiangxi Province to inspect and guide the work safety of enterprises such as China A National Building Materials New Materials, Ruichang CNBM Optoelectronic Materials Co., Ltd. and Sinoma Science & Technology (Jiujiang)



Li Xinhua. Party Committee Deputy Secretary and General Manager of the Group, went to subordinate enterprises to inspect and guide safety work

## Safety and Prudence

## Perfecting safety management

CNBM comprehensively implemented General Secretary Xi Jinping's important exposition on work safety, firmly established the concept of "life first, safety first", continuously improved the safety management system, established a regular meeting system of the Group Safety Committee, improved the mechanism of interviews on work safety accidents, implemented the safety inventory management of member enterprises, and strictly carried out safety production inspection and hidden danger investigation, promoted special rectification of work safety, implemented the main responsibility of work safety of member enterprises at all levels, and solidly carried out a series of activities such as the creation of "Zero Violation" outstanding individuals and organizations, "Work Safety Month" and "Year of Work Safety Enhancement", so as to promote the continuous improvement of the Group's safety risk management and control capabilities.

## Improving emergency management

The Group has continuously strengthened the emergency capacity building of key personnel in production and operation, actively carried out safety emergency plan drills, continuously improved the emergency management level and emergency response ability of key personnel, and prevented work safety risks and safety accidents. In 2022, the Group organized 13,887 safety emergency drills with a total of 362,412 participants.

Achievements

Sinoma Science & Technology Young Workers Firefighting Skills Competition



T China Construction Investment Logistics launched a joint fire evacuation exercise

Part II Service for Construction Keeping the Top Priorities of the Country in Mind



Together

Common Prosperity and

Prospering Scientific and Technological Innovation

Protecting Green Ecology Together

Sharing Development Achievements

## Adhering to safety enhancement with science and technology

We continued to deepen the strategy of "safety enhancement with science and technology", increased investment in work safety, used modern scientific and technological means such as big data and artificial intelligence to control risks, eliminate hidden dangers and prevent safety accidents, accelerated the process of scientific and technological informatization of work safety, and further improved the level of the intrinsic safety of enterprises.

In order to ensure the development of more than 2.000 OR code intelligent ledgers to comprehensively cover safety inspections, Sichuan Golden Cement Co., Ltd. has carried out work on fire-fighting equipment, safety belts, training and education, management of related parties, gas detection in limited space, mobile vehicles, and uploading image data for operation approval.

An intelligent security platform was built in Huaikan Nanfang Cements Co., Ltd., and "security access" and "energy isolation" management were implemented for high-risk areas, and "risk early warning" management was implemented for lowand medium-risk areas. By invading cameras, video forensics, audible and visual alarms and other equipment, timely reminded the personnel who mistakenly entered the dangerous zone, accurately sent the risk warning information to the security supervisors, and effectively reduced the security risk.

### Zhejiang South Cement Co., Ltd.: The first intelligent safety management platform **F** for cement enterprises was successfully launched

On June 10, 2022, the first intelligent safety management platform for cement enterprises of Zhejiang Southern Cement Co., 20 sub-modules, including safety shooting, anti-violation, operation safety, related party management, tools management, education and training, risk management, occupational health management, objectives and responsibilities, institutionalized management, emergency management and environmental protection management. The platform integrates new-generation digital technologies such as IoT, artificial intelligence and big data with all elements of safety and environmental protection, and is constructed according to the eight core elements of Basic Standards for Enterprise Work safety Standardization. It realizes the "one-click analysis of safety and environmental protection system, one-stop service for safety and environmental protection learning, a point-to-point inspection of project engineering, the all-around landing of leaders and their teams, and visual direct connection of construction site", effectively improving the work efficiency and digital intelligence level of work safety management.



## Cultivating safety culture

CNBM has attached great importance to the construction of safety culture, taken the Work safety Month as an opportunity, continuously strengthened the publicity and training of safety culture, safety concept and safety skills, further strengthened the creation of enterprise safety culture, created a work safety atmosphere in all directions and through multiple channels, and enhanced employees' safety awareness and ability.





Studying General Secretary Xi Jinping's Important Exposition on Work safety", and conducted 74 special seminars, centralized lectures, training and counseling on work safety, with 2,479 participants.

of affiliated enterprises gave a total of 1,019 public lectures on work safety

Sinoma Energy Conservation Ltd. combined the "Work Safety Month" with the "Ankang Cup" competition, and more than 1,800 people participated in the "Ankang Cup" test paper-answering activities.

Part II Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management

The sixth branch of Jushi Group Co., Ltd. holds safety month launch oath-taking ceremony

safety policies and regulations, emergency evacuation and selfrescue and mutual aid methods through online and offline exchanges and publicity and consultation activities.

410 trainees participated in the training online and offline.

Together

Common Prosperity and

Prospering Scientific and Technological Innovation

Protecting Green Ecology Together

Sharing Development Achievements

## Employee **Rights and** Interests

Protecting the rights and interests of employees

CNBM adheres to the recruitment principle of fairness, impartiality and openness, adheres to equal employment, does not take gender, age, nationality, ethnicity, religious belief, skin color, language, etc. as recruitment requirements, and opposes employment discrimination. The Group signs labor contracts with employees according to law, pays social insurance in full, protects employees' personal privacy and information security, provides competitive salaries and benefits, and builds a fair, inclusive and diversified workplace environment.

Total number of employees	Labor contract coverage
208,857 people	100 <sup>%</sup>
Employee turnover rate	Social insurance coverage
9.66 %	) 100 %
Number of female managers	
2,795 people	0

## Practicing democratic management

The Group implemented the spirit of General Secretary Xi Jinping's important exposition on the working class and trade union work. Trade union organizations at all levels adhered to the employee-centered work orientation, constantly improved the system of workers' congress and factory affairs disclosure work norms, built important channels for democratic participation, democratic management and democratic supervision, gave full play to the role of trade unions as a communication bridge, and effectively protected the employees' right to be informed, participate, express and supervise.



The Group organized the first session of the second congress of staff (members) to carry out the trade union renewal work

## Employee Development

## Carrying out skills training

Talent is the first resource for enterprise development. We actively organized all kinds of special work for personnel training, and initially formed a special training system for leading scientific and technological talents, young scientific and technological talents and skilled talents. At the same time, we continued to strengthen the training of cadres and talents and actively held training courses for EMT, directors and supervisors, and middle-aged classes





to provide talent guarantee for the highquality development of enterprises. In 2022, two members of the Group were selected for the second "Great Country Craftsman" program of central

The Group adhered to the strategy of "strengthening enterprises with talents", formulated the 14<sup>th</sup> Five-Year Plan for human resources, set up the leading group for talent work of the Party Committee of the Group, and optimized the structure of management talents, scientific and technological talents and skilled talents, focused

Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management



The Group holds a conference on talent work

enterprises, and three members won the honorary title of national technical experts.

## Smoothing career path

on the construction of scientific and technological talents teams, and carried out the construction of five talent teams, including directors and supervisors, scientific and technological talents, management talents, skilled talents and Party workers, so as to fully stimulate the vitality of internal talents.

Strengthening the construction of directors and supervisors We held a symposium on strengthening the construction of the Board of Directors and a symposium on centralized management by specified departments of directors and supervisors. There are 3 full-time directors and supervisors and 7 part-time external directors.

Strengthening exchanges of cadres between primary-level and headquarters cadres. Three people were promoted from enterprise exchange to head of the headquarters department, and 12 people at the headquarters were transferred to primary-level enterprises. 8 people of member enterprises went to the headquarters to work and train.

Strengthening the construction of outstanding young cadres We formulated the Implementation Plan for the Construction of Excellent Young Cadres during the 14<sup>th</sup> Five-Year Plan Period, established a young cadre pool by classification and stratification, forming a pool of 204 young cadres, and dynamically reserving talents.

Optimizing the team building of secondary enterprises According to the development of the Group's main business and the needs of sector integration, we formulated the personnel selection and employment plan, and strengthened the optimization

Common Prosperity and Development

Protecting Green Ecology Together

Sharing Development Achievements

## **Employee** Care

## Paying attention to occupational health

CNBM paid close attention to the health level of employees, established and improved the occupational disease prevention and work injury prevention system, and continuously practiced the concept of occupational health culture and promoted the coordinated development of enterprise construction and employees' health by carrying out occupational health examination, strengthening labor protection and health knowledge popularization, first aid skills training and improving production technology. In 2022, three online lectures on psychological counseling and first aid knowledge and skills training were organized for overseas employees, and there were no new employees suffering from occupational diseases.

## Caring for the life of employees

Employees are the most precious wealth of enterprises. We constantly improved the construction of staff activity venues and facilities, regularly organized various recreational and festival activities, created a strong atmosphere of happy work and healthy life, and constantly enhanced employees' sense of happiness and achievement.

Occupational health and safety investmer	
<b>10</b>	è
Number of member enterprises that nave established employee mental	Occupational health examination coverage
health systems or measures	
293 Home 🛖	11.3 <sup>10,000 persons</sup>

Prospering Scientific and

Technological Innovation

Together

## Caring for employees with difficulties

CNBM always adheres to the concept that "enterprises are humanized, enterprises exist for people, enterprises rely on people, and enterprises love people", and continuously pays attention to key groups. Implementing the Measures for the Implementation of Staff Assistance of the "Shanjian Charity Fund" of China National Building Materials Group Co., Ltd., we reviewed the scope and conditions of assistance objects at each level.

In 2022, we continued to play the role of "Shanjian Charity" Fund, with a total of RMB 2.505 million of assistance funds, helping 105 employees in difficulty, solving their practical difficulties and effectively playing the role of helping the needy.

