



# Preparation Notes

|                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <p><b>About this Report</b></p> <p>This is the 11th social responsibility report released by China National Building Materials Group Corporation (CNBM). This Report gives a true picture of CNBM's commitment to sustainable development.</p>                                                                             | <p><b>Period Covered by the Report</b></p> <p>1 January to 31 December 2013; given the progressing continuity of certain businesses or projects, some contents relate to the 1st and second quarters of 2014, the details of which are indicated in the Report.</p>                                                                                                                                                                                                                                    | <p><b>Reporting Frequency</b></p> <p>Annual report.</p> |
| <p><b>Entities Covered by the Report</b></p> <p>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.</p> | <p><b>Referential Guidelines</b></p> <p>Sustainable Development Report (G4) published by the Global Reporting Initiatives (GRI); Social Responsibility Guide (ISO26000) issued by the International Organization for Standardization (ISO); China CSR Reporting Guidelines (CASS-CSR3.0) issued by the Chinese Academy of Social Sciences, etc.</p>                                                                                                                                                    |                                                         |
| <p><b>Data Sources</b></p> <p>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 stated, all monetary amounts are expressed in RMB.</p>                                     | <p><b>How to Get this Report</b></p> <p>Please ask for the printed version of this Report via the contact information</p> <div data-bbox="523 1399 831 1817">  </div> <div data-bbox="855 1399 1198 1817"> <div data-bbox="855 1399 1198 1636"> <input type="text"/> </div> <div data-bbox="855 1657 1018 1817">  </div> </div> |                                                         |



## Assurances

The non-financial data in the Report are derived from CNBM's statistical data 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%.

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

## Preparation Process



# Contents

| Preface               | Corporate Profile       | Responsibility Activity       | Responsibility Practice                     | Postscript          |
|-----------------------|-------------------------|-------------------------------|---------------------------------------------|---------------------|
| Preparation Notes     | 4 Overview              | 14 Responsibility Footprints  | 36 Market performance                       | 98 Prospect         |
| 2 Executive's Address | 6 Business Activities   | 16 Responsibility Performance | 48 Energy Saving & Environmental Protection | 100 Indicator Index |
|                       | 8 Strategic Philosophy  |                               |                                             | 104 Rating Report   |
|                       | 9 Operational Strategy  | 24 Responsibility Management  | 64 Corporate Citizen                        | 105 Feedback        |
|                       | 10 Governance Structure |                               | 76 Employee Care                            |                     |
|                       | 11 Member Companies     |                               | 86 Technological Innovation                 |                     |
|                       | 12 Management Team      |                               |                                             |                     |



|    |    |                                                  |  |
|----|----|--------------------------------------------------|--|
|    | 26 | Responsibility Philosophy                        |  |
|    | 28 | Responsibility Governance                        |  |
|    | 30 | Promotion of Responsibility                      |  |
|    | 32 | Responsibility Communication                     |  |
|    | 34 | Sharing Responsibility                           |  |
|    | 38 | Excellent Corporate Management                   |  |
|    | 39 | Creating Excellent Performance                   |  |
|    | 42 | Providing Quality Service                        |  |
|    | 44 | Driving Supply Chain to Perform Responsibilities |  |
|    | 45 | Compliant management                             |  |
|    | 46 | Mutual trust and benefits                        |  |
| 50 |    | Coping with Climate Changes                      |  |
| 52 |    | Green Management                                 |  |
| 54 |    | Resource Conservation                            |  |
|    | 56 | Protecting Ecological Environment                |  |
|    | 58 | Green Products System                            |  |
|    | 62 | Green Service Industry                           |  |
|    | 66 |                                                  |  |
| 76 |    | Protection of Employees' Rights and Interests    |  |
| 77 |    | Implementing Democratic Management               |  |
| 88 |    | Building a Super Power of Scientific Researches  |  |
| 89 |    | Gathering Pioneers of Scientific Researches      |  |
| 90 |    | Guarantee of Investment in Scientific Research   |  |
|    | 78 | Production Safety Guarantee                      |  |
|    | 82 | Supporting Employees' Growth                     |  |
|    | 83 | Creating Happiness for Employees                 |  |
|    | 84 | The Most Adorable Employee                       |  |
|    | 91 |                                                  |  |
|    | 92 |                                                  |  |
|    | 93 |                                                  |  |
|    | 96 |                                                  |  |

Responsibility  
Management

Market  
Performance

Energy Saving &  
Environmental  
Protection

Corporate  
Citizen

Employee  
Care

Technological  
Innovation

## Executive's Address

We have established a vigorous internal mechanism through the mixed ownership. Motivated by the mixed ownership, CNBM has upgraded management system, operation system, concepts of staff. We have practiced the operation model of "Market-oriented Operation of Central State-owned Enterprises", obtained finance from the capital market, and realized diversified equities. We have also realized the standardization of governance structure through management integration based on market rules, practiced the marketization of internal mechanism to satisfy the development of various talents, and provided motivation to enterprise development through integrated innovations, driven by the market.

Our active exploration for mixed ownership has promoted the harmony and win-win development of the society. When developing the mixed ownership, we always follow such principles as normative operation, mutual benefit and mutual respect, and long-term cooperation. We combine the development of enterprise with local economic and social constructions and prosperities. We continuously contribute to the harmonious development of regions where our companies are located through paying taxes, driving the development of supply chains and SMEs, creating jobs, supporting local infrastructure constructions, and participating in social public benefit activities. The Group paid taxes amounting to RMB 13.17 billion, and donated RMB 21.95 million in 2013.

Confronted with a more complicated economic, social and environmental situation, we will adhere to the guideline of deepening innovation throughout the development, continue to explore effective methods to develop mixed ownership, timely spread and share beneficial experiences, and cooperate with stakeholders to harvest achievements of reform.



SONG ZHIPING  
CHAIRMAN OF CNBM

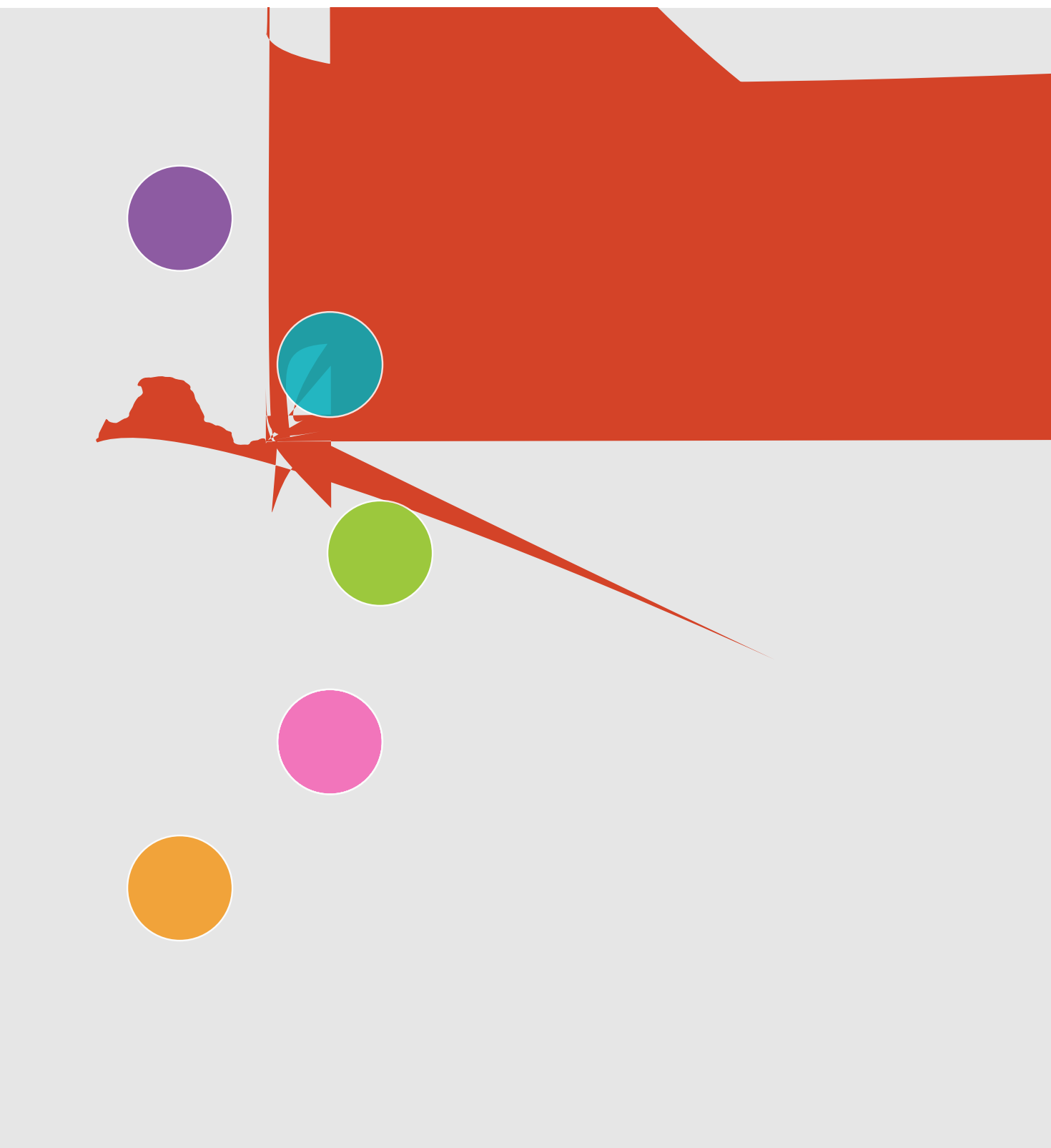
## Overview

As the leader in 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, 46th among the Top 500 Enterprises in China in 2013 and 267th among the Fortune Global 500. Up to the end of 2013, the total assets of the Group amounted to RMB 364.42 billion and the total number of employees reached 179,000. In 2013, CNBM achieved revenue of RMB 252.26 billion with total profit of RMB 11.51 billion, whilst taxes paid amounted to RMB 13.17 billion.

With the objective to maximize corporate value and improve core competence, CNBM has developed into a comprehensive building material industry group with integration of manufacturing, scientific research and development, set of equipment, logistics and trading, through asset restructuring, business integration and management improvement.

Headquartered in Beijing, CNBM has 1,113 holding member companies, dominates 6 listed companies, including 2 overseas listed companies. Member companies of CNBM are located in 30 Chinese provinces, municipalities and autonomous regions and over 30 overseas countries and regions, whose businesses

120 countries and  
municipalities and



# Business Activities

## Manufacturing

With China National Building Materials Company Limited, CNBM Glass Company and China New Building Group Corporation as the mainstay of manufacturing businesses, CNBM has built strong cement, glass, light-weight building material, new building, glass fiber, composites, and refractory platforms, through undertaking consolidation of strategic resources and restructuring, reconstructing traditional industry by new technologies, and developing advanced productivity by incremental input.



### Glass

The glass industrial platform can produce high-quality float glass in various colors and specifications with processing capacity of 10 million m<sup>2</sup>, covering products of vehicle glass, architectural fabricated glass, and decorative glass. We can produce 0.33 mm ultra-thin glass, the thinnest in China, and have the productivity of 40 million pieces of ITO electropane. We also have an industrial base, capable of producing 0.4 mm and 0.5 mm crystal glass substrates.

### Fiberglass

The total productivity of fiberglass has reached 1 million tons, which ranks the first in the world. With four production bases in China and Egypt, and the largest fiberglass R&D center and laboratory with the most advanced equipment in China, it also possesses world-leading technology of fiberglass tank furnace design and building, such as the world's largest alkali-free tank furnace production line with an annual productivity of 160,000 tons, the alkali tank furnace production line with an annual productivity of 40,000 tons, and alkali-free environmentally-friendly tank furnace production line with an annual productivity of 30,000 tons, which utilizes only wasted silk as raw material.

### Carbon fiber

We have the 1,000-ton carbon fiber production line, which owns largest scale and most advanced technology in China. We've reached the annual productivity of 10,000 tons PAN silk and 4,000 tons carbon fiber. We are China's first production line successfully producing high-quality T700 PAN silk and carbon fiber, with the productivity of T700 silk reaching 5,500 tons and that of T700 carbon fiber SYT-45 reaching 2,200 tons.

### Rotor blades

We are China's largest and world's top three manufacturer of megawatt rotor blades, covering most complete megawatt blade products in China with categories varying from 1.25 MW to 6 MW, and length of blade varying from 31.5 meters to 62 meters. Our products cover all categories of products for land and marine use. We have established a R&D center in Germany and other four production bases, with a total of 154,095.7 Tm(R)-4(ot) 1.794 2w5,000 blades) 11.2( . )36(W)33(e also )TJ0 -1.333 TD(o)7(w n(na)4(tion)6(blade t)6.1(esting c)6.1(en) bases, which a total of 154.0e rationibuted all over the country. Its annue 154.0957 Tm3oterboa 154.0d exceeds 1.65 billion m<sup>2</sup>, ranking the first in the world. The platform provides application solutions pack for public buildings and family housing with its complete e 154.0957 Tm3stem.

## Scientific Research and Development

Our scientific research and development business possesses 13 top scientific research and design institutes in building materials and light industrial machinery sectors of China, and a cluster of hi-tech companies. We also have a national scientific innovation platform, which comprise of state key laboratories, engineering (technology) research centers, company technology centers, industrial products QC and technical assessment laboratories, work stations of academician, mobile work stations of post-doctors, scientific research work stations, innovation alliances, etc. We have also established a new technical innovation system of building materials corporate group with international competitiveness.



### PV parts

We have the productivity of solar PV parts and industrial bases covering several provinces of China. We have also directed constructions of many PV power stations both at home and abroad.

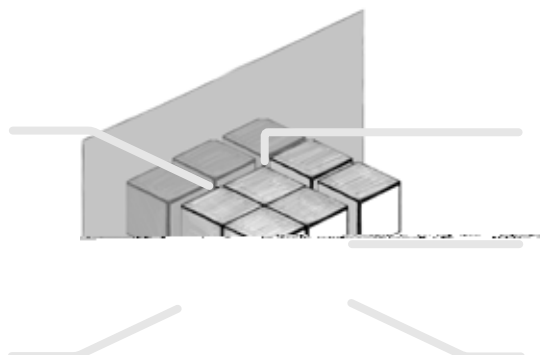




## Management mode

### grid- management and control

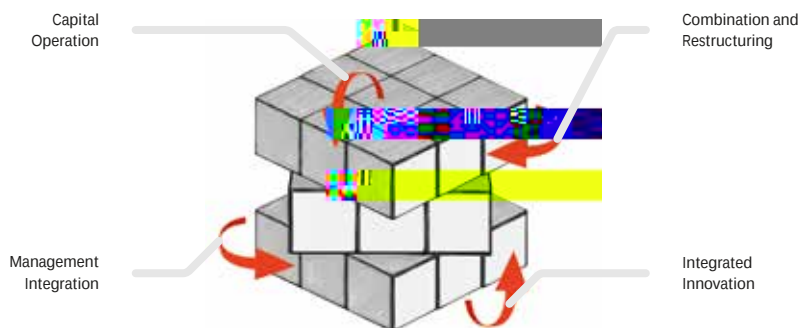
We promote “grid” management and cooperation mode, and fix the function division, operation mode and development orientation of the enterprise in specific grid through accurate management and control, thus keeping orderly and concerted operation in each enterprise. This management and control system include governance standardization, function stratification, building platform for business, delicacy management and culture integration.



