

# 2015 CHINA NATIONAL BUILDING MATERIALS GROUP CORPORATION Social Responsibility Report



# **Preparation Notes**

This Report gives a true picture of China National Building Materials Group Corporation's (CNBM) performance of social responsibilities.

### Which report is this one? How to get these reports?

This is the seventh social responsibility report released by CNBM. Please ask for the printed version of each year's Report via the contact information on the cover. You can also scan the twodimension code below or log onto http://www.cnbm.com.cn/EN/ to download the electronic versions and get more related information.

### How is this report prepared?

This report is prepared according to China CSR Reporting Guidelines (CASS-CSR3.0) issued by the Chinese Academy of Social Sciences, CNBM Methods of Social Responsibility Management, and CNBM Social Responsibilities Management Information Collection Measures. The detailed preparation process is as follows:

Preparation Process of

### 1.Project startup

Defining annual work plan, convening meetings or issuing documents

Analyzing of stakeholders' concerns, defining annual major core topics, analyzing domestic and overseas CSR standards and guidelines, studying new standards and trends

#### 4.Collecting materials

Feedback on member companies' materials, feedback on functional departments and offices' materials, analysis of stock materials, collection of media reports

### 7.Improvement

Text revision, data verification, standard self-examination

### 10.lssuance

Transmission to stakeholders via multiple carriers and channels

8. Design

draft

### On what standards is the Report based? How about the benchmarking and the evaluation?

The preparation of the Report is based on Sustainable Development Report (G4) published by the Global Reporting Initiatives (GRI), Social Responsibility Guide (ISO26000) issued by the International Organization for Standardization (ISO), CSR Reporting Guidelines GB/T36001-2015, China CSR Reporting Guidelines (CASS-CSR3.0) issued by the Chinese Academy of Social Sciences, etc. Please refer to Page 62-65 of the Report for the benchmarking between the Report and CASS-CSR3.0 and the evaluation result.

## How to feed back opinions and contact us?

You can complete the feedback page in the end of the Report, and send it to us through fax or mail; you can also visit the official website of our company or scan the two-dimension code below, and fill in your opinions on the web page or WeChat; you can also contact us directly through the contact information on the back cover.

### **Period Covered by the Report**

1 January to 31 December 2015; given the progressing continuity of certain businesses or projects, some contents relate to the first and second guarters of 2016, the details of which are indicated in the Report.

### **Reporting Frequency**

Annual report.

## **Entities Covered by the Report**

All the wholly-owned or controlled (including absolute and relative controlled) members of CNBM. For the purpose of concise description, terms of "CNBM", the "Group" and "We" are used in the Report to refer to China National Building Materials Group Corporation.

### **Data Sources**

All information and data used herein are from the headquarters of CNBM and its member companies. Notes have been made in the report for the information from external reference. Unless otherwise





### How to guarantee the data released in the Report?

The financial data in the Report are derived from CNBM 2015 Annual Financial Statement which has been audited by Baker Tilly China.

External data in the Report are derived from those released by third parties through media, sources of which are indicated in the Report.

The non-financial data in the Report are derived from CNBM's CSR information management system. Data in the system are faithfully reported by functional departments and offices of CNBM headquarters and its member companies in accordance with CNBM Social Responsibilities Management Information Collection Measures; data of member companies are submitted to the headquarters after approved at all levels; each department or office of the headquarters reviews special data according to its function; to ensure the standardization, reliability and authenticity of the data, the headquarters verify data of member companies through sampling at a proportion of at least 5%.

### 2.Defining core topics and boundaries

## 5.Writing report

Drawing framework of the Report, defining the topic, compiling the first

### 3. Printing and distributing information list

Defining indicator system of information system, making list of annual star cases

### 6.Consultation

CSR leading group, functional departments and offices in the headquarters, member companies, stakeholders, CSR experts

## 9.Evaluation

Readability, innovation, continuity

Rating Standards of Corporate Social Responsibility Reporting in China (2014)

### 11.Summary & Promotion

Analyzing deficiencies and making

improvement planhttp://www.cnbm.com.cn/EN/c\_IIII016II04II01/

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# Responsibility Performance

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# Chairman's Address

# Standing on the moral high ground to do business

During the "Twelfth Five-year Plan" period, China National Building Materials Group Corporation (CNBM), centering on the strategic goals of "Stronger and better; World leadership", actively transferred mode and adjusted structure, deepened market-oriented reform, vigorously promoted structural adjustment, merger and reorganization, and energy conservation and emission reduction of cement and glass, as well as developed new building materials, new housing and new energy materials, making remarkable achievements. During the "Twelfth Five-year Plan" period, CNBM realized a total profit of 55.4 billion yuan, with taxes of 61.2 billion yuan and total social contributions of 220.8 billion yuan. Started as a grassroot enterprise with small capital and weak economic foundation, CNBM has developed and grown into one of the world's top 500 enterprises with 180,000 employees and assets of more than 400 billion yuan.

The "Twelfth Five-year Plan" period is a golden stage for CNBM's growth and development, as well as a key period for us to make steady headway in social responsibility management and systematically carry out responsibility practices. Starting from releasing the first social responsibility report, we built social responsibility organization system, established and perfected social responsibility management rules, deepened the concept of responsibility and established responsibility model; we conducted stakeholder management and regular release of social responsibility report; we built the framework of five major responsibilities, continued

responsibility-fulfilling practices and persisted in improving responsibility-performing ability and level; we carried out responsibility research, joint in responsibility initiating organization and action plans to promote the dissemination and sharing of responsibility. We achieved growth from scratch and became the practitioner, impeller and leader of social responsibility.

General Secretary Xi Jinping said: "Only wealth with care is of true meaning; only the enterprises actively undertaking social responsibilities are the most competitive with the most vitality." Over the years, CNBM has been exploring in practice the most effective ways of sustainable development, as well as its laws and logic. Business activities regard profits as the core, but the companies are not pure economic organizations whose fundamental purpose is to serve the community. As the saying goes, a small victory is won by wisdom, a big by virtue. The development of enterprises should be combined with wellbeing of human, fate of the country, interests of the industry and happiness of employees. We should stand on the moral high ground to do business

## Being people-oriented and pursuing the realization of human values and happiness.

CNBM has always regarded "people" as the company's most valuable asset, and adhered to the principle of "enterprises being people, by the people, for the people and loving the people." Running enterprises relies on efforts and dedications of cadres and staffs; the development of enterprises is, in the final

4

analysis, for the people, including business people, investors and social persons. We have always been people-centered, focusing on the life security and occupational health of employees, respecting employee's rights and interests and caring staff's well-being and growth. We will build the corporate into a stage for employees to show their talents, as well as a home giving them sense of security, warmth and happiness. We devote creativity and labor contributions of staff to social developments and regard human happiness and value as a significant goal and the fundamental pursuit of the Group.

Putting the interests of the whole industry above everything and taking the course of mutual benefits and win-win situation. We always adhere to the idea of "industry interests outweigh those of enterprises which lie in the former" and strive to prop up the umbrella aiming at coexistence and multi-win situation for the industry. We take the lead in eliminating the backward, merger and reorganization and industry consolidation, leading the industry from competition to cooperation-competition and from the jungle to the blue ocean. We unite industry strengths with inclusive heart, making cement-industry concentration degree increase from 15% in 2005 to the present 58%. We have continuously expanded scientific and technological resources of the industry, built industry's innovation flagship and contributed efforts to industry sustainable development. A number of major scientific and technological achievements have been successfully applied to major engineering and construction projects such as Beijing Olympics,

high-speed railways, the Three Gorges, and Beidou Satellite. We promote adjustment and upgrading of industrial structure while realizing leapfrog self-development.

Human well-being first and following the logic of green and sustainable development. Building materials industry has all the time been highly dependent on resources and energy. We pay more attention to the sustainability of resources and energy, climate and ecological and environmental problems. We have implemented efficient manufacturing, clean production and comprehensive utilization of industrial and urban waste resources in many ways, achieving nearly 100 million tons of absorptive capacity of solid waste and taking lead in green manufacturing of building materials. In 2015, we launched "Blue Sky Responsibility" action plan, and made guarding the blue sky the first corporate responsibility, and proposed implementation plan for building materials industry group to tackle climate change. We are committed to providing for the community green and environmentfriendly building materials, promoting new building materials and Energy Plus 5.0 green town. We manufacture fan blades and strive to develop thin-film solar cell industry. Solar energy conversion efficiency of thin-film solar cell module has exceeded 17.9%, making contributions to the development of new

Taking common development as the guiding principle and practicing responsible operation model of "the Belt

energy.



and Road Initiative". CNBM is an advocate and practitioner of common development concept. In the meantime of giving play to our own industrial advantages, we promote common development within our area and related industries. During the "Twelfth Fiveyear Plan" period, a total of 42.18 billion yuan was turned over to local taxes, a total of more than 90,000 new employment opportunities were created and our charitable donations reached 88.31 million yuan. In the practice of "the Belt and Road Initiative", we uphold three concepts: first, to contribute to local economic development; second, to work closely with local businesses; third, to live on friendly terms with local people. With common development concept as the core, we actively promote policies of localization of raw materials, staff, environmental protection and public welfare, adhere to responsible development and utilization of resources in the area when giving play to our own industrial advantages, provide goods and services, jobs, tax contributions, public support for the region and protect the local environment and market order, and strive to become a practitioner, advocate and promoter of harmonious development.

Chinese economy has entered a new normal, with lack of market demand and severe overcapacity, and is facing enormous pressure and challenges. Looking into the "Thirteenth Five-year Plan" period, CNBM people, with full confidence, have worked out a blueprint for transformation in the new stage. In the next five years, we will focus on five development philosophies, stick to "three major

development strategies" of innovation-driving,

green development and internationalization; as for transformation and upgrading, we will work well to achieve the transformation and upgrading of traditional industries; we will vigorously develop the "three new" industries, strengthen "three curves" of manufacturing servitization and R & D industrialization, promote "four changes" in business model, value orientation, business areas and market area to achieve humanization, wisdom, greenorientation, performance-base and "five visions" of global enterprise groups.

As Confucius said, "the benevolent love others", "the benevolent take delight in benevolence; the wise practice benevolence for its sake". The true benevolent should bear in heart sincerity for love and the true wise must show with practice their favor of benevolence. Responsible businesses should have the guality, culture and mind of the benevolent, as well as the attitude of gratitude and the idea of love. We should make efforts to give back to and benefit the society with inclusive philosophy and spirit of altruism. We should adhere to "self-discipline and social commitment". We believe that if we stand on the moral high ground to do business and make joint efforts with stakeholders, we will surely have a better and more harmonious future!

Chairman of CNBM Song Zhiping

you

# **Company Profile**

As the leader of China's building materials industry, CNBM is the largest comprehensive building materials industry group in China. It has been ranked first among the top 500 enterprises in the building materials industry for many years, 50th among the Top 500 Enterprises in China, and 270th among the Fortune Global 500. Up to the end of 2015, the total assets of the Group amounted to RMB 432.65 billion and the total number of employees reached 176,610. In 2015, CNBM achieved revenue of RMB 199.25 billion with total profit of RMB 3.84 billion, whilst taxes paid amounted to RMB 11.91 billion.

Headquartered in Beijing, CNBM has over 1,100 member companies, and dominates 6 listed companies, including 2 overseas listed companies. Member companies of CNBM are located in 30 Chinese provinces, municipalities and autonomous regions, whose businesses cover over 120 countries and regions in the world. As an enterprise engaged in the highly competitive field, CNBM takes "efficient use of resource, serving the construction" as our core values, always follows market rules, strongly promotes structural adjustment, consolidation and restructuring, and energy conservation and emission reduction of such industries as cement and glass. CNBM vigorously develops new building materials, new energy-saving buildings, and advanced energy materials. CNBM has unswervingly followed the development path of capital operation, consolidation and restructuring, management integration, and integrated innovation. We have gradually established business segments of industrial manufacturing, research and design, engineering services, equipment manufacturing, logistics and trading, and new housing. We are committed to becoming a world-class comprehensive building materials industry group with sustainable innovation capabilities and outstanding international competitiveness.