Data Review 2022

Consolation to help special and difficult Expenditure on condolences and assistance to special and difficult employees employees amounted to 9.370 people **1,110.5** ten thousand (RMB) 



Beijing New Building Materials Co., Ltd.





Changde South Cement Co., Ltd. holds a reading sharing meeting

South China Materials Co., Ltd. hold flower arrangement activities

Bengbu Triumph sends



#### Part II Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management

The Group holds a public welfare lecture on health knowledge of "loving life, protecting health"

> The Group launches the "March 8<sup>"</sup> movie-watching





Beijing New Building Materials Co., Ltd. organizes the New Year visit and condolence activities

05



## Marching Towards a Better Future

With utter sincerity, CNBM firmly established the vision of a community with a shared future for mankind, unswervingly promoted the process of international development, actively implemented the Belt and Road Initiative and promoted the prosperity and development of local communities, consolidated the achievements in poverty alleviation, continued to promote rural revitalization, actively participated in social charity, and contributed to building a world of lasting peace, universal security, common prosperity, openness, inclusiveness, as well as a clean and beautiful environment.

39111

64 смвм

196

There are 196 overseas enterprises (institutions) of the Group

76

27

Distributing in 76 countries



Investing RMB 79.4 million in assistance funds

"Shanjian" Colorful Classroom Activity

0.34

Prospering Scientific and Common Prosperity and Technological Innovation Together

Protecting Green Ecology Together

Sharing Development Achievements

## Open Cooperation

## Building materials help "Hard Connectivity"

China National Building Material Group Co., Ltd. carries out the mission of "Materials Create a Better World", constantly innovates the "Going Global" model around "Three Main Businesses and Four Major Sectors", sets up 196 overseas institutions in 76 countries and regions around the world, invests in 45 fixed assets and equity acquisition projects in 27 countries, builds nearly 500 highquality cement and glass projects around the world, and invests and



builds in 32 overseas warehouses and building materials supermarket chains in 13 countries, creating a shining

"China Building Materials" business card on the "Belt and Road" Initiative.

## The Zambia Industrial Park of China National Building Material Group Co., Ltd.: **P** Drive "Made in China" to go global











Marching Towards a Better Future

Responsibility Management

Cement Engineering Egypt GOE6 projects with a daily output of 6,000 tons



Common Prosperity and

Prospering Scientific and Protecting Green Ecology Technological Innovation Together

Innovation accelerates "Soft Connectivity"

In the process of "Going Global", China National Building Material Group Co., Ltd. has internationalized the leading advantages of new materials in China, occupied the commanding heights of "technology + patent + standard", and carried out joint innovation in science and technology. The Group has participated in and presided over the formulation and revision of 58 international standards, contributing the wisdom of "China Building Materials" for the construction of Community of Shared Future for Mankind.

## Building "Heart Connection" with Emotion

the "Belt and Road" Initiative is a winwin road. China National Building Material Group Co., Ltd. adheres to the "Three Principles" of "contributing to the local economy, cooperating with local enterprises and serving local residents", from "Going Global" to "Going In", deeply cultivating the host country market, carrying out cultural integration, charity and other activities in depth, fulfilling the responsibility of world citizenship with practical actions, and contributing to the strength of "China National Building Materials" for building a beautiful home together.

### Jushi Egypt Company: Helping Egypt's manufacturing **F** industry transform and upgrade

Together



Nigerian Company of China National Building Material Group Co., Ltd. held the donation ceremony of metal colored stone tiles and the completion ceremony of "China Corner" house repair



Jushi Egypt Company carry out a donation campaign to the Hope School

Sharing Development Achievements

## Beautiful Overseas Employees

Wei Qiang, General Manager of Saudi YAMAMA Project Department and General Manager of Syrian

I am willing to use my 20 years of experience to make selfless dedication and meticulous management for Saudi projects, lead the team to build the Saudi project into a project benchmark, and contribute my own strength to the internationalization and localization development of the company.

## Sarabov Kerry Valerievich, Deputy General Manager of China National Building Material (Russia)

I am very grateful to the company for its trust, which made me the deputy general manager of the Russian company. Together with my colleagues, I will try my best to make the company grow and develop better in Russia and be an active practitioner of Sino-Russian friendship.

## Ahmed Seliman, Vice President of Jushi Egypt

Now I have been working in the company for 11 years. In these 11 years, I have changed from a college student who knows nothing about enterprise production management to a senior executive of a Chinese-funded enterprise with technology and experience, which I didn't dare to imagine at first.

## Prosper Ernest Hall, Regional Manager of Marketing Department of Beijing New Building

Beijing New Building MATERIALS (Tanzania) Co., Ltd. is a very good company with complete system perfect quality control system, good welfare treatment and fair promotion mechanism.

## Li's Xiang Lian employee of China Triumph International

In the past 10 years since the "Belt and Road" Initiative was put forward, as a witness, I have witnessed the key cooperation projects of the "Belt and Road" Initiative between China and Vietnam from blueprint conception to successful landing to economic benefits. This is an extraordinary 10 years, which is also a decade of continuous transformation and growth for me personally.



dedication.



Part II Service for Construction Keeping the Top Priorities of the Country in Mind

Marching Towards a Better Future

Responsibility Management

Take the road, put people first, and benefit the world. More than 20,000 overseas employees of China National Building Material Group Co., Ltd. all over the world, with different skin colors, nationalities and cultures, are reunited in CNBM's big family for the common goal and ideal. They work hard and love their work, study an industry and be proficient in it. And they work together in the construction of the "Belt and Road" Initiative, write wonderful answers in the process of forging ahead, achieve common growth in the development of enterprises, and work together to make big projects and great undertakings in small projects and posts, vividly writing a beautiful blueprint of "sharing beauty" with little by little



The Group's Peer with Unbounded Employees of China National Building Material Group Co. Ltd. was officially published



Common Prosperity and

Prospering Scientific and Protecting Green Ecology Technological Innovation Together

Sharing Development Achievements

Part II

# Rural Revitalization

### Optimize Top-level Deployment

Prosperity of agriculture leads to prosperity of the country, so comprehensively promoting rural revitalization is an important task for building a strong agricultural country in the new era. We continued the rural revitalization work, set up a leading group for fixed-point assistance work, held regular special meetings on fixedpoint assistance work, innovatively established a guarantee assistance mechanism. refined the assistance tasks, and effectively combined the advantages of member enterprises with the characteristics of assisting districts and counties, forming a threedimensional assistance mode of "unified leadership of the group, active planning and promotion of guarantee units, close attention to the front-line implementation of on-the-job cadres,

The Group: For more than 30 years, the initial heart of the **F** Group has not changed with helping the rural revitalization

Together



and active response and support of all member enterprises", which effectively improved the effectiveness of assistance. For four consecutive years, the Group has been evaluated as "Good" with the highest effect in the designated assistance work of the central unit.

Party Building Assistance		All member enterprises of the Group and grass-roots party organizations in designated helping counties have extensively carried out twinning and co-construction activities, strengthened the leading role of rural grass-roots party organizations in rural revitalization, and consolidated the achievements of poverty alleviation and difficulties tackling with the guidance of party building, continuing to promote rural revitalization.
Industrial Assistance	Þ	Concentrate on building demonstration villages and towns for rural revitalization and typical projects for industrial development, playing a leading role in demonstration. In 2022, 11 industrial projects have been implemented, involving 67.83 million yuan, accounting for 85.43% of the total investment. The "Public Welfare Cattle" assistance project implemented by the Group in Jingyuan County was successfully selected as an excellent case in the Blue Book of Central Enterprises Helping Rural Revitalization (2022) of SASAC.
Educational Assistance	Þ	Long-term educational assistance forms such as donating money to help students, volunteering to support education, scholarship support, etc., and expanding the "Good Learning Plan" Initiatives, including holding "Good Learning" summer camps, opening "Good Learning" reading rooms in mountain schools, awarding "Good Learning" scholarships, and carrying out "Colorful Classroom" volunteer activities to help education in mountainous areas achieve high-quality development.
Talent Support		Train entrepreneurial talents and technical leaders with 245 rural revitalization leaders and 229 professional and technical talents in 2022, injecting the driving force for sustainable development into poverty-stricken areas.
Consumer Assistance	Þ	Specially developed a public welfare e-commerce assistance platform "Hebaodan" for designated assistance areas, and carried out work around "Consumption Assistance, Brand Building, Intellectual Support,, Special Assistance, Public Welfare Services", etc., effectively alleviating the problem of unsalable sales of agricultural products in poverty-stricken areas.
Medical Assistance	•	Carry out special medical assistance according to local conditions, and join hands with Xi'an Fifth Hospital to carry out free clinic activities for endemic diseases in Jingyuan County.

### Consolidate the achievements of revitalization

In accordance with the "Four No Picks" requirements of the CPC Central Committee and focusing on the "Five Revitalization" goals and tasks, the Group has continuously innovated the assistance mode, and continuously carried out fixedpoint assistance in five districts and counties, including Shitai County, Anhui Province, Jingyuan County, Ningxia, Zhaoyang District, Yongshan County and Suijiang County, Zhaotong City, Yunnan Province, implementing more than 600 assistance projects in total, and sending 94 assistance cadres successively to effectively link the achievements of poverty alleviation with rural revitalization.

#### The Youth Takes Responsibility to Lights Up Dreams-the colorful class activities of "Good Building" of China National Building Material Group Co., Ltd.





Will you come back? Will you come again? Since you came, I feel it's good to study. I want to go to the outside world. I want to receive a higher education I want to change. I want to change my family and I want to change my village. It find another world.

#### –Lan Yuchen, Chengguan Middle School of Suijiang County

We met in this colorful Yunnan, adhering to the initial intention of volunteer teaching and growing up with the children. In class, I infect pure hearts with my heart, and the clear eyes of children also give me the strength to move forward. In the school surrounded by mountains, the innocent this encounter across the mountains and seas will be my cherished memory forever.