## Development mode

### four wheels-

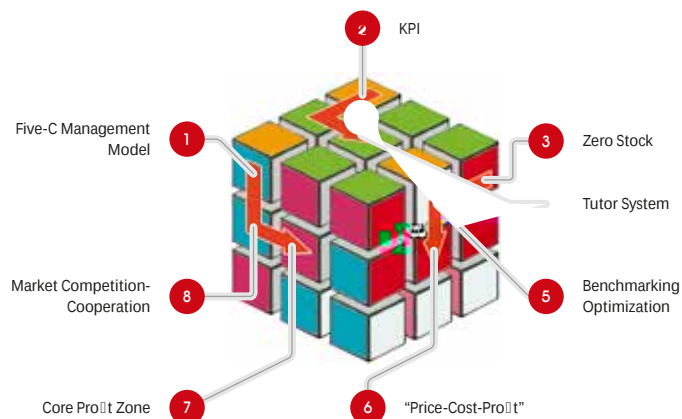
We have resolutely followed the development path of capital operation, combination and restructuring, management integration and integrated innovation, managed to find the sources of capital, resources and core competitiveness, realized the rapid development of enterprises, and promoted the transformation and upgrade of the industry.



## Management method

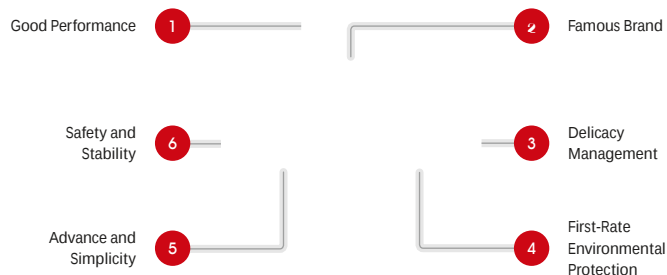
### eight management measures-

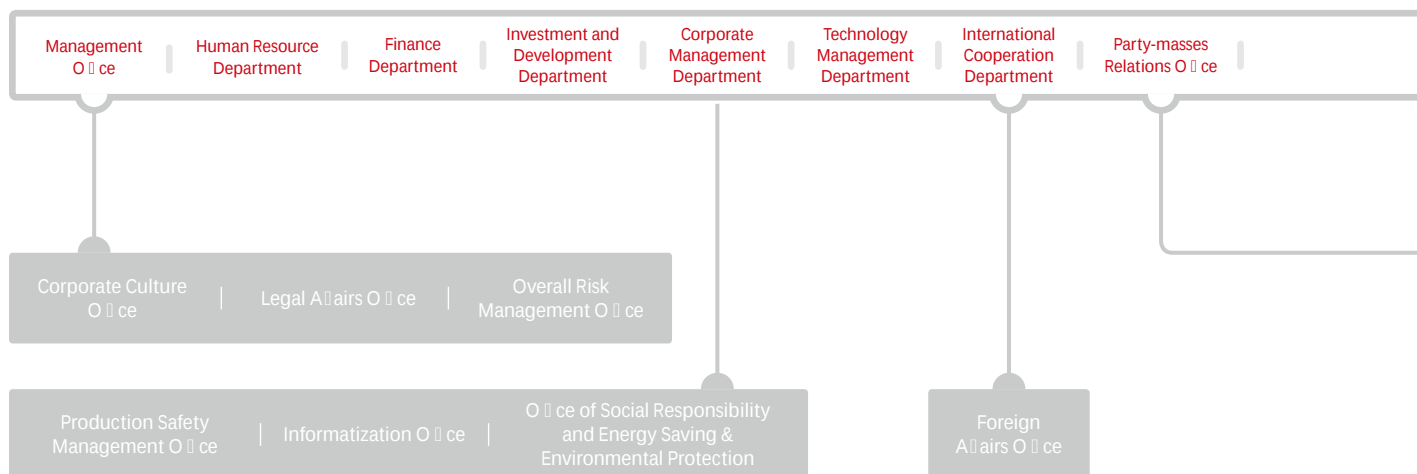
We constantly improve management integration method, and have formed “eight management measures”, applying simple and practical methods to deal with complicated affairs. This business management pack combines marketing with cost control, creating a favorable atmosphere of “six-star enterprise”, namely good performance, delicacy management, first-rate environmental protection, famous brand, advance and simplicity, safety and stability, contributing to the increase of enterprise competitiveness.



## Management goal

### six-star enterprise-





## Member Companies

Supervisory Committee

### China National Building Materials Company Limited

China United Cement Corporation  
 South Cement Company Limited  
 North Cement Company Limited  
 Southwest Cement Company Limited  
 CNBM Public Limited Company  
 China Composites Group Co., Ltd.  
 Lianyungang Zhongfu Lianzhong Composites Group Co., Ltd.  
 Zhongfu Shenyang Carbon Fiber Co., Ltd.  
 China Triumph International Engineering Co., Ltd.  
 Nanjing Kisen International Engineering Co., Ltd.  
 China Fiberglass Co., Ltd.  
 Jushi Group Co., Ltd.  
 CNBM Investment Co., Ltd.

### China Building Materials Academy

China Building Materials Academy (Beijing Headquarters)  
 Ruitai Materials Technology Co., Ltd.  
 China Building Materials Test & Certification Group Co., Ltd.  
 Hefei Cement Research & Design Institute  
 Anhui Huaguang Photoelectricity Materials Technology Group Co., Ltd.  
 Harbin FRP Institute  
 CNBM Design & Research Institute  
 Qinhuangdao Glass Industry Research and Design Institution  
 Xi'an Research & Design Institute of Wall & Roof Materials  
 Xianyang Research & Design Institute of Ceramics  
 Horological Research Institute of Light Industry

### China National Building Materials & Equipment Import & Export Corporation

CNBM International Engineering Co., Ltd.  
 CNBM International Corporation  
 CNBM Technology Co., Ltd.

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

INTECH Building Co., Ltd.  
 China National United Equipment Group Co., Ltd.  
 China New Building Group Corporation  
 CNBM Glass Co., Ltd.  
 China Luoyang Float Glass Group Co., Ltd.  
 Henan Zhonglian Glass Co., Ltd.  
 CNBM Assets Management Corp.  
 Zhejiang Leomax Group Co., Ltd.

Disciplinary  
Inspection &  
Supervision Office

Audit  
Department

Trade Union  
Office

Letters and  
Calls Office

## Management Team



## Board of Directors





## Management

|                                        |                                                                 |                                                 |                                                   |                                     |
|----------------------------------------|-----------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------|-------------------------------------|
| <b>Cao Jianglin</b><br>General Manager | <b>Hao Zhenhua</b><br>Deputy Secretary<br>of Party<br>Committee | <b>Guo Chaomin</b><br>Deputy General<br>Manager |                                                   |                                     |
|                                        |                                                                 | <b>Ma Jianguo</b><br>Deputy General<br>Manager  | <b>Huang Anzhong</b><br>Deputy General<br>Manager | <b>Wu Jiwei</b><br>Chief Accountant |

6.1768383.6835.12113640324.25076.8425541510011044246.147.141.7064.12136417415  
2012.12.22

2010

2011

2012

**2010.5.19**

CNBМ employed international verification group to review and verify the report.

**2010.9.20**

As the first enterprise releasing an annual corporate social responsibility report in the building materials industry of China, CNBM released 2009 Social Responsibility Report.

**2011.6.27**

CNBМ released 2010 Social Responsibility Report of CHINA NATIONAL BUILDING MATERIALS GROUP CORPORATION themed on "Innovation for Sustainable Development in the Future", which was the first themed report in the building materials industry. The Report was rated 4-star and excellent by CSR Research Center of Chinese Academy of Social Sciences, which was the highest evaluation among CSR reports in the building materials industry.

**2011.7.28**

CNBМ formulated annual promotion plan for CSR.

**2011.11.8**

In 2011 Research Report on CSR of China released by Chinese Academy of Social Sciences, the "social responsibility development index" of CNBM ranked the 15th, which was among the leading group.

**2012.7.30**

CNBМ released the English version of 2011 Social Responsibility Report, which was the first English report in the building materials industry.

**2012.12.22**

Social Responsibility Management System Construction of Large Building Materials Enterprise with Sustainable Development as the Guide, the social responsibility management practice of the Group, was awarded with the second prize of the 19th National Award for Innovation Achievements in Modernization of Management, and the first prize of Innovation Achievements in Modernization of Management of the Building Materials Industry.

**2013.1.14**

CNBM was awarded with the Award of "2012 People's Enterprise of Social Responsibility" in the "Positive Energy · the 7th People's Award of Social Responsibility" hosted by People's Daily Online.

**2013.2.26**

CNBM officially issued three management systems, including CNBM Instructions on Implementation of Social Responsibility.

**2013.6.30**

CNBM released 2012 Social Responsibility Report.

**2013**

**2014**

**2013.11.14**

Research Center Social for Corporate Responsibility of Chinese Academy of Social Sciences officially released 2013 Blue Book of Corporate Social Responsibility, in which the social responsibility development index of CNBM was 80.5 marks, ranking the 7th among top 100 enterprises in China. CNBM managed to break into the team of "excellence" among Chinese enterprises in terms of corporate social responsibilities.

**2013.12.20**

CNBM was awarded with the "2013 Demonstration Enterprise Award of Public Transparency Among Top 50 Enterprises in China".

## 2010-2013

### CORPORATE SOCIAL RESPONSIBILITY DEVELOPMENT INDEX OF CNBM



# Responsibility Performance

## Market Performance

2012-2014

Fortune Global Top 500 Building Materials Enterprises

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

2013

Performance of Holding Listed Companies

| Stock Name                    | Stock Exchanges                  | Stock Code | Dividend per Share<br>(RMB) | Earnings per Share<br>(RMB) |
|-------------------------------|----------------------------------|------------|-----------------------------|-----------------------------|
| CNBM                          | Hong Kong Exchanges and Clearing | 3323.HK    | 0.1600                      | 1.0672                      |
| BNBM                          | Shenzhen Stock Exchange          | 000786.SZ  | 0.4300                      | 1.5740                      |
| China Fiberglass              | Shanghai Stock Exchange          | 600176.SH  | 0.1200                      | 0.3657                      |
| Fangxing Science & Technology | Shanghai Stock Exchange          | 600552.SH  | 0.0650                      | 0.6500                      |
| CLFG                          | Shanghai Stock Exchange          | 600876.SH  | —                           | -0.2000                     |
| Luoyang Glass                 | Hong Kong Exchanges and Clearing | 1108.HK    | —                           | -0.2560                     |
| Ruitai Technology             | Shenzhen Stock Exchange          | 002066.SZ  | —                           | -0.5858                     |

**2009-2013**

**Main Business Revenue and Total Profit**

Unit: RMB 00' million

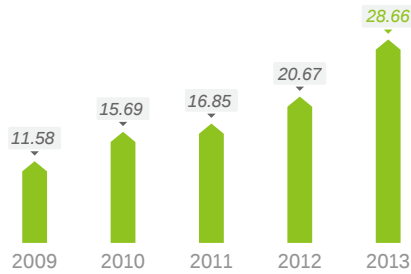


## Energy Saving & Environmental Protection

### 2009-2013

#### Energy Consumption

Unit: Million tons of standard coal



### 2009-2013

#### Comprehensive Energy Consumption per RMB 1,000 Output Value

Unit: tons of standard coal per RMB 1,000 output value



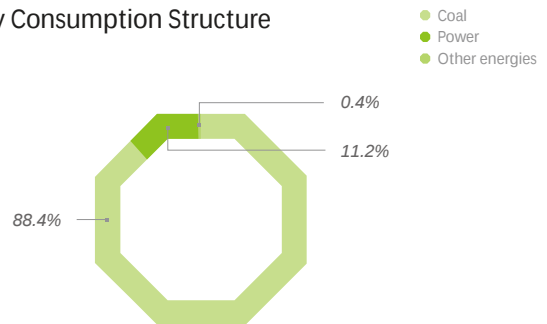
### 2013

#### Main Energy Consumptions

| Indicator                | Unit                            | Consumption |
|--------------------------|---------------------------------|-------------|
| Total Energy Consumption | Million tons of standard coal   | 28.66       |
| Of which: Coal           | Million tons of standard coal   | 24.68       |
| Power                    | GWh                             | 25794.57    |
| Natural Gas              | Million standard m <sup>3</sup> | 283.80      |
| Other Resources          | Thousand tons of standard coal  | 489.5       |

### 2013

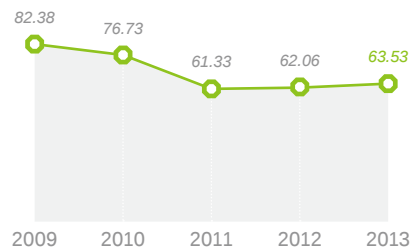
#### Energy Consumption Structure



### 2009-2013

#### Unit Energy Consumption of Cement Products

Unit: kg standard coal/ton



### 2009-2013

#### Unit Energy Consumption of Glass Products

Unit: kg standard coal/weight case



## 2010-2013

### Capital Investment for Energy Saving & Environmental Protection

686 Tm[R]-3(esponsibior E2er)8(g7.5it)-67.5i194.2436 s3598.66862012m[R]-(1)96(3)TJ0.123 0.11RelativeColorimetric 0.6q cn/T1\_249026spo82.6H3ponQBT0.625 0.626 1.628 Fm2ilitg6.5i686 Tm[R]-3(esponsibior E2er)

2013

Incentives for Students

| Indicator           | Unit   | 2013 |
|---------------------|--------|------|
| Special scholarship | Number | 18   |
| Total scholarship   |        |      |
|                     |        |      |
|                     |        |      |
|                     |        |      |

## 2010-2013

### Employee Profile

Unit: Person

|                                                               | 2010   | 2011   | 2012   | 2013   |
|---------------------------------------------------------------|--------|--------|--------|--------|
| Total number of employees                                     | 112676 | 126385 | 165652 | 179421 |
| Employees from foreign countries, Hong Kong, Macau and Taiwan | 397    | 594    | 1190   | 1234   |
| Employees of ethnic minorities                                | 1566   | 3516   | 2706   | 3031   |
| Employees with disabilities                                   | 599    | 1023   | 1620   | 1685   |
| Proportion of female employees in management                  | 24%    | 11.6%  |        | 1685   |

## Technological Innovation

### 2009-2013

#### Technology Awards at Provincial and Ministerial Levels

Unit: Number of Awards

|                                                                                  | 2009 | 2010 | 2011 | 2012 | 2013 |
|----------------------------------------------------------------------------------|------|------|------|------|------|
| Scientific and technological awards at Provincial and Ministerial level or above | 90   | 63   | 132  | 152  | 145  |
| Of which: National level Scientific and technological awards                     | 1    | 0    | 2    | 0    | 1    |
| Technical innovation awards                                                      | 21   | 17   | 46   | 89   | 54   |

### 2009-2013

#### The Standards of Presiding or Participating in Preparation or Amendment

Unit: Number of Standards

|                           | 2009 | 2010 | 2011 | 2012 | 2013 |
|---------------------------|------|------|------|------|------|
| Total number of standards | 100  | 79   | 28   | 22   | 59   |
| Of which: International   | 0    | 0    | 1    | 1    | 1    |
| National                  | 62   | 30   | 15   | 5    | 8    |
| Industrial                | 38   | 49   | 12   | 16   | 50   |