Largest ready-mixed concrete producer in the world

# **432.65** billion Total assets of RMB 432.65 billion in 2015

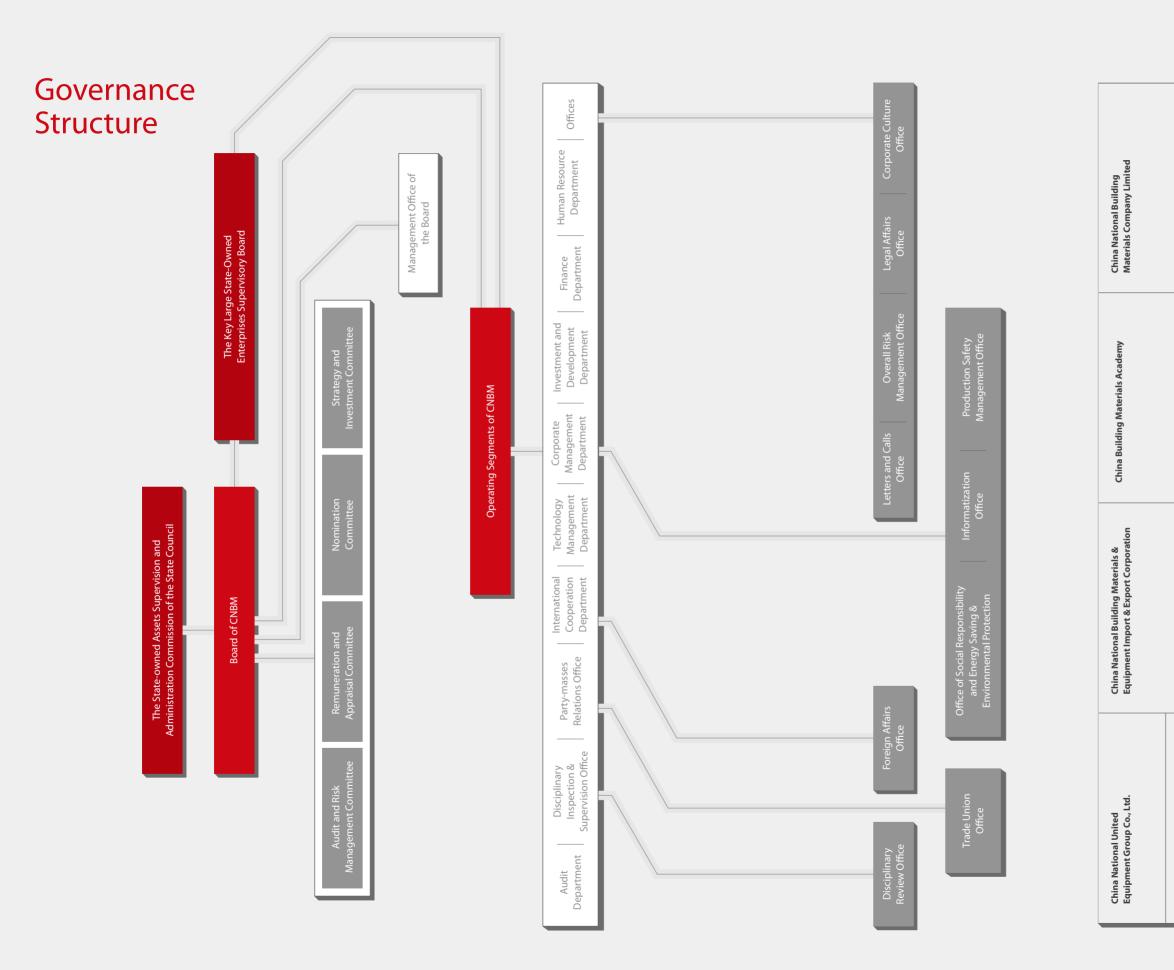


176,610 employees in 2015

**1999.25** billion Revenue of RMB 199.25 billion in 2015







China United Cement Corporation South Cement Company Limited North Cement Company Limited Southwest Cement Company Limited BNBM Public Limited Company China Composites Group Co, Ltd. Lianyungang Zhongfu Lianzhong Composites Group Co, Ltd. China Triumph International Engineering Co, Ltd. Nanjing Kisen International Engineering Co, Ltd.	conny montant advance ingineering co, tua. China Jushi Co, Ltd. CNBM Investment Co, Ltd.
China Building Materials Academy (Beijing Headquarters) Building Materials Technology Co., Ltd. China Building Materials Test & Certification Group Co., Ltd. Herfei Cement Research & Design Institute Harbin FRP Institute CNBM Design & Research Institute CNBM Design & Research Institute of Institution Material Constant of Wall & Roof Xian Research & Design Institute of Wall & Roof	Materials Xianyang Research & Design Institute of Ceramics Horological Research Institute of Light Industry
China National Building Materials & Equipment Supply Chain Go, Ltd. CNBM Smart Industry Technology Co, Ltd. CNBM International Engineering Co, Ltd. CNBM International E-Commerce Corporation CNBM International E-Commerce Corporation CNBM Neod Trading Co, Ltd. CNBM Engineering Materials Co, Ltd. CNBM Technology Co, Ltd.	Beijing New Building Materials (Group) Co., Ltd. INTECH Building Co., Ltd. BNBM House Co., Ltd.
China New Building Group Corporation China New Building Huagou Residence Industry Co., Ltd. Triumph Science & Technology Group	CNBM United Investment Co., Ltd. Zhongfu Shenying Carbon Fiber Co., Ltd. Zhejiang Leomax Group Co., Ltd. CNBM Assets Management Corp.

# **Business Activities**

### The annual capacity of cement is about 400 million tons; ready-mixed concrete is 410 million m3, both of which rank the first in the world

North Cement Company Limited, Southwest Cement Company

The glass industrial platform can produce high-quality float glass with a processing capacity of 10 million m2, covering products of vehicle glass, architectural fabricated glass, and decorative glass. We can produce 15 ultra-thin glass products from 0.15 mm to 1.3 mm. We also have an industrial base capable of producing 40 million pieces of ITO electropane and TFT crystal glass substrates.

China Luoyang Float Glass Group Co., Ltd., Anhui Huaguang & Research Institute for Glass Industry

The light-weight building material industrial platform includes three business sectors, namely the wall and suspended ceiling system, the housing parts and architectural energy conservation system, and the exterior building envelope system. It provides application solutions pack for public buildings and family housing with its complete product system. It also possesses internationally recognized high-end brands and proprietary intellectual property rights, as well as .... 54 major industrial bases. Its annual productivity of gypsum plasterboard exceeds 2 billion m2, ranking the first in the world.

The total productivity of fibreglass has surpassed one million tons. We have several production bases both at home and abroad, and the world's largest alkali-free tank furnace production line with annual capacity of 120,000 tons. We also possess proprietary intellectual property rights of such packaged technologies as alkali-free tank furnace, mediumalkali tank furnace, recycling of wasted silk of fibre glass, etc.

We have the 1,000-ton carbon fibre production line, which owns the largest scale and most advanced technology in China. We've reached the annual productivity of 10,000 tons of PAN silk and 5,000 tons of carbon fibre. We have China's first production line successfully producing high-quality T700 PAN silk and carbon fibre and T800S carbon fibre with good performance, with the productivity of T700 silk reaching 8,000 tons and that of T700 carbon fibre reaching 4,000 tons. We can produce ACCC conductor with a sectional area of 150 – 1,250 mm2, which can be applied in transmission lines of 35 – 1,000 KV.

Zhongfu Shenying Carbon Fibre Co., Ltd., Zhongfu Carbon Fibre Core



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Fibreglass

Carbon fibre





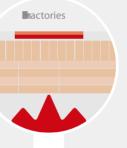
Rotor blades

. . .

testing center.

industry.

Representative company Ruitai Materials Technology Co., Ltd.

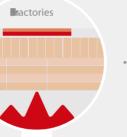




As the animateur and promoter of the environment-friendly and energy-conservation new housing industry of China, we integrate R&D, design, production and installation with system integration, and have several product systems, including steel, wood, PC, etc. As one of the first national demonstration bases of housing industrialization, we have many demonstration bases of new housing in Beijing, Sichuan, Jiangsu, Hainan, etc.

and dissemination of new-energy housing.







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We are a leading manufacturers of megawatt rotor blades in China, with a total capacity of 4,500 sets. Our products have 9 series and 58 types with categories varying from 1.25 MW to 6 MW, and length of blade varying from 31.5 meters to 75 meters. Our products cover all categories of products for land and marine use, and have been exported to dozens of countries and regions. We have blade production bases in Lianyungang, Shenyang, Jiuguan, Baotou, Hami, and Guizhou respectively, a R&D center in Germany, and a national blade

We establish a whole industrial chain of BIPV (Building Integrated PV) with a focus of thin-film solar products and technologies. We have several solar cell production bases at home and abroad. We have a 100-MW CIGS thin-film solar cell production base in Germany, and have developed several PV power stations in China, Great Britain, the United States, Thailand, and Japan respectively. We are committed to the integrated application of advanced energy materials and distributed energy and carrying out the R&D and application

Bengbu Design & Research Institute for Glass Industry, China Triumph International Engineering Co., Ltd., CNBM Jetion Solar Technology Co., Ltd.

••• Our products include refractories of fusion-cast zirconia alumina and fusion-cast aluminum oxide series, and unshaped, basic, alumina-silica and silica refractories. We have a world's largest professional production base of fusion-cast refractory, whose annual productivity is nearly 40,000 tons, and an automatic production line of unshaped refractory with annual capacity of 100,000 tons. Our comprehensive strength, product quality and service are all at a leading level in the

## Logistics and trading

With our experience of new Internet technology and e-commerce operation, we have rationally and effectively integrated such services as suppliers of bulk building materials, logistics and transportation, insurance and credits, inspection and guarantine, etc. We provide comprehensive solutions covering all links of international trade, and have realized the online one-stop management of export services. We've become a comprehensive building materials service provider for the international market, and been listed as a key export support enterprise and key commercial distribution enterprise by MOFCOM.

#### Representative companies

China National Building Materials & Equipment Import & Export Corporation, Beijing New Building Materials (Group) Co., Ltd., CNBM Investment Co., Ltd.

## **Verification service**

Backed by the Group's strong research and technical capabilities, the verification service business covers testing and verification services, including certification test, energy efficiency assessment, carbon assets checking, contract energy management, comprehensive utilization and evaluation of resources, production approval and evaluation of green building materials, energyconservation building materials, and supporting building materials products for constructions. We provide technical guarantee for the QC of building materials products, and the sound and sustained development of building materials market.

Representative company

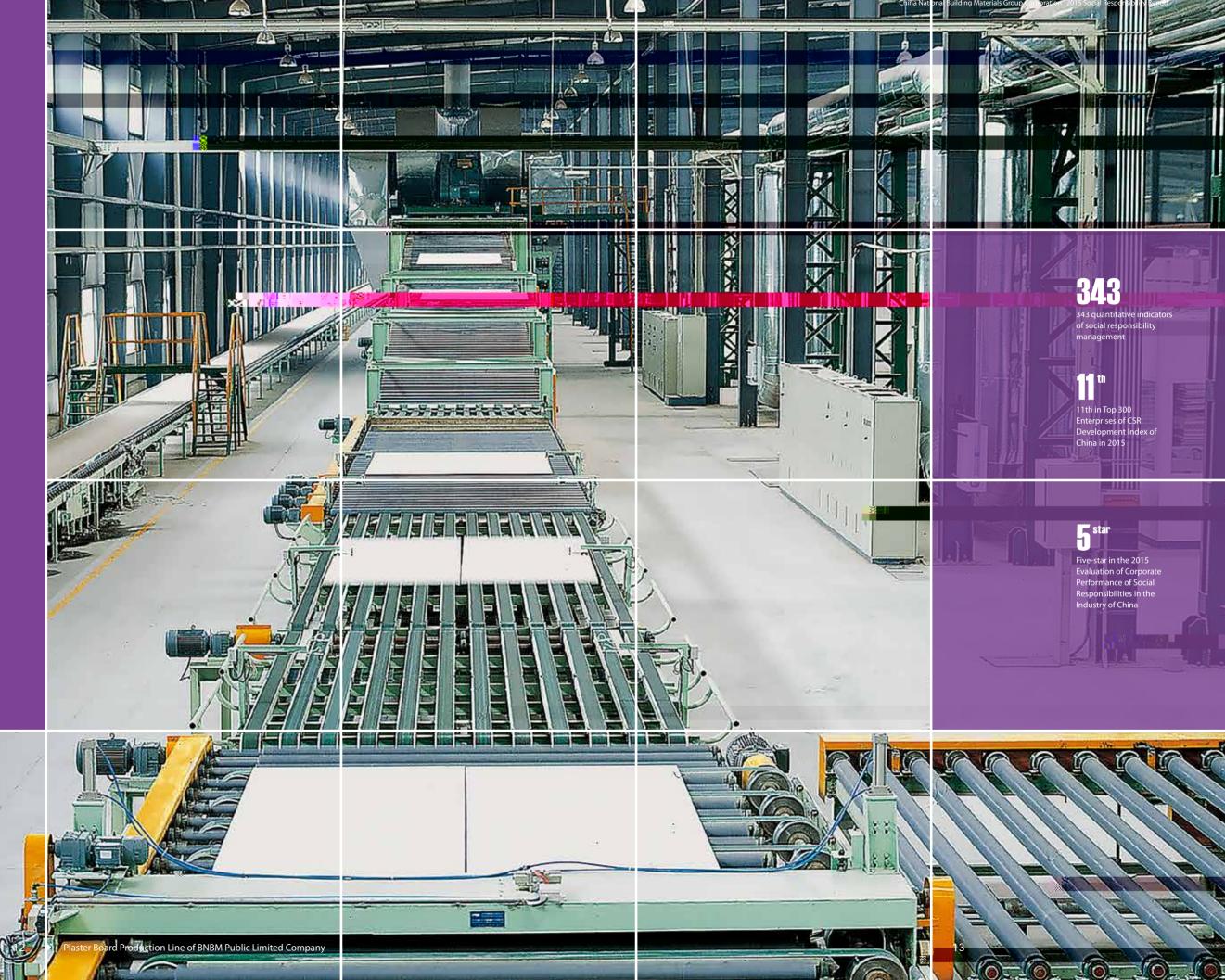
China Building Materials Test & Certification Group Co., I td

Beijing New Building Materials (Group) Co., Ltd., China New Building

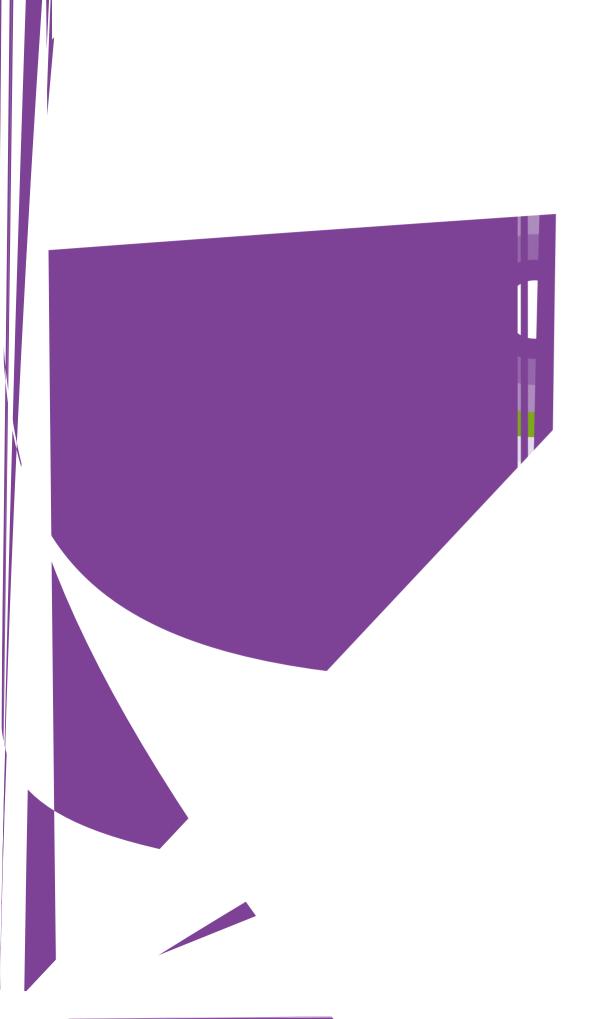


# Responsibility Management

We pay close attention to the expectations of stakeholders such as investors, government, employees, clients, partners, related groups, communities, media and the environment. We insist on the core philosophy of "efficient use of resource, serving the construction" and regard "innovation, performance, harmony and responsibility" as our core values. We insist on establishing a harmonious relationship with competitors, the nature, employees, and the society. We stress both technology and management innovation in our development, pursuing a coordinated and win-win situation with the market, the environment and the society, and constantly improving our capacity of holding responsibility.