—Tieyang, China United Cement in Rizhao City

Service for Construction Keeping the Top Priorities of the Country in Mind





I am very grateful to the summer camp for letting us get out of the mountains, feel different life, and know the direction of learning and

> -Ma Yuxiao, a member of the "Good Learning" Summer Camp

I will study hard to realize my dreams, fulfill my wishes and become a good pillar of China.

> -Fu Han, a member of the "Good Learning" Summer Camp

**Difficulties Together** 

Common Prosperity and	Prospering Scientific and
Development	Technological Innovation
	Togothor

The Group: United Together and Tide Over

Protecting Green Ecology Together

Sharing Development Achievements

# **Good Deeds**

### Join in public welfare and charity

We practice the concept of "Making Good Use of Resources and Serving Construction", set up a "Good Building" public welfare fund, and extensively carry out social welfare activities such as disaster relief, voluntary service, employee assistance, supporting education and helping students, and overseas aid construction, so as to dedicate and interpret the responsibilities of the central enterprises.

> Beijing New Building MATERIALS Co., Ltd. donated to Beijing Chaoyang District Experimental Primary School Boyue Campus China Jushi Co., Ltd. set up Jushi Love Bank and widely organized love assistance Taishan Fiberglass INC. Launches Volunteer Service of "Voluntary Blood Donation"

### Data Review 2022 Total foreign donations Total investment in voluntary activities 184.08 ten thousand (RMB) RMB 100 million Total number of foreign donation Number of volunteers among employees 842 11,517 number Number of corporate public welfare Number of working hours for volunteer funds/foundations established activities 15 74,568 Hours . Ļ



Sinoma Science & Technology Co., Ltd. launched the "Make a Volunteer Service Carnival and Create a City with Low Carbon" national health walking activity

致支援虹口抗击疫情捐赠者的感谢

China National Building Material Group Co., Ltd. and its affiliated Triumph Science & Technology Group Co., Ltd. won the Letter of Thanks from Shanghai Hongkou District Committee and

使专指打口指击病情相关的成准



Marching Towards a Better Future

Responsibility Management

### Stand firm against the epidemic

We have attached great importance to the prevention and control of the epidemic, resolutely implemented the decision-making arrangements of the CPC Central Committee and the State Council, and actively responded to the needs of epidemic prevention work, with hearing the order and acting in response to the epidemic. During the outbreak, the Group overcame difficulties and rushed to Shanghai,

Hong Kong and other regions to build a strong defense line against the epidemic. Under the premise of implementing their own epidemic prevention and control, all enterprises have strengthened their mission, actively participated in local volunteer services to fight against the epidemic, and fought hard in the front line of the fight against the epidemic.



▼ The volunteers cooperate with the medical staff to carry out nucleic acid detection in an orderly manner



06



# Talking about Responsibility Management

The new era and new journey have entrusted the central enterprises with greater responsibilities and missions. As the only central enterprise in the building materials industry, China National Building Material Group Co., Ltd. has thoroughly implemented the spirit of General Secretary Xi Jinping 's series of important speeches on corporate social responsibility, implemented the policy guidelines of the State-owned Assets Supervision and Administration Commission of the State Council for central enterprises to fulfill their social responsibilities, strengthened the top-level design of social responsibility, and bravely should red the great responsibility of central enterprises with a higher political position, stronger responsibility, more open and inclusive attitude and more practical work measures, striving to promote the sustainable development of the whole society.

中国建材





# 379

There are 379 quantitative indicators of social responsibility management

# The third place

Ranked the third in the "TOP10 of 2022 State-owned Enterprise Social Responsibility Development Index"



Common Prosperity and

Prospering Scientific and Technological Innovation Together

Protecting Green Ecology Together

Part II

Sharing Development Achievements

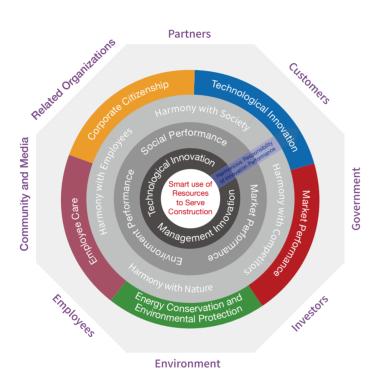
# Concept of Responsibility

We adhere to the core concept of "Making Good Use of Resources and Serving Construction", take "Innovation, Performance, Harmony and Responsibility" as the core values, pay attention to the organic combination of scientific and technological innovation and management innovation in development, and pursue the coordination and win-win of market, environment and society. We insist on harmony with competitors, nature, employees and society, and finally implement the concept of social responsibility in market performance, scientific and technological innovation, energy conservation and environmental protection.

# Responsibility Governance

Focusing on the strategic vision of "building a world-class industrial investment group specializing in the material industry with global competitiveness", relying on the fourin-one all-round innovation pattern of science and technology, business model, management and system, we actively improve sustainable development management, incorporate social responsibility management into the Group's strategy, overall planning and daily operation, improve the responsible organization, continue to carry out social responsibility capacity building, and improve the long-term mechanism of the Group's social responsibility management through performance evaluation and training research, and effectively improve the ability and level of responsibility management.

Social Responsibility Model of China National Building Material Group Co., Ltd.





#### Organizational Structure

- We have established a social responsibility work promotion leading group as the top leading body headed by the Chairman to lead and promote the social responsibility work of the Group.
- Based on the headquarters functional organization for social responsibility management, we have guided and promoted member enterprises to strengthen social responsibility management and actively fulfill their social responsibilities.
- With member enterprises at all levels as nodes, and in accordance with the unified requirements of headquarters, we have clarified the functional departments, appointed managers, and implemented the fulfillment of responsibilities. By the end of 2022, 212 member enterprises had set up social responsibility leading institutions, 537 member enterprises had set up social responsibility management institutions, and 559 member enterprises had set up social responsibility management posts, with a total of 1,559 full-time and part-time employees in social responsibility management.

#### **Continuous Improvement**

- We have given full play to the resources of the think tank of internal management experts to guarantee the applicability and operability of the substantiality and mechanism of social responsibility management.
- We have established partnership with professional organizations, grasped the development trends of social responsibility at home and abroad, and ensured the professionalism and compliance of the Group's social responsibility management system.
- We have enabled the extroverted responsibility management, such as brand responsibility activities, deep responsibility communication and theme responsibility publicity, so that the influence of responsibility is increased gradually.
- We have continuously improved the member enterprises' CSR report publishing rate and quality, and promoted the systematization and normalization of CSR performance.

0

2

Marching Towards a Better Future

#### Ability Improvement

- Taking CNBM's "Shanjian Charity" Fund as an important platform, we have created a brand of social responsibility.
- The stable operation of the "CNBM Social Responsibility Management Information System" achieved online management of personnel and information.
- We have established an index system of the Group's social responsibility with 379 indicators to ensure the integrity of social responsibility reporting.
- We have strengthened pilot demonstrations, promoted corporate accountability practices and participated in various training courses, such as China Social Responsibility 100 Forum.

#### Performance Evaluation

- We have prepared and published annual social responsibility reports, published performance trends on website columns from time to time, established an information disclosure system and built an effective communication platform.
- We have participated in external performance evaluation, implemented comprehensive evaluation and benchmarking in reporting quality, accountability performance and responsibility management, and learned from others for continuous improvement.
- We have promoted the integration of social responsibility management and group operation, and deepened the formation of a "six-star enterprise" evaluation system.

Common Prosperity and

Prospering Scientific and Technological Innovation

Protecting Green Ecology Together

Part II

2

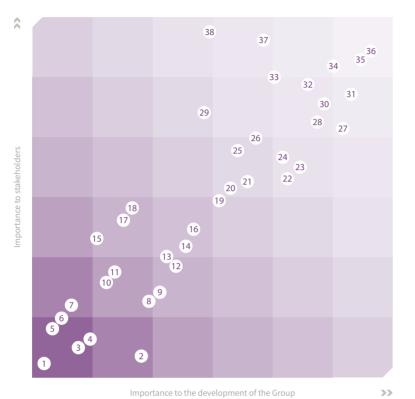
Sharing Development Achievements

# Responsibility Integration

We attach great importance to the organic integration and mutual promotion of social responsibility and enterprise development. According to the Group's development strategy and combined with the expectations of stakeholders, we have planned six social responsibility sections, namely, "common prosperity and development, common scientific and technological innovation, common green ecology, sharing development achievements, sharing a better future, and sharing responsibility governance". We sorted and screened the topics from the two dimensions of "importance to stakeholders" and "importance to the development of the Group", and finally determined the core topics of this year's social responsibility report.