### 2009-2013

#### Application and Grant of Patents

Unit: Number of applications and patents

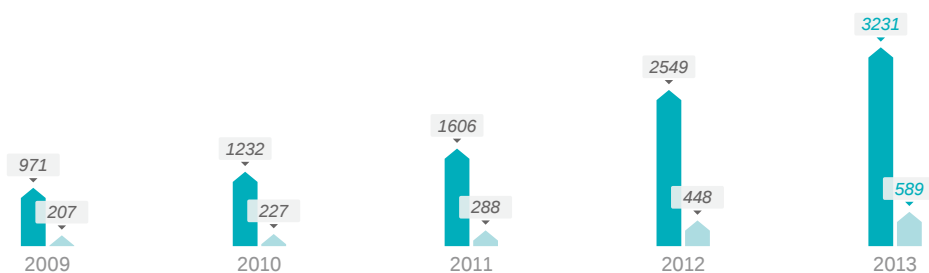
|                                     | 2009 | 2010 | 2011 | 2012 | 2013 |
|-------------------------------------|------|------|------|------|------|
| New applied patent                  | 430  | 514  | 630  | 766  | 1262 |
| Of which: invention patents         | 144  | 173  | 170  | 228  | 373  |
| Newly granted patents               | 202  | 420  | 487  | 729  | 848  |
| Of which: granted invention patents | 34   | 54   | 80   | 143  | 128  |

## 2009-2013

### Accumulative Patents Owned

Unit: Number of Patents

▲ Accumulative patents owned  
▲ Of which: invention patents

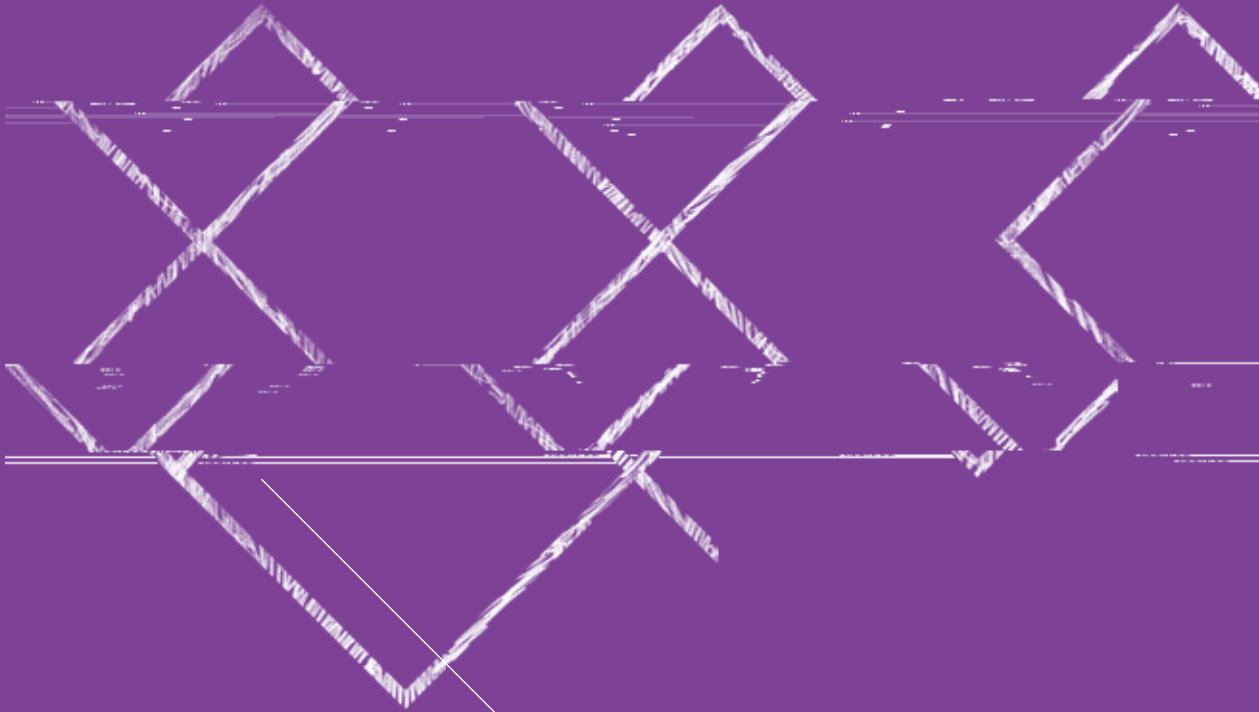


## 2009-2013

### Expenditure on R&D Activities

Unit: RMB 00' million





343



# Responsibility Management

We pay close attention to the demand of stakeholders, including investors, employees, clients, partners, related groups, communities, media, environment and government. We adhere to the core philosophy of efficient use of resource, serving the construction. We integrate social responsibility with daily management, practically implementing the idea in three aspects, namely market performance, energy saving & environmental protection, corporate citizen, employee care and technological innovation.

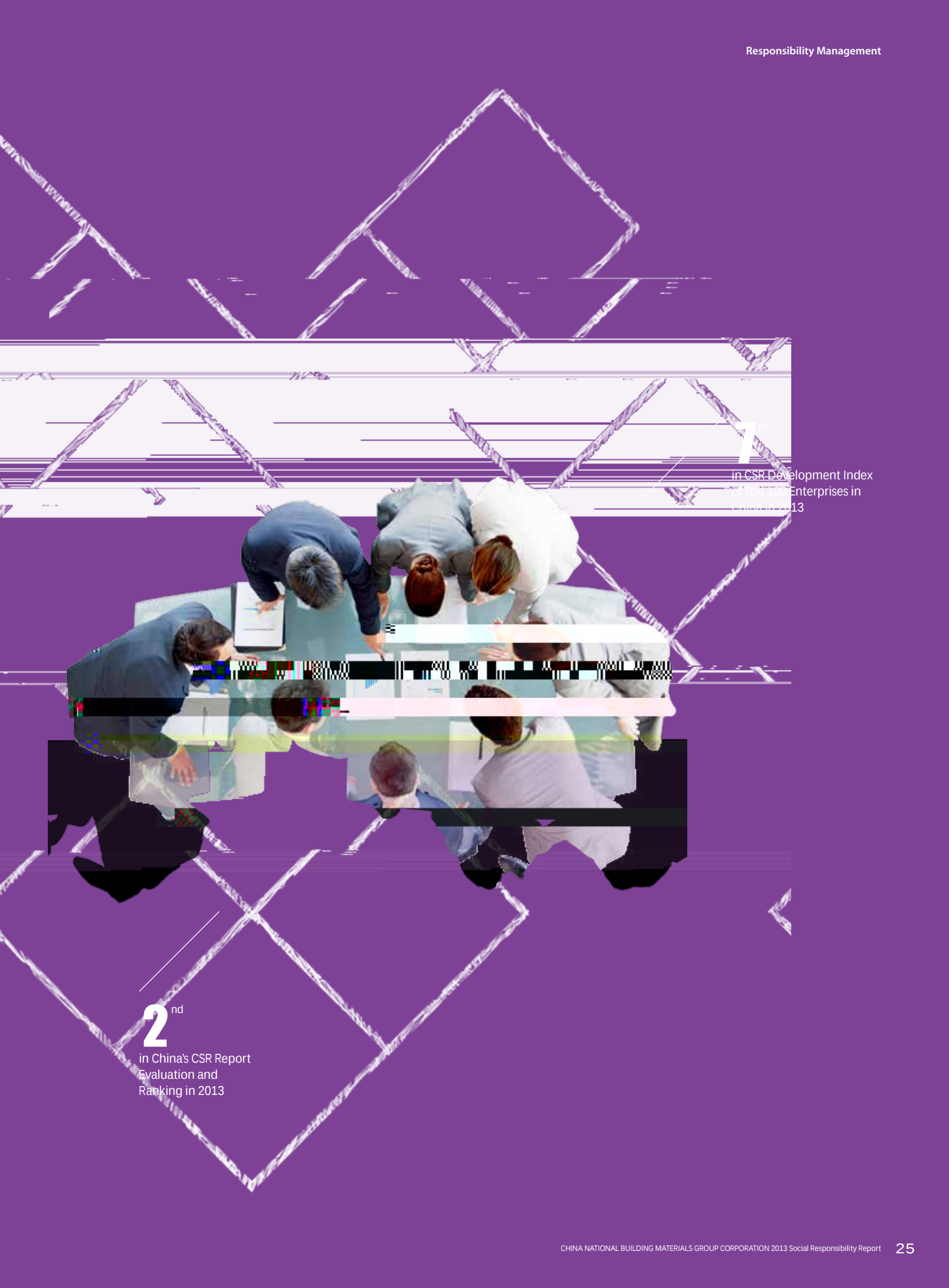
26 Responsibility Philosophy

28 Responsibility Governance

30 Promotion of Responsibility

32 Responsibility Communication

34 Sharing Responsibility



7<sup>th</sup>  
in CSR Development Index  
for Top 100 Enterprises in  
China in 2013

2<sup>nd</sup>  
in China's CSR Report  
Evaluation and  
Ranking in 2013

## Responsibility Philosophy

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 stress both technology and management innovation in our development, pursuing a coordinated and win-win situation with the market, the environment and the society. We insist on establishing a harmonious relationship with competitors, nature, employees and society, performing social responsibility in five aspects namely market performance, science & tech innovation, energy saving & environmental protection, employee care and corporate citizenship. We are committed to becoming a world-class comprehensive building materials industry group with sustainable innovation capabilities and outstanding international competitiveness.

### Core Topics

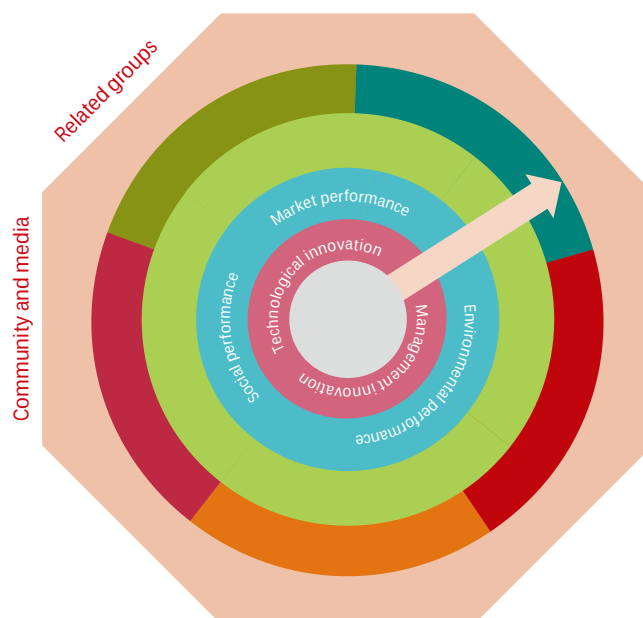


We reward our shareholders and investors with excellent operating results, serve our clients with quality products and services, growing together with our suppliers and industrial partners, and providing a platform for all the stakeholders to create values. Meanwhile, upholding the philosophy of “industry interest outweighs 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.



We take up the task of industrial innovation with our strong scientific prowess, advance industry transformation and upgrading with our forward-looking vision and advanced technology, disseminate and share technical information, devote ourselves to creating greener, more comfortable and intelligent living environment.

## Responsibility Model





## Responsibility Governance

### Organizational System

Organizations and personnel are the organizational guarantee for the implementation of social responsibility. With several years' effort, we have established a top-down organizational system of social responsibility, and formed a social responsibility management network covering organizations at all levels and member companies all over the Group, jointly performing the Group's social responsibility.

We take leading organization of social responsibility as the core with "CNBM Leading Group for Promoting Social Responsibility" headed by the Chairman. The Leading Group, the highest leading organization to promote social responsibility endeavors, is in charge of guiding and making decisions for social responsibility initiatives.

We rely on the social responsibility management functional organization of the headquarters to organize and coordinate social responsibility management, directing and supervising member companies in performing their responsibilities.

According to the unified requirement of the headquarters, each member company defines functional departments and assigns management personnel to perform social responsibility plan and scheme of the group and satisfy work requirements.

We give full play to the talent resources of management experts within the Group, and take their suggestions and advice in terms of adjustment of concept and strategy of social responsibility, preparation and revision of management systems, and the establishment and quantification of social responsibility indicator system, ensuring the feasibility and operability of social responsibility management mechanism.

We strive for social resources, actively seek help from professional consulting agencies, learn new trends of social responsibility theories, grasp latest international development tendency of the social responsibility, further study the new standards and requirements of social responsibility management, and guarantee the professionalism and compliance of the Group's social responsibility management system.

#### RESPONSIBILITIES OF CNBM SOCIAL RESPONSIBILITY MANAGEMENT DEPARTMENT

- To organize the preparation of the Group's strategic goals, planning, annual plan and implementation programs of corporate social responsibility;
- To establish and constantly improve the management system of social responsibility, and to prepare the Group's CSR management system;
- To establish and maintain the Group's organization and management system of CSR; to guide, assist and urge member companies to orderly implement social responsibility;
- To organize the preparation and release of the Group's annual CRS report; to guide, approve and assess the preparation and release of each member company's CRS report;
- To establish and constantly improve the social responsibility management performance indicator system; to organize, guide and assess the social responsibility information management quality of the Group.
- To establish and constantly improve the communication mechanism with stakeholders; to guide, trace and assess the communication performance with stakeholders of the enterprise.
- To organize and implement social responsibility publicity and philosophy promotion; to supervise and advance the disclosure of social responsibility information of member companies at all levels;
- To establish and constantly improve the evaluation system of social responsibility performance; to organize and carry out the evaluation of social responsibility management performance in member companies; to organize the appraisal of social responsibility; to release notifications and announcements related to social responsibility management;
- To organize and develop talent team building of social responsibility management and training sessions for social responsibility management personnel;
- To organize study on theory and practice of social responsibility, and to constantly improve the management level of social responsibility.



## System Guarantee

CNBM Instructions on Performing Social Responsibility, CNBM Methods of Social Responsibility Management and CNBM Methods of Information Collection of Social Responsibility Management are released and implemented. We aim at

systematically and normatively promoting the fulfillment of social responsibility by our member companies and make our social responsibility management system systematic, institutional, procedural and standardized.

3

social responsibility management systems are



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen



CNBM Social Responsibility Implementation Goals

|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Social Responsibility Philosophy                                              | Social responsibility philosophy and key topics have certain international influence, and have already become global typical cases.                                                                                                                                                                                                                                                            |
| Social Responsibility Strategy                                                | Taking harmonious development between enterprise and social environment as the core philosophy of the enterprise's development strategy.                                                                                                                                                                                                                                                       |
| Social Responsibility Work System                                             | The managers in charge of the enterprise are the primary persons responsible for social responsibility matters.<br>Developing effective and feasible social responsibility management tools, and applying these tools in the daily social responsibility management.<br>Participating in the preparation of domestic and international social responsibility standards with certain authority. |
| Fully Incorporation of Social Responsibility into the Operation of Enterprise | Good performance in integrating CSR into corporate management with certain international influence.                                                                                                                                                                                                                                                                                            |
| Social Responsibility Report                                                  | The quality of CSR report has some international influence, and is highly appreciated by international authoritative organizations.                                                                                                                                                                                                                                                            |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                |



## Performance Evaluation

Social responsibility performance evaluation is an important method to review the corporate's responsibility performance. We take an active part in the external performance evaluation, analyze evaluation results and define key issues for improvement. We organize internal evaluations, review member companies' performance in their implementation of social responsibility through the performance evaluation system, and guide the social responsibility work of the enterprise.