# Market Performance

We reward our shareholders and investors with excellent operating results, serve our clients with quality products and services, growing together with our suppliers and industrial partners, and providing a platform for all the stakeholders to create values. Meanwhile, upholding the philosophy of "industry interest overweighs corporate interest", we are dedicated to promoting industry restructuring, transformation and upgrading, and seek to achieve mutual development and create win-win situation with the industry and peers of the same industrial chain.





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# Dealing with New Normal by Surmounting Difficulties

2015, just last year, was the most difficult year for cement industry during the past 25 years. In 2015, CNBM faced the most serious and complex situation and the most difficult tasks since the outbreak of financial crisis in 2008. The painful process caused by restructuring and difficulties in building up new driving forces were intertwined; low effective demands and a shortage of effective supply coexisted. We suffered intensified industrial overcapacity, weak market demands, sharp decline in prices, and severe cutthroat competition. And the

cement industry suffered a negative growth for the first time during the past 25 years, decreasing by 5.3% on a year-on-year basis, with a sharp decline in industrial economic benefits.

During the past year, we endeavored to overcome the difficulties of the decline in sales volume, price, and economic benefit, strengthen marketing, adhere to the concept of price-cost-profit and self-discipline conventions, and lead the industry to a development path with orderly competition,

Well-kr

Brand

Protection

Delicacv

Management

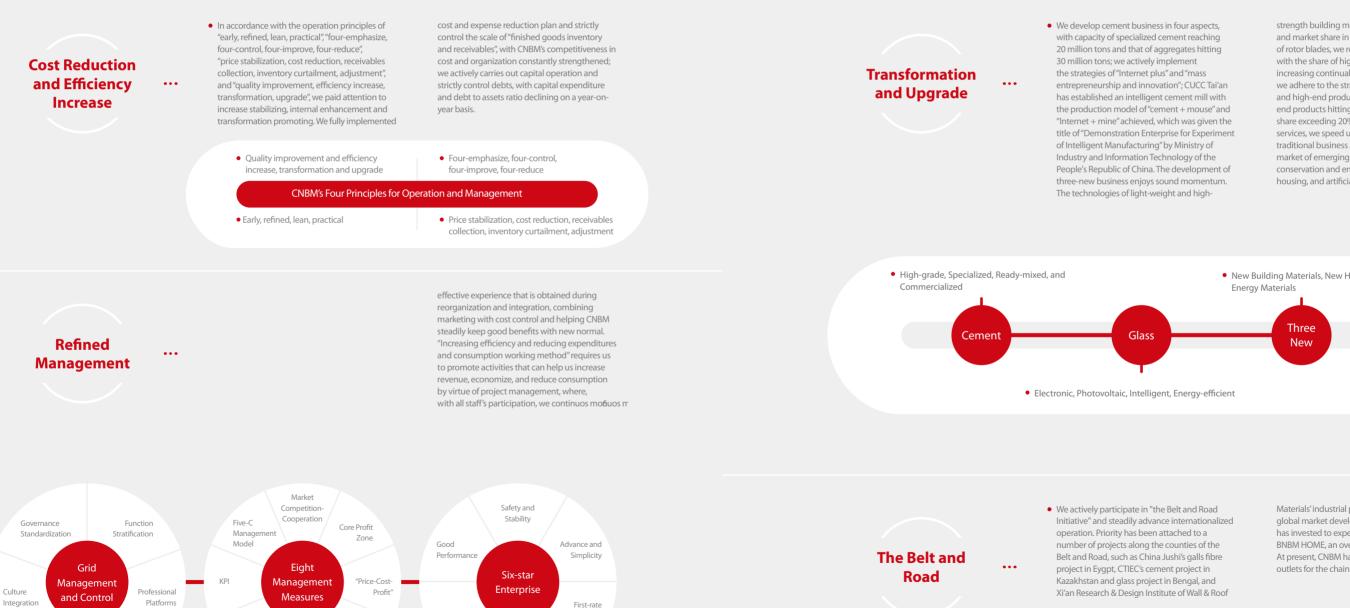
Benchmarking

Optimization

price stability, energy, and sound operation. Concerned companies actively carried out three-dimensional competition-cooperation by region, category, and structure; we made efforts in the field of supply by conducting peak-shifting production and closing down some kilns for production restriction so as to address the imbalance between supply and demand, stabilize prices, expand sales volumes, and maintain market shares. We actively promoted the concept of sound industrial development for the plateau of new normal, and endeavored to create a

positive atmosphere with industrial selfdiscipline.

The whole management and all the staff of CNBM worked hard together. In face of heavy operating pressure, the Group's cement business didn't offer good performance, but compared with the overall situation of the sector, other basic raw materials industries, and most of comparable companies, CNBM's cement business offered a better performance. Gratifyingly, three new business sectors, such as rotor blade,



Stock

Tutor

System

Delicacy

Management

glass fibre, and engineering services, offered excellent performance. In 2015, the cost of cements sector declined by 11%. The performance of major products of three new sectors met expectations and took over the lead: the sales volume of rotor blades increased sharply; the sales volume of glass fibre increased by 4% on a year-on-year basis, offering excellent performance in price and cost, with retained profits increasing by 107%; revenue and gross profit rate of engineering services increased on a year-onvear basis

strength building materials are fully popularized and market share in China hits 60%. In the field of rotor blades, we readjust the product mix, with the share of high-power blades in the sales increasing continually. In the field of glass fibre, we adhere to the strategy of internationalization and high-end products, with the share of highend products hitting 56% and its global market share exceeding 20%. In the field of engineering services, we speed up the transformation of traditional business and actively develop the market of emerging sectors, such as, energy conservation and environmental protection, new housing, and artificial intelligence.

New Building Materials, New Houses, New

Materials' industrial park project in Congo. With global market development accelerated, CNBM has invested to expedite the development of BNBM HOME, an overseas chain operation mode. At present, CNBM has established 13 overseas outlets for the chain.

# **Responsibility Operation** for New Development

- We insist on the working rule of lawful, compliant and honest operation. The Group has been awarded as AAA in credit rating for many years.
- We insist on fair competition without infringing competitor's or partner's rights by improper means or misconducts (fraud, bribery, malicious price cutting, etc.), and advocate building good partnerships based on free will and equality.



86,000 person-times of employee participated in legal publicity and education in 2015



In 2015, the rate of legal review of rules, regulations, management decisions and management contracts was 100%

<u>99</u>8 In 2015, the performance

rate of business contract was 99.8%

- In international operations, we firmly maintain national interests and our dignity, and actively respond to malicious anti-dumping events. With great attention paid to promote the concept of fair competition, staffs are organized to participate in fair competition training.
- We continue to improve our legal affairs mechanism. Major decisions and management contracts must be subject to a strict legal review procedure. Rules and regulations can be issued and put into practice only if approved by the legal affair department; we adhere to the integration of law popularizing activities with legal affair management and by means of law-popularizing activities in different form, we deeply publicize the concept of "legal system" and prevent risks in a systemic way.
- With much attention paid to anti-corruption, we integrate anti-corruption into reform, development and stabilization of the enterprise; we emphasize integrity in work and make efforts to create the culture of integrity; to give full play to its effects, efforts are made in efficiency supervision and inspection; we establish and perfect bodies for discipline inspection and supervision and further develop organizations and teams for discipline inspection and supervision, with work efficiency and quality of the Group continuously improved.

- CNBM establishes a standard corporation management system. As the strategic, resource and cultural center, the headquarters of the Group exercises the rights and functions of capital contributor. Business platforms focus on their expertise and principal businesses to build up profit centers. As operating entities, the enterprises at the primary level implement strict cost control while assuring quality. We align the pace of different enterprises with orderly management in the course of rapid development.
- Public companies build up efficient and streamlined shareholders communication model. Shareholders exercise their rights by holding shareholders meetings. They implement daily operation, supervision and management of the company through the board of directors and the board of supervisors. Decision-making by major shareholders or controlling shareholders and their control over board of directors and board of supervisors are regulated to give full play to the role of independent directors in protecting

interests of medium and small shareholders and an effective mechanism to maintain seats for and allow disinvestment by small shareholders is set

• Public companies truthfully, accurately, completely and compliantly disclose periodic financial data, significant matters and the matters required to be disclosed in accordance with Information Disclosure System issued by supervisory authority. In case that a company encounters an emergency possibly influencing its share prices, the secretary of the board of directors would organize study on handling, and timely disclose related information to investors in accordance with related procedure.

# Lawful .... Operation

Regular

Governance

The Night Scene of 20,000 tpd Cement Production Line of CUC

...

CUCC

Quality

Service

....

commercial values.

products.

Win-win ... Partnership

> • Under the concept of "industry interest new intra-industry ecosystem.

 We provide material supports and technical services for national key projects and urban infrastructures, and systemic building materials solutions for residents' daily life. Through our various products, sufficient production capacity, reliable quality assurance, globalized marketing system and convenient and friendly service system, we offer customers returns beyond

• Our member companies are instructed in the construction and certification of standard quality management systems, and implement guality management throughout the procedure from procurement of raw materials to delivery of products by QC group activities. We make public guality commitment and a customer evaluation & feedback mechanism is built. Customers are actively invited to get involved in product quality control, and we will compensate customers for their loss caused by the quality defect of our

 Service systems for pre-sales consultation. sales reception and after-sales service are well established. Complaints and inquiries from customers are responded to and handled without any delay. We own professional customer service teams and they regularly provide professional training for our agencies. Customer training meeting and product publicity meetings are held to deliver basic knowledge of green building materials, notes on selection and use of building materials, and knowledge of counterfeit identification to customers. With attention paid to protecting customer privacy, we execute a strict confidentiality system for customers' personal information.

• Keeping the responsibilities of leading enterprises in mind, we serve economic and social development, pay taxes, offer opportunities of employment, and support programs for public good, making contributions to national economy and harmonious development of the society.

overweighs and breeds corporate interest", we firmly curb illegal and blind capacity expansion, and practice expansion based on stock combination, technological transformation and upgrading based on increment input, and benefit creation based on management integration; we maintain balance between supply and demand in the market, execute industrial reconstruction, improve concentration ratio of the industry, and endeavor to create a

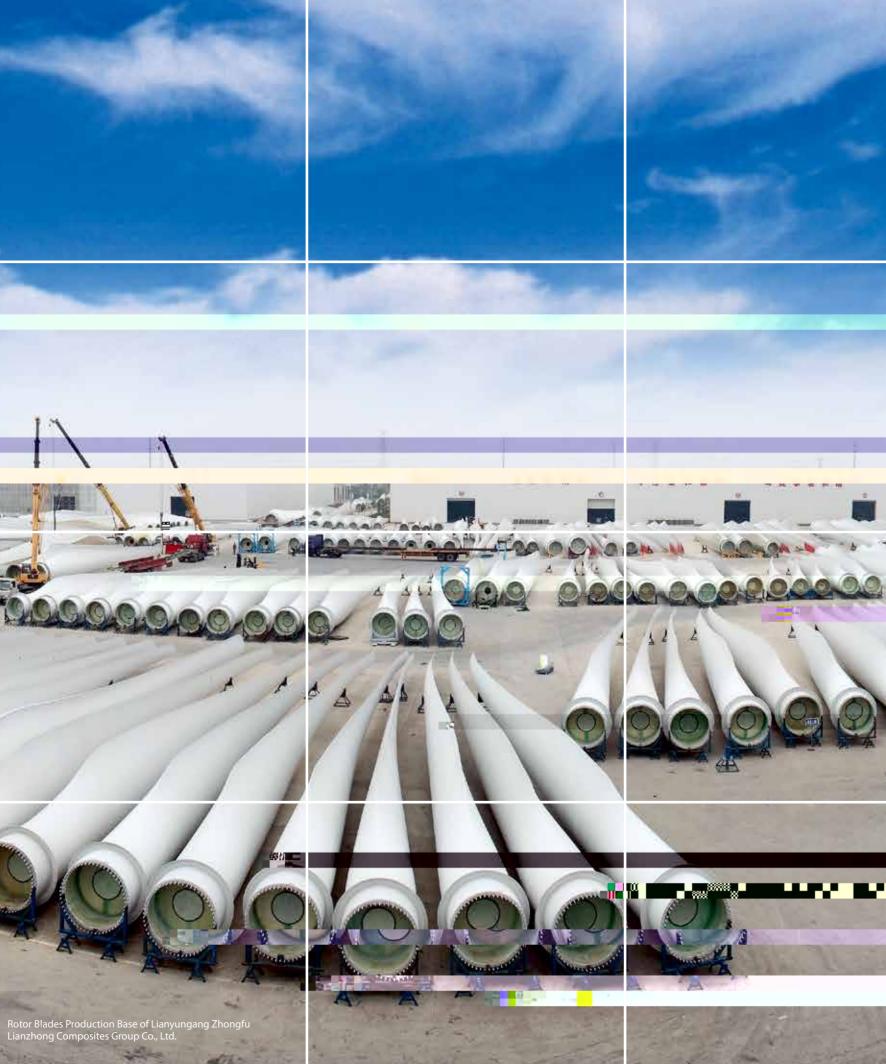
• We establish long-term strategic partnerships



# Energy Saving & Environmental Protection

We comprehensively utilize industrial and urban waste resource and manufacture low carbon products with minimal consumption and emissions; we are committed to providing the society with green and environment-friendly building materials with reliable quality and providing product and service support for new energy industry; we are delighted to share effective energy saving technologies and management experience, explore development mode for the industry and the nature to co-exist in harmony, and advocate sustainable development of the whole industry and society.





# 1.71 billion

In 2015, investment for energy saving and environmental protection reached RMB 1.71 billion



In 2015, installed capacity of cogeneration reached 1,732 MW

# **100** million

In 2015, treated and reused solid waste reached about 100 million tons

2

# Green Operation

# Compliance to Laws and **Regulations**

....

• We strictly abide by industrial access system, and resolutely close down outdated production facilities. We strictly implement the national quota on energy consumption, continuously improve the efficiency of energy utilization, and keep the energy consumption of main products at an advanced level. We strictly abide by standards on pollutant emission, improve

that the emission reaches the standards. • Mining is carried out according to the Green Mine Convention. We timely carry out ecological restoration while developing limestone mines. We respect the Convention on Biological Diversity; carry out strict arguments on the site selections and layouts of factories; protect natural habitats, wetland, forests, corridors

for wildlife and agricultural land during the construction of the projects; and

monitoring and emission reduction

systems, and ensure clean production and

reduce the adverse effect on surrounding environment and communities to the minimum

• We strictly perform the approval procedures of project environmental assessment, implement the "three meanwhile" requirement of energy saving and environmental protection for fixedasset investment projects, and earnestly organize and carry out the feasibility evaluation and environmental impact evaluation for new reconstruction or expansion projects. We establish the environmental risk warning mechanism, prepare contingency plans, and prevent and reduce potential environmental hazards

Systematic ... Management





employees attended training in regard of energy saving and environmental protection in 2015



13 on-site conferences were replaced by video conferences in 2015

motor system, expert control improve efficiency and safety

Low-grade energy and renewable energy are made full use of. Flammable wastes like gangue, sludge and urban refuse are comprehensively used on production line to replace fossil fuels (coal, etc.).

With attention paid to water resource protection, water recycling is realized in both waste gas systems and cooling systems. Auxiliary process water (washing water, etc.) is also effectively recycled through sedimentation and sewage treatment system. Industrial wastewater is drained up to standard.

Waste residues from production, reclaimed packing materials and nonconformity products are re-treated, and recycled as

Clean energy is selected to

reduce the formation and

emission of pollutants (SO<sub>2</sub>

,etc.) in waste gas.

raw material after passing inspections. This realizes recycling of self-produced solid waste.

Natural gas is selected as the fuel for transportation to reduce environmental pollution of tail gas.

In-depth integration of industrialization and informatization is deeply promoted, intelligent factory construction is greatly promoted to achieve unmanned, intelligent and distant production control and energy-saving and efficient operation.

# Green Synergy

# Going with Industry ···· Chain

 We implement green procurement. In the procurement of raw materials, we give priority to products which are lowcarbon and environmentally-friendly in the production and have a lower degree of damage to the environment; when selecting energies, we choose clean energy, and vigorously promote the use of such non-fossil energies as low-grade energy, municipal refuse, biomass energy, etc.; when choosing daily office supplies and other consumer goods, we prefer products with simple packages and convenient for recycling.

 Provide green building materials products. We research and develop new building materials, which is carried out in accordance with four core concepts, namely energy saving, safety, comfort, and ecology. We improve the quality of products, extend the service life of products, and reduce repetitive production. We develop and use industrial waste resources as raw materials to produce building materials to reduce the consumption of natural mineral resources, and achieve maximized recycle and effective disposal after service life. The new housing products not only integrate high-performance green building materials, but also joint seamlessly with new energy technologies and intelligent control technologies, thus turning into zeroemission, energy plus, future-core dream homes.



It has always been the dream of China National Building Materials Group Corporation to develop green building materials and build green constructions. In the nearly 40 years of exploration and practice, the Group has chosen new-type houses as supporting points to start a way for building green dream houses.

New-type houses refer to the kind of green building and manufacturing mode that is high-efficiency, high-quality, resource-saving (energy saving, water saving, materials saving and land saving) and lesspolluting with new-type environment-friendly building materials as well as with standardization, normalization and refinement as productive criterion, modular coordination and information technology equipment system intelligentization as basis, large-scale manufacturing of house components as industrialization means and onsite mechanized assembly construction as mode of operation. Compared with the conventional brick-structure houses, new-type houses have such physical performance advantages as safe structure (anti-seismic and wind-proof), heat insulation and recyclability, so the residence comfort has been greatly improved.

In recent years, China National Building Materials Group Corporation has developed Energy Plus 5.0 House on the basis of "zero energy" houses. Green, environment-friendly and recyclable newtype building materials have been adopted in Energy Plus 5.0 House instead of high energy consumption materials. Such houses have combined effective utility of energy with the

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concept of network and intelligentization in an effort to seek for high-end and humanity design. Not only can self-sufficient energy resources be achieved, but the energy can also be exported by effectively integrating 1.0 terrestrial heat, 2.0 photothermal, 3.0 photoelectricity, 4.0 domestic wind power and 5.0 marsh gas and other clean energy. In the meantime, such systems as smart home, central ventilation system, sewage treatment and rainwater collection can also be fully integrated to build "green ecological intelligence" houses. Selfsufficient energy and intelligence demand plan can be customized in accordance with the clients" requirements so as to make the dream of making every family to become an energy plant come true.

Cooperate with ··· Stakeholders4

 We establish the information open mechanism. We disclose annual energy saving and environmental protection performance via annual CSR reports, and accept the supervision of stakeholders. During the feasibility study, construction, reconstruction and acceptance of project, we take advice from residents nearby and stakeholders in the region, and reduce the adverse impact of operation activities of enterprises on the environment and society to the minimum.

 Keeping the responsibilities of enterprises in mind, we endeavour to become a practitioner, fugleman, and advocator in coping with climate change. We actively undertake national energy saving and emission reduction missions, have initiated and signed conventions and written proposals, and advocate responses to

28

climate change, environmental protection, dust-haze treatment, and low-carbon development. We also advocate and implement peak-shifting production, relieve the problems of overcapacity, and explore the sustainable development.

 We are active in environmental protection welfare and publicity activities, doing our best to promote environmental protection concepts; we donate money and supplies to support the construction of environmental protection facilities.
 We develop ecological forests with local community entities to jointly cope with climate change; we actively promote the knowledge of energy conservation, lowcarbon life and green consumption.



In 2015, we organized or participated in 752 publicity events on environmental protection

# 1 assigned operation utility of CDM



12 technical service agencies of energy-saving and environmental protection



1 training base of building materials industry of national carbon market competency construction





# Employee **Care**

We make every effort to safeguard the rights of our employees, respect their differences and make the company a reliable partner, and a happy and comfortable home for the employees. We try to build a sustainable and better future together with all our employees and deliver our happiness to the society.





# Safety

We have established a domestically top-ranking management system for safe production with safe production accountability system as the core, the standardization of safe production and the post safety technical regulations as the emphases, troubleshooting and treatment of accident potentials as the methods, the informatization of safety management as the tool, and the development of safety culture as the guarantee, to ensure the safe production and occupational health of staffs.

## Safetv .... **System**

• We set up the organizational system for safe production with the principles of comprehensive coverage and practicality. The managers in charge would be the primary persons responsible for safety in the workplace and take charge of safe production matters. All key production safety enterprises within the Group employ full-time production safety management personnel. We establish smooth channels for feedback, and encourage all staffs to participate in safety management.

• We attach great importance to building up a safety management team. We have continuously fostered the sense of responsibility and awareness of safety procedures in the workplace and improved the professional quality of safety management personnel. We strictly follow CNBM Safety Training Rules, ensuring the popularization of safety knowledge, the execution of safety procedures, the

implementation of contingency plans, the knowledge of occupational hazards, and the self-protection abilities through training and assessment.

• We give importance to investment in safety in order to provide financial support for improving and maintaining the safety equipment and facilities, implementing technical innovations for the purpose of essential safety, organizing training in safety procedures, spreading safety culture, etc.

124,000 person-times of employee received training in occupational health and safety in 2015

About RMB 570 million was invested in occupational health

and safety in 2015

# Security ... Mechanism

management system covering penalty for safety violations, etc. We have also introduced special regulations and work guidelines for managing occupational health, major hazard sources, overseas projects and non-coal mines, etc.

• We have established safety production

- We implement the standard safety management, and actively push member companies to implement occupational health system certification. As a national pilot enterprise in standard safe production, we actively promote the work of reaching standards of standard safety of cement enterprises, improve the safety management system, increase the safety management level, and boost the safety management performance.
- Intensify the check of hidden dangers. We take the development of "capacity to reject and prevent hidden hazards" as an important part of the effort to improve the basic management level of enterprise safety, and promote the closed-loop control, composed of "basic capacity buildingassessment and control of latent dangers of accident---work and performance reward assessment---the ability to enhance the safe operation", to achieve the PDCA's continuous improvement. We explore and establish a six-in-one screening and governing system of accident potential, the six respectively being "focusing on the job responsibilities fulfillment, using listed investigation standards as a tool, taking the close-loop self-examination and self-reporting of hidden hazards as the means, basing on team construction and all-staff participation,

taking reward and punishment system as the safeguard, and being supported by information-based management tools".

- Informatization technology is applied for the purpose of safe production management. The safety management information system independently developed by CNBM has also been included as one of the "Integration of Informationization and Industrialization" key projects by the Ministry of Industry and Information Technology. Online management has covered all key procedures and links of safe production management, including qualification management for safe production, basic files of safe production, eradication of hidden dangers, danger source management, safety checks, and safety training.
- We continue to improve the emergency management system. In the system that covers all layers of the Group, the Group's emergency management team takes the general charge, while the emergency management teams of the member companies would be responsible for specific measures. A comprehensive emergency response plan is established, supplemented by special emergency response plans and on-site response schemes. We organize member companies to check the reserves of emergency supplies regularly, take emergency response drills, and give on-site instruction on emergency response work.
- We actively organize safety promotion activities like "Safe Production Month" and "Safe Production Year", prepare and issue safety culture manuals, and incorporate the

# **30.8**<sup>%</sup>

Recordable injury rate per 1,000 employees was decr 30.8% on a year-on-year basis in 2015

In 2015, the completion rate of physical examination of employees reached 97.1%

# Occupational ··· Health

supporting facilities for dust prevention, gas defense, noise reduction and emergency alerts as well as first-aid equipment in the production place, based on our in-depth study and analysis on the features of building materials production. For the purpose of labor protection, we offer labor protection articles, which are put in place and replaced in a timely manner to ensure their efficacy.

• We have installed and optimized

• It's an established practice to organize employees to take health examinations, arrange extra heath checks for staffs in jobs with exposure to dust or radiation, establish Personal Health Record and keep reexamination

• We gradually incorporate mental health into the occupational health management. We encourage member companies to set up mental health consultancies or cooperate with mental health institutions to build health record archives and pay attention to the mental health of our employees.

## Improving attentively and restarting

In 2015, production safety accidents happened in two member companies of China National Building Materials Group Corporation. After the accident, the Group rescued the employees and comforted their families immediately; reported the accident conditions in a serious manner, investigated and analyzed the accident causes thoroughly and seriously punished the responsible persons. The Group has also requested that all the member companies including those where accidents happened investigate and implement enterprise entity responsibilities seriously, further establish and improve regulations of safe production in accordance with such legal provisions as Law on Safety in Production and Safety Production Management Regulations, strengthen the on-site

safety management and eliminate hidden troubles of production safety from the source. Supervision and accountability on commanding against rules, illegal operations and violation of labor discipline should also be enhanced. The Group should make every effort to investigate hidden troubles of production safety and urge those with potential safety hazards to rectify and reform immediately to ensure safe production, strengthen employee safety training and ensure the blind-angle-free training, enhance the examination, supervision and training of outsourcing labor employment, treat the production safety accidents with sincere and positive attitudes, take this as a lesson, make attentive improvements and restart, ensure life health of the employees and safe production of the Group.



idea of "people first and life foremost" into the corporate culture.

• We attach great importance to safety and occupational health management of suppliers and subcontractors, include terms on safety and occupational health into service contracts, and cooperate with companies in the supply chain to carry out routine safety checks, training, emergency response drills, and culture transmission.



63,000 person-times of employees participated in emergency response drills in 2015



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# Equality ...

- We respect and support the international covenants on human rights and labor standards, strictly forbid forced labor and discrimination, guarantee a decent working environment for employees, and strictly prohibit and reject employing child laborers in any form.
- We adhere to equal employment, respect and equally treat employees of different nationalities, ethnics, genders, ages, religions and cultural backgrounds. Employees are recruited and employed in an open, fair and impartial manner.

3.52

employees reached 3.521

- In line with the principle of equal pay for equal work, we equally treat part-time employees, day laborers, and the workers of our subcontractors. Their legitimate rights and interests are well protected.
- We respect the privacy of employees, and have established a privacy management system covering such management links as recruitment, assessment, health records, etc.

# In 2015, the number of female

employees reached 41.000

• We spare no efforts in the construction

of learning groups. We aim to build a

In 2015, the number of minority

In 2015, the number of disabled employees reached 1,449

Legal

Compliance

•••

• In strict compliance with "Labor Contract Law of the People's Republic of China" and relevant laws and regulations, we sign labor contracts with our employees and standardize the labor contract management.

 We pay basic pension insurance, basic medical insurance, unemployment insurance, work injury insurance, maternity insurance and other social insurances for our employees in accordance with laws, and establish schemes of supplementary medical insurance, corporate pension, and

### Democracy ····

- We keep widening our trade union network, set up and improve the trade union organizations and work organizations at all levels; develop members of these organizations, and make trade unions more attractive and cohesive.
- We support employees to express their rational appeals and safeguard their own rights in such aspects as laboring, labor remuneration, work time, rest and vacation, work safety and health, social insurance and welfare, special protection for female employees, etc, through collective bargaining, signing collective contracts and other forms.

**Happiness** 

multi-channel, multi-form, multi-level and differentiated employee cultivating and training platform. Following the training approach of "based on internal training and supplemented by external training", we share the education resources to build a comprehensive training system for the Group. We support the autonomous training of employees and encourage them in active learning. We also support and guarantee the re-education, re-training and

re-learning of employees from the aspects of working hours, training investment and reward mechanism.

• We attach great importance to the quality training of employees. Apart from encouraging vocational education and training, we create unique model for quality promotion of enterprise talents and establish unique corporate culture system to improve employees' executive ability, professional quality and cultural identity.

# 53.0

Proportion of member companies with an average salary higher than that of the local level was 53% in 2015



In 2015, our employees attended training for 1.33 million hours

### **Model for employee** quality of China National **Building Materials Group** Corporation

• San Kuan: Leniency, tolerance and ease

• San Li: Unity, affinity and cohesion

Cultural environment

San Kuan San Li

Humility, reverence, gratitude and decency

## Sense of ... Achievement

Sense of ...

Identity

two career paths for employees' promotion, leading to management positions and technical positions respectively. through which we manage to meet the development needs of different kinds of talents by allowing the talents from different fields and with different specialties to give full play to their expertise.

• We establish a scientific remuneration

system and incentive mechanism and set

a competitive salary standard. We also set

• We implement the mechanism of intragroup communication and on-position learning for employees, thus effectively allocating the human resources within the Group and providing a broad platform for the employees to develop their careers.

• We encourage enterprises to carry out corporate pension plans and diversity of equities according to the actual situation. We spare no effort to motivate the employees and retain the talents, and meanwhile, improve their sense of achievement by allowing the employees to feel the development and growth of our enterprise together.

### Four Elaborates

• Be elaborate in conducting oneself, handling affairs, exercising authority and making friends

Cadres Norms

Three Stricts and Three Steadies, Wu You Ba Jiang

Vocational demand

- Three Stricts: Be strict in cultivating one's moral character, preventing abuse of power and disciplining oneself
- Three Steadies: Be steady in planning matters, starting undertakings and conducting oneself
- · Wu You: having learning ability, market awareness, professional attitude, professional level and ideological level
- Ba Jiang: sticking to politics, overall situation, undertakings, dedication, solid work, actual effect, honesty and self-discipline

# Sense of ... **Belonging**

### • We care for the health and life of female employees, and treat them equally with male counterparts in salary, management position, professional training and vocational development opportunities. We buy maternity insurance for them. and provide antenatal examination leave, maternity leave, breastfeeding leave, and birth allowance to female employees. We are concerned about the life and mental needs of young employees. We bring young people together through the communist youth league, providing them a platform to demonstrate their talents and exchange ideas. We care for the work and life of expatriates, especially those who station abroad or in the communities of minority ethnic groups for long, hold special after-work activities and provide mental health counseling so as to relieve their pressure. We also improve the home leave system to remove their worries from behind and promote happiness. We respect disabled employees, and provide them with a convenient working environment and necessary amenities.

• We improve the system of employee support and relief, and help employees to overcome difficulties through "the Mutual Fund for Combating Serious Illness", "the

Code of conduct

periodical physical examination system. We also encourage our member companies to purchase accident comprehensive insurance and other supplementary insurances for employees in line with their actual conditions.

• We adopt a paid leave system according to such related regulations as Regulations on Paid Leaves of Employees, and pay remuneration for overtime work.



In 2015, the ratio of average salary of male employees to that of female employees was 3.4:1



In 2015, the total amount of remuneration for overtime worl was about RMB 0.19 billion

• We implement the Workers' Congress system, implement regulations on disclosure of factory affairs, and ensure employees' rights regarding participation, information and supervision. We share the corporate operation information with the employees through channels such as the disclosure board of factory affairs, employees discussion meetings, manager's mailbox and the company's website.

/ 7 In 2015, our coverage rate of collective bargaining and

contracts was approximately



29.1%

94.9% of the proposals of the Workers' Congress were handled and settled in 2015

Golden-autumn Grant-in Aid" and "the Sunshine Employment Program", etc. We do practical things, solve tricky problems and do good deeds for employees in difficulty, and make such actions regular, institutionalized and standardized. We stick to the custom of visiting needy groups in winter and two major festivals, mainly including childless and widowed elderly people, families of martyrs and poor retired employees.

• We encourage member companies to strengthen the construction of gymnasiums, recreation rooms, libraries and psychological counseling rooms. We also organize colorful cultural and art activities, sport competitions, visits and educational tours, and special educational activities, offering a broad stage for the staffs to show their gifts and improve their capabilities of beautifying themselves, operating their families and returning the society. Through continuously improving employees' physical qualities, cultural literacy and life qualities, we strive to make the company a happy and comfortable home for staffs.

RMB 7.09 million was spent to help and reward special groups of employees in 2015



7,777 person-times of special aroups of employees received help and rewards in 2015



In 2015, we organized 178,000 person-times of employees to participate in various cultural and sports events



# Corporate **Citizen**

During production and operation, we seek to achieve mutual development with the region where we operate. Our accomplishment cannot be achieved without the support of the stakeholders and people from all walks of life; we reward the society through unique social welfare projects. Our employees are delighted to make contributions and dedicated to volunteer activities, exercising their responsibilities as corporate citizens with their actions.





In 2015, the amount of taxes paid to local governments was RMB 9.91 billion





In 2015, the headquarters of the Group took posts in 52 organizations like associations and so on

18.03 million

In 2015, the amount of donation hit RMB 18.03 million

# **All-win Harmony**

We have established the overseas operation system with characteristics of CNBM and integrated the concept of responsibility and sharing into the business activities. Particularly in the practice of overseas business, CNBM has abided by local laws, respected the local culture, made good use of local resources and served for regional construction, safeguarded the rights and interests of shareholders and the safety of employees through effective risk management and control system, spread the

concept of responsibility through sunshine procurement and sharing cooperation, considered environmental protection and the quality of life in a comprehensive manner based on the regional civil interests. The responsible and sustainable business philosophy makes us highly recognized and fully accredited in local areas as we engage in "going out". When practicing "the Belt and Road Initiative" in the future, we should strengthen the cooperation in such technical

fields as the Internet, informatization and intelligentization, improve the industrial chain integrated with investment, construction, operation and follow-up services based on set of equipment and technical services and practice social responsibilities in overseas operation.

## **CNBM Overseas** Responsibility **Operation System**

• We strictly carry out the impact assessment of new projects, reconstruction ones and expansion ones fully solicit the views of interested parties on the economic and environmental benefits, and minimize the negative impact of business operations on the environment and society; we actively participate in local public welfare and community activities to create a favorable image.

We insist on public bidding and lawful procurement: we evaluate the busines capacity, credit status, and management of our sub-contractors and cooperate with that have good performance in social contracts, we explicitly stipulate the protection of lawful rights and safety and health of employees of subcontractors, and the management regulations on sub contractors shall be strictly executed.



risk, labor service

risk, and industrial

risk, as well as an

early warning system

with risk analysis and

emergency mechanism

to guarantee safety of

staff and assets.

management of overseas enterprises and projects, All-round risk management system covering risk factors the overseas companies face is established, including political risk, country risk, financial risk, lega risk, risk concerned

support for energy saving construction products; we construct large logistics parks and selling networks providing systematic trading service to distribution of regional resources.

ideas and provide

We make good use resources, combine them with enterprise technologies and management advantages to create a value chain with a competitive edge, provide value-added space for the raw material suppliers and product vendors in the local economy, and create tax revenue

We advocate localized operating management for providing employment opportunities to local areas, training local employees and popularizing advanced management philosophy, with a view to improve the quality



**56.1**<sup>%</sup>

plovees reached 56.1

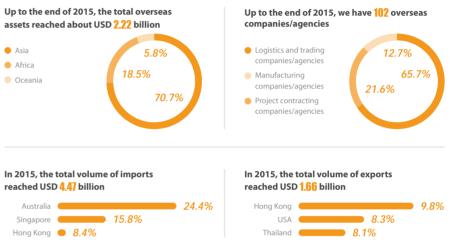
**54.0**<sup>%</sup>

procurement was 90.59

In 2015, 12 new projects along

of new signed projects along

19



Australia		
Singapore		)
Hong Kong	• 8.4%	

## "Green town" overseas

no one knows how to build them." 58-year-old Spanish entrepreneur Caesar Mattinal said in not come true until he cooperated with CNBM lately.

The Copiap new housing project in Chile constructed by CNBM in cooperation with Barcelona Housing System Company is the first residential building of light steel structure and "new-type house + new energy" mode in Chile with such features as "anti-seismic, environmentfriendly, energy conservation and comfort" which is particularly suitable for countries with many seismic zones as Chile. CNBM has promoted the products of "green town" all over the world and been committed to providing the global citizens with Energy Plus 5.0 House to make them enjoy energy-saving, environment-friendly, comfortable and safe houses and at the same time, to realize the good wish of sustainable development

China National Building Materials Group Corporation 2015 Social Responsibility Repor

"Everyone is talking about green buildings, but an interview. Mattinal's grandfather established the family construction company in Barcelona in 1916. About 10 years ago, Mattinal started to try to combine green solutions with the planning of economically affordable housing. His dream has together. CNBM has been working with Barcelona Housing System Company to build 8,000 green houses in the UK.

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# Sunshine Welfare

We firmly believe that a responsible social welfare system is the basis for promoting social justice and for central enterprises to fulfill social responsibility, and more importantly, it is an important measure to protect the interests of investors and the safety of state-owned assets. In the principle of being accountable for beneficiaries and shareholders, we carefully assess invitations for social welfare support prior to implementing any donation and cautiously

select projects to support in order to guarantee the public rights and interests by evaluating importance of projects, reliability of executing units of projects, and public benefits of projects as well as our annual business performance; we reject apportioned, duplicated, ineffective, poorly run public welfare projects as well as ones that are beyond the enterprise's capacity to ensure public interests. We respond to national calls to seriously promote poverty reduction work

in specific areas, give special attention to the development of environmental protection and education; at the same time relying on the support from Communist Youth League organizations, we continue to promote volunteer activities, and have achieved positive results.

### Donation ... **Standardization**

• We establish emergency response mechanisms, to provide first-time disaster relief, civil defense and other public safety matters

- We provide support for disaster affected areas, poverty-stricken areas, science, education, culture, and hygiene causes, welfare projects, and environmental protection causes in kind and capital, so as to support the development of society.
- We standardize donation management regulatory. We establish and improve the donation organization and management system, and strictly implement the annual budget and procedure for examination and approval of process; we have established a mechanism for periodically analyzing and reporting the donation project progress, evaluating effects and conducting return visits when the project ends, and reject apportioned, duplicated, ineffective, poorly run public welfare projects as well as ones that are beyond the enterprise's capacity. so as to focus on the donation's effect and quarantee the interests of investors.

In 2015, the total amount of input in environmental protection and public velfare reached RMB 672 000



reached RMB 18.03 million



In 2015, the number of foreign donation projects was 332

# Innovative Poverty ... Alleviation

## Voluntary **Activities**

 We advocate a harmonious social atmosphere, and encourage our employees to provide voluntary services and participate in social welfare activities. We provide guarantee and support for voluntary activities in such aspects as organizational structure, work mechanism, scheduling, financial support, communication and liaison, etc. Under

### Fires are ruthless while people are not, and enterprises are all in the family

China United Cement Dongping Co., Ltd started the fire emergency plan immediately. Hundreds volunteers gathered quickly and rushed to the site. Volunteers helped the panic-stricken villagers themselves to the fire fighting by drawing water to put out the fire and setting isolation belts to control





• We always focus on poverty reduction to fulfill our social responsibilities as a enterprise Since 2002 CNBM has established site-specific poverty-reduction relationships with Shitai County of Anhui Province, Jingvuan County of Ningxia and Zhaoyang District of Zhaotong City, Yunnan Province. By donating poverty alleviation funds, we help local areas to withstand natural disasters, improve educational environment, solve housing difficult, repair roads and build electricity and water conservancy facilities. Meanwhile, in order to help poor areas to rid themselves of poverty completely, the Group actively transforms poverty reduction thinking

and creates new modes to reduce

the volunteer service system with the Communist Youth League at the core, companies at different levels establish several volunteer activity groups, carry out varied volunteer activities, which demonstrate participants' enthusiasm and spread happiness.



In 2015, the input in voluntary activities reached about RMB 1.91 million



15,000 hours of volunteer services were provided by our employees in 2015

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family" have expressed villagers' simple but sincer

# Technological Innovation

We shoulder the responsibility of innovation for the industry by leveraging our strong research capabilities. We also promote the transformation and upgrading to the industry withong o the indust013sWradM82267 09, vis industradoncore



- DELLARS



## **Establishing platforms**

# Resources and Input

gather scientific research talents, guarantee input in scientific researches, and build a leading company of scientific researches in the industry. We implement the innovation mode which combines independent innovation, joint innovation and integrated innovation; promote technological breakthroughs, the transformation of

We integrate scientific research resources,

achievements, and information sharing; strive to build the largest comprehensive scientific research platform with the strongest power in the building materials and inorganic nonmetallic materials fields of China, and provide service and guarantee for the nationwide innovation.

### • We establish an integrated scientific research innovation center that comprises national research and design institutes. state's and industry's key laboratories, national research centers, technology development and promotion centers. scientific and technological cooperation demonstration bases, and public service demonstration platforms. We intend to build China's largest integrated scientific research platform with the greatest

strength in the field of building materials

and inorganic nonmetal materials.

talents.

Workstation of China Building Materials

Zhongguancun Haidiar Science Park

Workstation of Harbin FRP Institute

**10 Post-doctoral** 

Luoyang Float Glass Group Co., Ltd.

Post-doctoral Scientific

Workstation of Triumph Heavy Industry Co., Ltd.

Workstation of Xianyang Research & Design Institute

Products Quality Control and Technical Assessment

Scientific

Workstation

# Scientific Research and Service Platforms of CNBM

- Academy (Beijing Headquarters) • Hefei Cement Research &
- Research Institute for Glass Industry
- Institute

• Na

Nati

Key

3643 7

- Institute
- 13 National Scientific Research
- and Design Institutes

- Materials
- Xianyang Research & Design Institute of

- Light Industrial Xi'an Mechanic Design and Research Institute
- for Automation of Light Industry

	<b>5.06</b> billion RMB 5.06 billion was spent in scientific and technological activities in 2015	<b>122,000</b> In 2015, the number of personnel engaged in scientific and technological activities in the Group was nearly 12,000	<b>5.6%</b> In 2015, the percentage that the science and technology personnel of the Group accounted for the total number of employees was 6.8%		
tional Key Laboratory	<ul> <li>Quartz Glass Key Laboratory of Building Materials Industry</li> <li>Cement-based Materials Science Key Laboratory</li> </ul>	<ul> <li>National Glass Deep Processing Engineering Technology Research Center</li> <li>National Resin Matrix Composites Engineering</li> </ul>	Mobile Post-doctoral     Scientific Workstation of	Academician Workstation     of China Building	<ul> <li>Industrial (Building Materials) Products Quality Control and Technical Assessment Laboratory</li> <li>Industrial (Glass) Products Quality Control and</li> </ul>
Green Building terials cional poratories	of Building Materials Industry 3 Industrial Key Laboratories	Technology Research Center 3 National Research Centers	China Building Materials Academy 1 Mobile Post-doctoral Scientific Workstation	Materials Academy 2 Academician Workstation	Technical Assessment Laboratory 7 Products Assessment Laboratories
tional Key Laboratory New Technologies of at Glass	High-performance Ceramics and Refined Processes Key Laboratory of Building Materials Industry	<ul> <li>National and Local United Engineering Research Center for Glass Industry Energy-saving Technology</li> </ul>	۵	Academician Workstation of Bengbu Design & Research Institute for Glass Industry	Industrial (Building and Sanitary Ceramics and Products) Products Quality Control and Technical Assessment Laboratory
	17.9%—A new record of	suitable for B applications. and no harm process, it has environment	uilding Integrated Photovoltaic (BIPV) With low consumption of resources ful substances during manufacturing s obvious energy saving and al advantages when integrated into des and roofs.		<ul> <li>Industrial (Decorative Building Materials) Products Quality Control and Technical Assessment Laboratory</li> <li>Industrial (Building Materials for Roof, Wall and Road Surface) Products Quality Control and Technical Assessment</li> </ul>
	As a core enterprise of thin-film sola	Avancis R & D 300mm×300 renewed the rate, reaching the photoele enhance the	center in Munich has developed a mm CIGS thin-film solar cell, which record of photoelectric conversion 17.9%. Avancis continued to improve ctric conversion rate, which will greatly competitive advantage of thin-film		Laboratory <ul> <li>Industrial (Light Industrial Machinery) Products Quality Control and Technical Assessment Laboratory</li> <li>Industrial (Horologe)</li> </ul>

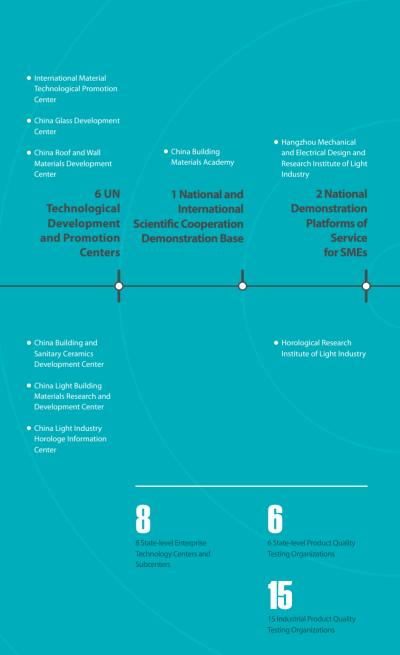
innovation and manufacturing of China National Building Materials Group Corporation (CNBM), the German company Avancis has outstanding technical advantages in Copper Indium Gallium Selenide (CIGS) and cadmium telluride (CdTe) thinfilm solar power. Technical system of Avancis is very solar cells in the photovoltaic sector, improve solarenergy development and utilization potential of confined space and provide better product solutions for new green energy industry.

## **Attracting talents**

• We build a strong contingent of scientific researchers by attracting and cultivating scientists and engineers. We set up the academician workstation, post-doctoral research stations and workstations, and implement the "Thousand-talent Program" in order to keep smooth the channels for introducing and exchanging highcaliber talents from overseas and domestic universities and institutes. We make innovations in incentive mechanisms and improve property protection to retain

## **Ensuring input**

• We lay emphasis on science and technology investment. We increase financial support for hardware construction and scientific research rewards, etc. Except for ensuring the needs for researches of the basic theories and cutting-edge technologies of material science, we also particularly boost our investment in the R&D of low-carbon environmental protection technologies and products.



45

# Mechanisms and Guarantees

# 5.663

In 2015, we held 5,663 patents in total

23

In 2015, we gained 123 scientific and technological awards at provincial or ministerial level



In 2015, we undertook 18 national scientific research subiects



Talent

Stimulating

Collaborative

Innovation

• We have gradually established the talent .... development mechanism to promote the development of talents, and the assessment and reward mechanism according to their performance and contribution. Inside the Group, we provide "Scientific and Technological Progress Award", "Technical Improvement Award" and "Group Technical Center Project"

> • We attach great importance to cooperation with famous universities and professional institutions in jointly tackling key problems, technical cooperation, academic exchanges, talent cultivation, incubation and transformation of achievements, etc., establishing an innovation alliance with various levels. We explore the establishment of an open scientific research system. Aiming at research hotspots and challenges which attract attentions from the country and the industry, we mobilize social technological

system which conforms to national requirements of scientific research management and has the feature of building materials industry, providing the efficient progress of scientific researches with mechanism guarantee.

to boost researchers' enthusiasm for innovation. We have established the Youth Science Foundation, and organized youth scientific research competitions to promote fast grow of young backbones of scientific research and inject vigor into the scientific research teams of the Group.

# Sharing and **Services**



activities were held and

organized in 2015

Open Services

Leading

Spread

Sharing

& ••• Exchange

• To give a play to our role as a demonstrating base for international scientific and technical cooperation, we hold overseas and domestic academic meetings, run forums, develop activities of exchange and visits to offer platforms of communication and promotion to specialists and scholars, serve innovation and common progress, accelerate technological upgrading and reform in the industry and related fields, and



# **Achievements** and Transformation

## **Enterprises as the Main Body**

### • In recent years, the Group has continuously been approved as a state-level enterprise technical center of composites, equipment manufacturing, glass fiber, cement equipment and special cement and other fields, formed a technological innovation system composed by one national enterprise (Group) technology center (CNBM Technology Center) and seven state-level enterprise technology subcenters, ranking first among central enterprises. The Group has formed six

professional R&D departments, strengthened core traction function of the industrial sector and independency right of R&D, enhanced production-study collaborative innovation and scientific and technological achievements transformation in this sector, and established technology clusters integrating advanced production technology, core technology and equipment and inspection and certification services.

• We have scientifically set the research direction based on technology productization, product marketization and market efficiency principles. We give full play to the advantages of integrated production-study-research platform, closely link industry and market to respond to market demand without any delay and scientifically plan R&D direction and technical research focuses. Our R&D achievements have solved the technical problems in the production process, met higher standards of market demand and provided a guarantee for R&D achievement

**Market as Guide** 

## **Combination of Production, Study and Research**

• We accelerate R&D application and benefit transformation. Relying on special cement technology of Key Laboratory of Green Building Materials, we have achieved special cement's industrialization promotion among four cements of the Group, become the largest manufacturer and supplier of special cement, and widely adopted it in power plants, oil and gas fields, harbors, high-speed railways and

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• We undertake secretariat work of standardization organizations, industrial organizations, professional societies and scientific agencies, and lead technology innovation and industry revolution of the professional sector We develop extensive science services. Industry websites and professional publications are run to timely publish frontier information

• We actively build service platform system of industry open style, have formed a comprehensive technical service platform system of building materials industry integrating industry-wide inspection and certification resources, industrial products quality control and technical evaluation laboratories and national public service demonstration platform for SMEs.

and share technological results and commercial messages. By building resource repositories (technical innovation institutional repository, technological result database, etc.) and information inquiry platforms we offer multiple channels of information exchange and technical communication to building materials enterprises.

The system provides for SMEs services including inspection and detection. management system certification, standardization, technical product development, intellectual property and brand building, promotes advanced practical technologies and provides entrepreneur services.

motivate technological innovations to faster and more effectively serve sustainable development of the society. We also undertake professional exhibitions to collectively exhibit and recommend new technologies and products, offering platforms and services to the industrialization of technological results, thus pushing technological progress and result sharing in the industry.

## Cement "Olympic" has finally come to China

In October, 2015, China Building Materials Academy

undertook 14th International Congress on the Chemistry of Cement (ICCCTChemistrl(dy)20-ist(t)6a(tionab0 cna)4 ICCtslopICCCChemistr

other major construction projects, with direct economic benefits reaching a billion dollars; relying on technological achievements of national science-technology support projects being successfully appraised as capital stock of CNBM Neijiang High-tech Company, we have achieved industrialized production of series Low-E products. Harbin FRP Institute has, through production-study cooperation

with Zhongfu Lianzhong Composites Group Co., Ltd., incubated Zhongfu Carbon Fiber Core Cable Technology Co., Ltd. with carbon core cable technology and become a qualified supplier of State Grid Corporation of China, with accumulative sales of products exceeding 3,000 km.

# **Development during the** 12th Five-Year Plan

During the 12th Five-Year Plan, to achieve the strategic objective of "to be stronger and better, to be globally top-ranking", CNBM actively transformed the business mode, adjusted the structure, deepened the market-oriented reform, pressed forward with the structural adjustment, combination & restructuring, energy saving and emission reduction in the cement and glass segments, and made great efforts to develop new building materials, new houses and new energy materials. By this, remarkable achievements have been made to lay a firm foundation for the development during the 13th Five-Year Plan.

 In the period, CNBM made many • In the period, the board of In the period, we made efforts • In the period, we kept improving directors played the important to build CNBM as a top-ranking noteworthy achievements in our influence, driving force, brand role of strategic guidance for enterprise by adhering to the technological innovation, and awareness and international built up a world-class technical reputation, and our development rapid and healthy development concept of "to be stronger and of CNBM, through strategy better", which was an extension of innovation system. On the basis, concept and growth history developing and regular the previous concept of "to be bigger breakthroughs were continuously attracted extensive attention. governance. All the directors made in key technology. CNBM is honored as a flag that and stronger". In the process of worked scrupulously, and racked growth from a grass-roots enterprise significant achievement and guides the industry to healthily their brains to give suggestions to a Global 500 company, CNBM product application, meanwhile develop, a paving stone for the numbers of major topics, on operation and development increased its operating income and enterprise reform and a corporate of the group. total profits by 242% and 252% rewards for technological citizen active in responsibility progress, patents and standards fulfillment. in comparison to the 11th Fiveincreased a lot. Thanks to this. Year Plan, respectively. At present, CNBM is ranked 1st in the world in CNBM now firmly occupies the commanding heights of multiple production capacities of 4 segments fields (cement, etc.), and ranked 1st at home in production capacities of a few other segments, and have worldclass capabilities of engineering design, engineering service and equipment manufacturing. Reform Transformation 0 -----Responsibility Innovation Growth floor, wallpaper, sanitary fittings, etc.) to make contributions to the development of the • In the period, starting from In the period, we accumulated In the period, we actively

about the practice of

rich experience in capital operation, combination & restructuring, management integration, reform towards diversified ownership, internationalized development and cultural development, and formed a complete, unique, effective operation management mode that features integration & optimization, marketization of centrallyadministered SOE, meshed control, the "8 techniques", the "six-star enterprise" and the "income-increasing, cost-saving, consumption-reducing" methods. and steadily carried out the Go Out policy to boost the implementation of the Belt and Road Initiative. In the process, our service of international engineering project (glass, cement, new building materials, new energy materials, etc.) covers the markets of Europe. Southeast Asia, Middle East, Africa and South America. In particular, the Egyptian glass fiber project, the German wind turbine blade project and the German solar energy project have brought satisfactory benefits, and the modes of "cross-border e-commerce + overseas location", intelligent industry, intelligent port and BNBM HOME are being laid out at a higher speed.

publishing the first social responsibility report, we built a social responsibility organization system. Besides, we conducted the management of interested parties, regularly published social responsibility reports, built the 5 responsibility framework systems, persistently improved the capability and effects of responsibility fulfillment through continuous practice, conducted responsibility research, and joined responsibility advocating organizations and action plans to promote responsibility communication and sharing. On the basis. CNBM developed into a practitioner, driver and guider of social responsibility.

### **Development History of CNBM**

**1984-2002** 



transformation

Renamed "China National Building Materials Group Corporation" in 2003, marched into

# 2002-200

nlatform

achievements

48

the strategic objective of "to be stronger and

imization, efficiency improving, internal management methods including

accelerated overseas market layout, boosted the implementation of the Belt and Road

Healthy growth

# 2005-2010

naterial and complete equipment

on reduction in the cer ment transformation and upgrade

the reform guideline of "marketization of centrally-administered SOE".

Proposed the work focus of "four-emphasize concept of "quality improvement, efficiency increase, transformation, upgrade".

develops diversified ownership and puts into practice the powers of the board of directors.

Make plans for new strategic restructurings, explored the transformation to an investor and



# Outlook for the 13th Five-Year Plan

In process of the rapid growth in the recent ten-odd years, CNBM has kept its composure under the guidance of correct strategic objectives by persistently observing the development rules of the industry and the growth logics of enterprise. During the 13th Five-Year Plan, we will continue practicing the 5 development concepts (innovation, coordination, green, opening-up, sharing), and lay emphasis on improving the development quality and benefits and promoting the structural reform to firmly transform the business mode and adjust the structure with a view to the strategic objective of "to be stronger and better", thus realize the "3345" transformation and upgrade in the next 5 years. In addition, we will make efforts to write a new chapter of sustainable development by adhering to the "3 strategies", working in line with the "3 curves" idea, promoting the "4 transformations" and realizing the "5 visions".

Consolidate the existing advantages o

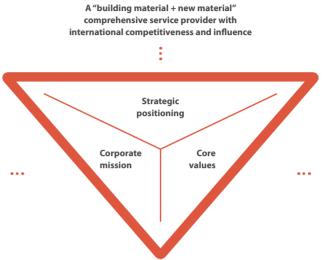
and service transformation in line with the "3

material + new material" comprehensive competitiveness and influence.

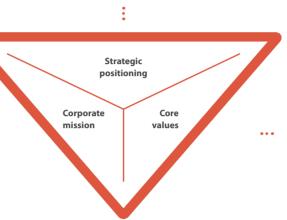
lding material + new material

hensive service provider

## CNBM's strategic framework for the 13th Five-Year Plan



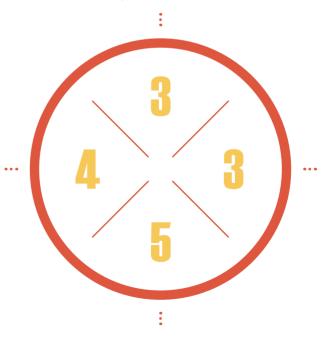
Efficient use of resource, serving the construction



3 strategies

### 4 transformations

- Transformation of CNBM from an industrial group to an investor and operator.
- Transformation of the subsidiaries to listed companies.
- Transformation of the business from building material to various materials.
- Transformation of CNBM from a native Global 500 company to a transnational Global 500 company.



5 visions • Humanity, intelligence, green,

## Evolution of CNBM's Strategic Positioning

Made great efforts to develop new building materials, played a demonstrative and guiding role in the field of new building material,

in the field of new building m



the cement and glass segments, made great efforts to develop new building materials, new houses and new energy materials, coordinated the developments of R & D, manufacturing global leading position, favorable capability of continuous innovation and international competitiveness.

Innovation, performance, harmony, responsibility

 Innovation-based driving, green development, internationalization.

performance, globalization

### 3 curves

- Press forward with the supplyside structural reform in the traditional segments (cement, glass, etc.), refine the cement segment, strengthen and optimize the glass segment, promote the development of special cement and PV glass for the purpose of "integration, engineering, industrialization, internationalization".
- Make great efforts to develop the 3-new industry (new building material, new house, new energy material), build new profitmaking points in integrated and innovative modes.
- Actively explore modern service, pay attention to the grand R & D, Internet plus, inspection &

# 3 Curves

#### As an extension of the corporate

development theory of "second curve", the "3 curves" idea refers to continuously fostering new growth points and promoting industrial upgrade and transformation in process of corporate development. During the 13th Five-Year Plan, CNBM will consolidate the existing advantages of the main business and accelerate product transformation, technical transformation and service transformation in line with the "3 curves" idea based on the building material segment and its associated segments, and continuously foster new impetuses for growth.

**Consolidate and** improve "curve 1"

products.

We will reconstruct and improve the traditional segments (cement, glass, etc.), and thoroughly press forward with the supply-side structural reform. In addition, to actively play the leading role of large enterprise, we will make efforts to promote the structural adjustment in the cement and glass segments through market co-opetition, outdated emission reduction, production optimization and product upgrade, and work on improving market health and achieving the goals of guality improvement and efficiency increase.

• Refine the cement segment, continue promoting industrial co-opetition, create favorable market environments, solidify the core profit-marking segments; promote the development of high-performance material, special material, commercial concrete and finished product, boost energy saving, emission reduction, cost reduction and efficiency increase by making greater efforts in equipment upgrading and technological transformation.











• New building material: continue optimizing and

• New house: make great efforts to develop the new

house system primarily made up of light steel structure

and prefabricated steel structure as well as the residence-

oriented component system, promote the Energy Plus

5.0 House System and build "green towns" at home and

abroad, supply the all-round housing solutions of ecosmart residence and elderly care housing to customers.

perfecting the layout of gypsum board segment, develop

and promote high-end products, increase added value of





We will make great efforts to develop the 3-new industry (new building material, new house, new energy material), and continuously improve the profitability. In order to meet the industrial demands and requirements for structural adjustment emerging in the new normal, we will expand and strengthen the emerging segments (new building material, new house, new energy material, etc.) through technical innovation and layout optimization, extend the business layout to the key links of the industry chain, and build new profit-making points in integrated and innovative modes.



• New energy material: continue optimizing and perfecting the advantageous segments (wind turbine blade, high-performance glass fiber, electronic glass, highend refractory material, etc.), improve the manufacturing, application and marketability of high-performance carbon fiber, PV glass, CIGS thin-film solar cell and graphite, make significant breakthroughs in the fields of BIPV and PV agriculture, march into the field of new energy power plant, perfect the new energy industry chain.









Design



selection, design benchmarking,

## **Actively foster** "curve 3"

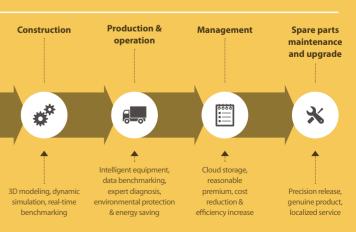
We will foster new economic growth points by strengthening innovation and service, actively explore serve-oriented manufacturing and industrialization-oriented R & D, integrate the existing products and segments by making use of the technologies like Internet, big data and intelligence, conduct the grand R & D, Internet+, inspection & certification, carbon trading, EPC and manufacturing services, and build new growth points with new economic forms, new modes and new types of operation



- Grand R & D: give full play to research resources and researchers, further improve the consciousness, guality and effects of technological service, build an open R & D service platform and a technological achievement incubation platform.
- Internet+: devote major efforts to promoting the new foreign trade modes ("cross-board e-commerce + overseas warehouses", "intelligent industry + intelligent port", BNBM HOME, etc.) based on the "Internet+" optimized service, build a global leading comprehensive service system.
- One stop: devote major efforts to developing the inspection & certification, carbon trading and consulting services, extend the industry chain to the field of comprehensive service (new material, new energy, energy saving and environmental protection, life science information technology, etc.), innovate on service modes to supply convenient, networked, localized one-stop service to customers.



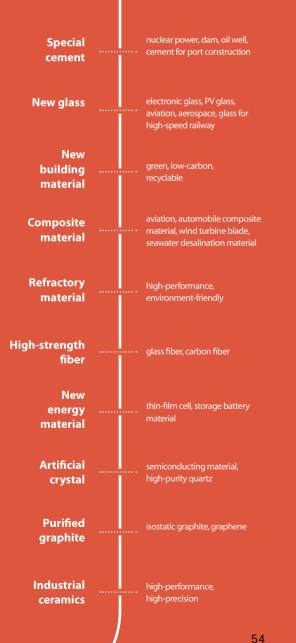




# 4 Transformations

In the new normal, transformation and upgrade are the only road for breakthrough and a source of opportunities. During the 13th Five-Year Plan, we will further accelerate the "4 transformations" through technological innovation, business mode based on consolidating the traditional

### 10 Types of New Materials



# **Transformation** of Operation ... Mode

 CNBM will transform from an industrial group to an investor and operator. The headquarter will actively strive to convert the form of state-owned capital at fair prices in capital markets (securities trading market, property transaction market, etc.). and promote the reasonable flow of and maintain and appreciate the value of stateowned capital through equity operation

and value management in an orderly way.

• The subsidiaries will transform to listed

# **Transformation** of Value ...

# Orientation

companies. Accordingly, the emphasis will be converted from income and profit to market value. The securitization rate of the CNBM's assets will be improved with the aim of listing 8~10 professional companies. A management mechanism oriented to market value will be established in the listed subsidiaries for the purpose of dual driving of entity operation and capital operation.

## **Transformation** of Business ....

building material to various materials. On the principle of proper diversity, CNBM will develop into a comprehensive material industrial group integrating the building material and new material segments, to further strengthen the segment combination and improve the comprehensive strength and international competitiveness.

• The CNBM's business will transform from

## **Transformation** of Market ...

Coverage

 CNBM will transform from a native Global 500 company to a transnational Global 500 company. By adhering to the cooperation culture of "genuine, honest, intimate, sincere", we will innovate on the Go Out modes, accelerate the implementation of the Belt and Road Initiative, emphasize the industry-financing combination, enhance branding and promote the win-win cooperation to grow into a transnational Global 500 company.



# **5** Visions

Any country, nation or enterprise should have a vision. As a distinguishing feature of outstanding team, common visions are a strong impetus for organization development and a reflector of the members' pursuits, integrating the personal visions of all the members. The CNBM's visions for the 13th Five-Year Plan are humanity, intelligence, green, performance and globalization.

## Humanity ...

• The so-called "people oriented" refers to "enterprises being people, by the people, for the people and loving the people". The "enterprises being people" mean-. thers a. stersc

## Intelligence ...

• We will seize the opportunities arising from the new round of technical revolution, accelerate the industrializationinformatization fusion, make progress in fulfilling the tasks related to Internet+ and the "Made in China 2025", make intelligent key equipment and technological processes, reduce the cost and the energy consumption, and strive to occupy the commanding heights of and make breakthroughs in a few key fields. To

Green

...

• By adhering to the principle of "benefit first, efficiency first", we will fulfill various tasks in strict accordance with the benefit objective, thoroughly put into practice the performance culture, and digitalize

Globalization ···

Performance ····

that an enterprise essentially operates for persons, including entrepreneurs, investors and social persons. The "loving the people" means that an enterprise should motivate the staff's enthusiasm and creativity, meanwhile care for the staff to grow simultaneously with the staff and create an environment with safety, warmth and happiness.

• By adhering to the development concept of "green, cyclic, low-carbon", we will voluntarily reduce the emission of hazardous gases (greenhouse gas,

• We will tightly seize the opportunities for internationalization (e.g. the Belt and Road Initiative) in the global perspective, innovate on the Go Out modes by making good use of domestic and

improve the overall value of the upstream and downstream industry chains, we will strengthen structural adjustment and technical innovation, further extend the industry and value chains through synthesis of service-oriented manufacturing, production-research combination and integrated innovation, and continuously scale the high end of the industry chain.

SO<sub>2</sub>, NOx, etc.) and other pollutants, and improve the capability of resource recycling.

all steps to continuously create high performance and rank among domestic leading and international top-ranking enterprises.

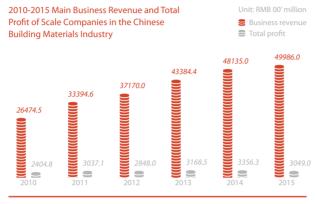
overseas markets and resources, and build a favorable corporate image. On the basis, the capability of internationalized operation, as well as the international influence, will be continuously improved.

# **Responsibility Performance**

# **Market Performance**

2015 Fortune Global Top 500 Building Materials Enterprises

2015 Ranking	Company	Operating revenue in 2014 (US\$ million)	Profit in 2014 (US\$ million)	Country	
192	Saint-Gobain	54459.4	1264.2	France	
270	CNBM	40644.4	477.8	China	
475	CRH	25087.3	772.0	Ireland	

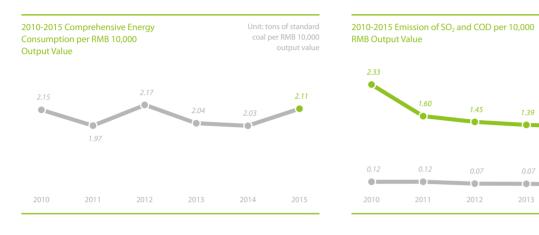


Source: Fortunechina.com

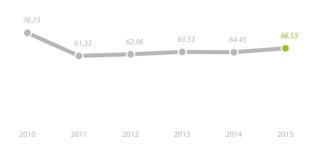
Source: China Building Materials Quantitative Economics Supervision Society

Unit: RMB 00' million

# **Energy Saving & Environmental Protection**









1.45

.

2012

1.39

. .

2013

2.33

0.12

0.12

Unit: kg/ RMB 10,000

1.46

Emission of SO<sub>2</sub> per RMB

10,000 output value

Emission of COD per RMB

10,000 output value

1.36

0.06

2014



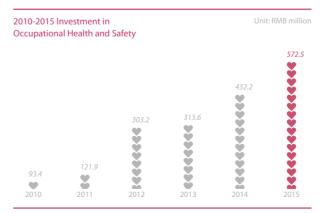


# **Employee Care**

2010-2015 Employee Profile Unit: Person						
	2010	2011	2012	2013	2014	2015
Total number of employees	112676	126385	165652	179421	176854	176610
Employees from foreign countries, Hong Kong, Macau and Taiwan	397	594	1190	1234	892	84
Employees of ethnic minorities	1566	3516	2706	3031	3120	352
Employees with disabilities	599	1023	1620	1685	2263	144
Proportion of female employees in the management	24.0%	11.6%	13.5%	18.1%	18.4%	17.29

### 2010-2015 Progress of Enterprise Annuity

	2010	2011	2012	2013	2014	2015
Number of member enterprises participated in enterprise annuity	38	53	66	67	67	68
Number of employees participated in enterprise annuity	12811	13368	20392	21131	21750	22165



### 2010-2015 Coverage Rates of Labor Contract, Social Insurance and Employees Joining Trade Union

• Coverage rate of labor contract • Coverage rate of social insurance Proportion of employees joining the trade union

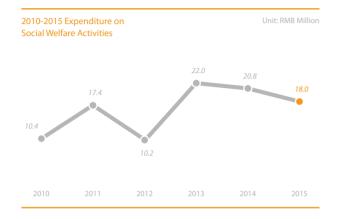
88%	94%	96%	96%	93%	100%
87%	91% 73%	92% 80%	<b>92%</b> 75%	88%	91%
2010	2011	2012	2013	2014	2015

### 2011-2015 Performance of Staff Training

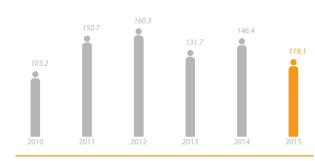
	2011	2012	2013	2014	2015
Number of employee training programs	11975	21028	37491	43352	32672
Training time (Unit: 0' thousand hours)	108	126	164	91	133
Number of diplomas or degrees obtained by in-service employees with our assistance	1580	1138	2387	3520	2882



# **Corporate Citizen**







2010-2015 Number of Supported Social Welfare Projects 209 46 2010 2011 2012 2013 2013 2014 2014

2011-2015 Performance of Creating

Employment Opportunities

	2011	2012	2013	2014	2015
New jobs created	2011				
Of which: Graduating students recruited	4276	3743	4383	3848	2473
Demobilized soldiers recruited	241	521	158	46	10

2011-2015 Incentives for Students

### 2011-2015 Volunteer Activities

	2011	2012	2013	2014	2015
Special scholarship (Number)	27	20	18	31	8
Total scholarship (RMB 0' thousand)	-	136	112	53	36
Students awarded or subsidized (Number)	727	466	506	227	159
Probation bases established (Number)	-	98	119	97	47
Intern posts provided to students at school (Number)	-	17815	36530	28619	26586

	2011	2012	2013	2014	2015
Volunteer teams (Number)	-	67	109	65	56
	1.4006 157.1	64 Tm⊠00	Tj0.953 0.5	597 luntee	er

# **Technological Innovation**

2010-2015 Technology Awards at Provincial	Unit: Number of Awa
and Ministerial Levels	

	2010	2011	2012	2013	2014	2015
Scientific and technological awards at Provincial and Ministerial level or above	63	53 132 152		145 117		123
Of which: National level scientific and technological awards	0	2	0	1	1	0
Technical innovation awards	17	46	89	54	48	48

2010-2015 Application and Grant of Patents

	2010	2011	2012	2013	2014	2015
New applied patent	514	630	766	1262	1571	1568
Of which: invention patents	173	170	228	373	531	566
Newly granted patents	420	487	729	848	1318	1492
Of which: granted invention patents	54	80	143	128	106	193

2010-2015 Expenditure on R&D Activities

Unit: RMB 00' million Expenditure on R&D activities Expenditure on research and

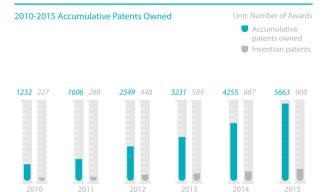
experimental development

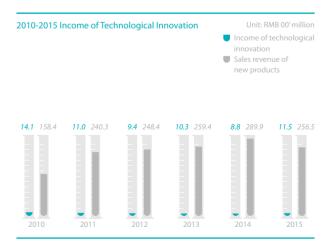


### 2010-2015 The Standards of Presiding or Participating in Preparation or Amendment

Unit: Number of Awards

	2010	2011	2012	2013	2014	2015
Number of Standards	79	28	22	59	104	62
Of which: International	0	1	1	1	3	2
National	30	15	5	8	35	36
Industrial	49	12	16	50	66	24





# Indicator Index (CASS-CSR3.0)

	Ne	Part 1 Preface of Report (P series)		Nature of Lating
	No.	Content of Indicator	Page	Nature of Indicato
	P1.1	Process of report quality assurance	Cover 2	Extended
Scope of	P1.2 P1.3	Interpretation of data in report Boundaries of report	Cover 2 Cover 2	Core
report	P1.5 P1.4	Report system	Cover 2 Cover 2	Core
	P1.5	Contact Information	Cover 2	Core
	P2.1	Preparation process of the report	P1	Extended
Report	P2.2	Selection process of material aspects in the report	P16	Core
process	P2.3	Process and means of stakeholders participating in the preparation of the report	P16-17	Extended
	P3.1	Opportunities and challenges of enterprises in performing social responsibilities	P4-5	Core
Executives' Address	P3.2	Summary of achievements and deficiencies of annual corporate social responsibility	P4-5	Core
	P4.1	Company name, nature of ownership, and location of headquarters	P6	Core
	P4.2	Major brands, products and services of enterprise	P10-11	Core
	P4.3	Region of enterprise's operation, including operational enterprises, subsidiaries, jointly-owned organizations	P6, P10-11	Core
Corporate	P4.4	Service markets divided by industries, customer types and regions	P10-11	Core
profile	P4.5	Number of employees reported according to contracts (formal and informal employees) and genders	P59	Core
	P4.6	List of memberships or other qualifications in associations, national organizations and international organizations	P16	Extended
	P4.7	Major changes in organizational scale, structure, ownership or supply chains in the term of report	N/A	Extended
A	P5.1	Annual major work of social responsibility	P17	Core
Annual	P5.2	Annual responsibility performance	P56-61	Core
progress	P5.3	Annual responsibility honors	P17	Core
		Part 2 Responsibility Management (G Series)		
	G1.1	Philosophy, vision and values of social responsibility	P14-15	Core
Responsibility	G1.2	External social responsibility proposals signed by the enterprise	P16-17	Extended
strategy	G1.3	Identifying core social responsibility topics of the enterprise	P16-17	Core
	G1.4	CSR planning	P14	Extended
	G2.1	Leadership organization of social responsibility	P14	Extended
Responsibility	G2.2	Channel and process of communication between stakeholders and the highest governance organization of the enterprise	P16-17	Extended
governance	G2.3	Organizational system of social responsibility	P14	Core
	G2.4	Responsibilities and division of work of social responsibilities in the enterprise	P14	Core
	G2.5	Management system of social responsibility	P14	Extended
Responsibility	G3.1	Promoting social responsibility work of subsidiaries	P14-15	Extended
fusion	G3.2	Promoting the performance of social responsibility by partners of supply chain	P16	Extended
	G4.1	Constructing indicator system of CSR	P14-15	Extended
Responsibility	G4.2	Conducting performance assessment based on the indicators of CSR	P15	Extended
performance	G4.3 G4.4	Excellence selection of CSR Major accidents of the enterprise in economy, society and environment, impact and punishment incurred, and excent and a construction of the enterprise.	P15 N/A	Extended
	G5.1	and corresponding countermeasures of the enterprise List of stakeholders of the enterprise	P17	Core
	G5.2	Process of identifying and choosing stakeholders	P16	Extended
Responsibility	G5.3	Concerns of stakeholders and response measures of enterprise	P17	Core
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	G5.5	Communication mechanism of corporate external social responsibility	P16	Core
	G5.6	Participation of corporate senior management in communication and exchange of social responsibility	P16	Core
	G6.1	Conducting CSR subject research	P16	Extended
Responsibility	G6.2	Participation in study on and exchanges of social responsibility	P16	Extended
capabilities	G6.3	Participating in the formulation of domestic and foreign social responsibility standards	P16	Extended
	G6.4	Cultivating corporate culture of responsibility through training and other measures	P15	Core
		Part 3 Market Performance (M Series)		
	M1.1	Policy and mechanism of shareholders' participation in the management of enterprise	P22	Core
		Protecting interests of mid and small investors	P22	Core
Responsibilities	M1.2			
Responsibilities	M1.2 M1.3	Normalizing disclosure of information	P22	Core
Responsibilities in respect of shareholders			P22 P56-57 P56-57	Core Core Core

	No.	Content of Indicator	Page	Nature of Indicator
	M2.1	Customer relations management system	P23	Core
				•
	M2.2	Popularization of product knowledge and customer training	P23	Core
	M2.3	Protection of customers' information	P23	Core
	M2.4	Stop loss and compensation	P23	Core
	M2.5	Product quality management system	P23	Core
Responsibilities	M2.6	Product pass rate	N/A	Core
in respect of	M2.7	System of supporting product and service innovation	P46	Core
customers	M2.8	Investment in technology or R&D	P44-45	Extended
	M2.9	Number and proportion of technical personnel	P44-45	Extended
	M2.10	Number of new patents	P61 P61	Extended
	M2.11 M2.12	Sales revenue of new products Significant innovation awards	P61	Extended
	M2.12	Survey on satisfaction of customers and satisfaction of customers	N/A	Core
	M2.13	Actively deal with complaints from customers and resolution rate of complaints from customers	P23	Core
	M3.1	Strategic sharing mechanism and platform	P23	Core
	M3.2	Philosophy of and system guarantee for honest operation	P22	Core
	M3.3	Philosophy of and system guarantee for fair competition	P22	Core
	M3.4	Economic contract performance rate	P22	Core
	M3.5	Identifying and describing the value chain and responsibility influence of the enterprise	P16	Extended
	M3.6	Initiative and policies of the enterprise in promoting the social responsibility performance of the rvalue chain	P16	Extended
Responsibilities in respect of	M3.7	Social responsibility education and training received by members of the value chain from the enterprise	P16	Extended
partners	M3.8	System and (or) policy of responsible procurement of the company	P16	Extended
	M3.9	Process and frequency of assessment and survey on social responsibilities of suppliers	P16	Extended
	M3.10	Ratio of suppliers passing quality, environment, and occupational health and safety management system certifications	P16	Core
	M3.11	Number of punishment in such aspects as economy, society and environment against suppliers	Not included in the statistics system	Extended
	M3.12	Ratio of responsible procurement	P39	Extended
		Part 4 Social Performance (S Series)		
	S1.1	Legal compliance system of enterprise	P22	Core
	S1.2	Training of legal compliance	P22	Core
-	S1.3	Prohibition on commercial bribe and corruption	P22	Core
Responsibilities in respect of	S1.4	Performance of legal compliance assessment of the enterprise	P22	Extended
government	S1.5	Total taxes paid	P19	Core
goreinnen	S1.6	Responding to national policies	P23	Core
	S1.7	Policies or measures to guarantee and (or) promote employment	P23	Core
	S1.8	New employment during the reporting period	P37	Core
	S2.1	Signing rate of labor contract	P59	Core
	S2.2	Coverage rate of collective negotiation and contract	P59	Extended
	S2.3	Democratic management	P34-35 P59	Core
	\$2.4 \$2.5	Proportion of employees joining the trade union Number of applied, treated and solved appeals of employees through the appeal mechanism	P39 P35	Extended
	S2.5	Management of employees' privacy	P34	Extended
	S2.7	Rights and interests protection for part-timers, temporary workers and employees of subcontractor	P34	Extended
Responsibilities	S2.8	The ratio of minimum wage of employees according to the operation region to the minimum wage in the region	P34	Core
in respect of	S2.9	Coverage rate of social insurance	P59	Core
employees	S2.10	Salary for overtime work	P35	Extended
	S2.11	Number of annual per capita paid vacation	P35	Extended
	S2.12	Welfare systems according to nature of employment (official, unofficial)	P34-35	Core
	S2.13	Proportion of female managers	P59	Core
	S2.14	Proportion of employees of minorities or other races	P59	Extended
	S2.15	Ratio or number of disabled employees	P59	Extended
	62.16	Proportion of employees in the occupational health and safety committee	N/A	Extended
	S2.16	rioportion of employees in the occupational nearth and safety committee	14/74	Externace

	No.	Content of Indicator	Page	Nature of Indicate
	S2.18	Training of occupational safety and health	P32	Co
	S2.19	New occupational diseases of the year and accumulative occupational diseases of the enterprise	P59	Co
	S2.20	System and measures of prevention against occupational injuries	P32	Extende
			P32	Extende
	S2.21	Mental health system/measures for employees		-
	S2.22	Coverage rate of physical examination and health records	P32	Co
	S2.23	Providing equal health and safety protection to part-timers, temporary workers and employees of subcontractor	P33	Extende
	S2.24	Career development channel for employees	P34	Co
	S2.25	Employee training system	P34	Co
	S2.26	Employee training performance	P59	Co
	S2.27	Investment in aiding and supporting employees in difficulties	P35	Co
	S2.28	Providing special protection for special populations (pregnant woman, nursing woman, etc.)	P35	Extend
	S2.29	Respect for employees' family responsibilities and life in spare time, and keeping balance between work and life	P35	Extend
	S2.30	Employee satisfaction	P31	Extend
	S2.31	Employee turnover rate	P31	Extend
	S3.1	Safety production management system	P32-33	Co
Safety production	S3.2	Safety emergency management mechanism	P33	Co
	S3.3	Safety education and training	P32-33	Co
	S3.4	Safety training performance	P33	Co
Jourenous	S3.5	Investment in safety production	P33	Co
	S3.6	Number of accidents in production	P33	Co
	S3.7	Number of employee casualties	P32	Co
	S4.1	Assessment of impact of enterprise entering or exiting the community on the environment and society of communities	P26	Extend
	S4.2	Rate of assessment on implementation environment and social influence of new projects	P26	Extend
	S4.3	Participation of community representatives in project construction or development	P26	Extend
	S4.4	Enterprise developed or supported project with social benefits in the community of its operation	P38	Extend
	S4.5	Employee localization policy	P38-39	Co
Responsibilities	S4.6 S4.7	Proportion of local employment Proportion of local employees in senior executives according to main operation regions	P39 P39	Extend
n respect of community	54.7 S4.8	Local procurement policy	P38-39	Extend
ommunity	S4.9	Corporate public welfare policy or main public welfare fields	P40-41	Co
	S4.10	Corporate public welfare fund/foundation	N/A	Extend
	S4.11	Overseas public welfare	P38	Extend
	S4.12	Total amount of donation	P40	Co
	S4.13	Policy and measures supporting voluntary service	P41	Co
	S4.14	Performance of voluntary service of employees	P41	Co
		Part 5 Environmental Performance (E Series)		
	E1.1	Establishing organizational system and mechanism system of environment management	P27	Co
	E1.2	Environment warning and response system	P26	Extend
	E1.3	Participation in environmental organizations or proposals	P28	Extend
	E1.4	Assessment on impact of enterprise on environment	P26	Co
	E1.5	Total investment in environmental protection	P25	Co
een	E1.6	Training and publicity of environmental protection	P26-27	Co
een peration	E1.7	Environmental protection training performance	P26-27	Co
	E1.8	Disclosure of environment information	P28	Extend
	E1.9	Process and frequency of communication with communities on environment	P28	Extend
	E1.10	Measures for green office	P27	Co
	E1.11 E1.12	Green office performance	P27 P27	Extend
	E1.12 E1.13	Saving energy by reducing business trips Green buildings and sales network	P27 N/A	Extend Extend
reen	E2.1	Establishing energy management system	P26-29	Extend
	E2.2	Energy conservation policy and measures	P26-27	Co

P26

Core

E2.3 Total annual energy consumption

# **Rating Report**

### Rating Report of 2015 CNBM Social Responsibility Report

Upon the request of CNBM, Chinese Expert Committee on CSR Report Rating selected experts to form CNBM CSR Report 2015 (hereinafter referred to as the Report) Rating Team.

#### I. Basis of rating

Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 3.0) and Rating Standards of Corporate Social Responsibility Reporting for Chinese Enterprises (2014).

### II. Rating process

1. Process Assessment Team interviewed main members of the Preparation Group of the Report, and reviewed the materials related to the preparation process; 2. The Rating Team evaluated the preparation process and disclosure of the Report, and drew up the Rating Report.

3. The Rating Report was submitted to the Vice Chairman of the Chinese Expert Committee on CSR Report Rating and the head of the Rating Team for their signatures.

#### III. Conclusions

#### Process (

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Enterprise Management Department of the Group takes the lead to establish the Report Preparation Group. The Chairman of the Group acts as the head of the Report Preparation Group and is responsible for the framework of the Report and the approval for the final draft. The Preparation Group identifies stakeholders, and collects their suggestions by questionnaire survey and emails. Substantial topics are defined according to the company's development strategy, related state policies, industrial benchmarking analyses, results of survey on stakeholders, etc. It is planned to release the Report on the "2016 Press Conference of Chinese Industrial Corporate Social Responsibility Report", and the Report will be presented in printed edition, electronic edition and Chinese-English version, etc., which reflects a leading process.

### Materiality (

The Report gives detailed and sufficient disclosures on the substantive issues of non-metallic mineral products industry like "Product Quality Management", "Technological Innovation", "Occupational Health Management", "Ensuring Production Safety", "Research & Development of Environment-friendly Products", "Conservation of Water Resources", "Reduction of Waste Emission", "Governance of Environment around Factories", with good materiality.

### Completeness (

The Report discloses the key indicators of "Responsibility Management", "Market Performance", "Technological Innovation", "Energy Saving and Environmental Protection", "Employee Care" and "Corporate Citizen", covering 92.0% of core indicators of non-metallic mineral products industry, and can be regarded as fairly complete.

#### Balance (

The Report discloses negative data and information on "the employee turnover rate", "the recordable injury rate per 1,000 employees", the number of accidents in production" new cases of occupational diseases", etc., and expounds the corrective measures against accidents in production of member companies in details, which shows a good balance.

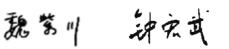
#### IV. Recommendations for improvement

Provide further disclosure of negative events to further improve the balance of the Report.

#### Rating team

Team leader: Zhong Hongwu, Director of the Research Center for Corporate Social Responsibility of Economics Division of Chinese Academy of Social Sciences

Team members: Wei Xiuli, Associate Professor from the Economics and Management College of North China University of Technology Fang Xiaojing Evaluator of Process



# Feedback

Thank you very much for caring and supporting the social responsibility work of CN questionnaire below, and send it back to us through fax or mail. If the blank space is response, please attach an additional page; if you want to reply by electronic means at www.cnbm.com.cn, click on "Social Responsibility" and then click on "Social Resp-- Feedback". You can also scan the two-dimension code on the right to fill in your fee We will make continuous improvements in our work in the future according to your

### Your overall evaluation of CNBM CSR Report 2015:

Overall e<del>valuation</del>

Suitability of page numbers

Design

Language

#### According to your opinion, what's the core of responsibility performance of C

Responsibility Governance Operation Performance Technologie Corporate Citizen

### Which aspect do you think we need to strengthen our effort in?

Information collection Development of organizational structure Management of stakeholders Public welfare planning Preparatio Others

### Which means do you want to learn information about our responsibility perfo

Printed report "Social responsibility" special column on the official webs Professional media of social responsibility Others

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Talent development	Performance evaluation Study on social responsibilities		
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