Together



Overseas Community Coconstruction

- Information Disclosure
- 3 Community Integration
- 4 Communication with
- Stakeholders
- 5 Public Charity
- **Rural Revitalization**
- Green Office and Environmental Public Welfare Activities
- 8 Advocating Sustainable Consumption
- 9 Promoting Industry
- Development 10
- Democratic Management Responsible Procurement 11
- 12 Overseas Development and
- International Cooperation 13 Supply-side Structural
- Reform 14 State-owned Enterprise
- Reform
- 15 Intelligent Manufacturing 16 Development of New
  - Materials Industry Transformation of Scientific
- 17 and Technological Achievements

- Mechanism for Customer 18 Complaint Resolution
- 19 Responsibility Management 20
- Employee Rights and Interests
- 21 Green Service
- 22 Responsible Supply
- 23 Concept of Responsibility
- 24 Green Products Cultivation of Innovative
- 25 Talents
- 26 Environmental Management
- 27 Employee Training 28
- Supply Chain Management 29 Corporate Governance
- System
- 30 Risk Management and
- 31
- Green Production Strengthening Party Building
- 32 and Anti-corruption
- 33 Innovation Management
- Safe Operation
- 34 Law-based Corporate 35
- Governance
- 36 High-quality Development
- Quality Management 37
- 38 Credit Management

### Social Responsibility Planning of CNBM

#### Value of Responsibility

- Deepening the concept of responsibility
- Deepening the integration of responsibility
- and business management Deepening the mechanism for employee
- responsibility fulfillment

#### **Responsibility Communication**

- Strengthening communication with stakeholders
- Creating an influential and sustainable responsible brand
- Developing rich responsibility theme activities
- Creating a normalized responsibility communication platform with stakeholders

# Responsibility Communication



Marching Towards a Better Future

#### Responsibility Management



#### **Responsibility Management**

- Strengthening the top-level design of social responsibility
- Improving the organizational system of social responsibility management
- Strengthening the training of social responsibility talents
- Improving the performance evaluation of social responsibility

#### Responsibility Sharing

- Enriching the social responsibility management platform
- Developing social responsibility benchmarking
- Strengthening research on responsibilities
- Strengthening external publicity
- Promoting the CSR report preparation of member enterprises

We pay close attention to the expectations and demands of investors, government, employees, customers, partners, relevant groups, communities, media, environment and other stakeholders, and convey corporate responsibility information through various forms such as the annual social responsibility report, the official WeChat account, the "Social Responsibility" section of official website and the "Smart Use of Resources" enterprise open day, strengthen information disclosure, and strive to maintain good communication and

contact with various stakeholders, respond to public concerns in a timely manner, pass on the concept of responsibility culture, listen to the opinions and suggestions of stakeholders, and continuously improve the ability of responsibility communication in the virtuous circle of disclosure-communication-promotion, so as to improve the public's awareness and recognition of CNBM. We value the feedback from stakeholders, which provides intellectual support for our sustainable development.

Together

Common Prosperity and Development

Prospering Scientific and Together

Technological Innovation

Protecting Green Ecology

Sharing Development Marching Towards a Responsibility Management Achievements Better Future Focus Response measures Sustainable high-quality management rise performance ts of shareholders and creditors Perfect information disclosure ticity accuracy timeliness mechanism Improve the value of enterprise mpleteness of information Standardize corporate governance ability of development Protect the interests of investors ate Governance Operate in accordance with the law Environmental and Compliance and implement national policies Sustainable high-quality management ements Tax Payment supply ment opportunities Provide jobs pment of local economy Adhere to green manufacturing ise to climate change rise credit Provide high-quality products and services ner relationship Advocate green consumption of products and services Improve quality management innovation Protect customers' privacy and Safety Launch scientific and technological innovation Advocating Sustainable Consumption Standardized safety and environmental protection management Credit Management nd prompt payment erm partnership Promote suppliers' responsibility istribution performance ation resource sharing Establish an effective partnership and reciprocity Establish an effective communication evention mechanism rise performance High-quality Management Protect employees' rights and interests ate Governance vee Rights and Interests Provide competitive salary development planning Improve employee welfare aint handling Strengthen employee training ational health Provide safe working environment and health protection ratic management ty of factory affairs Establish effective communication Democratic management Establish and improve safety and ng affairs mental protection and occupational health management system se to climate change Increase investment onstruction of a harmonious Timely information disclosure Improve public welfare investment unity ational safety and health Participate in community activities Promote green production and protect ecological environment nmental conservation Play membership role te sustainable development Provide economic and technical support Establish a cooperative relationship

#### Responsibility is on the shoulders and communication is unlimited

In 2022, CNBM continued to carry out various social responsibility communication activities with an open mind, insisted on positive publicity, actively voiced in mainstream media such as CCTV and Qiushi Magazine, actively participated in theme publicity such as "Extraordinary Decade", and jointly filmed CCTV "Pillars", "Dialogue" and other special programs, held "Smart Use of Resources Day" public opening activities, and launched "Materials World", "China Dimension Building Materials Seal" and other media works On behalf of the new atmosphere and new style of central enterprises, the brand image of the Group is more distinct.

More fields	More forms	More participants	More angles	More angles
Integrate the concept of social responsibility into daily work and communication, with the existing business communication combined with responsibility com- munication.	Keep continuous contact with stakeholders through questionnaires and special visits, etc.	Keep continuous co- mmunication with stake- holders; senior leaders, as the foregoers of respon- sibility com-munication, per-sonally participate in social responsibility com- munication in different levels and dimensions.	Collect and summarize stakeholders' comments on a regular basis and analyze insufficiencies for continuous improvement in a comprehensive and objective manner by means of public opinion collection, media infor- mation mining, etc.	Give timely feedback through democratic and convenient information channels by the Group' s internal management experts and grass-roots employees, as important internal stakeholders.



The video exhibition with the theme of "Intelligent Manufacturing" was showed, and the promotional film of "Intelligent Building Future" of CNBM was released, showing the image and elegant demeanor of Chinese building material enterprises at all levels practicing intelligent upgrading, innovative development and green environmental protection.

The popular science cartoon "The Story of Glass" of glass materials has been officially released, as well as a collection of short films of materials, which can popularize the wonderful world of materials in a simple and lively way and analyze the mysterious stories of materials, so that the on-site personnel can intuitively feel the latest achievements of China's building material industry and personally appreciate the great charm of the material industry.



ged a workplace youth film

on the spot. Hu Yadong, a national model worker and director of the Digital Research Institute of Tianjin Cement Institute, shared the intelligent process of "leaving the comfort zone to break through yourself". Xu Peng, Deputy General Manager of the Institute of Intraocular Lens, told the story of exploring the transformation of scientific and technological achievements, which was well received by participants.



Slakenoluers		communication mode	
Investors	Þ	<ul> <li>Periodic reports</li> <li>Corporate report</li> <li>Promotion activities</li> <li>Shareholder dialogue and feedback</li> <li>New media and network platform interaction</li> </ul>	<ul> <li>Enterpris</li> <li>Interests</li> <li>Authenti</li> <li>and com</li> <li>disclosui</li> <li>Sustaina</li> </ul>
Government	۵	<ul> <li>Publication of laws and regulations</li> <li>Special reports and visits</li> <li>Information submission</li> <li>Assessment of work objectives</li> <li>Industry Association</li> </ul>	Corporat Safety, E Requirer Secure s Employn Developi Respons
Customer	•	<ul> <li>Customer meetings and consultation</li> <li>Market research</li> <li>Daily contact</li> <li>Customer feedback mechanism</li> <li>Telephone service</li> <li>New media and network platform interaction</li> <li>Product packaging information</li> </ul>	Enterpris Custome Quality o Product Health a
 Partner	۲	<ul> <li>Contract negotiation</li> <li>Bidding conference</li> <li>High-level meeting</li> <li>Document, correspondence and telegrams</li> <li>Daily business communication</li> <li>New media and network platform interaction</li> </ul>	Price and Long-ter Profit dis Informat Credit ar Risk prev
Employees	Þ	<ul> <li>Employee Congress</li> <li>Publicity of factory affairs</li> <li>Labor contract</li> <li>Rationalization proposals</li> <li>Normal communication</li> <li>Letters and visits</li> <li>New media and network platform interaction</li> </ul>	Enterpris Corporat Employe Career d Complai Occupat Democra Publicity
Community and media	•	<ul> <li>Sign public welfare agreements</li> <li>Participate in volunteer activities</li> <li>Daily contact</li> <li>Open day Activities</li> <li>Media interview</li> <li>New media and network platform interaction</li> </ul>	<ul> <li>Planning</li> <li>Environn</li> <li>response</li> <li>Joint cor</li> <li>commun</li> <li>Occupation</li> </ul>
	Þ	<ul> <li>Regular participation in meetings or activities</li> <li>Daily contact</li> <li>New media and network platform interaction</li> </ul>	Environn Promote jointly

Communication mode

Stakeholders

Together

Common Prosperity and

Prospering Scientific and Technological Innovation

Protecting Green Ecology

J

Part II

Sharing Development Achievements

# Responsibility Sharing

### Guided by Responsibility

We actively respond to the policy guidance of the State-owned Assets Supervision and Administration Commission of the State Council on fulfillment of social responsibility by enterprises, and consciously take responsibility for stakeholders, society and environment throughout the operation, so as to maximize the integrated value of economy, society and environment and promote sustainable development. In 2022, China National Building Material Group Co., Ltd. became one of the first batch of member enterprises in "ESG Alliance of Central Enterprises" with its outstanding performance in ESG governance, contributing to the construction of ESG development ecosystem with Chinese characteristics and the sustainable development of Chinese enterprises.

> We recognize and abide by the "Ten Principles of the Global Compact" and actively contribute to the achievement of the sustainable development goals of the United Nations.



We actively participate in social responsibility sharing and initiative activities in different fields, participate in launching China Social Responsibility 100 Forum.

We rely on China Federation China Building Material Federation, China Building Materials News and other ideas, share experiences and launch initiatives, and work with stakeholders to seek better ways of sustainable development

### Driving Development of Supply Chain

In order to strengthen information sharing, promote the cooperation between upstream and downstream of the industrial chain, and create sunshine procurement, the Group continuously integrates new functions based on the "bidding and procurement management platform", promotes the "procurement transaction" to the mode "ecological winwin and co-creation of supply chain", and continuously improves the management level of supply chain. At present, the platform is a "one-stop" platform for information release and resource sharing of building materials industry chain integrating functional modules such as bidding and procurement, MRO mall, disposal of waste materials and valueadded services.