We implement the external rating of the annual social responsibility report, and improve the quality of report according to the rating and suggestions of experts. We participate in performance evaluation of CRS, and carry out performance benchmarking

with corporates in this industry, and review our work progress and responsibility performance. We constantly improve and enrich the internal indicator system of social responsibility key performance, providing data basis for external submission of evaluation information and internal monitoring.

We expand the coverage of social responsibility management, and promote the performance evaluation of social responsibility management among member companies. Through comprehensive evaluation of the establishment of CRS management system, we analyze the current situation of CRS management, and formulate improvement schemes and promotion plans, continuously improving the management level.



We have established a sustainable communication mechanism with external stakeholders, continuously expanding the channels and scope of communication. We value communication and cooperation in our daily operation and integrate the idea of social responsibility into our daily operation and communication; we inquire opinions and suggestions through questionnaires, visit important stakeholders to understand their demands. We have built a convenient and smooth online feedback channel, keeping us informed of the opinions of stakeholders. We regularly collect and collate the evaluations from stakeholders, which become important reference for the management decision; based on the feedback of stakeholders, we continuously improve our work and respond in an active manner.

The management of the Group highly values social responsibility communication. They participate in social responsibility communication activities at various levels and scopes. Through the means of forums, leader mailbox and meeting

of employee representatives, they have actively communicated with internal stakeholders; they are also presented at the communication activities with external stakeholders, timely arrange improvements according to key opinions and suggestions; when taking part in external activities, they are willing to share their experience in fulfilling social responsibility, playing an active role in spreading the idea of social responsibility. The active participation and promotion from management of the Group have significantly enhanced the performance and quality of the Group in fulfilling social responsibility.

We timely publish information regarding responsibility fulfillment in the column of social responsibility on our corporate website, continue to issue annual social responsibility reports, present our achievements in social responsibility and respond to the demands from stakeholders; we have established information release mechanism on emergencies for timely information disclosure, enhancing the enterprise's transparency and credulity.

Nearly

**18,000**

person-times participated in the external communication of stakeholders in 2013.

**5,068**

occasions of communication with external stakeholders were presented with corporate senior management in 2013.



## Sharing Responsibility

### Organizational Action

### Responsibility Research

We have actively participated in compilation and specific studies of social responsibility standards. We have continuously assigned management experts to join the compilation of amendment to the "Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises 3.0", an authoritative standard issued by Chinese Academy of Social Sciences on preparation of social responsibility reports in China; we participated in the studies of "Social Responsibility, Corporate Governance, and Internal Control Programs" hosted by China Group Companies Association and provided opinions for Chinese enterprises to fulfill social responsibility and achieve sustainable development. We have also actively participated in events specialized in social responsibility, focused on the latest trends in the field of social responsibility to acquire information resources for the Group's continuous improvement in fulfilling social responsibility.

We attach great importance to the research of social responsibility management. Through the research and benchmarking, we have further improved the management system and continuously enhanced the competence of our management. Based on a thorough research on relevant standards concerning social responsibility management and sustainable development at home and abroad, we have established an indicator

system for the Group's social responsibility management; based on the results from benchmarking on social responsibility management systems of overseas building materials companies and domestic enterprises, the framework of the Group's social responsibility management system has been set up and improved. We carefully organize benchmarking for the improvement of the enterprise's management and the benchmarking of social management, further define the focus and goal of improvement, solidify and maintain the leadership of the enterprises and strive to reach world class through specific improvement.

#### United Nations Global Compact

United Nations Global Compact is the world's largest and supreme initiative on corporate social responsibility and sustainable development with most extensive influence. The organization was proposed by Kofi Annan, then Secretary General of the United Nations, in 1999 at the annual meeting of the World Economic Forum in Davos and officially launched at UN Headquarters in July 2000. "Global Compact" is established to mobilize worldwide enterprises to abide by the standards with shared values, implement a set of necessary social rules, directly participate in the actions for



## Responsibility Spread

2

external researches on social responsibility were participated in 2013.

31

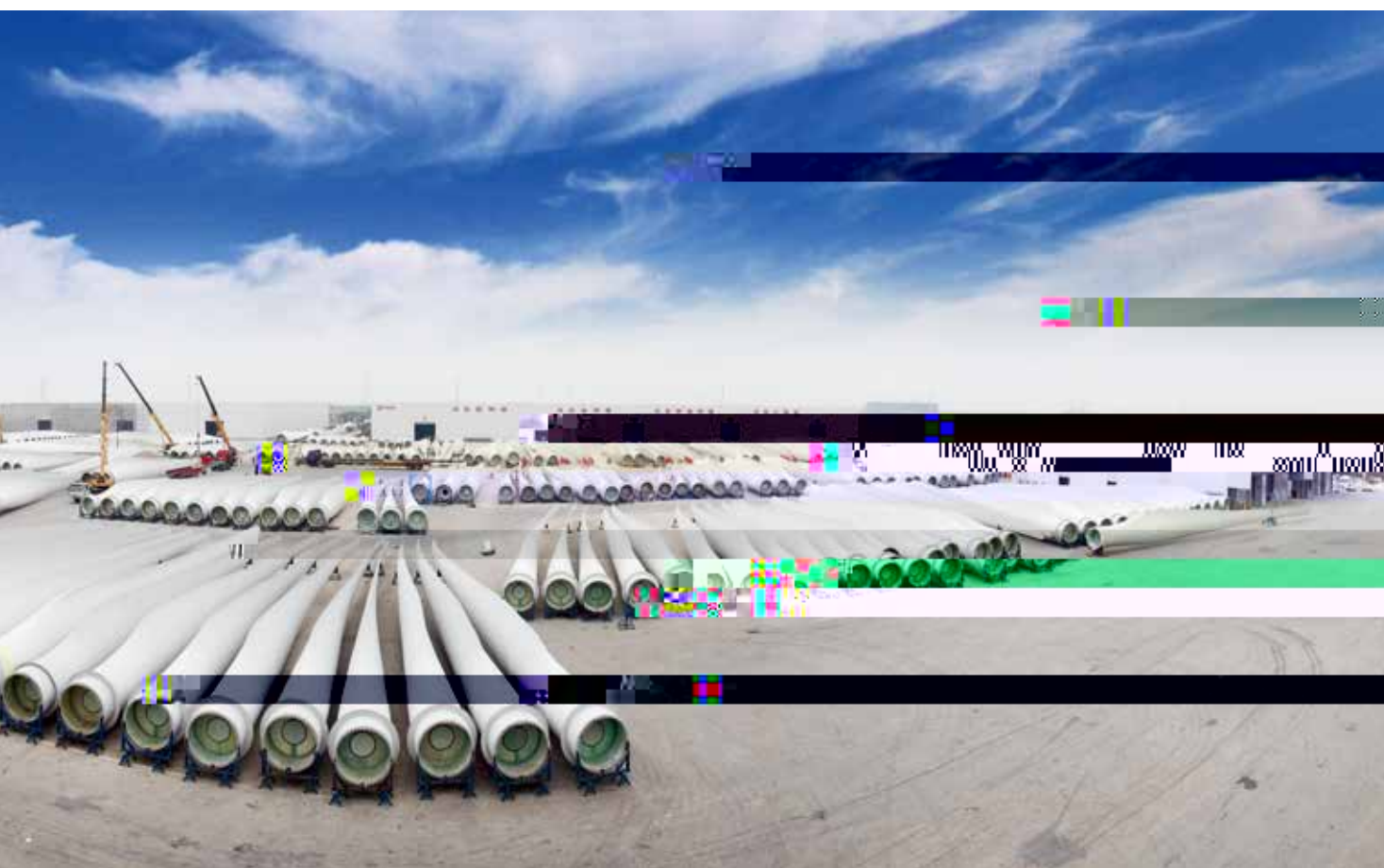
national social organizations were joined by the headquarters of the Group.

2

international organizations for social responsibility and sustainable development were joined.

We endeavor to disseminate the concept of responsibility to suppliers, clients, and industrial partners through value chain-based activities and cooperate with them to carry out responsibility-based activities. We share knowledge in social responsibility management and publicize corporate practices of social responsibility on corporate website; we actively participate in professional forums, share achievements in social responsibility management, and advocate the culture of social responsibility; suppliers' grade on quality, creditability, environmental protection, occupational health, and employees' rights are included

into evaluation system, and they are provided with free trainings on safety, laws, and environmental protection. We guide suppliers to provide responsible products and services, introduce green and environmental concept into the system of products and services, disseminate the concept of green consumption and low-carbon life among consumers; we consciously abide by industrial self-discipline rules, advocate industrial reengineering and value improvement, and cooperate with industrial partners for sustainable development.



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen



# Market Performance

We regard our shareholders and investors with excellent operating results, serve our clients with quality products and services, grow together with our suppliers and industrial partners, and try to become a platform for all 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.

- |                                          |                                                            |
|------------------------------------------|------------------------------------------------------------|
| <b>38</b> Excellent Corporate Management | <b>44</b> Driving Supply Chain to Perform Responsibilities |
| <b>39</b> Creating Excellent Performance | <b>45</b> Compliant Management                             |
| <b>42</b> Providing Quality Service      | <b>46</b> Mutual Trust and Benefits                        |

Total profit in 2013

RMB **11.51** billion



Taxes paid in 2013

RMB **13.17** billion

Sales revenue in 2013

RMB **252.26** billion

## Excellent Corporate Management

CNBM establishes a standard parent-subsidary corporation management system. As the strategic, resource and cultural center, the headquarters of the Group exercises the rights and functions of capital contributor. The subsidiaries (sub-Group) serve as business platforms, focusing on their expertise and principal businesses to develop profit centers based on their brand awareness and market share. As operating entities, the enterprises at the primary level implement strict cost control while assuring quality. By establishing and implementing a “standardized and stratified model” of management, we align the pace of different enterprises with orderly management in the course of rapid development.

We create new development concept and transform development mode, through which we not only achieve our own leaping development, but also lead the industry of building materials in China to a significant transformation of traditional operation mode and promote the transformation and restructuring of the industry. We adhere to the path of capital operation, consolidation and restructuring, and integrated innovation, creatively propose and implement a series of new concepts and measures, namely “market-oriented operation of central SOEs”, “five-mode management”, “instructor system”, etc., which help us not only achieve leaping development and become one of Fortune Global 500, but also provide solutions to the sustainable development of the industry with overcapacity and enterprises in the fields with full competition, boosting the development of enterprises with ownerships, providing new perspective of market-oriented reform for central SOEs”.

We focus on the problems occurred during the process of rapid expansion through consolidation and restructuring, and theorize the typical practices and understanding learned from management, with the concepts of “eight management measures” and “six-star enterprises” proposed.

### “EIGHT MANAGEMENT MEASURES”<sup>5</sup> BENCHMARKING MANAGEMENT

The purpose of benchmarking management is to improve and progress through learning from better enterprises. Through systematically benchmarking against management indicators of advanced enterprises in “human resource, financial resource, and materials” Sichuan Yunlian Southwest Cement Co., Ltd. (hereinafter referred to as Yunlian Southwest” includes all factors concerned with its production and operation into benchmarking, with a closed circle of management procedure from problem input to result output formed, which is necessary for the company promoting digitalized and standardized management. The indicators of “human resources” refer to “morality, capacity, attendance, performance, and integrity”; the indicators of “financial resources” refer to “price, cost, profit, loans receivable, and cash flow”; the indicators of “materials” refer to “output, sales, quality, coal consumption, and power consumption”. According to its actual conditions, Yunlian Southwest has achieved gradual improvement (from revision to standardization and then innovation) through making new benchmarking forms and crosswise and

Depending on management improvement and the construction of internal control system, we deepen the management integration and promote managements towards routinization, normalization, institutionalization, and standardization. We strengthen the leading role of strategic planning, complete the mid-term review on the implementation of "Twelfth Five-Year Plan", and launch the formulation of "Three New" strategy and development planning on the development of glass sector; we improve the assessment on business performance, deeply advance EVA evaluation, intensify the guidance in restructuring and scientific innovation, and utilize the leading role of performance assessment; we continue to streamline and integrate companies to shorten management chain and improve operational efficiency; we strictly control guarantee risk and further guide companies to reduce capital costs and preventing business risk; we deeply investigate and immediately adjust the thinking for risk management and expand all-round risk management and the

coverage of prevention against legal risk; we intensify the management on the audit plans of subsidiaries, with 614 audit projects implemented in the full year.

We firmly transform the Group's control and management from qualitative mode to quantitative mode, from administrative management to business management, and from consolidation prior to integration to consolidation and integration at the same time through the integration of informationization and industrialization. Five subsidiary enterprises of the Group have been successively honored as "Benchmark Enterprises for Integration of Informationization and Industrialization" by the Ministry of Industry and Information Technology; The Construction of Safe Production Management Information System For Improving the Groups' Capacity of Management and Control was awarded with the 2nd Prize of the National Awards for Innovative and Modern Corporate Management; 14 projects concerned with the integration of informationization and

industrialization, including The Research and Application of Production Management Information System for Cement Production Line with a Daily Capacity of 10,000 tons, have been awarded with 1st Prize and 2nd Prize of Modern and Innovative Management Achievement in the National Building Materials Industry.

## Creating Excellent Performance

The domestic building materials industry revived in 2013. Data published by Ministry of Industry and Information Technology indicated that over the year, the main operating income of the industry achieved RMB 6.3 trillion (increasing by 16.3% on a year-on-year basis) and the profit of RMB 452.6 billion (increasing by 18.2% on a year-on-year basis); the domestic cement output was 2.42 billion tons, increasing by 9.6% on a year-on-year basis; the domestic sheet glass output was 0.78 billion weight cases, increasing by 11.2% on a year-on-year basis; the commercial concrete output was 1.17 billion m<sup>3</sup>, increasing by 22.5% on a year-on-year basis. An initial success has

been achieved in curbing excess production capacity in the fields of cement and sheet glass. A good development trend has been presented and a positive progress in structural adjustment has been made in both fields of building materials product and deep processing.

In 2013, to actively address the challenges of economic slowdown, short demand, excess production capacity and price fall, we carefully studied on the market situation, timely adjusted the operation strategy, and took effective measures according to the deployment of "integration, optimization, efficiency improving, debt reducing", based

on which, stable progress has been made. By Dec 31, 2013, the total assets of CNBM have reached RMB 364.4 billion, accompanied with the operating revenue of RMB 252.3 billion (increasing by 16% on a year-on-year basis), a total profit of RMB 11.5 billion (increasing by 3% on a year-on-year basis), a net profit of RMB 8.8 billion (increasing by 2% on a year-on-year basis) and paid taxes of RMB 13.2 billion. In the end of 2013, asset-liability ratio was 81.89%, decreasing by 0.06 percentage points on a year-on-year basis; the SSCM (security surplus cash multiples) was 1.6, increasing by 0.29 times on a year-on-year basis.