We take the initiative to share

our experience in theories

and practice in terms of

social responsibility inside

and outside the industry and

promote the development of

social responsibility in China.

200,000 suppliers have been newly registered in the platform, which improves the ability to find sources; At the same time, we optimize the supplier management mechanism, expand supplier sourcing, strictly select suppliers

and cultivate high-quality suppliers, incorporate social responsibility into the supplier evaluation system, and urge suppliers to take social and environmental responsibilities. The Platform strictly prevents "blackbox operation" in bidding, eliminates commercial bribery and enables honest operations, fair trading and transparent procurement by promoting the integration of e-bidding and e-purchasing, standardization of the bidding process, transparency of the bidding performance and informatization of the bidding management.

### **Responsible Supply**

We are committed to supplying reliable, green and environmentally-friendly building materials, focusing on providing products and service supports for the development of new energy industry, adhering to the concept that the interests of the industry are higher than those of enterprises, deepening the supply-side structural reform, so as to promote the structural adjustment, transformation and upgrading of the building materials industry, and cooperate with industrial chain enterprises in building CNBM into a platform for stakeholders to jointly create values.



We have fully promoted the construction and certification of the quality management

We have always emphasized the protection of customer's privacy by keeping customer data under strict management.

We have established modern logistics parks for rational planning of supply and marketing as well as logistics schemes, reducing resource occupation and ultimately improving sales efficiency.

We have set up a pre-sales

consultation, in-sales reception

and after-sales service system

to respond to and properly deal

with customers' complaints

and inquiries in an immediate

manner, so as to improve

customer satisfaction

Marching Towards a Better Future

#### CNBM INTERNATIONAL: It won the title of "Leading Enterprise in Centralized Procurement and Supply Chain Finance (CPCF) ✓ of Central Enterprises in 2022"

In November, 2022, the 2022 (5th) Annual Meeting of Centralized Procurement and Sharing of Central Enterprises and the Sharing and Recruitment Conference of Suppliers in Centralized Procurement of Central Enterprises were held. CNBM INTERNATIONAL won the title of "Leading Enterprise in Centralized Procurement and Supply Chain Finance (CPCF) of Central Enterprises in 2022" by virtue of supply chain finance services in okorder.com. CNBM INTERNATIONAL is committed to providing efficient and timely supply chain finance products and services for domestic core enterprises and upstream and downstream small and mediumsized enterprises in manufacturing industry by improving the service capability of the comprehensive service platform outside the network, helping small and medium-sized production enterprises to focus on production, promoting dual circulation and promoting high-quality development of foreign trade.

> We have built a professional customer service team, able to provide professional technical training for dealers on a regular

> We have built an Internet sales platform, providing worldwide online trading services for building materials to reduce carbon emissions related to customers and sales representatives during business travel.

We have organized customer training meetings to carry out product promotion and offer customers the basic knowledge of green building materials, the considerations in building materials selection and use, and the knowledge of product anti-counterfeiting.

Common Prosperity and Development

Prospering Scientific and Technological Innovation Together

Protecting Green Ecology Together

Sharing Development Achievements

# Honor of Responsibility



Group	
It was awarded Grade A in the key task assessment of the three-year action of the central enterprise reform in 2022	It got the highest grade of "good" in the evaluation for the effectiveness of the designated assistance work in the central units
It was approved as one of the first five state-owned capital investment companies	Three people won the honorary title of national technical experts and two people were selected into the second program "Craftsmen in a Great Power" of central enterprises
It was selected as "Demonstration Enterprise in Corporate Governance" by SASAC and was awarded "Excellent" in the construction evaluation of SASAC Board of Directors	17 enterprises were selected as typical cases of digital transformation for intelligent manufacturing in building materials industry in 2022 by the Ministry of Industry and Information Technology

#### China National Building Material Company Limited

It was ranked the 73<sup>rd</sup> place in "Top 500 China Rankings" by in Fortune (Chinese version) and ranked the first among the most respected enterprises in the basic raw materials sector among "Management Teams in Asia Pacific Companies" by Institutional Investors, and won the first place in the "Comprehensive Strength Ranking among Listed Companies in Global Building Materials in 2022" of China Building Materials Federation

#### Ningxia Building Materials Group Co., Ltd.

It won the title of "National May Day Labor Award"

#### New Tianshan Cement

It was selected as the annual model of China's sustainable industrial enterprises in "2022 Forbes Selection of TOP50 Industrial Enterprises for Sustainable Development in China"

#### Beijing New Building Material (Group) Co., Ltd.

It was ranked 150<sup>th</sup> in the list of "Top 500 Brands in Asia" and once again won the top three building materials brands in Asia

#### China Jushi Co., Ltd.

It was selected as TOP50 among "Best Listed Companies" by the 4<sup>th</sup> New Fortune

#### China Jushi and Sinoma Science & Technology

They won the titles of "Top Ten Leading Enterprises in Science and Technology Breakthrough in National Building Materials Industry in 2022" by China Building Materials Federation

#### Zhongfu Shenying Carbon Fiber Co., Ltd.

Listed Company on Science and Technology Innovation Board in 2022" by CLS

Marching Towards a Better Future

It was selected as "the Most Innovative

#### Sinoma International Engineering Co., Ltd.

It was listed as one of "the 250 largest international contractors in the world" in ENR, ranking 44<sup>th</sup> in the world and 11<sup>th</sup> among Chinese enterprises

#### CNBM INVESTMENT COMPANY LIMITED

It was awarded one of the "Top 100 Enterprises in Building Materials Service Industry in China in 2022" by China Building Materials Federation

#### Sinoma Science & Technology Co., Ltd.

It won the title of "Top Ten Leading Enterprises in Science and Technology Breakthroughs in Building Materials Industry in China in 2022" by China Building Materials Federation

# Future Prospects

2023 is the first year to fully implement the spirit of the 20<sup>th</sup> National Congress of the Communist Party of China, and it is also a crucial year for connecting the preceding with the following in the 14<sup>th</sup> Five-Year Plan. Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, we will fully implement the spirit of the 20<sup>th</sup> National Congress of the Communist Party of China, focus on solidly promoting Chinese-style modernization, adhere to the overall leadership of the Party, adhere to the general tone of striving for progress steadily, implement the new development concept completely, accurately and comprehensively, serve to accelerate the construction of a new development pattern, focus on promoting high-quality development, comprehensively accelerate the construction of a world-class materials industry investment group, and make greater contributions to the opening of building a socialist modernized country in an all-round way.

Consolidate high- quality development with striving for progress steadily	We will continue to seek benefits from market development, three-refined management and collaborative benchmarking, strengthen confidence, improve quality and efficiency, and make every effort to win the tough battle of stabilizing growth.
Support high-quality development driven by innovation	We will continue to forge the national strategic scientific and technological strength further promote the industrialization of scientific and technological achievements accelerate the release of new digital kinetic energy, gradually increase scientific and technological innovation, and build a strong engine for a world-class enterprise.
Promote high-quality development with industrial upgrading	We will continue to consolidate the three main businesses and four major sectors we will accelerate the construction of a modern industrial system; we will solidly promote the dual-carbon work and fully promote the construction of beautifu China; we will steadily push forward internationalization, actively help promote dual circulation, strengthen multi-dimensional empowerment, and continuously promote transformation and upgrading.
Empower high-quality development with deepening the reform	We will continue to deepen the reform of the governance mechanism and build a modern new state-owned enterprise with greater efforts; we will give full play to the role of investment companies and accelerate the optimization and adjustment o state-owned capital layout; we will deepen the reform of market-oriented operating mechanism, fully stimulate organizational vitality, and deepen and enhance reform efficiency.
Escort high-quality development with risk prevention and control	We will continue to improve the risk prevention and control mechanism, keep a close eye on key areas and key links, firmly build a safe bottom line through risk management and control, and strengthen our firm and deep confidence in the future.
Guarantee high-quality development guided by Party building	We will continue to comprehensively study, grasp and implement the spirit of the 20 <sup>th</sup> National Congress of the Communist Party of China, adhere to the leadership o the Party, strengthen Party building, build a team of high-quality professional cadres and talents, promote the comprehensive and strict management of the Party to develop in depth, and promote the resonance at the same frequency between Party building and production and operation.

and the state of the

# Appendix

Responsibility performance

Market Performance

#### Ranking of Fortune Global 500 Building Materials Enterprises in 2023

Ranking in 2023	Enterprise Name	Operating Income in 2022 (One million US dollars)	Country
247	247 CNBM		China
263	Saint-Gobain Group	53846.9	France
464	Anhui Conch Group	32990.9	China
459	CRH Corporation	33368.0	Ireland

Data source: Fortune Chinese website

Output of Cement from 2012 to 2022	Unit: 100 million tons	
Year	Output of Cement	
2022	3.0	
2021	3.5	
2020	3.5	
2019	3.7	
2018	3.4	
2017	3.4	
2016	3.2	
2015	2.4	
2014	2.5	
2013	2.4	
2012	2.7	

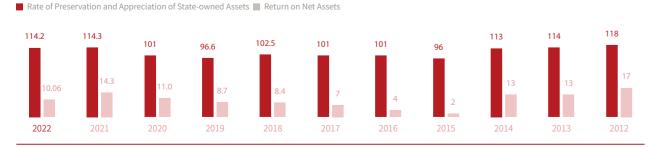
Total Operating Income and Profit from Unit: 100 million tons 2012 to 2022

Year	Operating Income	Total Profit	
2022	3801.6	265.8	
2021	4155.1	386.9	_
2020	3941.0	306.1	
2019	3981.0	235.2	
2018	3480.0	206.6	
2017	3021.2	151.1	
2016	2612.3	75.8	
2015	1992.5	38.4	
2014	2504.3	130.1	
2013	2522.6	115.1	
2012	2174.3	111.6	

Unit: %

#### Rate of Preservation and Appreciation of State-owned Assets and Rate of Return on Net Assets from 2012 to 2022





#### Performance of Listed Companies in 2022

Stock Name	Stock Exchange	Stock Code	Dividend per Share	Earnings per Share
China National Building Material Company Limited	Hong Kong Stock Exchange	03323.HK	0.3780	0.9440
Xinjiang Tianshan Cement Co., Ltd.	Shenzhen Stock Exchange	000877.SZ	0.2700	0.5259
Ningxia Building Materials Group Co., Ltd.	Shanghai Stock Exchange	600449.SH	0.3900	1.1100
Gansu Qilianshan Cement Group Co., Ltd.	Shanghai Stock Exchange	600720.SH	0.0000	0.9770
China Jushi Co., Ltd.	Shanghai Stock Exchange	600176.SH	0.5210	1.6512
Beijing New Building Material (Group) Co., Ltd.	Shenzhen Stock Exchange	000786.SZ	0.6550	1.8560
Sinoma Science & Technology Co., Ltd.	Shenzhen Stock Exchange	002080.SZ	0.6600	2.0923
Sinoma International Engineering Co., Ltd.	Shanghai Stock Exchange	600970.SH	0.3000	0.9800
Zhongfu Shenying Carbon Fiber Co., Ltd.	Shanghai Stock Exchange	688295.SH	0.1000	0.6900
Ruitai Technology	Shenzhen Stock Exchange	002066.SZ	0.0800	0.2868
China Certification and Inspection Group	Shanghai Stock Exchange	603060.SH	0.1220	0.3485
Triumph Science & Technology Group Co., Ltd.	Shanghai Stock Exchange	600552.SH	0.1000	0.1800
Triumph New Energy Company Limited	Shanghai Stock Exchange	600876SH	0.0000	0.6300
Triumph New Energy Company Limited	Hong Kong Stock Exchange	1108.HK	0.0000	0.6300
Sinoma Energy Conservation Ltd.	Shanghai Stock Exchange	603126.SH	0.0900	0.2569

#### Total Assets from 2012 to 2022



#### Production Capacity of Cement from 2012 to 2022

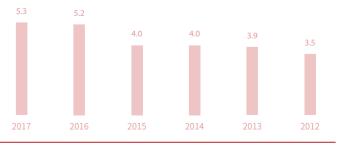




Unit: Yuan

Unit: RMB 100 million

Unit: 100 million tons



#### **Technological Innovation**

It won science and technology awards at or above the Unit: Term provincial or ministerial level from 2012 to 2022

Year	Science and technology awards at or above the provincial or ministerial level	Including: National Science and Technology Progress Award
2022	166	0
2021	116	1
2020	109	0
2019	166	3
2018	231	1
2017	197	2
2016	173	2
2015	123	0
2014	117	1
2013	145	1
2012	152	0

## Application and Authorization of Patents from 2012 to 2022

Year	Newly Applied Patents	Including: Invention Patents	Newly Authorized Patents	Including: Invention Patents
2022	5978	2601	4911	1319
2021	4004	1820	3745	747
2020	4436	1821	2576	532
2019	3308	1638	1804	478
2018	2287	1056	1571	385
2017	2144	1039	1524	428
2016	2156	880	1793	455
2015	1568	566	1492	193
2014	1571	531	1381	106
2013	1262	373	848	128
2012	766	228	729	143

## Expenditure on Scientific Research Activities Unit: RMB 100 million from 2012 to 2022

#### Year Expenditure on Research and Experimental Dev lopment

2022	149.0
2021	147.2
2020	119.1
2019	95.9
2018	81.9
2017	59.3
2016	51.2
2015	40.9
2014	41.6
2013	36.2
2012	33.4

hosted and participated in the formulation or vision of standards from 2012 to 2022					
Year	Total Number of Standards	Including: International	Including: Country	Including Industry	
2022	169	10	82	77	
2021	130	4	84	42	
2020	74	3	39	32	
2019	88	0	52	36	
2018	167	4	90	73	
2017	122	4	90	28	
2016	91	2	57	32	
2015	62	2	36	24	
2014	104	3	35	66	
2013	59	1	8	50	
2012	22	1	5	16	

Unit: Term

#### Accumulated Patents from 2012 to 2022

Unit: Term

Year	Number of Accumulated Patents	Including: Invention Patents
2022	22425	5926
2021	17642	4577
2020	14463	3816
2019	12124	3164
2018	10967	2765
2017	10024	2403
2016	8408	1913
2015	5663	900
2014	4255	687
2013	3231	589
2012	2549	448

### Income from scientific and technological Unit: RMB 100 million innovation from 2012 to 2022

Year	Income from Scientific and Technological Innovation	Sales Revenue of New Products
2022	39.0	850.6
2021	34.7	810.6
2020	35.2	754.7
2019	28.4	577.6
2018	30.1	555.9
2017	16.6	468.5
2016	15.7	339.0
2015	11.5	256.5
2014	8.8	289.9
2013	10.3	259.4
2012	9.4	248.4

### **Energy Conservation and Environmental Protection**

#### Comprehensive Energy Consumption of Output Value per Ten Thousand Yuan from 2012 to 2022

2022	1.21			
2021	1.29			
2020	1.38			
2019	1.30			
2018	1.46			
2017		1.74		
2016			2.01	
2015			2.	11
2014			2.03	
2013			2.04	
2012				2.1

#### Comprehensive Energy Consumption per Ton of Cement from 2012 to 2022

rgy Consumption per Unit: Kilograms of standard coal/ton

2022	68.58
2021	70.43
2020	71.59
2019	73.55
2018	74.14
2017	72.91
2016	74.04
2015	66.55
2014	64.45
2013	63.53
2012	62.06

## Disposal and Utilization Performance of Solid Waste from 2012 to 2022

Year	Consumption of Solid Waste (ten thousand tons)	Disposal Rate of Self-produced Solid Waste (%)
2022	10360	96.8
2021	13121	96.3
2020	17880	91.7
2019	14967	99.9
2018	9900	92.8
2017	15615	99.0
2016	14909	88.6
2015	7545	98.5
2014	7882	98.0
2013	6191	99.2
2012	9700	100

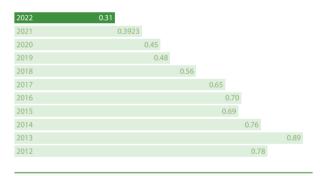


# Emissions of SO2 and COD with Output ValueUnit: kg/tenof Ten Thousand Yuan from 2012 to 2022thousand yuan

Year	SO <sub>2</sub> Emission with Output Value of Ten Thousand Yuan	COD Emission with Output Value of Ten Thousand Yuan
2022	0.27	0.05
2021	0.33	0.04
2020	0.42	0.04
2019	0.62	0.03
2018	1.09	0.03
2017	1.07	0.03
2016	1.60	0.05
2015	1.46	0.06
2014	1.36	0.06
2013	1.39	0.07
2012	1.45	0.07

#### Emission of Nitrogen Oxides per Ton of Cement Clinker from 2012 to 2022

Unit: Kilogram/ton



#### Utilization Performance of Water Resources from 2012 to 2022

Year	Consumption of Fresh Water with Output Value of Ten Thousand Yuan (ton/ten thousand yuan)	Consumption of Fresh Water per Ton of Cement Clinker (ton/tons of cement clinker)	Utilization Rate of Circulating Water (%)
2022	5.4	0.37	95.6
2021	5.4	0.53	97.8
2020	5.3	0.49	95.1
2019	3.6	0.34	90.0
2018	7.9	0.45	90.8
2017	7.1	0.51	96.2
2016	6.2	0.38	93.7
2015	7.2	0.46	93.5
2014	6.2	0.41	90.3
2013	8.0	0.41	96.4
2012	5.0	0.33	94.7

### Employee Care

Employee Profile from 2012 to 2022	Unit: people

Year		Foreign and Hong Kong, Macao and Taiwan employees	Employees in ethnic	Employees with disabilities	Proportion of Female Employees in Management (%)
2022	208857	965	7511	1340	17.6
2021	206910	881	6199	1478	17.9
2020	202844	1036	5725	1731	16.9
2019	204763	483	5808	1729	16.2
2018	208680	1059	5167	1697	18.7
2017	221421	750	5985	1732	18.4
2016	234511	1126	5964	1875	18.3
2015	176610	841	3521	1449	17.2
2014	176854	892	3120	2263	18.4
2013	179421	1234	3031	1685	18.1
2012	165652	1190	2706	1620	13.5

Coverage of Labor Contracts and Social Insurance and Membership of Trade Union from 2012 to 2022

Ye	ar	or contract coverage	Social insurance coverage	Proportion of Employees Joining in Trade Unions
20	22	100	100	84
20	21	100	100	84
20	20	100	90	78
20	19	100	92	78
20	18	100	90	78
20	17	100	98	92
20	16	100	98	91
20	15	100	98	91
20	14	93	88	70
20	13	96	92	75
20	12	96	92	80

Training Performance of Employees from 2012 to 2022

Unit: %

#### Progress of Enterprise Annuity Work from 2012 to 2022

Year	Number of Member Enterprises Participating in Enterprise Annuity	Number of Employees Participating in Enterprise Annuity
2022	588	109323
2021	580	104210
2020	531	95554
2019	207	56174
2018	100	35644
2017	74	24093
2016	71	22871
2015	68	22165
2014	67	21750
2013	67	21131
2012	66	20392

r of Employees ing in Enterprise Annuity 109323	Year	Number of Training Programs Organized or Organized to Attend	Employee Participation in Training (ten thousand hours)	Number of Academic Degrees Obtained by On-the- job Employees with Support
104210	2022	87920	185	1944
95554	2021	77120	250	2431
56174	2020	84771	215	2628
35644	2019	107787	137	1679
24093	2018	75187	485	1424
	2017	52676	112	2251
22871	2016	47554	331	3028
22165	2015	32672	133	2882
21750	2014	43352	91	3520
21131	2013	37491	164	2387
20392	2012	21028	126	1138