Executive's Address



Market Performance



Science &amp; Tech Innovation



Energy Saving &amp; Environmental Protection



Employee Care



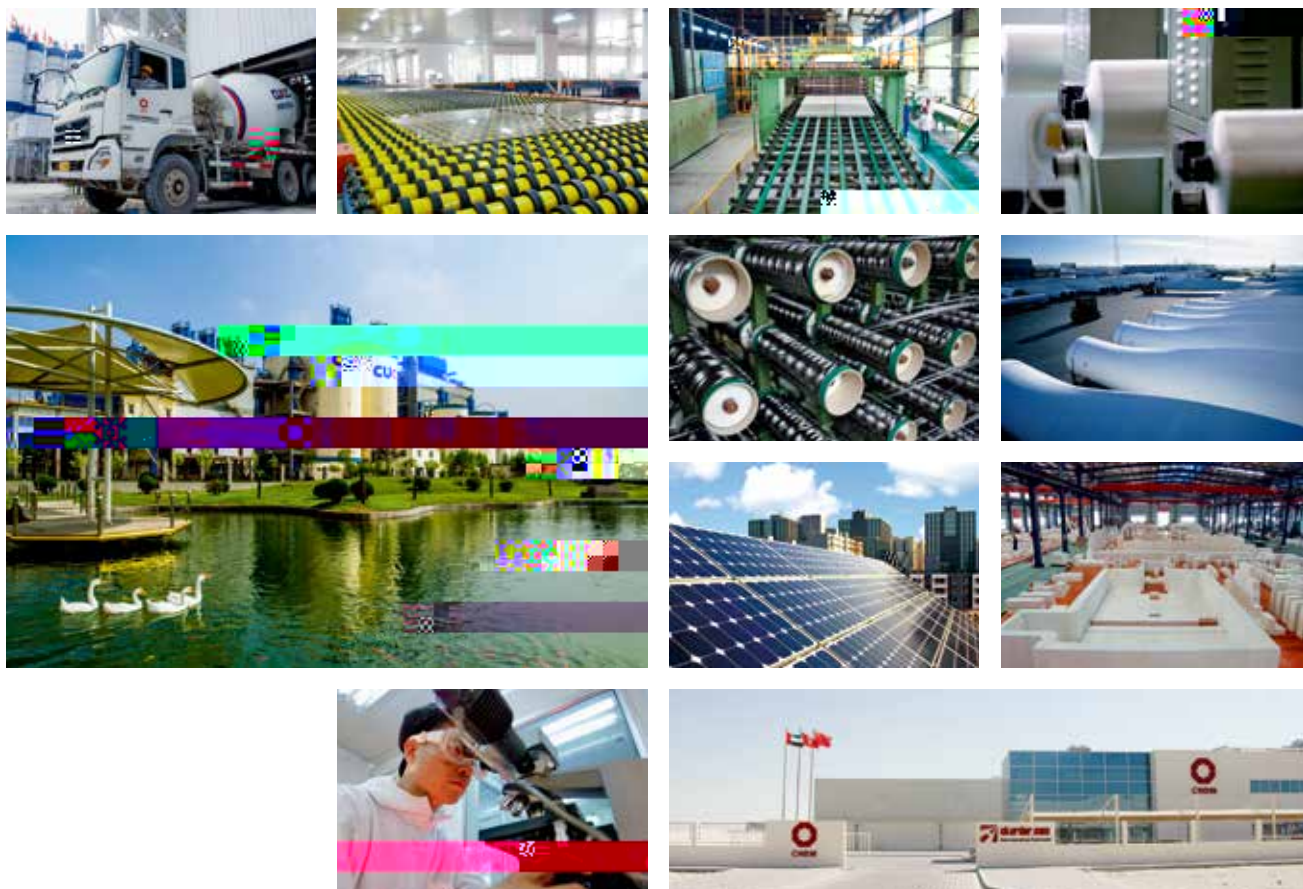
Corporate Citizen

Wang Yong, State Councilor

"In recent years, by persistently implementing requirements of the Party Central Committee, the State Council and the SASAC, CNBM has not only opened up an innovative developing path for traditional central SOEs in the fields of industrial development, technological innovation, transformation & upgrading, management improvement and modern enterprise system, but also made outstanding achievements in respect of asset, income, profits, fulfillment of military production, civil production and research tasks.

The revenue of the inspection and certification service of China Building Materials Academy (CBMA) increases substantially, and multiple results, including cement application in hydropower project, optical fiber, green building, etc.

The sales of cement up to 220 million tons (increasing by 33% on a year-on-year basis); sales of commercial concrete reaches about 87 million m<sup>3</sup> (increasing by 174% on a year-on-year basis) based on favorable interaction with market; benefited from the value of international brand in the plasterboard business, sales of plasterboards reaches 1.23 billion m<sup>2</sup> (increasing by 17% on a year-on-year basis); more than 3200 pieces of fan blades are sold based on "dual adjustment of customer and product"; sales of glass fibers reaches 820,000 tons by giving play to the advantages in technology and cost; an anti-trend increase is realized in engineering service sector by vigorously developing solar engineering service based on the glass and cement engineering services.



## PROTECTING SHAREHOLDERS' RIGHTS AND INTERESTS

As a forerunner of developing mixed ownership economy, the Group holds 6 domestic and overseas listed companies. Non-governmental capitals account for two thirds of the member companies' total capitals. Aiming at maintaining all shareholders' interests, the listed company members, such as China National



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen

We are dedicated to offering safe, reliable,

## Quality Assurance

Based on years of production practice, we have built complete quality management systems and process to implement quality management throughout the procedure from procurement of raw materials to delivery of products. To lay a firm foundation for product quality from the source, we pay close attention to quality inspection and ratio of materials. To assure the quality control level during production based on complete organization systems and procedure control mechanisms, our member companies are instructed to build standard quality management systems. By means of multiple mechanisms and activities (quality group activity, quality benchmarking, quality appraisal, etc.), we continuously improve quality management level and

product quality. Customers are actively invited to get involved in product quality control, and a customer evaluation & feedback mechanism is built to timely and continuously improve product quality upon feedbacks from customers. Our efforts are recognized by customers and national quality supervision and inspection departments. Our products and member companies have been titled as national/provincial/municipal inspection-free products and quality products for many times. In 2013, in the 14th Cement Quality Indicator Inspection & Comparison, 144 enterprises under the Group stood out in near 1000 participants, and five of them won the "Special Prize for Cement Enterprise".

In 2013, the pass rate of quality standard system certification on manufacturing enterprises was

# 82.6%



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen

Performing social responsibilities is included in supplier evaluation system. Our suppliers are dynamically evaluated in terms of law compliance, environmental protection, protection of laborer's rights and interests; any form of commercial bribe is prohibited. We urge our suppliers to continuously improve product quality, supervise and push suppliers to pay attention to physical and psychological health of their staffs, and irregularly assess responsibility certification on suppliers in long-term cooperation management. In each bidding for production line construction, energy saving and end en— 26.1(onstru5-bi5JT\*(in)4(t)6(eg)6(r39(nrt)61(nrt)155Tt(n)4)4(ek(s)and)4)(in)4men)in)4ai5JT\*)6(eg)

The concept of social responsibility has been integrated into procurement management. We stick to “sunshine procurement”, and spare no efforts to eradicate commercial bribes in procurement by pushing regional procurement-bidding integration, bidding process normalization, bidding performance opening and information-based bidding management. The concept of sustainable development has been integrated into our procurement system. In purchasing materials, the products that are manufactured with low-carbon harmless to environment are preferred; in selection of energy, non-fossil energy (low-grade energy, urban refuses, biomass energy, etc.) is vigorously preferred; recyclable products with simple package are preferred in purchasing office supplies and other consumer goods.



## Compliant Management

### Lawful Operation

We insist on the working rules of law compliance and honest operation. A perfect legal affair management mechanism has been built. 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 insist on the integration of law popularizing activities with legal affair management for interactive promotion. The concept of "compliance creates value" is deeply publicized by means of law-popularizing activities in different forms (National Legal Publicity Day, legal training lecture, legal knowledge contest, etc.). To prevent risks in a systemic way, practical experience is shared in legal case explanations and exchange of experience in legal affair management.

# 64,000

person-times of employees participated in legal publicity and education in 2013.

In 2013, the rate of legal review of rules, regulations, management decisions and management contracts was

# 100%



### Anti-corruption

We're fully aware that anti-corruption is as important as marketing and management. Both operation performance and anti-corruption are mandatory quotas decisive for development. Anti-corruption is firmly considered as a major agenda, integrated into all tasks of reform, development and stabilization.

We persistently develop anti-corruption and anti-bribery systems, and continuously push high-efficiency running of normalized management activities. With attention paid to integrity in work, efforts are made to build the culture of integrity; to give full play to its effects, efforts are made in efficiency supervision and inspection.

Organizations and teams for discipline inspection and supervision are further

developed. The member enterprises are pushed to establish and perfect bodies for discipline inspection and supervision, organize professional training for discipline inspection and supervision cadres, thus continuously improving work efficiency and quality.

In 2013, the number of efficiency supervision and inspection projects was

# 145

# 32,000

person-times of employees participated in anti-corruption (anti-commercial bribery) training in 2013.



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen

## Mutual Trust and Benefits

### Honest Operation

Integrity has always been our value orientation and code of conduct. The member companies' conducts are widely recognized and reported by the society. Multiple banks have signed

cooperative agreements with us to offer general credit limits. We were again awarded as AAA in credit rating by China United Assets Appraisal Group in 2013.

In 2013, the performance rate of business contract was

**98.0%**

### Fair Competition

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. In operational activities, the concept of "harmonious relationship with competitors" is observed, voluntarily

maintaining harmonious environment of the industry with fair competition. 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 for fair competition training.

**22,000**

person-times of employees participated in honest operation and fair competition trainings in 2013.



Keeping the responsibilities of leading enterprises in mind, we serve economic and social development with unremitting efforts, offer opportunities of employment, pay taxes



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen



## 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 technology and management experience, explore green development mode, and advocate sustainable development of the whole industry and society.

**50** Coping with Climate Changes

**52** Green Management

**54** Resources conservation

**56** Protecting Ecological Environment

**58** Green Products System

**62** Green Service Industry

In 2013, investment for energy saving and environment protection reached

RMB **1.45** billion

In 2013, installed capacity of residual heat  
power generation reached

**1,606** MW

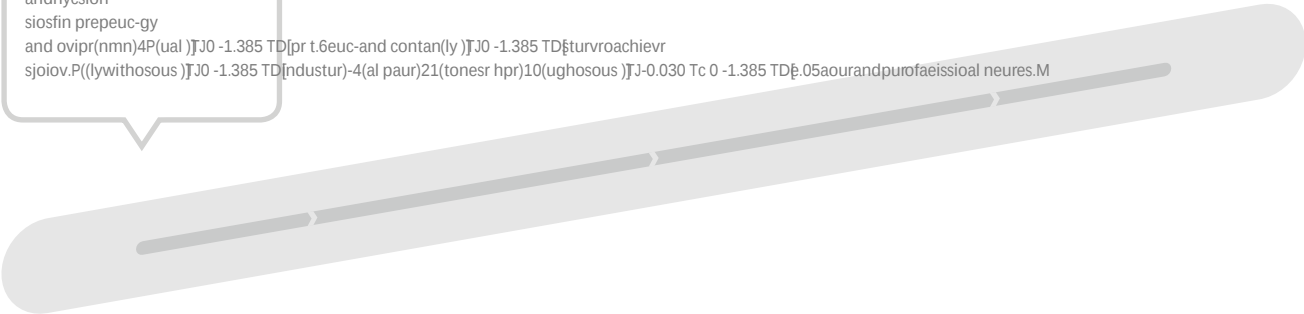
In 2013, treated and reused solid waste reached

**61.91** million tons



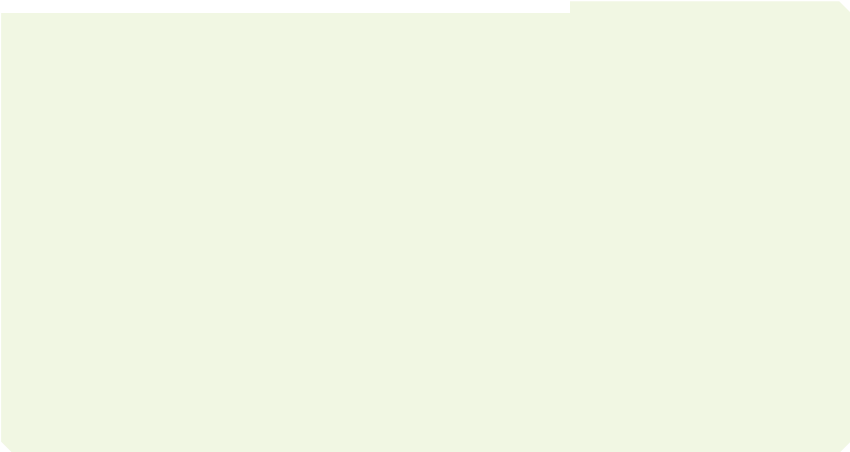
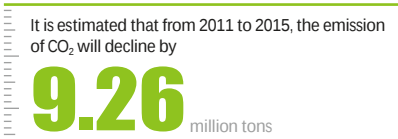
Energy-saving and Environment-friendly Management Model of CNBM

We endeavor to reduce resource and energy consumption in manufacturing process and the emission of v.P2ur sr t.6(o thenav.P(tur95.(ualwr)10(ur)-4ldr)10.s))JTJ0 -1.385 TD[cov.P(inuous(lye)3(xp(an(ingw)48.1an)8yc)6ss))JTJ0 -1.385 TD[t.6(oachiev)16.1( safe)13e (and .03cieov.P(s))JTJ0 -1.385 TD[utilizav.P(sion ofindust ipr(nmn)48.1(s(and pr)10( t.6euc-)13pn))JTJ0 -1.385 TD[the clogcpr(nmn)4P(s))JTJ0 -1.385 TD[t.6(oachiev)16.1( adhaur)-4monious and preduc-oceser t.6(o))JTJ0 -1.385 TD[ppreduc63e (and manufac)-3P(tur)16es en (and ov)13(ipr)10((nmn)4P(e)5-fur)-4( en(ly))JTJ0 -1.385 TD[puiln(ingmav.P(c)1(ur)-4(als)-11,s pr)10(mo t.6es))JTJ0 -1.385 TD[pr]10efab hous( syc)6s t.6em, advroav.P(c)1(s))JTJ0 -1.385 TD[pcen consumption ingpr t.6(orbladess(and))JTJ0 -1.385 TD[olar PV m(edlesr t.6(oboos(s(g))JTJ0 -1.385 TD[nour)16ese)3(xc-)13pc)6.1(nsivr)16es(and .03cieov.P(s))JTJ0 -1.385 TD[pplioav.8.1(tion ofcleanleoner89(gc390.M))JTJ0 -1.385 TD[q0 0 595. gysanlogly and maagenmnsexpeur eoca,s vinegde t.6euc-andnycsion siosfin prepeuc-gy and ovipr(nmn)4P(ual))JTJ0 -1.385 TD[pr t.6euc-and contan(ly))JTJ0 -1.385 TD[eturvroachiev sjoiov.P((lywithosous))JTJ0 -1.385 TD[industur)-4(al paur)21(tonesr hpr)10(ughosous))JTJ0 -1.385 TD[0.030 Tc 0 -1.385 TD[0.05aourandpurofaeissioal neures.M



## Responsible and Exemplary

We keep corporate responsibilities in mind and devour to become a practitioner, fugleman, and advocator in coping with climate change. We actively undertake the task of energy saving and emission reduction, contributing to China's national low-carbon action. From 2011 to 2015, 214 member companies of the Group will reduce energy consumption by approximately 4 million tons of standard coal under “10,000 Enterprises Energy Conservation



## Green Management

Based on the characteristics of the building materials industry, we set up a green management system, which is appropriate for a diversified and comprehensive industrial Group, aiming at building an energy-saving and environment-friendly enterprise. We strictly abide by national laws and regulations, national quota on energy consumption and





3

We attach great importance to the construction of energy saving and emission reduction team. Our industrial enterprises assign personnel to be in charge of energy saving and emission reduction in accordance with relevant national laws and regulations. Management personnel on key positions have obtained professional certificates. We make full use of internal and external educational resources to intensify the training provided for management personnel on key positions, enrich employees' knowledge on energy saving and emission reduction, and improve the management competence of employees.