Investment in occupational health and safety	Unit: ten thousand	Performance in Safety Production from 2012 to 2022
--	--------------------	--

from	2012 to	2022	2						(	RMB)
2022									160	000
2021									16	2000
2020									151500	
2019								123697		
2018							108357			
2017					870	32				
2016				79	9527					
2015			57249							
2014	2	43221								
2013	31363									
2012	30324									

Year	Accident Rate of Work-related Injuries of Thousands of People That Can Be Recorded (%)	Number of New Cases of Occupational Diseases
2022	0.2	0
2021	0.2	0
2020	0.2	0
2019	0.4	1
2018	0.5	1
2017	0.5	2
2016	0.5	0
2015	0.9	3
2014	1.3	2
2013	1.6	1
2012	2.3	3

### Corporate Citizenship

Social Welfare Expenditure from 2012 to 2022 Unit: ten thousand (RMB)

			14157.7
2021			14073.8
2020			
2019			14243.9
2018		6291.5	
2017	2335.5		
2016	2400.4		
	1802.8		
2014	2080.5		
	2195.1		
2012	1015.1		

Taxes Paid from 2012 to 2022

Unit: RMB 100 million

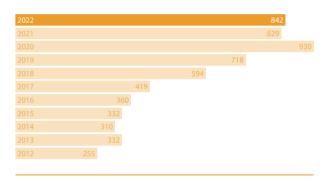
2022			271.7
			301.6
			290.6
			272.2
2017		196.8	
	157.3		
	119.1		
2014	146.4		
	131.7		
2012		3	

#### Student Loans from 2012 to 2022

Year	Number of Special Scholarships Established	Total Amount of Scholarships Provided (ten thousand yuan)	Students Awarded or Subsidized	of	Study Positions Provided for Students in School (person-day)
2022	37	79	174	70	73582
2021	16	109	200	85	37005
2020	20	99	298	128	53145
2019	22	113	284	132	52689
2018	18	73	188	118	45464
2017	14	72	155	163	31519
2016	8	37	266	134	34030
2015	8	36	159	47	26586
2014	31	53	227	97	28619
2013	18	112	506	119	36530
2012	20	136	466	98	17815

# ŴĨ

#### Number of Social Welfare Projects Supported from 2012 to 2022



#### Guarantee Employment Performance from 2012 to 2022

Unit: people

Unit: Term

Year	Number of Employed People	Including: Number of Fresh Graduates Recruited	Number of Demobilized Soldiers Recruited
2022	50243	3067	21
2021	35170	3375	2
2020	22032	3667	24
2019	27763	3890	22
2018	26553	3626	141
2017	29612	4727	139
2016	22342	3129	23
2015	16929	2473	10
2014	23617	3848	46
2013	16081	4383	158
2012	15901	3743	521

#### Organization of Volunteer Activities from 2012 to 2022

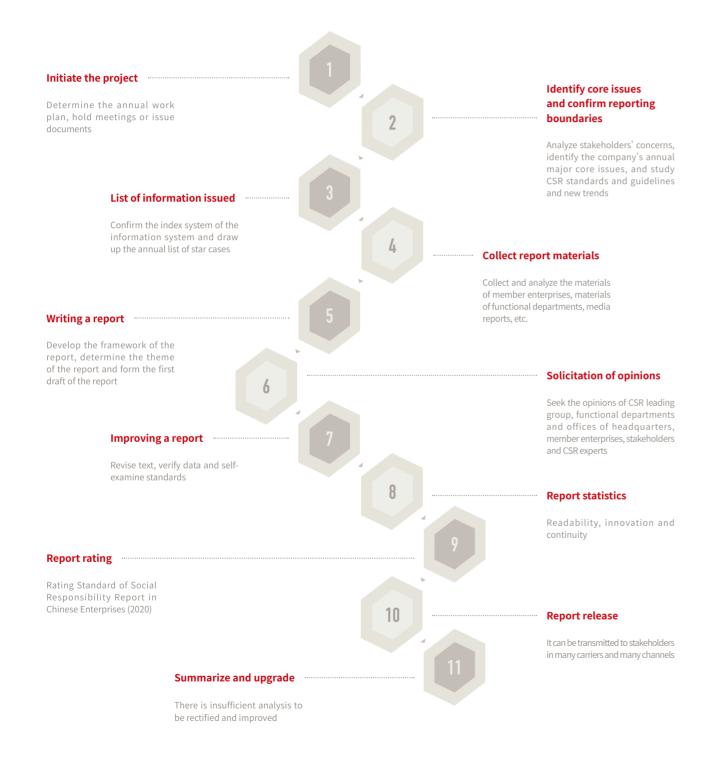
Year	Number of Volunteer Groups Set up Established	Investment to Support Voluntary Activities (ten thousand yuan)	Number of Employee Volunteers	Time of Volunteer Services Provided (hours)
2022	216	184	10935	63257
2021	221	180	11517	74568
2020	192	190	10121	49220
2019	213	2219	10343	40192
2018	189	126	6853	44445
2017	335	363	5334	25164
2016	112	344	5646	28157
2015	56	191	2187	14840
2014	65	145	3400	9418
2013	109	145	4864	10681
2012	67	91	3337	39778

### Indicator Index

Catalogue of Report	Sustainable Development Goals (SDGs) of United Nations	GRI Standards of Sustainable Development Reports (GRI Standards)	Guidance on Compilation of Social Responsibility Reports in Chinese Enterprises: Non- metallic Mineral Products Industry (CASS-CSR4.0)
Report Norms	-	102-46、102-50、102-52-53	P1.1-1.2
Chairman's Address	-	102-14-15	P2.1-2.2
About Us	-	102-1-2、102-4-8、102-16、102- 18、102-22、102-24	P4.1-4.5
Contribution of Building Materials to Sustainable Development	1         NULLY         2         NORE         3         SOUR HALLENNE         4         SULLY           1         NULLY         1         Image: Source and s	203-13-2、302-4-5、303-3、304- 2-3、401-2	G2.1、S2.4、S2.14、S2.18、 S4.5-4.7、S4.9、S4.12、E1.3、 E1.9、E2.11、E2.18、E2.4、 E2.25、E3.3-3.4
Topics of Responsibility: Creating ESG Building Material Strength to Help Chinese-style Modernization	1     Notestart     3     Ale Relie Res     8     ECENT NEW AND     10     RECORD       12     RECORD     Ale Train     Image: Ale Training and Ale	203-1-2	P1.3、M3.4、M3.6、E1.3、 E1.9、E2.2、E2.24、S4.1、 S4.12
Part	I: Smart use of resources to build excellen	t materials for the country and its	people
Common Prosperity and Development	9 NOUSTICK MONATOR AND MARKENSING AND MARKE	102-2、102-26、102-30、201- 1、203-1-2、205-2	M1.1、M1.3、M1.6-1.8、M2.7、 M3.6、S1.4、E1.7、E1.9、 E2.1、E2.3
Prospering Scientific and Technological Innovation Together	4 CALIFY 10 CATOR 10 MONTACTICATION 10 MONTACTIC	201-1、203-1-2	M2.4-2.5、M2.7、M3.4、M3.6
Protecting Green Ecology Together	7       STREMMEL AND BLANDERSTR       9       ACISTIC MONITORIA       11       SCREMMEL AND ACISTIC MONITORIA       12       SCREMMEL COCO         13       ACISTIC       ACISTIC MONITORIA       15       SCREMMEL ACISTIC       16       FASE ASSISTE ACISTIC       17       FASE ASSISTE FOR THE GASE         13       ACISTIC       ACISTIC <td>203-1-2、304-1-3、302-1、302-5</td> <td>M2.7、E1.1、E1.3、E1.5、E1.8- 1.9、E2.1、E2.6-2.7、E2.15- 2.16、E2.19、E2.2、E2.24- 2.25、E3.3-3.4、E3.6</td>	203-1-2、304-1-3、302-1、302-5	M2.7、E1.1、E1.3、E1.5、E1.8- 1.9、E2.1、E2.6-2.7、E2.15- 2.16、E2.19、E2.2、E2.24- 2.25、E3.3-3.4、E3.6

Catalogue of Report	Sustainable Development Goals (SDGs) of United Nations	GRI Standards of Sustainable Development Reports (GRI Standards)	Guidance on Compilation of Social Responsibility Reports in Chinese Enterprises: Non- metallic Mineral Products Industry (CASS-CSR4.0)
	Part II: Services for construction with the "	'Top Priorities of the Country" in M	nd
Sharing Development Achievements	4 EQUATIV LINE 5 EXAMP STATUS 12 EXAMPTION RADIAL STATUS	102-8、203-1-2、401-1、403- 2、404-2、405-1	S2.1-2.4、S2.7-2.8、S2.11、 S2.132.18、S2.20、S3.1-3.7
Marching Towards a Better Future	1       NOVERTY       2       RECE       3       MODIFICATION       4       COULTY         1       NOVERTY       1       S       S       MODIFICATION       1       S <t< th=""><th>201-1、203-1-2、413-2、415-1</th><th>M2.4、M2.7、S4.5、S4.9、 S4.6-4.13、E1.3、E1.7</th></t<>	201-1、203-1-2、413-2、415-1	M2.4、M2.7、S4.5、S4.9、 S4.6-4.13、E1.3、E1.7
Responsibility Management	16 ALL JUSTICE NEW THORE TO BE THE GAUSE	102-9、102-12-13、102-40、 102-42-44、418-1	G1.2、G2.1、G2.3-2.4、G3.1- 3.3、G4.1-4.3、G5.1-5.2、 G6.1-6.2、M2.9、M2.15-2.16、 M3.1、M3.3、M3.6、M3.8、 M3.10、E1.6、E2.2、E2.6
Future Prospects	-	-	Al
	Append	ix	
Responsibility performance	-	-	A2
Indicator Index	-	102-55	A5
Reporting Process	-	-	P1.1
Rating Report	-	-	A4
Feedback	-	102-53	A6

### **Reporting Process**



### Rating Report

#### Rating Report of 2022 Sustainable Development Report in China National Building Material Group Co., Ltd.

Entrusted by China National Building Material Group Co., Ltd., experts were selected from "Rating Expert Committee for Social Responsibility Report in Chinese Enterprises" to form a rating team to rate the 2022 Sustainable Development Report of China National Building Material Group Co., Ltd. (hereinafter referred to as the "Report").