4

We make strategies, general policies, plans and systems on energy saving and emission reduction, improving our work through three systems covering measurement and statistics, monitoring and analysis, evaluation and assessment. We implement category-based management for the Group's member companies and formulate classified objectives and assessment schemes according to the characteristics of member companies.

5

Standardization management system is implemented. Manufacturing companies of the Group have established standardization management systems regarding quality, environment, and energy, most of which have been certified.

8

During the feasibility research, construction, renovation, and acceptance check of projects, we actively collect advice from local residents and main local stakeholders, minimizing the negative impact of our business activities on society and environment.

Adhering to the concept of green office, we have formulated detailed plan on saving electricity, water, and office consumables. Performance on green office is included in routine monitoring and evaluation system. We actively promote the construction of video conference system to reduce on-site conferences; we arrange business travel in a scientific way and prefer low-carbon vehicles.

## Resource Conservation

### Production Improvement and Consumption Reduction

We value mineral resources. In respect of mine production and development, we adopt top-down bench mining approaches, combining with open-pit mining, road development, lateral stripping and bench mining, so as to prevent geological disasters at the mining areas. In respect of production blasting, multi-row hole and millisecond blasting method is adopted to reduce the waste of resources and environmental pollution caused by blasting vibration. In respect of ore crushing and transportation, ores are usually transported

by conveyer belts connecting pits and plant areas. These conveyer belts are enclosed, thus avoiding fugitive dust caused by vehicles transport and reducing energy consumption as well lessening the impact on the surrounding living environment. In respect of mineral resources utilization, we accurately determine the composition of mineral resources of different batches, make reasonable formula for raw materials compounding, efficiently using low-grade ore and fully demonstrating the value of every mineral resource.

We strive to improve energy utilization efficiency and level. Effective transformation of energy-saving techniques is implemented for the purpose of achieving continuous reduction in consumption and emission per unit of products. Backward production equipment is eliminated timely. Combustion efficiency is continuously improved through upgrading furnaces; power utilization efficiency is increased through promoting energy conservation of motor systems; the consumption of fuel oil for transportation is reduced through performance assessment and benchmarking. The Group's energy consumption for per unit of main products continues to be leading in the industry.

We strive to reduce use of fossil energy in the production process and make full use of low-grade energy and renewable energy, with comprehensive utilization of coal gangue, sludge, urban wastes and otherction l8dT ion e use of fconsumption of fuel oil for tre t, consumption of fuel\*[1(o if)or t if if

-3.ufa-0.nsump strpg

## Water Conservation

We attach great importance to the protection of water resources. The water used in residual heat systems and cooling systems of our manufacturing member companies is recycled. Other water resources for auxiliary processes such as flushing are effectively recycled through the settlement and sewage systems treatment. In 2013, the Group's commercial concrete business expanded further. Due to its production process,

## Recycle

We make full use of our edges over techniques to recycle industrial waste resources. Under the precondition of guaranteeing quality and safety, we continuously expand portfolio of waste resources that can be recycled and increase the utilization efficiency. We have gradually achieved effective utilization and harmless

disposal of industrial waste, industrial byproducts, environmental by-products, sludge of sewage plant, construction waste, and urban waste at production lines of building materials, thus avoiding resource waste or environmental pollution.



**61.91**

tons of industrial by-products and solid waste were consumed by the Group.

**82,000**

tons of urban waste were consumed by the Group in 2013.

## Protecting Ecological Environment

### Environmental Improvement

We are committed to development in harmony with nature and endeavor to reduce environmental pollution and ecocide caused by the companies' operation.

We strictly abide by relevant national laws and regulations, policies and standards on environmental protection, and strive to reduce the discharge of wastewater, waste gas and waste residue in the production process. Through effective technologies on environmental improvement and delicacy management systems, we have reduced discharge of wastewater, waste gases and residues discharges at production lines to or below the national emission limit.

We reduce the formation and emissions of pollutants such as SO<sub>2</sub> and NO<sub>x</sub> in waste gas through the application of clean energy and increase of oxygen content in combustion systems. We actively advance the construction of denitration systems

in cement production, under which we can sharply reduce the emission of NO<sub>x</sub> by effectively utilizing technologies on low-nitrogen combustion and selective reduction; we explore the construction of matching information control system, rationally control the usage amount of reducer, extend the service life of the system, and control the consumption of reducer and the cost of denitration; the dust in waste gas is effectively reduced through dust removal technologies, namely bag type dust removal. We have achieved integrated utilization of technologies on desulfurization and denitration, dust removal, and residue heat power generation to systematically control the quality of waste gases. We strive to achieve "zero" discharge of wastewater through the construction of sewage treatment and recycling system at the production base of galls fiber.

We attach great importance to waste residue management. Through technological innovation and delicacy management, we have been able to reprocess wastes generated in production process, recovered product packaging and substandard products and recycle those are tested to be qualified as raw materials, thus realizing the recycling of self-produced solid wastes. We pay close attention to noise control and employee protection, monitor and control the impact of production noise on the health of our employees and neighboring communities in accordance with national noise control standards. We strive to reduce noise hazards through optimized layout of production lines, use of physical isolation, green shielding and occupational protection. 93.6% of our manufacturing member companies reach the noise control standards.



We integrate low-carbon and environment-friendly concept into the whole production process, including R&D, design, production, package, sale, and recovery of products, providing clients with systematic low-carbon and environment-friendly products and

services. We endeavor to promote low-carbon achievements, provide green services, and disseminate environment-friendly concept to contribute to the sustainable development of the whole society.

Massive flexible structure, 30% of the weight of traditional brick-concrete structure, lightly respond to earthquakes, with anti-seismic and fastened joint components; it can meet the requirements for protection against 9.0-magnitude earthquake and 12-class typhoon.

"Dual heat insulation (internal and external heat insulation of exterior walls) + double interlayers (open ventilation layer and closed air layer)"; effectively avoid "dew formation in the winter" and "damp in the summer", with energy consumption declining by over 75% compared with traditional housing structures.

We adopt the design of open ventilation layer according to the principle of air heat cycle to achieve cross-ventilation and indoor air ventilation; the main structure and the decoration layer of exterior walls are directly equipped with "one-way breathing paper", an effectively barrier to the entrance of external moisture and other corrosive gases into the main structure, through which the indoor moisture can go out.

Compound walls with multilayer cavities made of different textures and of various thicknesses provide even better performance in sound insulation than five-star hotels.

The materials of exterior walls and for heat insulation are level-A noninflammable materials that can fully meet the national requirements for small and medium-sized buildings to prevent fire.

With less bearing partition indoor, flexible layout, wall with half thickness of traditional structure, 10% more usable area inside, and an efficiency rate of 92%.



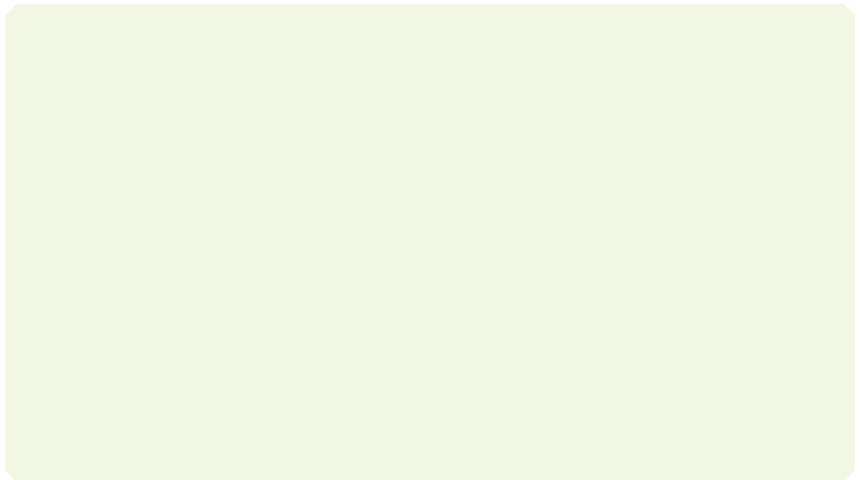
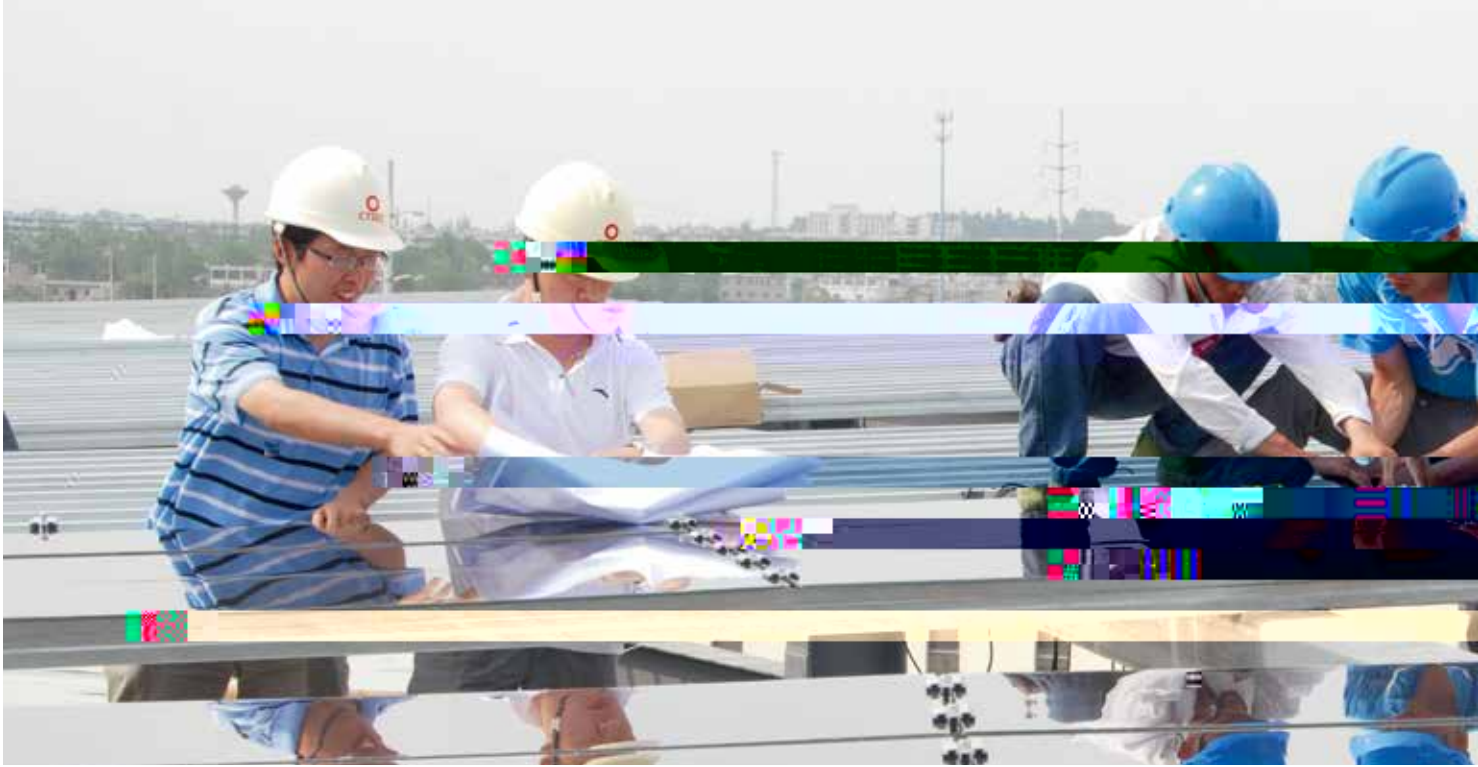
## Green Building Materials

We adjust the product structure of basic building materials. We actively push cement industry to produce "high-grade, specialized, ready-mixed and commercialized" cement, providing clients with green low-carbon cement products of high quality. We lead the glass sector to manufacture "high-end, LOW-E, ultra-thin and high-performance" glass, with a focus on LOW-E glass, enhancing the functionality of building glass products and offering materials support to architectural energy conservation.

We make research and develop new building materials, which is carried out in accordance with four core concepts, namely energy saving, safety, comfort, and ecology. We aim to enhance the thermal insulation property of products to reduce energy consumption, minimize the use of raw materials that are radioactive, poisonous or harmful, so as to guarantee safe use and living, highlight functions in sound insulation, moisture-proof and permeability to improve living comfort, 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. Currently, the system of new building materials, including gypsum plaster board, GeiL board, GeiL tile, etc. is widely used in architectures at home and abroad, contributing to energy conservation in building industry.







## Low-carbon Sale

We adopt green sale model. We reduce resource occupation and improve marketing efficiency through establishing modern logistic park and rational plan on supply, marketing and logistics. We provide online transaction service for worldwide building products and reduce the carbon released by business travel of clients and sales personnel through establishing online marketing platform.

Bulk cement means cement is directly delivered from plants to transfer stations or users after produced at factories through specific facilities or containers, without any pouch pack.

Using bulk cement can improve the reliability and safety of constructional engineering. When leaving the factories, bulk cement has relatively high stability and quality. During transportation and storage, they cannot be easily deteriorated by moisture, thus avoiding strength decrease caused by moisture.

Developing bulk cement can improve the working condition of workers and achieve civilized production of cement enterprises. If cement leaves factories in traditional paper bag packing, workers will have to





## Four Service Systems



### Technological Transformation

We are committed to providing the industry with efficient and environment-friendly manufacturing process and technology; our independently developed technologies related to cogeneration, desulfurization and denitrification, full-oxygen combustion and integrated utilization technology of solid waste are extensively applied; several technologies have been included into the national list of promoted technologies and equipment for saving energy and water, environmental protection, and recycling of resources. We are committed to advancing the deep integration of industrialization and informatization, integrating intelligent control technology into the manufacturing of our clients and providing large and intelligent outputs for our clients; according to the demands for intelligent manufacturing in the field of building materials manufacturing, we provide production and operation control systems, including energy efficiency control system, environmental protection system, expert control system, online simulation system, safe operation system, etc., and transformation into intelligent factories with functions of procurement, production, sale and current management and into digitalized workshops based on remote control technology.



### Experts Consultation

We employ experts in technology, energy efficiency, environmental protection, and management in the industry to provide enterprises with standard implementation and certification concerned with standardization management systems on energy, environment, and help enterprises deeply tap into the potential of energy saving. We provide services related to management and consultation, including energy audit, clean production verification, and carbon check, to help companies determine improvement path, working goals, and gradually advance energy saving and emission reduction according to the plan.



### Financing Management

We provide financing services to those enterprises with financial difficulties in technological transformation of process and informationized energy saving through energy performance contracting, and operation, maintain services for energy saving system, share financial risk and energy-saving benefits with the enterprises.



# Corporate Citizen

During production and operation, we seek to achieve mutual development

66

68

69

70

72

Hours of volunteer services provided by our employees in 2013 hit approximately

**11,000** hours



Number of projects of donation in 2013 was

**332**

Total amount of donation in 2013 was

RMB **21.95** million



We value the Group's responsibility-related image in overseas operation. In order to bring mutual benefits with host countries and realize coexistence with local societies, we respect local religions and customs,



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen



## Commitment to Social Welfare

Adhering to the principle of making donations on a voluntary basis, with clearly defined responsibility and subject to our resource capability, 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. We put our best efforts in supporting social development by facilitating mutual development in the areas where we run our business.

We believe that a comprehensive donation management system is not only beneficial for us to play a better role in national disaster relief, help the distressed, promote social equality and perform the social responsibility of a central SOE, but also important for safeguarding contributor's interests and national assets. When major natural disasters hit, we provide support in kind and capital as soon as possible; we are committed to supporting the social welfare and public facilities construction; we pay special attention to the development of environmental protection and education causes. In line with

the principle of guaranteeing the rights and interests of stakeholders 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.

Our donation management system is established and improved. We have established and perfected management and organization system, formulated management measures on donation, and made strict donation approval process, and managed our member companies in a unified way. The donation outlay has been incorporated into the budget management system; limits and authorities relating to donation expenditure are specified; the approval and filing system of donation has been carried through; we provide statistical analysis of donations in each quarter and intensify internal supervision; we have established a

mechanism for periodically analyzing and reporting the donation project progress, evaluating effects and conducting return visits when the project ends, so as to guarantee that the donation projects serve social welfare purpose as expected.

In 2013, the Group and its member companies carried out 332 donation projects, with the amount of donations up to RMB 21.95 million, of which 31% was donated for the construction of public utilities, 15% for disaster-affected areas, 11% for designated poverty alleviation regions and 8% for social welfare and charity.

In 2013, the amount of donation hit

RMB **21.95** million

In 2013, the number of donation projects was

**332**



### SUPPORT KNOWLEDGE BASE FUTURE

We have developed close cooperation and consecutively entered into strategic cooperation agreements with a number of renowned universities and colleges, including Wuhan University of Technology, Tongji University, Nanjing University of Technology, etc., pursuant to which fellowship and scholarship are founded to help needy students finish their studies and for brilliant students to make their dreams come true. We take advantage of our top-ranking production, experiment and application platforms, and establish an experimental teaching base for teenage students and an internship base for college graduates, providing opportunities for young students to practice or even start their own business. Teenage students can therefore get access to combine their knowledge with production and corporate management, laying a solid foundation for their future career.

A post-doctoral research center and post-doctoral research workstation are established in the Group, which becomes a channel for universities, R&D institutions, and enterprises to communicate and cooperate in the fields of talent, technology, and project, providing guarantees in capital and practical environment for excellent scientific research personnel. It also prompts the close combination of production, learning and research and the commercialization of research findings, establishes a new production-study-research relationship on the basis of mutual benefit.



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen

On April 20, 2013, 7.0-magnitude earthquake hit Ya'an of Sichuan, causing mass human casualties and property loss in disaster-affected areas.

After the earthquake, CNBM quickly launched the earthquake contingency plan and established "Emergency Command Center for 4·20 Earthquake Relief" to arrange and deploy emergency rescue, securing the safety of our employees and their families, minimizing property loss, resuming production as soon as possible, and guaranteeing the supply of basic building materials in the affected areas. The member companies in Sichuan were required to strengthen their leadership and organization, well check and monitor dangerous cases to prevent secondary disasters, investigate disaster situations of the companies, make careful statistics analysis, and officially launch information releasing

platform for earthquake relief, carefully and immediately managing the submission and release of related information. Our achievement in the earthquake relief work was substantial, with no casualty among employees or their families. Three days after the earthquake, Shifang Southwest Cement resumed its production, providing building materials for disaster relief and post-disaster reconstruction.

The Group's enterprises at all levels utilize their advantages to actively participate in earthquake relief, reconstruction and recovery in affected areas. The Group's member companies and employees donated RMB 3 million to support earthquake relief and post-disaster reconstruction in Ya'an. The enterprises in the area increased the output of various building materials and anti-seismic houses required by earthquake relief and reconstruction to ensure market supply and relief demands, effectively maintained the production, operation, and market order and also enterprises in the area



Executive's Address



Market Performance



Science & Tech Innovation



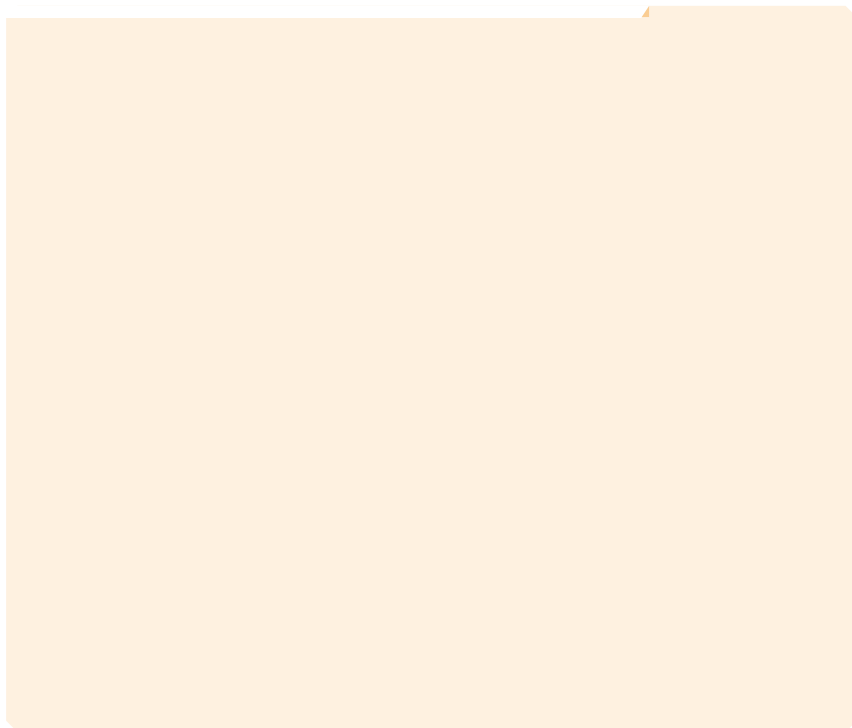
Energy Saving & Environmental Protection



Employee Care



Corporate Citizen





We advocate a harmonious social atmosphere.



Corporate Citizen



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen



At the end of 2013, the total number of employees reached about

**179,000**

## Employee Care

We make every effort to safeguard the rights of our employees, respect their differences and make the company a reliable partner, 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.

**76** Protection of Employees' Rights and Interests

**77** Implementing Democratic Management

**78** Production Safety Guarantee

**82** Supporting Employees' Growth

**83** Creating Happiness for Employees

**84** The Most Adorable Employee



RMB **310** million  
was invested in occupational  
health and safety in 2013.

In 2013, our employees  
attended training for  
**1.64** million hours



The ratio of salary of male employees to that of female employees was

We respect and support the international covenants on human rights and labor standards and strictly prohibit and reject employing child laborer in any form according to laws including “Law of the People’s Republic of China on the Protection of Minors”, “Provisions on Prohibition of Child Labor”, etc.

Forced labor and discrimination are strictly forbidden. Employees are guaranteed with a decent working environment of freedom, fairness, safety and dignity.

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. 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.

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 respect the working privacy right of employees and establish a privacy



## Implementing Democratic Management

We consistently promote direct collective bargaining, encourage employees to deal with the issues of their concern through collective bargaining, thereby fully protecting their rights and interests.

We have set up channels through which the employees could freely send their suggestions to the senior management. Through the trade unions, we collect proposals and reasonable recommendations from the staff, drawing on the talent and wisdom to sustain the growth of enterprises.

We continuously consolidate, deepen and perfect the disclosure mechanism of factory affairs and take the hot, tough and key issues of concern to the employees as the priorities in the disclosure of factory affairs, so as to expand their 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.

# 90.7%

of the proposals of the Workers' Congress were handled and settled in 2013.

### PARTICIPATION OF EMPLOYEES IN THE GOVERNANCE OF ENTERPRISE MANAGEMENT

The Logistics Center of Beijing New Building Materials (Group) Co., Ltd. is an operation and service platform integrating metal trades, storage and logistics. For years, taking employees' rationality point, the Logistics Center adheres to the participation of employees in management, respects the initiative spirit of employees, optimizes its management process, and increases its operation performance. It proves that employee is a strong supporter for the management of enterprise, and the participation of employees is the golden key to enterprise management.

Since employees work at the site of management, they have the clearest picture of problems and hidden dangers in field management, and their suggestions are the most authoritative. The Logistics Center takes the participation of employees in the management as a kind of management philosophy and system standard, giving a full play to the enthusiasm of employees at all posts, including field operation, business operation, marketing, risk management; respecting employees and listening to employees' rational enterprise. They believe and rely on employees, eliminating their worries and allowing them to propose their ideas freely; as for suggestions of employees, leaders of the Center always respond timely, and solve problems one after another. They directly include valuable suggestions into management system or process, and improve the performance of posts and the management of the enterprise.

When their suggestions are respected, the employees will have the sense of responsibility; when the enterprise cares about employees' lives, they regard the enterprise as the most authoritative. The Logistics Center takes the participation of employees in the management as a kind of management philosophy and system standard, giving a strong confidence to the employees, improves employees' enthusiasm, and increases the operation performance. In the past six years, the performance of the Center had been increasing year by year, and the Center has been evaluated as "Star Team" for many consecutive years. Every employee has a sense of pride in his heart, and believes that the Center is a big family with their care and devotion.



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen

## Production Safety Guarantee

We have established a domestically top-ranking management system for safe production with safe production accountability system, standardization of safe production, and operation specification of safe production as the core.



**0**

fatal accident in 2013.

**149,000**

person-times of employees received training in occupational health and safety in 2013.

In 2013, the number of accidents of minor wounds declined by (on a year-on year basis)

**24%**

In 2013, the person-time of the minor wounds declined by

**3**

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 attach great importance to building up a safety

4

We have established safety production 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.

5

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

7

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.



### Sun Huashan, vice director of State Administration of Work Safety:

"CNBM adopts safe production standardization as an effective means to achieve integrated corporate management; through the copy of the management model of safe production standardization, CNBM regularizes and integrates enterprises newly affiliated to the Group, with digestion and absorption achieved quickly, which helps the member companies improve their production environment, guarantee the Group's implementation of large-scale consolidation and restructuring, and contributes to sound and sustainable corporate development."

# 95.4%

We have installed and optimized 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 like overalls, helmets, protective footwear, gloves, noise-proof ear covers and anti-dust masks, which are put in place and replaced in a timely manner to ensure their efficacy. We provide equal protection of occupational health and safety for part-time employees, contract employees, and day laborers, require our subcontractors to provide occupational and safety protection for their employees according to the Group's regulations on occupational health and safety. We standardize the management system on occupational health and actively implement occupational health system certification.

We attach great importance to the training of occupational health, raise the awareness among the staff of protection against health and occupational hazards and impart relevant knowledge. Through regular training sessions and assessments, we improve the self-protection capacity of our employees.

We put occupational diseases prevention and warning in the first place. It's an established practice to organize employees to take health examinations, arrange extra health checks for staff in jobs with exposure to dust or radiation, establish Personal Health Record and keep reexamination.

We explore ways to establish mental health management system for employees and 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.







Helping Employees in Need

Caring about Special  
Group of Employees

Enriching the Life of Sta



Executive s Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection



Employee Care



Corporate Citizen

## Be the Most Adorable Employee

In 2013, average employee turnover rate was around

**10.8%**

In 2013, the number of member companies carried out employee satisfaction surveys was

**453**

We always adhere to the “people-oriented” management concept, promote the environment of “San Kuan San Li”(being lenience, tolerance and ease; unity, affinity and cohesion), vigorously implement the strategy of “talents-invigorate-enterprise” and strive to create a “one-CNBM family” corporate environment. Our work has also been recognized by the community.

Our efforts have been recognized by the staff, as indicated by the ever-increasing employee satisfaction level. Our employees strive to excel in the Group and in their own professions, serve the companies and the community by strenuous efforts that deliver good results. Our employees show their talents and encourage other people in their own specific fields.





Su Zhixiong, a young man born in the 1980s, was a project director of BNBM Homes Co., Ltd. He led a team to build green pre-fab housing in the desert, overseas, and rural areas. The experience records the lively outline of common workers. The story of Su Zhixiong is not only a story of a person; it is one of thousands of ordinary people who are working hard for the company's development.



Executive's Address



Market Performance



Science & Tech Innovation



Energy Saving & Environmental Protection

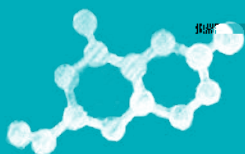


Employee Care



Corporate Citizen

RMB **5.49** billion  
was spent in scientific and



## Technological Innovation

We shoulder the responsibility of innovation for the industry by leveraging our strong research capabilities. We also promote transformation and upgrades to the industry with our foresight, vision and advanced technology. We promote and share our technical information. We are committed to building a more environment-friendly, comfortable and intelligent living environment and creating a sustainable future.

- 88 Building a Super Power of Scientific Researches
- 89 Gathering Pioneers of Scientific Researches
- 90 Guarantee of Investment in Scientific Research
- 91 Improvement in Innovation Activities

- 92 Acting as the Engine of Innovation
- 93 Expediting the Transformation of Achievements
- 96 Science and Technology Serve the Society

RMB **25.94** billion  
was recorded from sales of new  
products in 2013.



**3,231**

valid patents had  
been accumulated till  
the end of 2013.

Dedicated to developing an innovation engine in the industry, and by integrating and optimizing technological resources under the Group, we have established a science & technology innovation platform and system centered on China Building Materials Academy (CBMA) and become a comprehensive scientific research and development organization of the largest scale and strongest capability in the building materials and inorganic non-metallic materials industry.

## Gathering Pioneers of Scientific Researches

We pay close attention to the development of scientific research teams. In 2013, the number of personnel engaged in scientific and technological activities in the Group totaled nearly 14,000, approximately accounting for 8% of the total number of employees in the Group. The Group also has 1 academician of Chinese Academy of Engineering, 6,069 R&D personnel, and 13,959 engineering technicians. As a national innovative and venture base for overseas top talents, we attach great importance to the introduction and selection of senior scientific research talents. As of 2013, we had successfully recruited 41 overseas top talents, three of whom were selected in the "Thousand Talents Program".

We continuously deepen talents team building, and spare no efforts to improve the quality and vitality of scientific research teams. 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. Through such ways as establishing the Youth Science Foundation and organizing youth scientific research contests, we promote the development of key young personnel, and provide a continuous flow of talents for the scientific research team of the Group.

In 2013, the number of personnel engaged in scientific and technological activities in the Group was nearly

# 14,000

In 2013, the percentage that the science and technology personnel of the Group accounted for the total number of employees was

# 8%

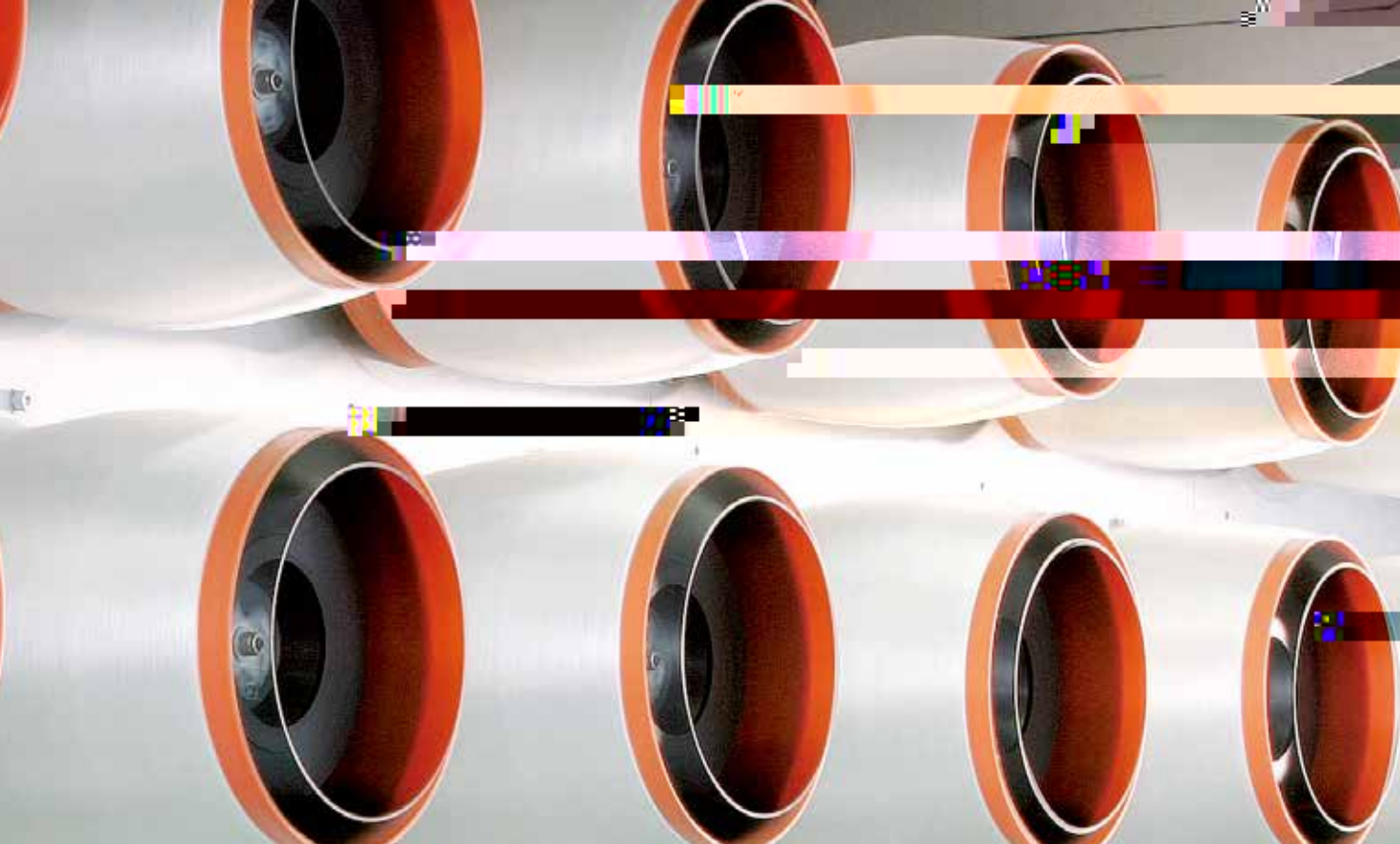


Financial support for science and technology is an important guarantee for scientific and technological progress, so we attach great importance to the investment in science

We have established "Science and Technology Progress Award" and "Technical Innovation Award" within the Group.

We actively undertake tasks of tackling key problems and researches of key technologies in related fields, and shoulder

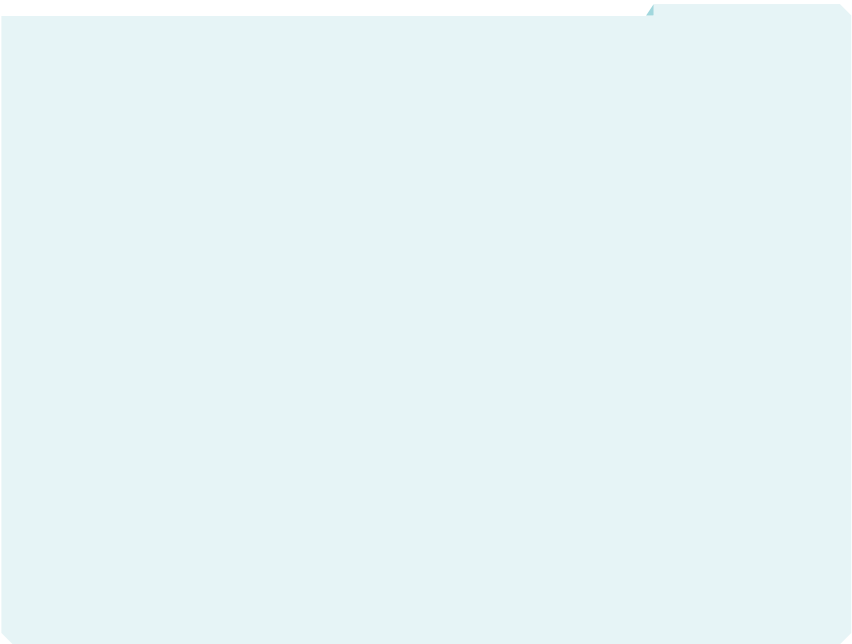




We lead independent innovation and intellectual property protection. The Group's patents increased steadily in 2013. There were 1,262 new patent applications including 373 patents for invention, and 848 newly authorized patents including 128 patents for invention. A total of 3,231 valid patents were accumulated, including 589

patents for invention. The Group has also made breakthrough in the authorization of international patents, with 4 international patents authorized in the US and some other countries.

**848**  
patents were newly authorized in 2013.



#### PUSH APPLICATION OF NEW MATERIALS BASED ON PRODUCTION-RESEARCH INTEGRATION

Jointly founded by Lianyungang Zhongfu Lianzhong Composites Group Co., Ltd. and Harbin FRP Institute, subordinating to CNBM, Zhongfu Carbon Fiber Core Cable Technology Co., Ltd. is dedicated to R & D, production and sales of carbon fiber compound core conductors in dependence on the advanced technologies of Harbin FRP Institute for producing such conductor. The carbon fiber compound core conductor independently developed and produced by the company is a new-type conductor based on the high strength and excellent corrosion resistance of carbon fiber. Compared to ordinary steel core aluminum strands, it has the advantages of light weight, high tensile strength, high temperature resistance, anticorrosion, large current-carrying capacity, less line loss and less sag. As an energy-saving capacity-increasing conductor with brand-new structure, it is favorable to building a safe, environment-friendly, efficient and energy-saving transmission network. Zhongfu Carbon Fiber Core Cable Technology Co., Ltd. has undertaken the first large-span transmission conductor project (max. span, 1180m), which was the first application of carbon fiber compound core conductor in the world.

## Science and Technology Serve the Society

### Guarding the Development of the Industry

We actively participate in the formulation and amendment of national and industrial standards, and contribute to improving the quality and performance of building materials, reducing pollution and safeguarding employees' health through promoting the application of standards and regulations. In 2013, we formulated and amended 1 international standard, 5 national standards and 50 industrial standards. We also participated in the formulation and amendment of 7 national standards and 9 industrial standards.

In 2013, the Group led the official release of ISO 17095: 2013 Fine Ceramics (Advanced Ceramics, Advanced Technical Ceramics) – Test Method for Interfacial Bond Strength of Ceramic Material at Elevated Temperatures, which effectively solved the technical problems of ceramic material assessment at elevated temperatures, filling the vacancy of strengthen assessment of elevated temperature materials. The international standard, ISO 13124: 2011 Fine Ceramics (Advanced Ceramics, Advanced Technical Ceramics) – Test Method for Interfacial Bond Strength of Ceramic Materials, which was also released by us in 2011, won the second prize of Contribution to standards Innovation in China.

We have test and certification resources and quality control and technical assessment laboratories of industrial products (building materials, ceramic sanitary wares, decorative building materials, wall and roof materials, glass, horologe, light industrial machinery), covering the whole industry. Our business scope includes quality, safety, environment production, low carbon, etc. We provide enterprises and consumers with comprehensive, professional and authoritative services, promote continuous improvement of processes, management, and product quality, contributing to the sound and orderly development of the industrial chain.

We hosted and participated in the formulation and amendment of

**71**

national and industrial standards in 2013.



#### GREEN SCALEPLATE – GUARD THE DEVELOPMENT OF THE BUILDING MATERIALS INDUSTRY

As a third-party test and certification agency approved by CNCA and accredited by CNAS, CTC is a key high-tech enterprise in the National Torch Plan. CTC, dedicated to five business sectors including building inspection, certification, safety service, R&D of instrument, and extended service, has already been the most authoritative agency providing test, certification and assessment services in the building materials industry. In 2013, CTC undertook numerous test tasks of major projects in China, and issued 550,000 reports in the year. Those projects including nuclear power engineering, Disney Land, the best practice zone of Expo City, main urban rail transit projects in Beijing and Shanghai, providing professional consultation on low-carbon, environmental protection, quality, safety for the main venue of 2014 APEC meetings. It has provided standard assessment services for over 620 enterprises, and offered consultation guarantee for the safe operation of building materials enterprises.



### PRACTITIONER OF INTERNATIONAL TECHNOLOGICAL COOPERATION

China Building Materials Academy (CBMA) has organized and undertaken high-level international meetings (e.g. International Symposium on Cement & Concrete), joined and taken important posts in multiple international academic organizations (e.g. RILEM). Since the first international standard for the industry published in 2011, CBMA has successfully published 3 international standards for the industry in 3 consecutive years, which significantly improves the authority and influence of China in the international standardization field. To occupy the international commanding height of the industry, CBMA runs and issues English periodicals all over the world. The successful bid to host the 14th International Symposium on Cement & Concrete realizes the long-cherished wish of a few generations of Chinese cement scientists. Depending on the strong power of innovation and the achievements made by active involvement in international technological cooperation, CBMA was highly appreciated, and identified as a state-level "Demonstrative International Technological Cooperation Base" of the industry by Ministry of Science and Technology of PRC.

## Prospering Innovation Culture

Giving full play to our advantage in scientific research and our influence, we have built platforms for communication, promotion and sharing to drive and prosper the innovation culture.

Industry websites and professional publications are run to timely publish frontier information 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 material enterprises.

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 motivate technological innovations to faster and more effectively serve sustainable development of the society.

Professional exhibitions are undertaken to collectively exhibit and recommend new technologies and products, offering platforms and services to technological result industrialization, thus pushing technological progress and result sharing in the industry.

# 622

academic exchange activities were held and organized in 2013.



Achieve sustainable development. We are fully aware that the reform is to realize sustainability. Consequently, we will continue to firmly and deeply push building enterprises of social responsibility, integrate responsibilities into management, emphasize the role of responsibility management in the group strategy and the development planning, and make efforts to practice and propagate the social responsibility concept with international



Executive's Address



Market Performance



Science &amp; Tech Innovation



Energy Saving &amp; Environmental Protection



Employee Care



Corporate Citizen



[illegible]

This image shows a full-page view of a sheet of graph paper. The background is white, and it is covered by a uniform grid of thin, light gray lines. The grid consists of small squares. At the very bottom of the image, there is a solid, thick green horizontal band that spans the entire width of the page. This band appears to be a header or footer area, possibly for a logo or title. The rest of the page is left blank, showing only the grid pattern.

| No.                                 | Content of Indicator                                                                                                                                           | Position in Report | Nature of Indicator |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|
|                                     | Measures for green office                                                                                                                                      |                    | Core                |
|                                     | Green office performance                                                                                                                                       |                    | Extended            |
|                                     | Saving energy by reducing business trips                                                                                                                       |                    | Extended            |
|                                     | Green buildings and sales network                                                                                                                              | N/A                | Extended            |
|                                     | Green factory                                                                                                                                                  |                    |                     |
|                                     | Establishing energy management system                                                                                                                          |                    | Extended            |
|                                     | Energy conservation policy and measures                                                                                                                        |                    | Core                |
|                                     | Total annual energy consumption                                                                                                                                |                    | Core                |
|                                     | Comprehensive energy consumption per unit output value of the enterprise                                                                                       |                    | Core                |
|                                     | Policy and measures for utilization of new, renewable or clean energy                                                                                          |                    | Extended            |
|                                     | Utilization amount of new, renewable and clean energy                                                                                                          |                    | Extended            |
|                                     | Policy, measures or technologies for reducing waste gas emission                                                                                               |                    | Core                |
|                                     | Emission and emission reduction of waste gas                                                                                                                   |                    | Core                |
|                                     | System, measures or technologies for reducing waste water discharge                                                                                            |                    | Core                |
|                                     | Emission and emission reduction of waste water                                                                                                                 |                    | Core                |
|                                     | System, measures or technologies for reducing waste emission                                                                                                   |                    | Core                |
|                                     | Emission and emission reduction of waste water                                                                                                                 |                    | Core                |
|                                     | Policies and measures for the development of circular economy                                                                                                  |                    | Core                |
|                                     | Cyclic utilization rate of renewable resources                                                                                                                 |                    | Core                |
|                                     | Building a water-saving enterprise                                                                                                                             |                    | Core                |
|                                     | Annual consumption of fresh water/ fresh water consumption of unit industrial added value                                                                      |                    | Core                |
|                                     | Volume of neutral water reuse                                                                                                                                  |                    | Core                |
|                                     | Plan and action for the reduction of greenhouse gas emission                                                                                                   |                    | Core                |
|                                     | Emission and emission reduction of greenhouse gases                                                                                                            |                    | Extended            |
|                                     | Green products                                                                                                                                                 |                    |                     |
|                                     | Proportion of suppliers passing ISO 14000 Environment Management System Certification                                                                          |                    | Core                |
|                                     | Measures to improve suppliers' awareness and capabilities of environmental protection                                                                          |                    | Extended            |
|                                     | Number of suppliers receiving punishments in respect of environmental protection, and number of punishments                                                    | N/A                | Extended            |
|                                     | Support for R&D and sales of green low-carbon products                                                                                                         |                    | Extended            |
|                                     | Measures and performances of waste products recycle                                                                                                            |                    | Core                |
|                                     | Policies and performances of package minimization and recycle                                                                                                  |                    | Core                |
|                                     | Green ecology                                                                                                                                                  |                    |                     |
|                                     | Protection of biological diversity                                                                                                                             |                    | Core                |
|                                     | Protection of natural habitats, wet land, forests, wildlife corridor, and farm land in constructions                                                           |                    | Extended            |
|                                     | Ecological restoration and governance                                                                                                                          |                    | Extended            |
|                                     | Rate of ecological restoration and governance                                                                                                                  |                    | Extended            |
|                                     | Public welfare activities for environmental protection                                                                                                         |                    | Core                |
| Part 6 Report Postscript (A Series) |                                                                                                                                                                |                    |                     |
|                                     | Future plan: Corporate planning on social responsibility work                                                                                                  |                    | Core                |
|                                     | Report Evaluation: Evaluation of experts in social responsibility or industry experts, relevant interested parties or professional organizations on the report |                    | Core                |
|                                     | Reference Index: Application of indicators as required to be disclosed by the guide                                                                            |                    | Extended            |
|                                     | Feedback: questionnaire of readers' opinions and feedback channel for readers' opinions                                                                        |                    | Core                |

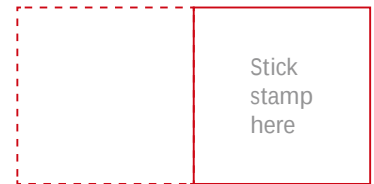
## Rating Report



E-mail:



Please fold here



Stick  
stamp  
here

Suite 2216, Building 2, Guohai Plaza, 17 Fuxing Road, Haidian  
District, Beijing

Social Responsibility and Energy Saving & Environmental Protection Office  
China National Building Materials Group Corporation

Please fold here