#### I. Rating Basis

Guidelines on Social Responsibility Reports in Chinese Enterprises (CASS-CSR 4.0) of Chinese Academy of Social Sciences and Rating Standard for Social Responsibility Reports in Chinese Enterprises (2020) by "Rating Expert Committee for Social Responsibility Report in Chinese Enterprises"

#### II. Rating Process

1. The rating team reviews and confirms the Confirmation of Procedural Data of Corporate Social Responsibility Report and relevant certification materials submitted by the Writing Team of the Report;

2. The rating team evaluates the preparation process and content of the Report and formulates the rating report;

3. The vice chairman of the rating expert committee, the leader of the rating team and the experts of the rating team jointly sign and review the rating report.

#### III. Rating Conclusion

#### Procedure ( $\star \star \star \star \star$ )

Set up a leading group for promoting social responsibility work with the chairman as the team leader to coordinate and dispatch social responsibility work. The group's management department takes the lead in setting up a report preparation working group, key departments submit basic information and review relevant contents, and the chairman and general manager are responsible for final review and issuance; position the report as an important tool to prevent environmental and social risks, disclose responsibility information in accordance with provisions, improve the management level of social responsibility, strengthen stakeholders communication, and enhance brand value, with clear positioning in functional values; identify substantive issues according to national macro policies, group development strategies and stakeholder expectations; publish the special issue of "the Belt and Road Initiative" for ten years and promote 13 subordinate listed companies to issue social responsibility reports to enhance the depth and breadth of responsibility information disclosure; it is planned to publish the report through the official website, and participate in the "Centralized Press Conference for Social Responsibility Reports in Central Enterprises" for the second release. The report will be presented in the forms of electronic version, printed matter and long layout with excellent process performance.

#### Substantive ( $\star \star \star \star \star$ )

The Report systematically discloses key issues in the industry, such as product quality management, product innovation, occupational health management, safety production, research and development and application of environmental protection technologies and equipment. saving energy and water resources, reducing the emission of "three wastes", environmental treatment around the factory area, supply chain responsibility, Internet + non-metallic mineral products, etc., with sufficient details and outstanding substantive performance.

#### Integrity ( $\star \star \star \star \star$ )

The main content of the Report discloses 93.61% of the core indicators of the industry from the perspectives of "common prosperity and development", "common scientific and technological innovation" "common green and ecology", "sharing development achievements", "sharing a better future" and "sharing responsibility management" with outstanding integrity performance.

#### Balance ( $\star \star \star \star \star$ )

The Report discloses negative data such as "employee turnover rate" "recorded rate of work-related injuries for over 1,000 people", "number of deaths in safety liability accidents", "new cases of occupational diseases" and "substantive complaints due to disclosure of customer information in the year", and discloses the number of suppliers who have completed social responsibility review and evaluation, and the number of suppliers who have been rejected and terminated from cooperation in the year, with excellent balance performance.

#### Comparability ( $\star \star \star \star \star$ )

It is disclosed in the Report that the comparative data of 63 key indicators such as "operating income", "cement output", "scientific and technological innovation income", "employee training performance", "comprehensive energy consumption with output value per 10,000 yuan", "comprehensive energy consumption per ton of cement" and "occupational health and safety investment" for three consecutive years, and a horizontal comparison is made on indicators such as "Ranking of Fortune Global 500 in 2023" with excellent performance in comparability.

#### Readability ( $\star \star \star \star \star$ )

The framework structure of the Report is clear. From the six chapters including "common", "common prosperity", "common defense", "sharing", "going together" and "talking together", it systematically shows the performance of enterprises in corporate governance, scientific and technological innovation, going green and environmental protection, winwin partners, harmonious communities, responsibility management, etc., and fully responds to the expectations and demands of stakeholders; the high-definition and infectious real-life pictures are adopted across chapters in the cover and chapters to show the characteristic performance scenes and highlight the characteristics of the industry; the report is concise in typesetting, illustrated with pictures and texts, flexible in expression, rich in reading experience and excellent in readability.

#### Innovative ( $\star \star \star \star \star$ )

At the beginning of the Report, in the special form of " Contribution of CNBM for Sustainable Development" and "Building ESG CNBM' s Power to Help Chinese Modernization", it corresponds to the responsibility issues of SDGs and ESG standard systems one by one, systematically combs the annual key responsibility actions, discloses responsibility performance in detail, and highlights the image of corporate international responsibility; The ten-year special issue of "the Belt and Road Initiative" was released and 13 subordinate units were continuously promoted to issue responsibility reports, which built a multi-form and multi-level reporting ecology, further improved the influence of responsible brands, and achieved outstanding innovation performance.

#### Comprehensive Rating ( $\star \star \star \star \star$ +)

According to the evaluation of the rating team, the process, completeness, substantiality, balance, comparability, readability and innovation of 2022 Sustainable Development Report in China National Building Material Group Co., Ltd. have reached five stars and the comprehensive rating is "five-star good". The report is a model in corporate social responsibility report.

#### 型 中国企业社会责任报告 🔁 评级专家委员会

The Sustainable Development Report of China National Building Material Group has won five-star rating for seven consecutive years and five-star good rating for the fourth consecutive year

#### IV. Suggestions for Improvement

Increase the disclosure of key issues in the industry and further enhance the materiality of the report.

Vice Chairman of Committee of Rating Experts

Leader of Rating Team

Expert of Rating Team

Time to Issue: October 23, 2023



Scan code to view Enterprise rating file



### Feedback

#### Dear Readers,

#### Hello!

Thank you very much for your concern and support for the social responsibility work of China National Building Material Group. Please fill in the questionnaire below, and we will continue to improve and upgrade in the future work according to your opinions and suggestions.

#### Your evaluation for the annual sustainable development report of China National Building Material Group is:

 Overall evaluation of the report:
 Very good
 Good
 General
 Not good
 Rather poor

 Richness of Content:
 Very good
 Good
 General
 Poor
 Rather poor

 Suitability of Page Number:
 Very good
 Good
 General
 Poor
 Rather poor

 Aesthetic Degree of Design:
 Very good
 Good
 General
 Poor
 Rather poor

 Friendliness of Language:
 Very good
 Good
 General
 Poor
 Rather poor

#### In your opinion, the core of China National Building Material Group's responsibilities is:

□ Market performance □ Scientific and technological innovation □ Energy conservation and environmental protection □ Employee Care □ Corporate Citizenship □ Responsibility Management

#### What aspects of social responsibility management do you think we should further strengthen:

□ Information Collection □ Organization Construction □ Personnel Training □ Performance Evaluation □ External Publicity □ Stakeholder Management □ Public Welfare Planning □ Preparation Level of Annual Report □ Research on Social Responsibility □ Others

#### In what way do you prefer to know our information about responsibility performance:

🗆 Paper Report 🔹 Social Responsibility Column of Official Website 📄 WeChat Official Account 📄 Professional Social Responsibility Media 📄 Others

What do you want to see in the annual sustainable development report of China National Building Material Group?

What aspects of China National Building Material Group's performance do you pay more attention to in the future?

Other comments and suggestions?

#### From what position did you participate in our solicitation of opinions?

□ Government departments □ Institutional investors □ Medium and small shareholders □ Financial institutions □ Industry associations

🗆 Suppliers 🔹 Customers 🔅 Enterprises in the same industry 🔅 Partners 🔅 CSR professional organization 🔅 Non-profit organization

□ News media □ Middle and senior management personnel of the group □ Employees of the group □ Others

In order to get contact with you conveniently and respond to your opinions and suggestions in a timely manner, please provide your contact information and relevant information. We will keep it properly and not disclose it to the outside world.

E-mail:

Name:	Occupation:	Institution:
Contact Address:		Post Code:
Telephone	Eav	











China Jush









Engineerir Co Itd

Hebaodar

Ningxia Build Materials Gro

Zhongfu Lianzhong Zhongfu Shenyi Carbon Fiber

Industry Design & Research Institute





CBMI Construction Ma

China Building China Materials Academy Certification and Inspection Group

of China Nationa Building Materia



okorder.com



Smart Industry







BNBMG FORESTS Triumph Science & Technology Group Co., Ltd.

a Energy Finance Com ervation



**C D** LJ





China National Building Material Group Co., Ltd. Address: Building 2, Guohai Plaza, No. 17, Fuxing Road, Haidian District, Beijing Post Code: 100036 Contact Person: Wang Qun E-mail address: csr@cnbm.com.cn Contact Number: 010-68138139 Fax: 010-68138088 Website: www.cnbm.com.cn Considerations for the publication environment of the report Paper: Printed on environmentally friendly paper Ink: Environmentally friendly ink is adopted to reduce air pollution

Designed and produced by:



