



北京金隅集團股份有限公司  
**BBMG Corporation\***

*(a joint stock company incorporated in the People's Republic of China with limited liability)*  
**(Stock Code: 2009)**

## **2017 Environmental, Social and Governance Report**

# 2017 SOCIAL RESPONSIBILITY REPORT OF BBMG CORPORATION

## ABOUT THIS REPORT

This is the 7th Social Responsibility Report released by BBMG Corporation (“**BBMG**” or the “**Company**”) since its establishment, which gives a true view of the active performance of economic, social and environmental responsibilities of the Company to realize comprehensive, coordinated and sustainable development. BBMG Corporation was jointly founded by BBMG Group Company Limited\* (北京金隅集團有限責任公司) (currently renamed as BBMG Assets Management Co., Ltd.\* (北京金隅資產經營管理有限責任公司)), China National Non-Metallic Materials Corporation\* (中國非金屬材料總公司) (currently renamed as China National Materials Company Limited\* (中國中材股份有限公司)), Hopson Holdings Limited, Beifang Real Estate Development Co., Ltd.\* (北方房地產開發有限責任公司) and Tianjin Building Materials Group (Holdings) Corporation (天津市建築材料集團(控股)有限公司) upon approval by Jing Fa Gai [2005] No. 2682 Document issued by Beijing Municipal Commission of Development and Reform.

### Time frame

From 1 January to 31 December 2017.

### Report scope

This report covers BBMG Corporation and its subsidiaries.

### Data scope

In this report, the relevant data covers the subsidiaries of Tangshan Jidong Cement Co., Ltd. (“**Jidong Cement**”) and Jidong Development Group Co., Ltd (“**Jidong Development Group**”).

### Information sources

In this report, all information and data are extracted from the official documents, statistical reports and financial reports of the Company, as well as the practical social responsibility information as collected, summarized and reviewed by the Company. The external data referenced are sourced from public available data of the third parties. The business data and cases contained herein are respectively derived from the data reported by functional departments and members of

China National Building Material Group Corporation\* (中國建材集團) in strict accordance with the Regulations on Collection of Social Responsibility Management Information of BBMG; the data of internal departments and subsidiaries of the Company are reported to the BBMG after examination on a level-by-level basis; the relevant departments of BBMG perform review and sampling verification at a sampling rate of no less than 5%, with an aim to assure the standardization, reliability and authenticity of such data. The financial data is extracted from the annual results report for the year of 2017 released in the People’s Republic of China (“China” or “PRC”) and Hong Kong. All the financial data are expressed in RMB, unless otherwise specified.

### **Basis for preparation**

The report is prepared by reference to the Environmental, Social and Governance Reporting Guide contained in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “**Hong Kong Stock Exchange**”) (the “**Listing Rules**”), the *Guidelines on Environmental Information Disclosure by Companies Listed on the Shanghai Stock Exchange* and *Guidelines on Preparation of ‘Corporate Report on Performance of Social Responsibilities’* issued by the Shanghai Stock Exchange, the *Sustainability Reporting Guidelines* (4.0) published by the Global Reporting Initiative (CRI), the *Guidance on Social Responsibility* (ISO26000) issued by the International Organization for Standardization, as well as relevant provisions of the State-owned Assets Supervision and Administration Commission of the State Council and State-owned Assets Supervision and Administration Commission of Beijing Municipality, and in accordance with *Regulations on Collection of Social Responsibility Management Information of BBMG*. The specific compilation process is as follows:

The Company has complied with the provisions of “comply or explain” as set out in Appendix 27 to Listing Rules.

### **Preparation process**

1. Project initiation: determine the preparation plan of annual report, convene a coordination meeting and issue a notice.
2. Determination of major issues and reporting boundaries: analyze the stakeholders’ concerns, identify key annual core topics of the Company and study the CSR standards and guidelines as well as new trend.

3. Preparation of checklist of materials: confirm the information system indicator system and sort out the list of typical cases in the year.
4. Research interviews: conduct internal and external questionnaire survey, interviews with various departments.
5. Collect report materials: collect and analyze materials from member companies, functional department's materials and media reports.
6. Report preparation: formulate the basic structure of the report, determine the subjects of the report, and complete the first draft of the report.
7. Consultation: seek for opinions from the CSR leadership team of the Group, headquarters' functional departments, member companies, stakeholders and experts.
8. Final review: proofread text and data, submit for review and revise as needed.
9. Report release: release to public via various means.

### **Interpretations of terms**

For the purpose of concise description and convenient reading, the terms of "BBMG", "the Company" and "We" are used in the report to refer to BBMG Corporation. "BBMG Assets Management" refers to BBMG Group Company Limited\* (北京金隅集團有限責任公司) (currently known as BBMG Assets Management Co., Ltd. (北京金隅資產經營管理有限責任公司)).

### **Report availability**

This report is prepared in Chinese, of which the electronic version is available on the Information Disclosure Column of Shanghai Stock Exchange ([www.sse.com.cn](http://www.sse.com.cn)), the website of the Hong Kong Stock Exchange ([www.hkexnews.hk](http://www.hkexnews.hk)) and the Investors Relations column of the website of the Company ([www.bbm.com.cn/listco](http://www.bbm.com.cn/listco)). The English version of this report is also available on the website of the Hong Kong Stock Exchange ([www.hkexnews.hk](http://www.hkexnews.hk)).

## COMPANY INTRODUCTION

BBMG Corporation is a joint stock limited company established in Beijing in December 2005 upon approval by Beijing Municipal Commission of Development and Reform and the Ministry of Commerce of the People's Republic of China.

BBMG is a large state-controlled industry group which takes the “cement and ready-mix concrete-modern building materials and commerce and logistics-property development and management” as its core industry chain. Its principal business is listed in Hong Kong (02009) and Shanghai (601992) and Jidong Cement (000401) and Jidong Equipment (000856), its controlled companies, are listed in Shenzhen. BBMG is one of the China's top 500 enterprises, China's top 200 enterprises in terms of profits and China's top 100 enterprises in terms of profitability.

BBMG was established in August 1992. Its predecessor was the Beijing Construction Materials Bureau established in 1955. In December 2005, five entities such as BBMG Group Company Limited (now renamed as BBMG Assets Management Co., Ltd.) promoted the establishment of BBMG Corporation 北京金隅股份有限公司 (the name of which was changed to BBMG Corporation 北京金隅集團股份有限公司 (hereinafter referred to as “**BBMG**”) in December 2017). In July 2009, BBMG was listed on the Hong Kong Stock Exchange and successfully accessed to the international capital market. In March 2011, A Shares of BBMG were successfully listed in Shanghai, making it an A+H dual listed company in both domestic and foreign capital markets. In May 2016, BBMG and Jidong Development Group entered into an equity restructuring agreement, since when BBMG has developed into a leading enterprise in the industry, ranking top ten in the global building materials industry, the fifth in the global cement industry and the third in the PRC market. At the same time, BBMG is one of the largest building materials manufacturers in the PRC and a leader in the building materials industry in Beijing-Tianjin-Hebei area, one of the most powerful property development companies in terms of integrated capacity in Beijing, and one of the largest investment property holders and managers in Beijing. After the restructuring and consolidation, the four industrial segments of BBMG experienced strong growth and achieved coordinated development. There are over 210 wholly-owned and controlled companies, and the principal business has been expanded to cover more than 20 provinces and cities and many overseas cities.

Relying on the state-level enterprise technology center owned by the Company, the Company continued to implement structural adjustment and continuously transformed its development mode. The urban environmental protection industry with its own characteristics taking the harmless and resourceful disposal of urban waste as its core business has become a model of the national circular economy sector, which has realized the coordination and unification of economic, social and ecological benefits, and has formed a new pattern of leaping development driven by innovation.

In the coming years, BBMG will commit to developing into a first-class international enterprise group and entering into the Global 500, by focusing on independent innovation, realizing integration among economic benefits, ecological benefits and social benefits, further enhancing its core industrial chain and strengthening core competitiveness as well as following our characteristic path of integrated, rapid and sustainable development, with the implementation of the spirit of the 19th National Congress of the Communist Party of China.

- Corporate spirits:** Focus on practical, innovation and benefits and endeavor to be first class
- Corporate development concept:** Integration, communion, mutual benefits and common prosperity
- Corporate core values:** Trust, responsibility and respect
- Corporate mission:** Fulfillment of missions, values and responsibilities
- Corporate human spirits:** Especially hardworking, dedicated, passionate, innovative, collaborative, enterprising, considerate and practical
- Corporate business culture:** Be willing and capable to do the right thing in a right manner with good team spirits

## CHAIRMAN'S STATEMENT

On behalf of the board of directors, I am pleased to present to you the annual results report of the Company for the twelve months ended 31 December 2017, and the operating results of the Company during the said period for your review.

The year 2017 saw continuous deepening of reform and significant achievement in development of BBMG Group. The Company made strenuous efforts in various aspects, including deepening of reform, driving innovation, transformation and upgrade, as well as enhancing quality and efficiency, through which it has achieved enhanced synergy from the restructuring of Jidong, positive innovation of organization, management and control system, significant achievement in green reform and strengthening technological innovation. Relevant key projects progressed in an orderly manner, while strategic expansion and external cooperation were further strengthened. The overall economy of the Company grew steadily at a rapid pace with continuous improvement in quality and efficiency of economic operation. During the Reporting Period, the Company recorded operating revenue of RMB63,678.3 million, representing a year-on-year increase of 33.4%; net profit attributable to the shareholders of the parent company amounted to RMB2,836.7 million, representing a year-on-year increase of 5.6%; basic earnings per share attributable to the shareholders of the parent company amounted to RMB0.27, representing a year-on-year increase of 8.0%.

2018 is a critical year for implementing the 13th Five-Year Plan. It is expected that the global economy will continue to recover, yet there still remain numerous instabilities and uncertainties. With guidance of the new development concept, the Chinese economy will continue to adhere to the key note of making progress while maintaining stability with a focus on changes in major social contradictions, and take supply-side structural reform as its main task in accordance with the requirements of quality development, with a view to keeping all works and plans in progress and maintaining continuous and sound development. Meanwhile, the Company will closely adhere to the positioning of functions of Beijing, the synergetic development of Beijing, Tianjin and Hebei Province and the strategic requirements of the new master plan for Beijing to adopt precise positioning and active initiatives to accelerate its transformation and upgrade and enhance the quality of its development, with a view to making its businesses stronger, better and larger and achieving a new round of leap-forward development for BBMG.

In respect of the cement and ready-mixed concrete segment, the Company will further enhance the synergy brought by the restructuring of BBMG Jidong. In particular, the cement business will aim at optimizing its regional market layout and enhancing its core competitiveness. It will strive to further increase the concentration level of its production capacity and maintain sound market order by enhancing business strengths in core areas, improving quality in key areas and activating the regional network. As for concrete business, leveraging the cement sub-group as platform, the Company will establish an operation system with centralized operation, synergetic efficiency and strong management and control, and further strengthen its flat, professional and regional management. In respect of modern building materials and commerce and logistics segment, the Company will further enhance its fundamental management, utilize its advantages in terms of production capacity, strengthen technological innovation and enhance the technical content of its products with a view to creating unique products. In respect of property development segment, leveraging the property development sub-group as platform, the Company will seriously examine the industry policies to accurately capture market trends, continue to optimize its operation and management model to enhance operation efficiency and quality. As for the property investment and management segment, the Company will focus on the establishment of “Four Centers” in Beijing to fully explore and utilize the stock resources of the Company’s real estate with a view to fully enhancing the quality and momentum of its development.

Lastly, on behalf of the Board, I would like to express my gratitude to the shareholders and business partners of the Company for their support and assistance. I hope to continue walking hand-in-hand and creating a win-win future with you in the new voyage.

**Jiang Deyi**  
*Chairman of the Board*



## **1. SOCIAL RESPONSIBILITY MANAGEMENT**

The Company has always integrated the performance of social responsibilities with daily operation activities to formulate the management system consistent with sustainable development requirements and provide more economical and environment-friendly products through continuous innovation and practice, thus creating better comprehensive values for stakeholders, realizing the harmonious development of economy, environment and society, and promoting the sustainable development of the Company and the society.

### **1.1 Social responsibility management system**

While continuously strengthening the sustainable operational capacity, the Company has also incorporated the performance of social responsibilities into the corporate management system, delegated responsibilities to all departments and required the headquarter and its subsidiaries to comprehensively carry out practical activities of corporate social responsibility management, in a bid to realize the social responsibility objective of complete coverage, adequate performance, gradual perfection and industry leading. The incentive system for social responsibility management has also been formulated to commend teams and individuals with outstanding contributions to the corporate social responsibility in terms of business operation, scientific and technological R&D, safe production, energy conservation, environmental protection, etc. The establishment and gradual improvement of the system has been conducive to the determination of specific evaluation standards for the responsibility value, and the sustainable development of the Company.

Structure of social responsibility management of the Company:

1. Steering group and secretariat for social responsibility of the Group (corporate sustainable development)
2. Functions at the headquarters and platforms regarding various industrial sectors (Business Unit)
3. Second-tier corporate social responsibility management divisions (General Office or Party-masses Working Department)

4. Third-tier or below corporate social responsibility management divisions (General Office or Party-masses Working Department)

## 1.2 Communication with stakeholders

The Company has attached great importance to concerns and interests of all the stakeholders, continuously perfected the mechanism for the participation by stakeholders, and maintained active, smooth and normative communication with all the relevant parties, in order to improve the communication efficiency, enhance the operation transparency, and realize the harmonious development mode of integration, communion, mutual benefits and common prosperity between the Company and all the stakeholders.

### 1.2.1 *Identify core groups based on the demands of stakeholders*

According to the general rules, the Company analyzes and combs the target groups that it is mainly responsible for, which are divided and classified in accordance with the influence, dependence and representativeness. Finally, seven core stakeholder groups are identified.

Stakeholders	Demands to the Company	Performance of the Company
Investors	Reasonable returns Risk control	Improvement of corporate governance structure Internal control supervision
Customers	High-quality products High-quality after-sales service	Diversification of products Product innovation Establishment of customer service system Customer satisfaction survey
Suppliers	Honest cooperation Mutual assistance and benefits	Establishment of supplier management system Full-process monitoring and periodic management of upstream and downstream enterprises

<b>Stakeholders</b>	<b>Demands to the Company</b>	<b>Performance of the Company</b>
Government and regulatory authorities	Tax payment in accordance with laws Enhancement of employment Compliance operation Risk prevention	Response to and support industrial and national policies Establishment of internal control system Disclosure of compliance operation information
Natural environment	Transformation and upgrading Energy conservation and consumption reduction Waste gas emission Ecological restoration	Construction of energy management system Manufacture of green products Utilization of advanced emission reduction technology Elimination of waste
Employees	Safe production Protection of labor rights and interests Vocational development Care for employees	Establishment of safety management system Prevention and control of occupational diseases and occupational health monitoring Democratic management Smooth vocational development channel Assistance for employees in need Guarantee the balance between life and work of employees
Social public	Attention to social development Joint development of harmonious communities	Serve community Participation in public welfare activities Voluntary activities

### ***1.2.2 All-round communication system***

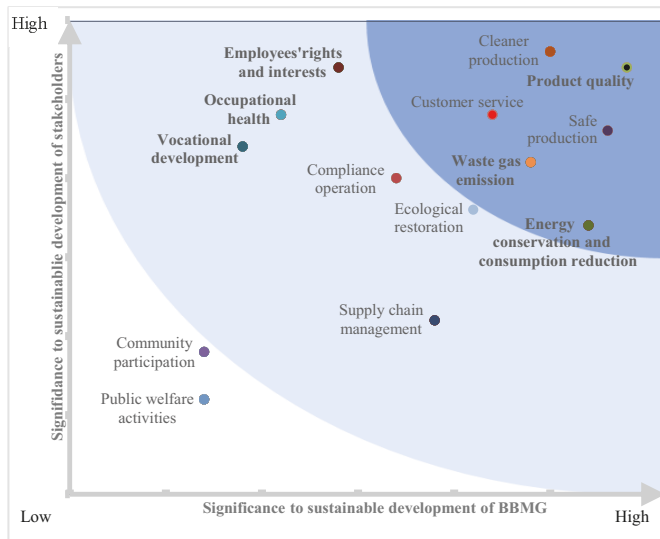
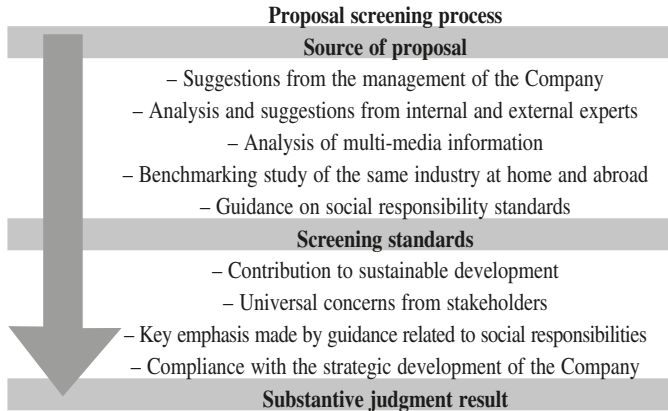
The Company integrated and unified business communication and responsibility communication. We continued to maintain communications with stakeholders through convenient and smooth communication methods such as questionnaire consultation, special visits, and online communication; in addition to paying attention to the communication and interconnection with external stakeholders, we also communicated with in-house employees of the Group who are also taken as important internal stakeholders to gain feedback on a timely basis; through the collection of public sentiment, discovery of media information, and other means, we collected and sorted out positive and negative comments from stakeholders on a regular basis to analyze our deficiencies in a more comprehensive and objective manner for continuous improvement.

### ***1.2.3 Full engagement of senior management of the Group***

The Company continued to promote the communication mechanism among stakeholders. The Group's senior management, as the leader of the Company, attached great importance to social responsibility communication, and personally participated in social responsibility communication in different levels and aspects; and achieved significant results through regular and irregular symposiums, leaders' mailboxes, employee representative meetings and other communication ways.

## **1.3 Evaluation of material proposals**

The Company has made analysis and evaluation of the environment, corporate strategy and sustainable development capability, identified expectations and demands of stakeholders, sorted substantial proposals from two aspects, namely, "significance to the sustainable development of the Company" and "significance to stakeholders", and finalized the extent and boundary of proposals disclosure, in order to guarantee more accurate and comprehensive disclosure of relevant information of operation and management.



***Fourteen material proposals relating to corporate social responsibility of BBMG***

Cleaner production	Energy conservation and consumption reduction	Waste gas emission
Ecological restoration	Safe production	Compliance operation
Product quality	Customer service	Employees' rights and interests
Occupational health	Vocational development	Supply chain management
Community participation	Public welfare activities	

## 2. VALUE CREATION

The outstanding performance achieved by the Company in the intensified market competition shall be attributed to the trust from investors, and support from customers and suppliers. The Company has been committed to realizing and improving investors' rights and interests while striving to achieve the operation performance objective, and offering satisfactory products and services to customers as well as establishing long-term stable relationship with suppliers, maintaining adequate communication and interaction with investors, customers and suppliers, in order to realize mutual development and business prosperity.

### 2.1 Protection of rights and interests of investors

Since its listing, the Company has always adhered to the operation concept of integrity management, standard governance, transparent information and outstanding performance by attaching highly importance to investors' rights and interests, focusing on the protection of investors' rights and interests with devoting to create wealth for investors, which has built up an image of high-quality blue-chip for the Company in the capital market and cultivated a group of institutional investors advocating value investment concept, thus winning the trust and a good reputation among investors.

#### 2.1.1 *Creating value for investors*

The Company has guided the value investment concept, and highly focused on the protection of investors' rights and interests, especially small and medium investors.

#### **Key operation performance indicators in 2017:**

Aggregate operating revenue: RMB63.778 billion

Total profit: RMB4.057 billion

Net profit attributable to the shareholders of the parent company: RMB2.837 billion

Basic earnings per share: RMB0.27

### **2.1.2 Investor relationship management**

The Company has continuously improved the investor relationship management system, designated the administrative body, established the liaison mechanism for shareholders, standardized the reception of public investors, dealt with relevant matters involving consultation explanation, external speech and media interview, carefully listened to the appeal of investors so as to fully protect the rights of small and medium investors to know and to make recommendations. In 2017, the Company strictly complied with the Listing Rules and relevant provisions of Shanghai Stock Exchange and the Hong Kong Stock Exchange, actively participated in various investor relationship activities, and provided real-time information for investors via the websites of the Hong Kong Stock Exchange, the Company and the disclosure media stipulated by the government.

#### **BBMG investor relationship management system:**

The Chairman of the Board is the first superintendent responsible for the investor relationship management affairs of the Company

The Board Secretary is fully responsible for the specific investor relationship management affairs of the Company

The Board and senior management provide full support for investor relationship management affairs of the Company

#### *Announcement of the results*

The Company has prepared results information presented by ways of detailed results reports and presentation materials during the period of publishing the interim and annual results. The teleconferences between the mainland and Hong Kong, on-site investors' presentations, press conferences and online road show live broadcast were also held to provide updates in relation to the market environment, financial performance, operating strategies

and future prospects to the public in an accurate and effective manner, which has maintained highly transparent investor relationship strategy and effectively strengthened the interaction and communications with investors.

**Financial calendar for 2017:**

2017 annual results announcement was published on 29 March 2017

2017 first quarterly results announcement was published on 26 April 2017

2017 interim results announcement was published on 29 August 2017

2017 third quarterly results announcement was published on 27 October 2017

2017 annual results announcement was published on 29 March 2018

Closure of register of H shares members was from 25 April 2018 to 24 May 2018

The 2017 Annual General Meeting was held on 24 May 2018

The financial year-end date is 31 December

*Communication activities*

The Company has convened the annual general meeting and extraordinary general meetings on a regular and irregular basis respectively in accordance with the Company Law of the PRC, Opinions on Standardization of General Meetings of Listed Companies and Articles of Association, in order to guarantee the equal status and legitimate rights of all the shareholders, especially the small and medium shareholders. The Company has actively attended the investors' conferences, road shows and recommendation conferences held by famous investment institutions and securities companies,



exchanged opinions with fund managers, analysts and small and medium investors, conducted online interaction with public investors, and released the operation result, business expansion and future development prospects of the Company by establishing the investor reception hotline and investor column on the website.

**▲ Case: BBMG ‘s overseas results roadshow has gained a complete success**



From April 5 to 15, 2017, BBMG organized 2016 annual results roadshow in Hong Kong, Sweden, Denmark and the United Kingdom. The roadshow team leading by Jiang Deyi,

our chairman, made detailed descriptions in respect of what the investors concern about, including the 2016 annual operating results, core competitiveness of business segments, the strategic restructuring of BBMG Jidong, and the outlook and prospect for 2017. The 11-day results roadshow continued the benign interaction with important international investors, further enhanced the institutional investors’ confidence in the investment in BBMG and achieved a complete success. Many investors stated that in the context of profound changes in the international economic situation, BBMG proactively responded to the new normal, actively explored its potentials to improve quality and efficiency, sustained the momentum of organic development, and achieved strong operating results. They will continue to pay attention to BBMG and have full confidence in the development of BBMG.

**Performance of communications with investors in 2017:**

The Company convened 31 meetings in total, including 3 general meetings, 10 Board meetings, 8 meetings of Supervisory Board, and 10 meetings of committees of the Board;

Considered and reviewed 116 proposals;

Answered 500 consulting calls from the hotline;

Held one online performance explanation meeting and two meetings of analysts;

Accumulatively received 925 investors via teleconferences, on-site surveys, investigations and small symposiums;

Answered 51 questions raised by investors via the Shanghai Stock Exchange E-Interaction (上證e互動).

### 3. SUSTAINABLE DEVELOPMENT

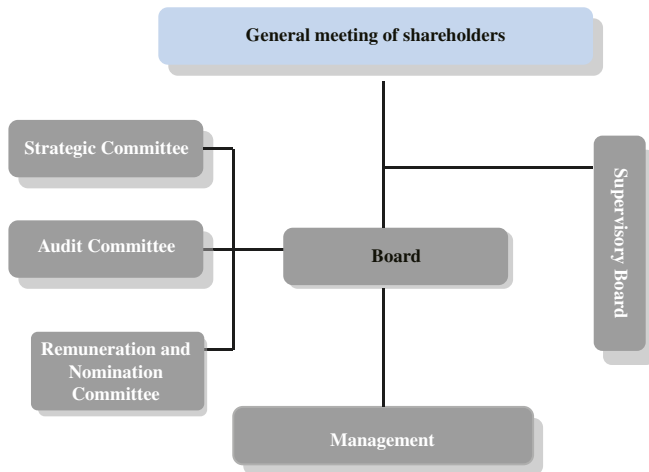
The Company has conducted operation in compliance with laws, implemented comprehensive risk management mechanism for internal control supervision, provided safe and high-quality products and services to customers, and extended the requirements on quality safety and social responsibilities to the supply chain, with the purpose of promoting the joint healthy development of the industrial chain to provide strong protection for the sustainable and healthy operation of the Company.

#### 3.1 Corporate governance structure

The Company has attached great importance to interests of shareholders and all the stakeholders, continuously improved its corporate governance structure, standardized the operation and management process of the Company, established operation mechanism with close linkage and effective communication between the board of directors (the “**Board**”), the supervisory board of the Company (the “**Supervisory Board**”) and the

management to ensure the establishment of an operation and management structure with well-defined powers and responsibilities, independent duties, mutual coordination, effective balance, scientific decision-making and standardized operation.

The Board believes that its prime duty is to protect and best utilise resources in the Company and thereby to create value for shareholders and customers. A high standard of corporate governance is the key to improving corporate profit and facilitating sustainable development. BBMG Group will continuously enhance its corporate governance standards, and take into consideration of the expectations and interests of all the stakeholders while striving to push forward and improve corporate governance standards in various aspects.



**▲Case: Jiang Deyi, our secretary to Party Committee and Chairman, was awarded the Top Ten Most Influential Entrepreneurs of “Beijing Influence”**

In the evening of 8 December, 2017, the 8th “Beijing Influence” awarding party with the theme of “Beijing • Towards the Future” was held in Beijing TV Grand Theatre. Jiang Deyi, secretary to Party committee and Chairman of BBMG, was granted the “Top Ten Most Influential Entrepreneurs” award.



The “Beijing Influence” selection event was co-sponsored by 13 mainstream media such as Beijing TV, Beijing Daily, Beijing Evening News and Beijing Youth Daily, and held every two years. Over 13 years, it has become the largest and most credible brand TV selection event in Beijing, and is known as the “Oscar” of Beijing’s economic circles. The purpose of the event is to tease out the economic development process of Beijing, demonstrate the most promising economic forms, and provide assistance to achieve new upgrade and further development of the Chinese economy.

### **3.2 Integrity and compliance**

The Company has established and enhanced its internal control system, enhanced the development of anti-corruption system, and ensured the operational integrity and compliance of the Company in various aspects such as the organization setting, procedure management and formulation of laws and regulations, following the “standard, efficient and transparent” management concept.

**▲Case: BBMG Ecological Island and Mangrove Company were invited in recording of “The 2nd Integrity Beijing 315 Special Program” of BTV**



On 15 March, the “2nd Integrity Beijing 315 Special Program” was broadcast on the Beijing TV Finance Channel. BBMG Ecological Island and Mangrove Company were recommended by several authorities such as the Capital Civilization

Office as a representative of high-integrity enterprise and invited to participate in the recording of this program in recognition of their actual actions to absorb and handle the industrial wastes and hazardous wastes in Beijing and serve the environmental safety in Beijing.

BBMG Ecological Island and Mangrove Company have performed the social responsibility of state-owned enterprises, while have extensively carried out cultural activities and ideological education for their employees, so that each employee deeply understands the importance of environmental protection work, and concept of honest operation and disposal in a legal way has been rooted in the hearts of every employee, and has become the commitment of all employees to abide by. They have obeyed the rules and regulations and performed their duties in their respective positions, which has formed a good cultural atmosphere. For commitment of environmental safety, we were committed conducting our business in accordance with the laws and in a lawful manner, and took honest operation as our responsibility with aims to make positive contributions to the environmental protection work in Beijing and even the PRC, which have created a brand model of environmental protection for BBMG.

### **3.2.1 Internal control supervision**

The Company has ensured the legal compliance of the operation and management of the Company by establishing a standard, complete, scientific and reasonable internal control system, and guarding against problems early on. At the same time, it has also strengthened the risk management consciousness, established the scientific and effective risk prevention and control mechanism with unified deployment and close integration with the business, integrated risk consciousness into the daily operation activities in terms of the strategic management and control, and performed risk management work in relation to various risks, especially significant risks, in order to minimize risk. In 2017, the Company completed appraisal of its internal control system, the preliminary review of internal control of the whole system, the preparation of the whole-system internal control self-appraisal report and annual disclosure work.

Appraisal work in relation to internal control is led by the Audit Committee of the Board of the Company. The Company has established the internal control appraisal team to organize and implement the self-appraisal of internal control. The internal control appraisal team comprised members of the Board and Audit Committee, members of the management, and personnel selected from the Audit Department and relevant functional departments, and is under the leadership of the management. The Audit Department of the Company was responsible for the organization of the internal control appraisal, and the personnel in charge of the process operation and control activities in the subsidiaries were responsible for the appraisal of the effectiveness of the respective internal control activities.

### 3.2.2 *Anti-corruption*

In 2017, the Company was committed to being strict in Party and enterprise administration in every aspect, closely linked the anti-commercial bribery and anti-corruption work with the Company's reform and development, adhered to the simultaneous research and deployment, and simultaneously promoted the implementation, and practised the spirit of the Eight Regulations of CPC Central Committee on an ongoing basis, and strictly guarded against the rebound of the problem of "four undesirable work styles", and actively created a corruption-free culture atmosphere for entrepreneurship.

The Company attached great importance to operating its business in a manner that meets ethical standards and complies with all applicable laws and regulations. It prohibited the use of improper payment of money to obtain commercial benefits, and strictly abided by the *Criminal Law of the People's Republic of China*, the *Anti-Money Laundering Law of the People's Republic of China* and the *Anti-Unfair Competition Law of the People's Republic of China* and other relevant laws and regulations. The Group has established relevant management systems such as the *Management System of Capital Flow between BBMG Corporation and Related Parties* to strengthen the management and control of integrity and credit risk for employees, suppliers and customers, and avoid and reduce the loss of the Company as results of dishonest conduct of our employees, suppliers or customers, and reviewed, verified, used and managed the credit risk information in an orderly manner to prevent damage suffered from the external integrity and credit risk.

Any bribery or other improper payment of money during the course of business operations of the Company was strictly forbidden. Such provision applies to all business activities, regardless of whether the person involved is a government official or businessman, such payments should not be confused with reasonable and limited expenses directly related to gifts, rewards and other legal activities of the Company's business operations. In

the meantime, the Company has formulated a policy to prevent bribery and anti-corruption in accordance with the Anti-unfair Competition Law of the People's Republic of China and relevant laws and regulations, as a standard of conduct for all employees.

#### *3.2.2.1 Organization building*

Improving the construction of discipline inspection and supervision teams. We gradually equipped with dedicated secretary to disciplinary committee, adjusted and completed the delineation of secretary to Party committee and secretary to disciplinary committee of 46 second-level enterprises; and organized entities to carry out rectification and regulation of the establishment of discipline inspection committees in grassroots party organizations in accordance with the relevant provisions of the Constitution of CPC, and set up a dedicated member of discipline inspection in Party general branch (Party branch) committee of 32 second-level enterprises.

#### *3.2.2.2 System building*

Implementing measures for the assessment of the responsibility system for anti-corruption building. We organized the signing of the Responsibility Statement of Improvement of Corruption-Free Party Construction and the Anti-Corruption Commitment at all levels. The leaders at the middle level and above signed 156 copies of the Responsibility Statement of Improvement of Corruption-Free Party Construction and compiled and printed 1,000 copies of the *Work Manual of Practice for Improvement of Corruption-Free Party Construction*, organized 16 evaluation teams to carry out on-site comprehensive inspection of 102 enterprises, and steadily promoted the work for improvement of corruption-free party construction.



Implementing the “double signature” system in the selection of personnel. We implemented the “double signature” system of the secretary to Party committee and secretary to disciplinary committee in determining the candidates to resolutely prevent the bad practice in selecting and employing personnel; implemented a “one-vote veto” policy in the issue of integrity. Before discussing cadres, we should seek the relevant opinions from the disciplinary committee and issue an opinion letter of integrity.

Implementing integrity risk prevention and control management system. We focused on the supervision and management of key personnel in key positions of enterprises, carried out risk assessment management of integrity risk, developed risk prevention measures on a case-by-case basis, and strengthened supervision and management; a total of 8,155 key personnel were identified, 28,820 integrity risk management points were analyzed, and 39,197 prevention and control measures were formulated.

#### **▲ Case: BBMG convened 2017 general meeting for Corruption-Free Party Construction**

On February 16 2017, 2017 general meeting for Corruption-Free Party Construction of the Company was held in Beijing. More than 1,000 persons such as



members of the senior management of the Company, leaders of the Beijing State-owned Enterprise Supervisory Committee, members of the Company’s party committee and disciplinary committee, responsible persons of various departments of the headquarters, and secretaries to Party committee, manager, secretaries to disciplinary committee and

financial controllers of the Company's various enterprises and institutions attended the meeting. The enterprises based in the place other than Beijing participated in the meeting through video. The meeting was presided over by Zeng Jin, deputy secretary to party committee and general manager of the Company. Jiang Deyi, secretary to party committee and chairman of the Company, delivered a concluding speech.

The meeting reviewed and reported the relevant situation of the democratic life meeting of senior management of the Company in 2016, and granted awards to the 2016 advanced entities of the clean and honest Party administration. 10 entities including BBMG Jidong Cement Yixian-Laishui Regional Company signed the Responsibility Statement of Improvement of Corruption-Free Party Conduct at the main venue.

### *3.2.2.3 Corruption-free education*

Adhere to guidance for positive practice and warning for negative practice. We actively promoted the "Five Propaganda" of corruption-free culture, carried out education through special lectures, visiting corruption-free education bases, prisons, detention house and other forms; We published over 30 work dynamics of various entities for learning in the corruption-free Garden column of the BBMG newspaper to actively create a good atmosphere for the construction of corruption-free culture; recorded 336 warning education CDs for anti-corruption and distributed them to grassroots party organizations.

Enhance the reminder education at the material time. We issued special documents at the material time to make clear requirements for corruption-free festivals, and reaffirm disciplinary regulations; and organized entities to enhance corruption-free education through centralized learning, sending anti-corruption warning text messages, and collective talks.

Strengthen training of discipline inspection and supervision. We organized over 260 persons in total including secretaries to disciplinary committee (including secretaries to Party general branch and the Party branch of the independent assessment units), deputy secretaries to the discipline inspection committee, and the dedicated and part-time cadres of discipline inspection and supervision of subordinate enterprises of the Company to participate in the cadre training course of discipline inspection and supervision.

**▲ Case: The Company organized the 2017 discipline inspection and supervision cadre training**

In April 2017, the Company organized the 2017 Inspection and Supervision Cadre Training Course of BBMG, aiming to fully implement the work plan of the 2017 general meeting for the clean and honest Party

administration of BBMG, strengthen the political quality and work ability of



discipline inspection and supervision cadres at all levels, and facilitate in-depth advancement of anti-corruption work in every aspect. More than 260 persons in total including secretaries to disciplinary committee (including secretaries to Party branch of the independent assessment units), deputy secretaries to discipline inspection committee, and the dedicated and part-time cadres of discipline inspection and supervision of subordinate enterprises of the Company attended the training course. The training course covers the situation and tasks of the clean and honest Party administration and anti-corruption work in the new era, knowledge and application of Party discipline regulations, responsibility system assessment standards and related requirements of the clean and honest Party administration of the

Company in 2017, process and work standards of discipline review and handling, practices of efficiency supervision projects, the establishment and maintenance of corruption risk prevention and control management system.

#### *3.2.2.4 Enhancing supervision*

Focus on key issues to conduct efficiency supervision. A total of 111 efficiency supervision projects were carried out in relation to the topics of material procurement, marketing, recovery of accounts receivable, rental management, key tasks, major projects, and must-do projects.

Focus on problems to carry out special administration and treatment. We organized special inspections of internal management of enterprises and special work of “checking and clearing the assets of enterprises under the name of individuals”, and especially conducted random inspection of construction and implementation of the system of collective decision-making of “Three Majors and One Big”, management of accounts receivable, performance of duties and implementation of the expenditure system of 39 enterprises.

Announce the telephone number and e-mail for whistle-blowing, and accept anti-corruption reports. We have established a monthly zero report system for complaints filed through letters and visits and their handling, and grasped complaints filed through letters and visits and their handling of entities in a timely manner; and investigated and handled the problem clues through “four types of methods”.

In 2017, the Company did not have any material violation with relevant laws and regulations regarding bribery, extortion, fraud or money laundering.

### **3.3 Providing diversified products**

The main business of the Company covers four major business segments, namely, cement and ready-mixed concrete, modern building materials and commerce and logistics, property development, and property investment and management. With acceleration of industrial transformation and upgrading, the cement industry has turned from a grey industry to a green one, while the industry's development layout has shifted from single product to a comprehensive industrial chain. By leveraging the advantages accumulated in the manufacture of green building materials, the Company has extended its industrial chain upward and downward and expands toward property development. While focusing on business collaboration and high-end development, the Company has developed toward the modern service sector, including modern property management services and financial services. Taking advantage of the characteristics of the real estate development industry of large amount of funds and great demand for products, the Company, through market behaviors, has driven the application of modern building materials, cement, concrete and other products as well as the development of relevant services such as design, decoration and property management. The Company, by enhancing the quality of products and the capacity of offering relevant services, has enhanced its competitiveness in modern building materials and property management services and promoted the quality of real estate projects. Property operation and high-end property management services with the support of the Company's edge in brand, operation, management and techniques, have succeeded in the enhancement of values of real estate for both commercial and residential purposes.

### **Cement and ready-mixed concrete**

The Company is one of the 12 major cement conglomerates or groups supported by the PRC government, and its products have been widely applied in key municipal, provincial and national projects. Its products include cement, ready-mixed concrete, ready-mixed mortar, aggregate, grinding aid and admixture.

### **Modern building materials and commerce and logistics**

The Company is the largest building materials company in China, one of the largest Chinese building materials manufacturers, the largest building materials manufacturer and the leader in the building materials industry in the Bohai Economic Rim. Its key products include furniture woods, wall body and insulation materials, and decorative and fitting materials.

### **Property development**

The Company is one of the leading property developers in terms of comprehensive strength and one of the largest affordable housing developers in Beijing. Its services cover the property development, architectural design, construction, sales agency, etc. The developed products include common commercial residences, high-end villas, commercial properties and economically affordable houses.

### **Property investment and management**

The Company is one of the largest owners and managers of investment properties in Beijing holding approximately 1,700,000 m<sup>2</sup> high-end office properties (including investment properties of approximately 720,000 m<sup>2</sup> at the core area of Beijing) in Beijing and managing approximately 12,000,000 m<sup>2</sup> properties (including residential communities and commercial units at low floors). It has been leading the industry in Beijing and even China for years in terms of specialized techniques, brand awareness, occupancy rate and revenue.

**▲Case: The Company participated in the “Capital State-owned Enterprise Open Day” theme publicity campaign to demonstrate the characteristics of BBMG**



On June 10, 2017, the Beijing Municipal Party Committee Propaganda Department, Capital Civilization Office, Municipal Federation of Trade Unions, Municipal State-owned Assets Supervision and

Administration Commission, Municipal Education Commission, Municipal Youth League Committee, Municipal Tourism Commission and Press Center of State-owned Assets Supervision and Administration Commission of the State Council jointly hosted the 2nd Capital State-owned Enterprise Open Day. More than 10,000 people from all walks of life divided in 132 routes were welcomed to witness the fruitful results of the reform and development of the state-owned enterprises in the Capital. With careful planning and organization by the Propaganda Department of the Party Committee of BBMG at the earlier stage, three companies of BBMG divided in 4 routes participated in the Open Day event to demonstrate the characteristics of BBMG.

The “Capital State-owned Enterprises Open Day” not only demonstrated BBMG’s strategic vision and development achievements over the years, but also demonstrated that BBMG values, protects and inherits historical culture and his own cultural heritage, and profoundly interprets the meaning of BBMG culture. This also made the citizens who rarely get close to the state-owned enterprises understand the undertakings and responsibility of the state-owned enterprises.

### 3.4 Product quality control

Each segment of the Company has reached advanced level in the industry in terms of the manufacturing base, production scale and service capability, which formed the manufacturing capability with competitive edges. The Company has established sound quality management system and information-based quality control management platform on the above basis and carried out QC team activities to integrate the quality management into the entire process from raw materials procurement to product delivery, thus providing first-class quality services for customers.

#### ▲ Case: Tiantan Furniture participated in 2017 Shenzhen and Guangzhou international Furniture Fair

In late March, Shenzhen Creative Week and the 32nd Shenzhen International Furniture Exhibition and the 39th China Furniture Fair



(Guangzhou) opened successively, representing the launch of grand exhibition of the Chinese furniture design trend. With its keen market insight, advanced design concept and advanced manufacturing process of environment-friendly green furniture, BBMG Tiantan Furniture has attracted a lot of attention from visitors in the major exhibitions, and thus achieved brilliant results.

#### 3.4.1 Implementing high-quality strategy

In 2017, Zanhuang BBMG and BBMG Dingxin established a high-quality enterprise development strategy, increased investment in quality factors such as talent, capital and resource, consolidated management foundation, established quality awareness, paid close attention to changes in the market, and constantly kept the customers' needs in mind. As a result, their products and services were highly recognized by the market, and business performance of the companies improved continuously. BBMG Property Management actively



promoted the performance-based management model, and comprehensively benchmarked the leading enterprises in the enterprise strategy, operation indicators, product indicators and business indicators, and built the brand image of BBMG, stepping towards the target of an outstanding enterprise.

BBMG Tiantan, BBMG Coating and Shexian BBMG proactively carried out green transformation and upgrading of products, passed the certification of environmental labeling products and thus improved the product quality.

**▲ Case: BBMG Jidong Cement successfully gained the “First Bid” Xiong’an Civic Service Center Project in Xiong’an New District**

On December 18, 2017, With the cement tanker slowly exiting BBMG Cement Yixian-Laishui Regional Company, BBMG Jidong Cement officially became the first cement supplier of the first construction project of Xiong’an New District – Xiong’an Civic Service Center Project.



The total investment of the project is RMB800 million, with a total floor area of 99,600m<sup>2</sup>. It was undertaken by China Construction West Construction (Tianjin) Co., Ltd 中建西部建设(天津)有限公司. With its advantages of brand, guaranteed supply, production capacity, quality, service and transportation in the industry and region, BBMG Jidong Cement has successfully entered into cooperation intention with China Construction West Construction (Tianjin) Co., Ltd.

BBMG Jidong Cement gave full play to the unique advantages of serving Xiong’an New District, meeting its demand for cement, lime and sandstone in expressways, railways, bridges, water conservancy and hydropower, airports, housing and other infrastructure, and helping the development and construction of Xiong’an New District.

The Property Development Group established a quality management and supervision system and communication mechanism, fully utilized the unified procurement information platform to ensure the quality of the supply and construction parties; relying on the constantly improving construction node standards and acceptance criteria to improve the on-site construction level, and primary qualification rate of project reached 100%, and the brand value of BBMG Property continued to increase. Property management companies continued to strengthen the service brand of BBMG, constantly upgraded service standards, and made full use of its supervision mechanism, third-party evaluation, and competition events to improve its service quality.

**▲ Case: BBMG Aerated Company's products have been successfully applied to the construction of Beijing New Airport**



In 2017, BBMG Aerated Concrete Company's products were successfully applied to the construction of Beijing New Airport. It is estimated that the overall projects require 80,000-100,000 cubic meters of BBMG Aerated's products. This is another positive contribution made by BBMG Aerated Company to the construction of the capital city following supply of products to the key projects such as the Beijing City Sub-center this year. The company's products have the advantages of light weight, high strength, thermal and sound insulation, fire prevention, easy to use, etc. It actively coordinated matters in relation to product density, specifications, quality, delivery through the operation and management department, to ensure that the products are delivered with quality and quantity guaranteed on a timely basis. As of October 17, the company has supplied more than 24,500 cubic meters of products for the Beijing New Airport, which has been well appraised by the construction side.

### 3.4.2 *Enhancing process quality control*

For the cement segment, we further improved the internal quality standards and on-site technical quality evaluation standards, and constantly conducted comparison of the on-site random inspection of physical quality of products and raw materials and laboratory capability. Through the random inspection, laboratory capability comparison, on-site evaluation and other methods, the quality management foundation has been consolidated. In 2017, the pass rate of random inspection of the principal business products reached 100%, and no product recall occurred.

Handan Taihang and Tianjin Zhenxing insisted on identifying quality risk factors and formulated preventive measures to alleviate process risks; BBMG Coating and Zanzhuang BBMG have continuously improved 5S management and equipment maintenance management, and the basic management work has been continuously enhanced.

#### **▲ Case: Both BBMG Energy-Saving and Jinhaiyan Glass Wool were granted the title of the “Product Quality Leader”**

In November 2017, the 7th session of member representative meeting of the China Insulation & Energy Efficiency Materials Association and the 30th Anniversary Symposium was held in Beijing, at which the “Product Quality Leader” awarding event for the insulation and energy efficiency materials industry was held, and granted certificate of award to the special contributors of 2017 in the industry. Both BBMG Energy-Saving Company and Jinhaiyan Glass Wool Company were granted the title of “Product Quality Leader”.

The title of the “Product Quality Leader” in the insulation and energy efficiency materials industry granted to both BBMG Energy-Saving Company and Jinhaiyan Glass Wool Company represents the industry’s recognition of the Company. The Company will further enhance brand awareness with innovative idea to improve its product quality, continuously improve its brand influence, and

make greater contributions to promote the industry's honest operation and sound and rapid development.

### **3.4.3 Intellectual Property Protection**

The Company attaches great importance to the protection of property rights and gives full play to the important role of intellectual property rights in enterprises. Over the years, it has developed implementation measures for the overall planning and management of protection system of intellectual property rights in respect of patents, trademarks, copyrights, trade secrets and domain names.

The Company assigned dedicated staff to take charge for the management of intellectual property rights to list the details and establish the archive; classified intellectual property rights based on their actual value, importance to the Company's development, maintenance costs, etc.; established intellectual property data platforms, such as Chinese and foreign patent database, China science and technology periodical database, Chinese and foreign standard database, etc., to timely grasp the latest data information at home and abroad with aims to prevent duplication of research from causing loss of capital of the Company, and avoid infringement of other intellectual property rights.

**▲ Case: The brand value of BBMG has significantly increased to rank 69th among the China 500 most valuable brands of 2017**

The World Brand Congress hosted by the World Brand Lab was held in Beijing on June 22, at which the China 500 Most Valuable Brand Analysis Report for 2017 was released. The BBMG brand with the evaluation value of RMB51.018 billion ranked 69th in the list of the most valuable brands of the year. The brand value significantly increased by RMB10.333 billion year-on-year, ranking the second in the national building materials industry and the third among the municipal state-owned first-level enterprises in Beijing.

Over several years, the Company has been focusing on strengthening corporate brand building and actively cultivating and building the BBMG brand. For product marketing and promotion, the Company regulated the “金隅/BBMG+ Enterprise Product Brand” model and continuously improved the social influence of the BBMG brand. All classes of the “金隅/BBMG” trademark has been registered in the PRC and some classes have been registered overseas in Hong Kong, the United States, Japan and other countries, and the protection of the brand is highly valued.

### **3.5 Enhancing customer service**

Adhering to the “customer comes first” service concept, the Company commits itself to establishing long-term stable cooperative relationship with customers, setting up the customer service system targeted at customer demands, continuously deepening connotations of the customer service, and providing value-added services for customers.

Each business segment has conducted in-depth investigation and summary based on daily business, has followed the product usage by customers, analyzed and satisfied customer demands, dealt with customers’ complaints, collected and classified quality problems put forward by customers, and promptly notified subsidiaries of the cement industry of relevant situations, so as to make coordination between customers and subsidiaries of the cement industry, and properly solve various matters. The aforementioned works with effective measures has played a supportive role in the sales channel, marketing management and customer service management.

#### ***3.5.1 Customer management system***

Equipped with a fixed customer management team, the enterprises of the Company in each business segment have established standard customer service contents and process, determined the relevant standards and requirements for the service quality in each production and operation phase, and actively responded to customer complaints following the customer-oriented principle, achieving a customer complaint response rate of 100%.

We invited our customers to engage in our product quality control, and compensated for the loss of our customers due to product quality. We have established pre-sales consultation, sale reception and after-sales service system. We respond and deal with our customer complaints and inquiries in a timely manner; have a professional customer service team, provide professional technical training for distributors on a regular basis; organize our customer training meetings, conduct our product promotion briefings, and truthfully convey our product information, and educate our customers in respect of the basic knowledge of green building materials, matters need attention in the purchase and use of building materials, and knowledge about anti-counterfeiting identification of products; pay attention to protecting our customers privacy and implement strict confidentiality system for our customers' personal data.

### 3.5.2 *Customer service system*

The Company has a large customer information system. The multi-dimension customer information control system has been established to strictly keep the customer information confidential, and regularly updated to enhance the reliability and security. The customer service management systems for each business segment have been respectively formulated according to the product classification and operation characteristics. In order to satisfy different demands of different types of customers, the Company has established relationship with each type of customers, strengthened the communication and exchanged with them, understood their needs and provided personalized service for customers on the above basis.

#### **▲ Case: BBMG Dacheng Property and the owners jointly built beautiful home**

Chang'an New Town Project Department of BBMG Dacheng Property Company held the event of



“2nd Chang’an New Town Planting Festival” in both Xiaoxingyuan Central Plaza and the Area 2 Central Garden. In order to increase the communication between the owners and the property management company, the responsible persons of the various departments of the project planned and prepared carefully, and all participants worked together. Based on the experience of the first planting festival, in addition to planting small arbors, the planting experience of flowering bulbs and small shrubs was added. The event not only allowed the owners to experience more diverse planting, but also enhanced their sense of responsibility in protecting the flowers and trees and cherishing the green, and made contributions to maintain a good ecological environment in the community.

### **3.5.3 *Customer satisfaction survey***

Enterprises in each business segment have conducted the customer satisfaction survey according to actual situation, and formed the customer satisfaction survey questionnaire model with unique characteristics. The result code and sample analysis were generated through scientific sampling and assessment analysis, periodic comparison and analysis reports were generated and changes in customer expectation were mastered through the assessment and collection for several times. The customer service level and quality has been continuously improved according to the analysis result. In 2017, the property management enterprise comprehensively carried out the third-party customer satisfaction survey, and continuously enhanced the service quality of the property service business.

### 3.6 Cooperating with suppliers for mutual benefits

Following the principle of openness, fairness, justice and scientific selection, the Company has standardized the whole-process management of supply chain. Focusing on product quality and safe production, it extended the social responsibility requirements to the supply chain, strived to establish stable cooperative relationship with suppliers, and helped suppliers enhance their consciousness and capability in performing social responsibilities during the cooperation, so as to enhance the sustainable development of the supply chain. In 2017, the pass rate of environmental management system certification for suppliers qualified for long-term cooperation was 32.1%, with business relations with 36 suppliers being terminated and 12 suppliers disapproved due to non-compliance with social responsibility requirements. The proportion of responsible procurement reached 93.6%.

#### ▲ Case: BBMG 2017 Businessman Conference & New Product Launch Conference Was Held



In February 2017, the 7th BBMG Businessman Conference & New Product Launch Conference was held in Beijing. “Upgrading, Innovation and Win-Win Outcome”-themed, the conference gathered more than 300 partners

from all over the country to make innovation-based development and win the market jointly. During the Businessman Conference, Tangshan Jidong Development Yan Dong Construction Co., Ltd. (唐山冀東發展燕東建設有限公司) and BBMG



Corporation signed a strategic cooperation agreement to join forces to give full play to their respective product technology and market advantages and carry out in-depth cooperation in exterior wall coatings, steel structure fireproof coatings and floor paint, thus laying a solid foundation for the comprehensive entry of products and services into the real estate market.



### **3.6.1 *Management Philosophy and System***

The Company's various industrial segments continued to implement the Measures for the Management of the Group's Materials Purchasing and Suppliers, apply an access system to supplier management and carry out real-time monitoring of suppliers from the aspects of law compliance, environmental protection, protection of labor rights and integrity management and regular or irregular responsibility management evaluation. Suppliers are urged to continually improve product quality, monitor and promote suppliers' attention to the physical and mental health of employees within the Company.

In the construction bidding of the real estate development segment, safety, energy conservation and environmental protection are included as key conditions in the bidding conditions; in the construction operation of the construction enterprises, the basic rights and benefits of the employees, occupational health and safety guarantees are monitored. The concept of responsibility, evaluation of suppliers, product design and strategic cooperation mechanism are integrated in depth.

### **3.6.2 *Principles of Transparent Procurement***

The Company's various industrial segments have always adhered to the transparent procurement. Through the promotion of regional procurement tender integration, standardization of the tendering process, transparency of tendering performance, informatization of tendering management, it steps up efforts to eliminate commercial bribery in the procurement process; implement green procurement, select low-carbon environmental friendly products that exert little impact on environment in the procurement of raw materials; purchase clean energy; vigorously promote non-fossil energy such as low-grade energy, municipal waste, biomass energy, etc.; choose consumer products such as daily office supplies that can be recycled.

### **▲ Case: BBMG Jidong Cement Shijiazhuang Marketing Company Signed a Strategic Cooperation Agreement with CSCEC Road and Bridge Group**



In September 2017, B B M G J i d o n g Cement Shijiazhuang Marketing Co., Ltd. and CSCEC Road and Bridge Group Co., Ltd. negotiated and signed

strategic cooperation agreement in CSCEC Road and Bridge Co., Ltd\* (石家莊市中建路橋公司). The renewal of the contract highlighted the full trust and support of the CSCEC Road and Bridge Group to the BBMG Jidong Shijiazhuang Marketing Company. Both sides expressed their willingness for further utilization of resources, enhancement of the breadth and depth of strategic cooperation and building of larger platform for cooperation and development in the future so as to achieve a breakthrough in strategic development.

#### **4. TECHNOLOGY INNOVATION**

The Company has always adhered to technology first, innovation drive, pragmatic management and has achieved remarkable results in technological transformation, industrialization of results, quality management and innovation platform construction. It formulated and implemented the Measures for the Administration of Scientific Research Projects (Trial), standardized the establishment, progress, acceptance, funding, assets and other aspects of scientific research projects, implemented refined management of the whole process of the project, and improved the project management level.

In 2017, the Company invested RMB1.1 billion in scientific and technological innovation and implemented 18 key scientific research projects; the sales revenue of new products reached RMB2.3 billion; 15 provincial and ministerial-level and industrial science and technology awards were obtained, 95 national patents were obtained, including 28 invention patents, 6 software copyrights, 34 national, industry and local standards; 2 first prizes, 7 second prizes and 45 third prizes of the Group's Science and Technology Progress Award; more than RMB9.5 million of science and technology funds from all levels of government.

## ▲Case: The Company's 2017 Science and Technology Innovation Work Conference Was Held



In May 2017, the Company held the 2017 Science and Technology Innovation Work Conference. The Company's leaders, the heads of relevant departments at the headquarters, the main responsible persons of each enterprise and the deputy leaders in

charge of technology, quality and informatization, Company's key scientific research project leader and technical backbone, scientific and technological experts in 2017, totaling more than 700 people, attended the conference at the main venue and various video and audio sessions. The meeting comprehensively summarized the Company's completion in terms of scientific and technological innovation, quality management, and information construction in 2016, detailed deployment of relevant work in 2017, and read out the list of commendation decisions and award-winning units of the Company's advanced technology, quality and informatization in 2016. It signed the task book of the Company's key scientific research projects in 2017 with the heads of some enterprises.

In 2017, the Company organized and implemented post-evaluation of key research projects of the Group from 2012 to 2014. In the past three years, 51 technology R&D projects were implemented and 41 projects achieved industrialization. The industrialization rate reached 80.4%; 51 project totaled investment of RMB180 million, realized sales income (savings funds) of RMB3.447 billion and an input-output ratio of 1:19. The above projects have developed 38 new products (series), developed 23 new technologies (processes), completed 4 sets of information systems, built two pilot lines, applied for (acquired) 58 patents, edited(co-edited) 14 standards, won 20 awards at various levels, which strongly supported the development of the Group's main business.

In 2017, the Company had 10,961 scientific and technical personnel, accounting for 20.9% of the total number of employees, organized 341 scientific and technological innovation and technology exchange activities with participants of 29,000 person-times. The members of the Company's science and technology committee will be re-elected, and four professional committees will be set up to strengthen the technical services for enterprises and strengthen the training of young scientists and technicians.

The Company owns 21 high-tech enterprises such as Beijing Building Materials Academy Co., Ltd. (北京建築材料科學研究總院有限公司), Beijing Building Materials Testing Academy Co., Ltd. (北京建築材料檢驗研究院有限公司), Beijing Jiandu Design and Research Institute Co., Ltd.(北京建都設計研究院有限責任公司)and Beijing BBMG Mangrove Environmental Protection Technology Co., Ltd. (北京金隅紅樹林環保技術有限責任公司), 2 national technical centers, 10 provincial and municipal engineering and technical centers, 1 national key laboratory, 2 academicians workstations and 3 post-doctoral stations.

#### **▲ Case: Guangling Jinyu Won the “High-tech Enterprise” Certificate**

In April 2017, Guangling Jinyu Cement Co., Ltd. successfully passed the national high-tech enterprise evaluation and obtained the “high-tech enterprise” certificate, becoming the first enterprise in the county industry in Datong to receive the honorary title. Since its establishment, the Company has adhered to the road of scientific and technological innovation, focused on product research and development, technology investment and continuously strengthened its independent innovation capability. Many product technologies took a good lead. The road cement and medium-heat Portland cement developed by the Company obtained a production license in 2015, which filled the blank of Shanxi Province in this product, and the low-alkali cement won the bid of national key project. At present, the Company has obtained 8 patents, including 2 invention patents, and declared 3 invention patents and 1 utility model patent.



### **Technological Innovation Leads Traditional Industries:**

- The high-efficiency potassium and sodium salt separator developed by BBMG Liushui Environmental Protection Technology Co., Ltd. and Beijing Building Materials Academy achieve national first-class purity of potassium chloride products. For the first time in China, the recovery and utilization of potassium chloride in fly ash has been realized. The processing capacity of fly ash increases by 20%.
- Tangshan Branch implemented technical transformation of cement mills and successfully achieved the goal of pre-grinding and producing ore powder by roller press, which marks the precedence in China.
- Handan BBMG Company built the first production line that can handle 500t urban domestic solid waste on a daily basis, which laid a foundation for the Group to apply the cement kiln to the co-disposal of domestic garbage.
- The retarded P.O42.5 cement developed by Yongji Company has been successfully applied to key projects such as Jishu Expressway and Jilin Outer Ring Expressway.
- Durable concrete developed by Tangshan Jidong Concrete Company has achieved good application results at Beijing New Airport.
- The high water-reduction and slow-release polycarboxylate superplasticizer developed by Cement Energy Saving Technology Co., Ltd. has reached the international advanced level and meets the needs of special construction.
- The highly efficient and environmentally friendly iron ditch castable developed by Tongda Company provides solutions for various blast furnace types.

- The research and application of drier spraying materials for underground engineering and reinforcement engineering of BBMG Mortar Co., Ltd. has been widely used in many subway projects and urban sub-centers.
- The 2600KW permanent magnet direct-drive motor developed by Jidong Equipment Company was first applied to the vertical grinding system. It took the lead in the domestic and international cement industry.
- Beijing BBMG GEM Company and Beijing Building Materials Academy completed the overall technical plan and milestone construction plan for the ultra-low energy demonstration building project, which was approved by the Ministry of Housing and Urban Development and the German Energy Agency.
- Xishan Jia No. 1 Project developed by Beijing BBMG GEM Company integrates a number of green energy-saving technologies such as ground source heat pump system, ceiling radiation system and displacement fresh air system to create a green ecological technology system.

### **Development and Promotion of Information Technology**

- The Company's headquarters OA platform was revised and upgraded with the establishment of 3 major portals, 8 modules, and 83 business processes to achieve process standardization, management refinement, and data centralization of the Company's headquarters office management.
- Integrate Jidong SAP-ERP and the original BBMG industrial management information system to realize the integration of finance, business and management.

- BBMG Dingxin Internet of Things Mine Mobile Digital System, equipped with GPS positioning technology and mobile APP, achieved self-inquiry of loading and weighing information on weighbridge to realize unattended weight room.
- 11 companies including Zanhuang BBMG and Linyi Company put into use the kiln grinding expert control system, 47 cement enterprises adopted the intelligent logistics system, and 12 enterprises including Zanhuang BBMG and BBMG Dingxin fully operated the energy management system. 105 anti-pressure machine and anti-folding machine of 33 enterprises completed the automatic uploading data integration interface transformation and 26 enterprises ran the EAM equipment inspection system.
- Jiandu Design and Research Institute designed the smart life of “Internet + Community” in the rented house of Zhongguancun Xisanqi (BBMG) Science and Technology Park according to the three-star standard of green building.
- Jinhaiyan Property Company has upgraded the level of community smart management and control system and accumulated experience in community property in exploring the use of scientific and technological means to reduce and control risk, improve management efficiency and improve service capabilities.
- BBMG Jidong Cement Company’s supply chain + Internet cloud platform development project has built a cement e-commerce platform, achieving a total of RMB103 million in online sales of cement and RMB100 million in online procurement.

### **External Recognition of the Quality Management Institute in 2017:**

BBMG Liushui Environmental Protection Technology Co., Ltd., BBMG Dingxin Company and Guangling Jinyu Company were approved as national high-tech enterprises.

Beishui Environmental Protection Co., Ltd. was awarded the title of Beijing Science and Technology Innovation Team.

Guangling Jinyu Company became the first cement enterprise with national “Informatisation and Industrialisation” certification in Shanxi Province.

Beijing Building Materials Academy and Jiandu Design and Research Institute were awarded the qualification of “Industrial Energy Conservation and Green Development Evaluation Center” by the Ministry of Industry and Information Technology.

Xishan Jia No. 1 Project of Beijing BBMG GEM Company won the Green Building Two Star Design Certificate.

## **5. PRODUCTION SAFETY**

The Company attaches great importance to safety management, constantly improves the safety management system, strengthens the responsibility of production safety entity, implements hidden danger investigation and management system, strengthens education and training, enhances employee safety awareness, etc., and builds a safe enterprise. In 2017, the Company suffered a one-person death safety responsibility accident. No major fires and special equipment accidents and no occupational disease occurred. The production safety work throughout the year was generally stable.

### **5.1 Improving the Safety Management System and Giving Full Play to Management Responsibilities at All Levels**

The Company promoted the construction of the responsibility system of “the party and government with the same responsibility, one post and two responsibilities, co-management, and responsibility claim for dereliction of duty”, established a Safety Production Committee, the Department of Safety



Production and Security as a production safety management organization. The Safety Production Committee is headed by the general manager; deputy general manager of each business serves as deputy director and the heads of various departments and related member units at the headquarters serve as members. At least one production safety conference is held every quarter, and special meeting minutes are formed.

The Company established the Measures for Administration of Production Safety, Production Safety “Party and Government with Same Responsibility, One Post and Double Responsibilities” Interim Measures, Safety Production Responsibility System of Headquarters Department, Safety Accident Report and Investigation and Handling Measures, Construction Project “Three Simultaneous” Management Measures for Labor Safety (Trial), Fire Safety Management Implementation Rules and Traffic Safety Management Regulations and other systems to guide all units to carry out production safety in a standardized and orderly manner.

The Company formulated and signed a responsibility statement and notification letter for individualized production safety targets with 114 assessment units. A total of 5 safety production committee meetings and 6 production safety seminars were held throughout the year to study and determine major safety work items.

**▲ Case: The Company Successfully Completed the “Belt and Road” Summit Forum Service Support Mission**

The world-famous “Belt and Road” international cooperation summit was recently held in Beijing. The summit was the most high-profile international event for “Belt and Road” in last three years. It was an important home-based diplomatic event in China in 2017, which was of great importance for international and regional cooperation. The BBMG Sheraton Beijing Hotel was designated by the organizing committee as the residence of ministerial politicians of various countries, and successfully completed the reception task of more than 30 deputy prime ministerial and ministerial politicians from 22 countries. In the process, BBMG Property Management and other related units



worked together to ensure the smooth completion of the reception task, which was highly praised by the armed police, public security, firefighting and other departments. The successful completion of the reception task demonstrated the Company's high political responsibility and strong historical mission.

## **5.2 Continuing to Increase Investment to Ensure Safety Production Capital Requirements**

The Company's Production Safety Management Measures clearly stipulated the guarantee of enterprise production safety funds and required high-risk industry enterprises such as construction enterprises and mines to strictly withdraw production safety costs pro rata in accordance with the provisions of the Administrative Measures on the Withdrawal and Use of Production Safety Costs of Enterprises. Other enterprises refer to it for implementation or develop annual production safety cost budget at the beginning of every year.

In 2015, the Company invested nearly RMB5 million to establish a platform for the investigation and management of hidden dangers in BBMG accident. In 2016, the investment in safety management exceeded RMB210 million. In 2017, the Company reviewed nearly RMB80 million of special security funds for the rectification and upgrading of hidden dangers.

## **5.3 Innovating Management Methods, Continuing to Strengthen the Hidden Dangers Investigation and Management System**

With the increasing volume of the Group, combined with the characteristics of the safety management and control of the four major industrial segments, the Standardized Safety Management Assessment Standards for Safe BBMG was compiled and formed, including two major parts of production safety basic management and on-site management, with a total of 22 assessments elements and 99 assessment projects, covering the production safety system production, archives establishment, site environment, equipment and facilities, operational behavior and key points control.

The role of third-party professional institutions was highlighted and production safety technology and service agencies were hired to conduct professional guidance, review and evaluation. Each year, with the help of internal technical forces, routine inspection and testing of special equipment, lightning protection facilities, fire-fighting facilities are carried out to provide technical support.

In 2017, the Company inspected and tested 141 boilers, 269 pressure vessels, 1,406 elevators and 8,229 lightning protection facilities, timely corrected the defects in the operation and management of equipment and facilities, and improved technical and service measures so as to ensure the safe and stable operation of special equipment.

Up to now, the Company's hidden danger investigation and management system has included 5,472 users, completed hidden danger identification for 52,852 person-times and completed hidden danger identification for an average of 3,523 person-times each month. 1,548 hidden dangers have been eliminated, and an average of 103 hidden dangers rectification has been completed every month. The application of system achieved initial effect.

**▲Case: Zanhuang BBMG Passed the First-Class Safety Standard of on-Site Assessment of the Company**



Recently, under the entrustment of the State Administration of Work Safety, China Building Materials Inspection and Certification Group Co., Ltd. formed a production safety standardization review team consisting of 7

experts and conducted on-site assessment of the establishment of the production safety standardization first-class enterprise of Zanhuang BBMG Cement Company. After a rigorous and detailed review by the expert group, the Company successfully passed the on-site assessment and became the first batch of production safety standardization first-class enterprise of BBMG Jidong Cement Enterprises this year. Since the establishment of the production safety standardization first-class enterprise work last year, the Company has strictly advanced and fully implemented according to the requirements of the standard. During the on-site review process, the Company's high level of safety management was unanimously affirmed and praised by the expert group.

#### 5.4 **Comprehensively Enhancing Employees' Consciousness of Identification, Elimination and Prevention of Risks under the Guidance of Corporate Culture**

Following the concept of culture-driven management, the Company provides publicity, education and training for front-line positions and employees, and has gradually formed the safety culture with its own characteristics based on its fine tradition and rich experience.

The Company printed and distributed 6,500 separate editions of its rules, organized two sessions of trainings for explanations of rules for more than 800 safety management staff, designed, printed and distributed 500 sets and 8,000 copies of system innovation analysis posters and publicity leaflets for comprehensive publicity.

The Company publicized safety knowledge and aroused the participation by all the employees by holding activities such as theme conservation, publicity and counseling day, skill competition, safety commitment, prize-giving quiz, safety riddle guessing, fun sports meeting, safety speech contest, theme photography and calligraphy and essay contest during the “production safety month”, “119” fire day and Ankang Cup. As many as 37,000 employees participated in the production safety publicity and education activities throughout the year.

#### **▲Case: The Company obtained a good result in the 3rd Youth Production Safety Management Masters Contest**

2016-2017 Youth Production Safety Model Post of Beijing City & the Commendation Conference of the 3rd Youth Production



Safety Management Masters Contest was solemnly held in Beijing in August 2017. Three groups, i.e. the fly ash disposal section of the Clinker Workshop of Beijing B B M G L i u s h u i

Environmental Protection Technology Co., Ltd., the Production Planning Department and Technology R&D Department of Beijing Bio-Island Technology Co., Ltd. were respectively

honored as the Youth Production Safety Model Post of Beijing City. Li Guohua from BBMG Property Management Co., Ltd. was awarded the “Silver Prize of the 3rd Youth Production Safety Management Masters Contest”, and Sun Dazhi from Siping BBMG Cement Co., Ltd. was awarded the “Bronze Prize of the 3rd Youth Production Safety Management Masters Contest”.

The Company focused on risk prevention and control, and carried out 270 drills for emergencies such as flood prevention, warehouse fire, someone trapped in an elevator, spontaneous combustion of mobile equipment, pre-heater cleaning, vehicle damage, electric shock, leakage of chemicals and first aid throughout the year, which were attended by 29,000 employees.

### **▲Case: Global Trade Center Carried Out Fire Drill to Prevent Fire Accidents**

The fire evacuation drill was carried out in the Global Trade Center Phase I on July 7 2017, during which 75 customers were evacuated with tight arrangement, orderly organization and rapid fire extinguishment. Ditan Detachment and Beixinqiao Detachment dispatched one fire command vehicle, two water tenders and one aerial ladder truck. Customers were acquainted with matters that need attention during the escape from fire in detail, and offered the usage experience of evacuation tents and aerial ladder. BBMG Property Management Global Trade Center Branch will continue to improve its capability to respond to safety disasters and other safety-related emergencies, in a bid to lay solid foundation for constructing a safe and harmonious building.



The Company appointed internal experts and external teachers to offer training in rotation for all the fire safety management staff on an annual basis, and organized professional trainings in terms of system building, traffic safety, occupational health and special equipment for 5,300 employees, in order to enhance the professional skills and attainments of the production safety management team.

At present, three subordinate units of the Group have been honored as the National Safety Culture Model Enterprise, and six have been honored as the Provincial and Municipal Safety Culture Model Enterprise. Some enterprises are currently developing the safety culture, realizing initial achievements.

### **▲ Case: The Company Held “Safety BBMG” Training on Assessment Standards of Standardized Safety Management**

In 2017, the Company organized special training on the self-assessment of the “safety BBMG” training on assessment standards of standardized safety management



(trial implementation), which was attended by more than 240 employees from subordinate enterprises.

The training made detailed explanations from three aspects, namely, the basic management of production safety and guard, on-site management and index assessment. The basic management emphasizes the standardization and effectiveness of various supporting documents and records, pays attention to the compliance, improves the process management, and tries to realize trace operation and closed-loop management; on-site safety management focuses on the essential safety and intactness of the operating environment, equipment, facilities and safety protective devices, as well as the safe operation of employees; the index assessment emphasizes the establishment of safety responsibility system and effective management and control of special targets.

## **5.5 Strengthening Occupational Health and Safety and Building a Good Working Environment for Production Safety**

Committed to providing a healthy and safe working environment for all the employees, the Company has formulated production safety measures in strict accordance with the *Law of the People's Republic of China on Work Safety* and other relevant rules to prevent accidents in production. The Company and subordinate enterprises have passed OHSAS18001 occupational safety and

health system, and entrusted third-party occupational health evaluation center with the workshop inspection on an annual basis, in order to guarantee employees' health and safety. We arrange pre-job physical examinations for newly recruited employees, and offer occupational health examinations and complimentary physical examinations for incumbent employees each year. We offer special training on emergency medical aid for workshop management staff, and provide medical kits for each workshop. Special operators are required to receive training at the designated training institution, and allowed to work upon qualification in the training. In 2017, the Company continuously conducted the prevention and treatment of occupational diseases and the monitoring of occupational health according to production and operation characteristics and phases of all the affiliated companies, provided protective articles for occupational hazards, supervised the inspection of such articles to guarantee the normal operation, and put up occupational health protective signs and hazard notifications to remind employees in contact with occupational hazards to correctly wear and use the relevant protective gear and effectively prevent the occupational hazard. More investments were made into the management of occupational hazards to prevent, control and eliminate the occupational hazards.

In 2017, there were no new cases of incumbent employees found suffering from occupational diseases, records of lost working days due to work-related death or injury, or any records of the Company's violation of laws and rules related to employees' safety.

## **6. ENVIRONMENTAL PROTECTION**

In view of the increasing concerns on energy efficiency and environmental problems, the Company has been strictly observing the ecological "red lines". The Company has actively promoted the energy conservation, cost reduction and cleaner production, strengthened internal control on energy efficiency and environmental protection, enhanced refined management and increased investment in environmental protection technology and practices, pursuing a green and sustainable development path. In 2017, the Company invested approximately RMB770 million in the energy conservation and environmental protection, with no material environmental incidents reported during the year, realizing continuous improvement in capability and standards of sustainable development.

## **6.1 Environmental management**

The Company has formulated the Environmental Protection Management System to effectively fulfill its corporate responsibilities under the supervision of the environmental protection administrative authority and leadership of management of each business division with a three-level management system comprising supervisors, division leaders and the corporate.

In 2017, the Company included the subsidiaries of Jidong Cement and Jidong Development Group into its standardized environmental management program for the first time. Standards on environmental management by classification were further revised and improved according to the specific characteristics of each sector and industries. As of the year-end, the Company has finished the environment standardization of 113 enterprises with comprehensive environmental inspection and supervision on each enterprise and various measures to improve environmental protection conditions, which effectively enhanced our environmental protection management and achieved full compliance with relevant standards on pollutant discharge.

### ***Grid-type environmental protection inspection and supervision***

The Company has supervised the environmental protection in the form of daily inspection, special inspection and supervision in case of emergency. Daily inspection is carried out on the production and operation site, operation of environmental protection facilities, standardized discharge, and dust control of each segment while special inspection and supervision are conducted in terms of air and water pollution, gradually forming a grid-type pattern of the environmental protection supervision and inspection.

During 2017, in response to the special environmental inspection on the “2+26” Cities, the Company established 10 environmental inspection groups and 2 environmental supervision groups and completed 494 special inspections on 115 enterprises, identifying and eliminating 935 hidden risks, which effectively fulfilled our corporate responsibility on environmental protection and reduced the environmental risks. There were no material administrative penalties imposed on the Group.



## 6.2 Resource conservation

The Company has established and perfected the industrial energy-saving management system to continuously enhance the resource utilization efficiency and promote the green and low-carbon cycling of the industry. The Company has been strictly implementing the restrictions and guidance by laws and regulations, reinforcing energy measurement work by standardizing energy efficiency metrics and conducting cleaner production reviews on a regular basis, so as to minimize energy and material consumption. The Company will continuously strengthen the coordination between the upstream and downstream industrial chains such as cement and commodity concrete to reduce the consumption of packaging materials. In 2017, the total amount of finished packaging materials was 223.79 tons, and the unit product accounts for 10.5 g/ton.

### *Energy consumption*

The Company started with management system by establishing quantified detailed standards for the full process of production and operations, and emphasizing on the responsibilities of energy-consuming units to ensure full participation of all employees. It has further promoted the energy-saving objectives for the key energy-consuming enterprises and enhanced the energy control system focusing on both consumption amount and intensity. Significant efforts have been made to improve the energy management system, reinforce energy efficiency management with information technology, and continuously carry out energy-saving diagnosis, energy audit and energy management and control center projects, with an aim to realizing visual assessment and online optimization of energy consumption to maximize energy efficiency.

Type of energy	Consumption amount
Electricity (10,000 kWh)	811,329.49
Raw coal (10,000 tons)	1,016.96
Natural gas (10,000 m <sup>3</sup> )	3,513.76
Gasoline (ton)	894.33
Diesel (ton)	44,277.95

## ▲ Case: BBMG Property Management Honored as “Energy Efficiency Leader”



In 2017, the selection of “energy efficiency leader” of Beijing City organized by Beijing Development and Reform Commission came to an end. According to the material review, on-site review and consultation

among competent authorities, industrial associations, and experts, two companies in the property management industry of Beijing City were honored as the “energy efficiency leader” of Beijing City. BBMG Property Management Co., Ltd ranked No.1 in the appraisal.

Over years, BBMG Property Management has proactively explored the green and intelligent development paths, and conducted in-depth and detailed work in terms of strategic planning, energy-saving technology research and demonstration, refined management and energy-saving public-welfare publicity through cleaner production and energy audit, in order to build the management project into a green and low-carbon building. After several years’ endeavor, Tengda Building under the management of BBMG Property Management obtained the first “green building” operation logo of Beijing City, and the Global Trade Center obtained the “green building” two-star operation logo of Beijing City and US LEED-EB golden certification.

### *Energy-saving Transformation*

The Company has actively conducted the energy efficiency benchmarking and target attainment activities. In 2017, it invested special funds totaling RMB98,000,000, eliminated 2,094 sets of outdated mechanical and electrical equipment, replaced 20,236 old lighting with green lighting, and conducted 35 energy-saving transformation projects for production process system, 31 water-saving transformation projects, 20 energy system optimization projects, 14 kiln reform projects and 3 waste heat and pressure utilization projects.

In 2017, the total installed capacity of waste heat power generation reached 566.9MW, and the actual waste heat power generation was 2.3 billion kWh. 8,757,400 tons of standard coal were totally consumed, and 59,000 tons of standard coal were saved throughout the year. Siping BBMG, Beishui Environmental Protection, Liushui Environmental Protection, BBMG Property Management and Jinhaiyan Property Management comprehensively fulfilled annual energy-saving objectives and tasks of the government. Cement enterprises passed the special audit of the energy-saving tiered electricity price.

**▲ Case: The Company Organized the Training Course on Energy-Saving and Carbon Emission Verification among Key Energy-Consuming Units in 2017**

From 19 to 21 July 2017, the Technical Quality and Environmental Resources Management Department of the Company hosted the training course on energy-saving and carbon emission verification among key energy-consuming units in 2017 at BBMG Fengshan Training Center, attended by more than 120 people including leaders in charge of energy and carbon emission and department heads of BBMG Jidong Cement, Jidong Development Group and their subordinate enterprises. This training integrated theoretical teaching, method training and actual operation, and combined problem solutions with actual cases, which aroused the enthusiasm and interest of trainees, enhanced the understanding and mastery of relevant knowledge, and greatly lifted the training effect.

The Company has controlled the water consumption in the production and working procedure. Water for production and living is taken from safe and compliant channels such as surface water, tap water, and self-prepared well water. The Company fully promoted the water-saving technical transformation, and popularized the industrial process, technology and equipment for water saving, in order to enhance the water usage efficiency. It has also organized special water-saving activities, publicized the water conservation, and promoted the cyclic utilization of water resources and disposal and recycling of industrial wastewater. In 2017, the enterprise water consumption, water conservation and fresh water consumption of products amounted to 21,834,100 m<sup>3</sup>, 831,000 m<sup>3</sup> and 0.29 m<sup>3</sup>/ton, respectively, with the recycled water utilization rate of 95.38%.

### 6.3 Cleaner production

The Company has continued to implement the Cleaner Production Promotion Law (《清潔生產促進法》) and Cleaner Production Review Methods (《清潔生產審核辦法》), reviewing the cleaner production in enterprises according to the law by stages and in groups. 59 enterprises of the cement segment and 27 enterprises of other segments owned by the Company have passed the cleaner production review.

BBMG Jidong Cement invested RMB1.05 billion in the two-year cleaner production promotion project, and realized 437 renovation projects including transformation of electric dust removers into bag dust removers, desulfurization and denitrification, shed building, transport and transshipment closure, sewage treatment and noise control. In 2017, RMB670 million was invested in 377 renovation projects, over-fulfilling the annual plan.

In 2017, the Company's subsidiaries Dacheng Real Estate, Construction Machinery Company and BBMG Chengyuan Company successively invested RMB16,500,000 in the transformation of coal-fueled heat supply into gas-fueled or power-fueled heat supply for 565 households in seven districts, and comprehensively fulfilled the work task of "coal elimination and nitrogen reduction" assigned by Beijing Municipal Government before the heating season.

Three subsidiaries, namely, BBMG Dingxin, Handan BBMG, Guangling Jinyu were selected as the first pilot green plants by the Ministry of Industry and Information Technology.

#### **▲ Case: Tianjin Zhenxing Cement Co., Ltd. Won Recognition by the Ministry of Environmental Protection and Special Inspection Team**

In March 2017, Tianjin Zhenxing Cement Co., Ltd. successively received inspection by the inspection team of the Ministry of Environmental Protection and the special inspection team for elimination of outdated capacity of the cement glass industry. The Company



won the recognition by the Ministry of Environmental Protection and special inspection team with high-level on-site environmental management. The Company proactively fulfilled its responsibilities as a state-owned enterprise, and persisted in the integrated utilization of resources and sustainable development. It successively invested funds in the environment-friendly and energy-saving transformation, and proactively conducted transformation and upgrading projects. Confronted with increasingly severe environmental protection situations, and more frequent environmental protection inspection, Tianjin Zhenxing Cement Company will proactively shoulder its environmental protection responsibilities, make concerted efforts to conduct on-site management and reduction of pollutant discharge, and help enterprises to enhance the environmental protection industry, and realize the new path of green development.

#### **6.4 Reduction of emissions of waste gases and greenhouse gases**

The Company has strictly complied with the national and local laws, regulations, policies and standards on environmental protection such as the *Environmental Protection Law of the People's Republic of China*, the *Law on the Prevention and Control of Air Pollution*, the *Emission Standard of Air Pollutants for Cement Industry*, the *Emission Standard of Air Pollutants for Wooden Furniture Manufacturing Industry*, and the emission standards of air pollutants of furnaces for building materials industry and other industries. The Company has orderly organised production and operation activities, utilised the advanced emission reduction technology and improved refined management and control to control the exhaust emission, and made improvement in production technology and technical reform to ensure that the discharge of pollutants fully comply with relevant standards.

##### ***Promoting emission reduction technology***

The discharge of pollutants such as NO<sub>x</sub> and SO<sub>2</sub> has been obviously decreased by the Company with the denitrification and desulfurization technology. The technology for storage and utilization of CO<sub>2</sub> in the waste gas of cement kiln has been developed to reduce the content of CO<sub>2</sub> in the waste gas of cement kiln. The dust collection equipment has been updated and reformed and closed conveying equipment has been adopted in the product packaging and delivery, in order to ensure that dust discharge is in compliance with relevant standards. In 2017, the CO<sub>2</sub> emissions of products from the corporate boundary of the Company were 0.9131 ton/ton, and the emissions of NO<sub>x</sub>, SO<sub>2</sub>, PM and other pollutants were lower than the emission limits.

## ***Controlling Carbon Emission***

The Company completed the carbon emission report, verification, inspection and performance in key carbon emission units in Beijing on time with 100% performance rate. In 2017, its carbon dioxide emissions amounted to 67,936,500 tons, representing a year-on-year decrease of 9.41%, and traded emission surplus quota of 450,000 tons throughout the year.

### **▲ Case: BBMG Xishan Jia No.1 Aims to Build Ecological Technology Residence in the Southwest of Beijing City**



With the enhancement of energy-saving and environment-friendly production and further promotion of products, it has continuously developed new

technology of building energy efficiency. Green and high-tech buildings are key to the building of a resource-saving and environment-friendly society, and an important approach to promote the urban sustainable development. In response to the government's strategic deployment of ecological construction, the Company adopted various green building energy conservation measures in the project design of BBMG Xishan Jia No.1 following the "high-tech, healthy and eco-friendly" positioning. For instance, ten high-tech systems, namely, breeze corridor, roof greening, low-elevation greenbelt, rainwater recycling, high-proportion woodlot, ceiling radiation, ground source heat pump, fresh air haze removal, same floor wastewater discharge and external sunshade, were adopted to create natural and pure microenvironment of the residential area, effectively reduce the energy consumption in the area, guarantee constant temperature, humidity and oxygen, and build a livable, eco-friendly and healthy residential area.

## **6.5 Manufacturing green building materials**

The new building material manufacturing segment has formulated relevant standards for materials, construction and inspection, manufactured pollution-free and environment-friendly interior decoration materials, developed green furniture and production technology, carried out VOC reduction plan, and provided reliable and green building materials for the society. The energy-

saving and green furniture production line built by Beijing BBMG Tiantan Furniture Co., Ltd. increased the volatile section of the drying oven for the water paint with long volatilization time and high humidity, which enhanced the dehumidification and balancing capability, greatly reduced VOC emission, and reduced the environmental impact.

### **▲ Case: Jinhaiyan Glass Wool Products Won China Environmental Labelling**

On February 6, 2017, the glass wool blankets and glass wool boards produced by Dachang BBMG Jinhaiyan Glass Wool Co., Ltd. passed China Environmental Labelling



Certification, and won China Environmental Labelling. It was the only domestic manufacturer whose glass wool products passed the certification. The Company has reached high industrial standards in terms of manufacturing technique, material selection and product quality. Its glass wool products and chocolate wool products are produced with imported equipment and unique formula in strict accordance with the European technical standards and requirements. It has continuously improved the fiber forming and curing process of the glass wool to make the fiber thinner and more elastic, which can effectively enhance the thermal insulation, workability and endurance quality of glass wool products, and greatly reduce the consumption of fossil resources and energy and waste discharge during the production process.

#### **6.5.1 Elimination of waste**

The Company has enhanced the technology supporting capability, promoted the accurate pollution treatment through technology innovation, made comprehensive utilization of resources, popularized the technology without waste or with less waste, committed to a circular economy via intensive production, continuously enhanced the resource development and reasonable utilization, and realized the recycling, reduction and harmless treatment of “three wastes” of the enterprise to the largest extent.

The cement and ready-mixed concrete segment has strengthened the innovation and management of the development mode of the environmental protection industry, gave play to the function of the infrastructure, and enhanced the environmental service capability. Cement kiln have been utilized for the co-disposal of industrial and city garbage, which leads to reduction of usage of natural resources and allows reutilization of waste resources, reducing the pollution. The harmless wastes produced in the production process of the Company has been used to substitute raw fuel materials to realize the resource utilization, creating a new mode of cross-industry sustainable development.

The Company intensified the comprehensive utilization of industrial solid waste, and realized harmless disposal of 38,100,000 tons of waste such as coal gangue, coal ash, mineral waste, smelting waste, desulfurized and denitrified gypsum with advanced production technology and equipment. So far, there have been 17 enterprises under the Group engaged in the business of synergetic use of cement kiln for the disposal of 930,000 tons of urban solid waste such as hazardous waste, civil sludge and domestic garbage.

**▲ Case: The Fly Ash Disposal Project of BBMG Liushui Won The Bronze Medal of the “1st China Energy-saving and Environment-friendly Innovation Application Competition”**



From November 23 to 25, 2017, the 1st China Energy-saving and Environment-friendly Innovation Application Competition was held in Xuzhou, Jiangsu.

The panel of experts of the competition was composed of academicians of Chinese Academy of Sciences and Chinese Academy of Engineering and famous experts in the industry, and the review was supervised by Beijing National Technology Transfer Center of CAS. The Fly Ash Disposal Project of BBMG Liushui Environmental Protection Technology Co., Ltd. stood out among the intensified competition and won the bronze medal.



The reutilization technology of fly ash produced by domestic waste incineration is energy-saving and environment-friendly innovative technology owned by Liushui Company with the proprietary intellectual property right, which solves the difficulty in the fly ash disposal in the domestic waste incineration, and realizes the harmless disposal, reclamation and minimization of fly ash produced by waste incineration. After more than one decade's endeavor and improvement, the fly ash disposal technology has gradually become mature, and achieved industrialized development thanks to new opportunities.

## **6.6 Policies on minimizing significant impact on the environmental and natural resources**

While realizing the business development, the Company has paid special attention to the impact on the environment, and actively conducted the restoration of the environment (including the ecological environment). Environmental impact assessments and geological disaster assessments have been conducted and relevant protection proposals formulated prior to project implementation. The Company also strengthened knowledge education in relation to environmental protection for construction staff, enhanced the environmental protection consciousness of the construction staff, and reduced the damage to the environment during the project implementation. Upon completion of projects, the Company implements measures to aid the restoration of ecology and land.

The Company has increased its investment in ecological restoration and strengthened the R&D in ecological restoration technology. In 2017, it enhanced measures in relation to the “green mining”, and developed technology in relation to ecological restoration and solidification and stabilization technology of contaminated soil. At present, the greening rate of the Company's plant areas is more than 15% and the Company also owns 2 national green mines.

### **▲Case: BBMG Jidong Sand Gravel Aggregate Realized Achievements in Environmental Protection**

Since its establishment, BBMG Jidong Sand Gravel Aggregate has persisted in the circular economy path with low pollution and zero emission, and realized the optimal allocation and reasonable development layout of mineral resources following the green and environment-friendly concept. Since 2017, it conducted the inspection and treatment of cleaner production in response to the environmental protection requirements.

On the above basis, all the subsidiaries and branches of the Company totally invested RMB8,070,000 to rejuvenate the appearance of the enterprise by means of equipment purchase, sapling transplant, road surface renovation, external wall painting, and cultural logo establishment, in order to create “green mines”, and build garden-style plants. The green area is increased by over 90,000m<sup>2</sup>, the total green area of all the subsidiaries and branches reaches 122,000m<sup>2</sup>, the green coverage ratio exceeds 30% and even 50% in some enterprises, and the overall ratio exceeds Grade II standard of the urban garden greening and maintenance management, which effectively improves the production environment, and enhances the corporate image.



## 6.7 Energy-saving and Environmental Protection Publicity and Training

In 2017, the Company held senior environmental protection, energy-saving and low-carbon training courses for 4,420 employees. On “6•5” Environment Day, BBMG Dingxin carried out “protection of the blue sky by all the people” and distributed more than 500 pamphlets jointly with Luquan District Government. It organized or participated in the environmental protection publicity for 20,000 employees throughout the year. Its subsidiaries including Bio-Island, Jidong Tangfen, Beijing Concrete, Yandong Construction, BBMG GEM, BBMG Property Management and BBMG Tiantan Furniture held various activities such as knowledge quiz, voluntary labor, emergency drilling, signature activity, distribution of publicity materials and low-carbon life, which enhanced the legal consciousness and responsibility consciousness, improved the awareness of energy conservation and environmental protection, and build an atmosphere for energy conservation and environmental protection.

### ▲Case: Planting Trees for Green Hopes – BBMG Youth Proactively Carried Out Voluntary Tree-Planting Activities



In April 2017, BBMG Youth League Committee organized young league members to participate in the tree-planting activity with the theme of “youth actions for clean air”

hosted by Beijing Youth League and Beijing Youth Association Development Promotion Center, and guided the youth to actively participate in the urban eco-environment building, advocated the continuous improvement of air quality, and promoted the treatment of “urban diseases” in Beijing. BBMG Youth League Committee will proactively lead all the young league members to make contributions to the urban development planning and eco-environment protection, according to the spirits of the important speech made by the General Secretary Xi Jinping during his visit to Beijing and the arrangement made by the municipal league committee.

## **7. EMPLOYEES' GROWTH**

Employees are the key driving force for the sustainable development of the Company. We have persisted in the equal employment and democratic management, expanded the channel for employees' growth, and conducted rich and colorful cultural entertainment activities, building a fair and just environment for employees' growth, and guaranteeing the balance between work and life of employees.

In 2017, the Company has strictly complied with relevant laws and regulations relating to remuneration, dismissal, recruitment, promotion, hours of work, holidays, equality of opportunities, diversification, anti-discrimination, other treatment and welfare, prevention of child labour, forced labour and others that have a significant impact on the Group, maintaining the harmonious and stable labor relations with the employees.

### **7.1 Protection of employees' rights and interests**

The Company has strictly abided by relevant laws and regulations such as the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Regulations for the Implementation of the Labor Contract Law of the People's Republic of China*, the *Social Insurance Law of the People's Republic of China*, and the *Provisional Regulations on Salary Payment*, and paid attention to protecting the legitimate rights and interests of employees, opposing employment discrimination, and insisting on equal treatment of employees with different backgrounds. The Company formulated relevant system documents in terms of employment system and salary and welfare, such as management regulations on recruitment and employment of employees, code of conduct and detailed rules of management, to ensure that employees receive their salaries in full and other statutory benefits on time. The workers' congress system has been adopted to guarantee the employees' entitlement to collective negotiation, realize democratic management, and actually respect and maintain the human rights of employees.

### 7.1.1 *Equal employment*

The Company has persisted in the equal employment and opposed employment discrimination in strict accordance with relevant laws and regulations such as the *Employment promotion Law of the People's Republic of China*. The Company respects and fairly treats employees of different nationalities, races, genders, ages, religious beliefs and cultural backgrounds, and adopted the principle of equal pay for equal work. Forced or child laborers in any form were strictly prohibited and resisted by the Company. The Company maintained endowment insurance, medical insurance, unemployment insurance, work-related insurance and birth insurance, and paid the housing provident fund for employees. Employees may be entitled to legal holidays and vacations according to national policies and relevant laws and regulations.

The Company established management regulations on selection and appointment of management personnel and those on election of high-level management. The personnel selection and promotion mechanism was open in procedure, fair in process and impartial in results. The Company performs democratic decision-making, and ensure the promotion opportunities of employees.

#### *Prohibition of employment of child or forced laborers*

According to relevant provisions in the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Collective Contract Regulations*, and *Administrative Measures for Labor Service and Business Outsourcing*, the Company shall recruit employees at the age of 18 years old and above. Meanwhile, it is explicitly stipulated in the *Administrative Measures for the Recruitment of BBMG* that, it is forbidden to recruit employees under 18 years old; the requirement on the minimum age should be specified in the recruitment information released through recruitment channels; such requirements should be informed to candidates during interview and recruitment procedures, and the identity information of candidates should be verified within such a scope as permitted by national laws and regulations.

It is stipulated in the *Administrative Measures for Rewards and Punishments for Employees (Trial)* that, each department of the Company shall strictly control and approve the labor service such as overtime work. In order to enhance working efficiency and make full use of normal working hours, the approval shall be obtained in advance for overtime work. Meanwhile, the Company's employees are entitled to equal consultation and supervision on their own rights and interests through the labor union organization, in order to avoid the forced labor.

In 2017, the Company didn't have any child or forced labor.

#### *Recruitment of university talents*

With strictly adhering to the relevant provisions of *Interim Measures for Recruiting University Graduates of BBMG Group*, the Company has recruited employees via various channels to strengthen the talent reserves. In 2017, it organized the secondary enterprises to attend several university recruitment fairs with 139 undergraduates recruited, and actively participated in special recruitment fairs such as the allocation of village officials assumed by university students upon expiry of tenure, introduction of graduates native to Tibet, and arrangement of university student soldiers released from military service.

In 2017, the Company actively approached various universities, including University of Science and Technology Beijing, Wuhan University of Technology, Beijing University of Technology, Yanshan University, Hebei University and University of Jinan in order to meet its regional and industrial development demands. Both parties reached an intention to enter into a preliminary strategic cooperation in talent cultivation, delivery, industry-university-research cooperation, employer brand promotion and other aspects, involving more than 30 professional categories.

According to the layout of four principal businesses of the Company, the employees are mainly located in several regions such as Beijing, Hebei, Tianjin, Henan, Shanxi, Sichuan and Zhejiang. As at the end of 2017, the Company had 52,321 serving employees in total, decreasing by 1566 and the turnover rate was 3%. The details are as follows:

**Composition and distribution of  
female and male employees**

<b>Composition</b>	<b>Number</b>	<b>Proportion</b>
Male employees	39,933	76.3%
Female employees	<u>12,388</u>	<u>23.7%</u>
Total	<u><u>52,321</u></u>	<u><u>100%</u></u>

**Regional distribution of employees**

<b>Composition</b>	<b>Number</b>	<b>Proportion</b>
Employees of enterprises in Beijing	13,415	25.6%
Employees of enterprises outside Beijing	<u>38,906</u>	<u>74.4%</u>
Total	<u><u>52,321</u></u>	<u><u>100%</u></u>

**Education level composition and distribution**

<b>Number</b>	<b>Type of composition</b>	<b>Number</b>	<b>Proportion</b>
1	Postgraduate or higher	909	1.7%
2	Undergraduate	12,335	23.6%
3	Tertiary college graduate	11,776	22.5%
4	Secondary vocational school graduates or lower qualifications	<u>27,301</u>	<u>52.2%</u>
Total		<u><u>52,321</u></u>	<u><u>100%</u></u>

<b>Profession composition and distribution</b>			
<b>Number</b>	<b>Type of composition</b>	<b>Number</b>	<b>Proportion</b>
1	Production personnel	27,494	52.6%
2	Sales personnel	4,090	7.8%
3	Technical personnel	10,961	20.9%
4	Financial personnel	1,825	3.5%
5	Administrative personnel	6,291	12.1%
6	Other personnel	1,660	3.1%
	Total	52,321	100%

### **7.1.2 Democratic management**

#### *Workers' congress*

The Company has continuously improved the workers' congress system, and formed the democratic management pattern of "unified leadership by the Party Committee, overall responsibility by administrative department, implementation organization by labor union, active participation by employees, and endeavor by all the parties", and guaranteed employees' right to participate, know, express and supervise. In 2017, the Company successfully organized and convened the Second Workers' Congress of BBMG Labor Union. In addition, a total of 21 enterprises completed the election of labor union at the grassroots level. The sessions of the workers' congresses were held in each enterprise, and all the new workers' representatives received relevant training. The democratic management organization at the grassroots level was perfected.

#### *Collective consultation on wages*

The Company formulated and issued the *Implementation Proposal for the Special Action Promoting the Collective Negotiation of Beijing BBMG*, in order to guarantee the extensive participation by employees. At present, more than 95% collective contracts were established and renewed in each enterprise. According to the requirements of the Municipal Federation of Labor Unions and Beijing Municipal Bureau of Human Resources and



Social Security, the collective contracts and collective consultation agreements on wages were classified and filed online for immediate inquiry and more standard management.

## 7.2 Vocational development

The Company has focused on the cultivation of team spirits and learning ability, and offered adequate development space and job opportunities for employees, in order to realize the mutual development of the Company and its employees.

### 7.2.1 Promotion channel

The Company has provided perfect career development channels for employees. The promotion channels for operation and management personnel and professional technical personnel has been established with the supporting remuneration management and career development system, which has guaranteed the career development of employees, and satisfied the career demands of employees' growth and self-value realization.

The Company has formulated the internal employee cultivation plan for grassroots management, selected excellent employees with outstanding business capability and management potential by means of performance assessment as reserve management, provided guidance for employees in the career development planning, and offered a development platform.

### ▲ Case: The Company Successfully Completed the Orientation Training for University Graduates in 2017



From August 6 to 10, 2017, 139 university graduates from more than 40 enterprises subordinate to the Company received the orientation

training in Beijing for five days. The training was divided into four chapters, namely, “interpreting BBMG culture and fostering professional spirits”, “experiencing team spirit and displaying collective wisdom”, “sharing feelings

and experience and pursuing for youthful dreams” and “interpreting development blueprints and starting the path to success”. New employees were guided to learn the corporate culture, integrate into new teams and rapidly change their roles through five-day centralized training.

### 7.2.2 *Selecting outstanding models*

The Company selects “Top ten salespersons”, “Top ten scientific and technical personnel”, “Top ten excellent CPC members” and “Top ten youth league members” in a total number of 40 each year, and takes part in the appraisal of several outstanding groups and individuals upon recommendation by the labor union. Among them, Dingxin Cement No. 2 Branch was honored as the National Pioneer Worker, Beijing BBMG Liushui Environmental Protection Technology Co., Ltd. won the Labor Commendation of the Capital, the Energy Department of Jidong Development Group International Trade Company won the Pioneer Workers of Beijing City, the general counsel of BBMG Zheng Baojin won the Labor Medal of the Capital, Wang Xinguang from BBMG GEM was honored as the National Model Worker in the Housing and Urban and Rural Construction System, Zhang Guoliang from BBMG Liushui was awarded the “May 4th Youth Medal”, and Liu Gengsheng from Tiantan Furniture Longshuncheng Company was successfully honored as Great Craftsman of Beijing City. It also introduced the surrounding model craftsmen through programs such as the *Great Country Craftsman and The Pillars of a Great Power*.

#### **▲ Case: Beijing BBMG Held a Symposium among Outstanding Groups and Individuals with the Labor Prize**

On May 16, 2017, Beijing BBMG held a symposium among advanced groups and



individuals of the labor prize. Leaders from All China Federation of Trade Unions, Beijing Federation of Trade Unions and the Company gave interviews to representatives of outstanding groups and individuals

that had been awarded the title of the National Pioneer Worker, the Pioneer Worker of Beijing City, the Labor Commendation of the Capital and Labor Medal of the Capital in 2017, and had informal discussions with outstanding representatives with the theme of “practicing the culture of practicality and trying to become pioneers in development”.

At the meeting, the relevant decisions concerning the commendations made by the All China Federation of Trade Unions and Beijing Federation of Trade Unions were announced, medals and honorary certificates were awarded to award-winning representatives, and some representatives of outstanding groups and individuals introduced their meritorious deeds. Outstanding groups and individuals present at the meeting said that, they should give full play to their leading and demonstration role, carry forward the model worker spirits, proactively implement the culture of practicality, and provide better service for the reform and development of BBMG.

### **7.2.3 Professional skills improvement**

The Company has highly emphasized the employee training, collected training plans of the Company and subsidiaries, formulated key training plans at various levels, and made active innovation in the training mode to guarantee the training effect. The training contents covered the professional technology and general job skills, which have comprehensively enhanced the comprehensive qualities of employees.

#### **▲ Case: Li Zuneng Innovation Studio Honored as Model Worker Innovation Studio of Shanxi Province**



In March 2017, Li Zuneng Innovation Studio of Zuoquan BBMG Cement Company was honored as Model Worker Innovation Studio of Shanxi

Province by Shanxi Federation of Trade Unions. It was another achievement made by the studio after it was honored as an innovative studio by the Company, county

and city. The studio was the first innovation studio established by the employees since the establishment of the factory. The innovation studio won the first prize in the “five-item” competition of Jinzhong City for three consecutive years; it was honored as Pioneer Worker of Shanxi Province in 2015, and the National Pioneer Worker in 2016.

In 2017, six employees were awarded the national professional qualification certificates and sponsorship in the “vocational development promotion program for incumbent employees” of Beijing Federation of Trade Unions. The chemical analysis and physical test skill competition was held among cement enterprises, attended by 224 chemical and physical testers from 55 cement enterprises. The professional skills competition was conducted among central control room operators (cement kiln), during which 97 contestants were selected for the next round of competition.

#### **▲ Case: Beijing BBMG Concrete Company held the 1st Employees’ Post Skills Competition**



On June 15, 2017, the 1st Employees’ Post Skills Competition was solemnly held by the Trade Union of Beijing B B M G Concrete Company at Xibeiwang Station, attended by

more than 40 tanker car drivers, bench workers and welders from eight stations and pump truck fleets. The Trade Union of the Company organized the job skills competition with the theme of “learning knowledge, competing skills, improving quality and promoting development” jointly with the Security Department, and Environmental Protection and Equipment Department.

The skills competition is an important measure to enhance employees’ business level and enhance the building of specialized teams, as well as an important approach to the sustainable development of the Company, which can enable employees to show their talents and potentials, and create a good atmosphere with respect for knowledge, labor and skills within the Company.

In 2017, enterprises subordinate to the Company organized lots of multi-field education and training in terms of ideological and political education, cultural publicity, finance, human resources, safety, environmental protection, production technology, official document writing and Party-related knowledge. The Trade Union of the Company organized three sessions of training for chief employees, eight lectures for employees and two post skill drills. As many as 21,000 employees participated in the training totaling 45,000 hours throughout the year.

#### **7.2.4 Innovation and Efficiency Enhancement**

The Company focuses on the production and operation center, and promotes the transformation and upgrading through economic and technological innovation projects. It has determined 273 outstanding innovation projects and 60 key projects, attended by more than 85% of employees. Among the first Youth Innovation Workstations of Beijing City, the League Youth Workstation of BBMG Liushui Environmental Protection participated in Beijing Sci-tech Expo on behalf of the youth in the capital.

#### **▲ Case: The Innovative Environmental Protection Achievement Made by BBMG Youth Stood out in the 20th Beijing International High-tech Expo**

The 20th China Beijing International High-tech Expo (CHITEC) jointly hosted by the Ministry of Science and Technology, State Intellectual Property Office, China Council for the Promotion



of International Trade and Beijing Municipal People's Government, and organized by China Council for the Promotion of International Trade Beijing Sub-council was held in Beijing in July 2017.

BBMG Liushui Youth Innovation Workstation stood out among the youth teams from various industries with its scientific research achievement and application of "garbage incineration fly ash disposal project", and fully displayed BBMG's outstanding contributions and rich achievements

in the environmental protection field, as well as the enterprising, innovative and responsible spirits of BBMG Jidong youth in the new era to various leaders, visitors, industrial experts, scholars and media representatives from all over the world on behalf of the youth in the state-owned enterprises in the capital.

### **7.3 Care for employees**

The Company has understood the demands of employees, solved problems that employees are concerned with. The Company has enriched the cultural life of employees in their spare time, realized the balance between work and life, enhanced employee satisfaction, and strived to build a positive and harmonious atmosphere for employees.

#### *Assistance for employees*

The Company has actively implemented the Opinions Concerning the General Establishment of Special Assistance Fund in Subsidiaries of BBMG approved by the staff representative committee. The files of employees in difficulty have been established and improved subject to prompt adjustments as per minimum subsistence allowances and dynamic management, which has provided basic basis for the assistance for employees in difficulty, and actually solved living difficulties for employees.

The mutual assistance guarantee for employees has received great popularity and recognition among employees, becoming an excellent brand of service provided by trade union for employees. According to the “generalized system of benefit and full coverage” working requirements, the mutual assistance guarantee for employees has strengthened the resource integration based on information technology, and realized the information-based, flat and networked operation by connection with the Mutual Service Card of Trade Union Members of Card of Bank of Beijing. More employees benefited from such efforts with the continuously expanded coverage.

In 2017, the Company showed concerns to employees by adhering to the principle of “normal care for employees in difficulty and key assistance in emergencies”. The trade unions at various levels expressed sympathy and solicitude for more than 3,000 needy employees and model workers at their home. Special funds aiming for “showing concern, realizing harmony and promoting development” granted subsidies totaling RMB376,000 to 107 destitute and needy employees and eight model workers from 24 front-line units subordinate to the Group.

## ▲ Case: Sincere Concern and Service for Higher Unity Of Employees



In recent years, the Company has established and improved the archives of needy employees, and carried out a series of activities to show concern for needy employees. In the past five years, the Company accumulatively helped 276 destitute and needy employees out of difficulty, granted more than RMB3,340,000 as consolation, and issued students' subsidies totaling RMB82,000. All the enterprises were encouraged to establish special assistance funds according to actual situations, which enhanced the effectiveness of the assistance.

The mutual assistance mechanism was further improved. According to the “generalized system of benefit and full coverage” working requirements, BBMG Trade Union offered Mutual Service Card of Trade Union Members for employees, and covered insurance for employees in the “bundled”, “1+1”, “distributed” and “contracting” forms; the mutual assistance was basically provided for special diseases of incumbent female employees; more than 100,000 employees benefited from various insurances.

### *Enriching employees' lives*

The Company has continuously organized rich and diversified activities, in order to reach consensus and gather power for the transformation, upgrading and green development of BBMG Jidong, Jidong Development Group and BBMG Jidong Cement Tangshan Branch held the performance with the theme of “unity of BBMG Jidong for mutual progress”, which greatly encouraged leaders and employees of BBMG Jidong to continue with new development and resplendence with wisdom, enthusiasm and passion. BBMG art troupe and chorus proactively created artistic works that gained popularity among employees and eulogized the reform and development achievements of the enterprise, and gave 41 performances at the front-line construction sites.

### **▲ Case: BBMG Art Troupe Offered Performance for Four Days in Celebration of Two Festivals in Four Places**

With the advent of the “May Day” and “May 4th”, BBMG art troupe gave splendid performances in Tongda Refractory Company Zibo Branch, Gongyi Branch, Yangquan Branch and Datong Jidong Cement, conveying sincere



greetings of BBMG Party Committee and Board of Director to the employees. The joint performance was divided into three chapters, i.e. “an ode to May”, “creating resplendence with labor” and “striving to be pioneers”. The performance not only enriched the cultural life of leaders and employees, but also encouraged them to make contributions to the integrated development of BBMG Jidong with higher morale and firmer faith, and realize the practical development, transformation and upgrading of the Company.

Following the principle of “breaking up the whole into parts, small-scale and diversified, regional combination, enterprise undertaking and guidance by the Group”, the Company divided the grassroots trade unions into 17 districts such as Tangshan Area and Jizhong Area. In 2017, the enterprise organizations at various levels held nine artistic performances, eight tugs of war, 17 table tennis and badminton matches, attended by more than 10,000 employees.

### **▲ Case: “BBMG Tongda Cup” Tug of War Came to a Successful End**



In May 2017, the Company carried out “BBMG Tongda Cup” tug of war. The competition introduced the new mode of sub-match for the first time. Second level enterprises of BBMG were divided into eight areas. As the first large-scale sports activity throughout the Group after the strategic restructuring



of BBMG Jidong, this tug of war enhanced the team spirit and indomitableness of employees of each company, enhanced the vertical exchange between different sectors, promoted the rapid integration of BBMG Jidong, carried forward the cultural of practicality, and displayed the humanistic spirit of “eight specials” of BBMG employees.

### *Caring for female employees*

The Company has protected rights and interests of female employees, and for this purpose, it has proactively conducted various activities. The Company provided equivalent remuneration, management positions, professional training and career development opportunities for female employees as male employees. The Company contributed to the birth insurance fund for female employees, and offered antenatal care leave, maternity leave and breastfeeding leave for female employees. In addition, it also positively conducted activities to enrich and for the convenience of the work and life of female employees. Since 2016, the home of female employees in each unit successively conducted the “8 March” pace-setting group and “8 March” pace-setting medal appraisal activities. Trade union at various levels actively organized the construction of “mother & infant caring room”. The Trade Union of the Company offered RMB2,000 to the established mother & infant caring rooms as the construction subsidies.

## **8. PUBLIC WELFARE**

As a large-scale state-owned enterprise in the industry and region, the Company has always acknowledged its responsibility for realization of both the economic and social benefits. In 2017, the Company actively participated in social service and public welfare charity activities in response to the call of government, reduced the non-capital functions of the Company, and provided cooperation in relation to air quality assurance work in the capital.

### **8.1 Regional contribution**

#### *Reduction and Transformation for Enhancement*

According to the urban function positioning of Beijing, the Company took the initiative in the “reduction and transformation for enhancement” program to proactively transfer non-capital

functions, and make contributions to building Beijing into a world-class harmonious and livable city by making use of its own industrial advantages as the leader of state-owned enterprises. It realized rich achievements in the reduction and renovation and obvious effects of transformation and upgrading. The real estate on the land reclaimed through transfer of functions were proactively utilized to develop new industries and types of business in conformity with the capital function positioning, and establish the “high-grade, high-precision and advanced” industry structure. In recent years, the Company has completed the closedown and business transformation of 23 industrial enterprises including Star Building Materials, transferred the production capacity to Dachang, Tangshan and Cangzhou in Hebei, Zibo in Shandong and Guizhou, and realized the industrial upgrading during the transfer.

The Company made its own investment to build the Southern Lake Park with an area of 140,000m<sup>2</sup>, and cooperated with the Sports Bureau to build the basketball, tennis and badminton courts in the park to improve the nationwide fitness facilities. BBMG has also relocated and evacuated Daxing Production Base of Beijing Aerated Concrete Company to build the high-tech industry park under construction; evacuated the tenants in the former Doudian Bricks and Tiles Plant to build BBMG Doudian Sci-tech Park; handed over part of the land of Zhaikou Mine formerly used for the production of limestone for free to Haidian District Government for the construction of renewable energy power generation plant and construction garbage recycling project.

### **▲ Case: The Company Was Invited to the Direct Broadcasting Room of the “Dialogue between Citizens and Top Leaders” Program**

On November 21, 2017, the Deputy Secretary of Party Committee and General Manager of the Company, Zeng Jin was invited to the direct broadcasting room of the “Dialogue between citizens and top leaders” Program (FM107.3/AM1026) of Beijing Public Service Radio. During the program, with the theme of “Beijing BBMG



Beyond the Dream and Leading the Future” he expounded on the important role played by BBMG as a state-owned enterprise in the capital in terms of urban construction, service for urban environment and fulfillment of social responsibilities, and had online exchanges with citizens concerning the proactive transfer of non-capital functions, implementation of synergetic development of Beijing, Tianjin and Hebei Province, promotion of supply-side structural reform and service for the “four-center” building in Beijing during the implementation of the spirits of the 19th National Congress of CPC.

In 2017, with the further transfer of non-capital functions of Beijing, and implementation of the synergetic development strategy of Beijing, Tianjin and Hebei Province, the Company successively assigned 62 evacuation and adjustment tasks, 78 transfer and renovation tasks and the entire evacuation of the southern plant. The subordinate Construction Machinery Company also assigned 11 evacuation and adjustment tasks according to actual situations of the internal management. The Company made arrangements of the transfer and renovation tasks by the region, and listed them into the letter of responsibility of the objective management; all the relevant units and comprehensive management department assigned responsibilities to relevant employees. At present, the Company has completed 110 evacuation projects, evacuating a floor area of nearly 55,000m<sup>2</sup>.

### **▲ Case: BBMG Made Concerted Efforts to Renovate the South Luogu Lane**



The General Secretary Xi Jinping pointed out when he inspected the urban planning and construction of Beijing City from February 23 to 24, 2017 that, transferring the non-

capital functions of Beijing City was key to the urban planning and construction of Beijing City. He also stressed that the history and culture of Beijing City witnessed the long-standing Chinese civilization, and we should elaborately protect the history and culture to display the overall value. As a municipal large-scale state-owned enterprise, BBMG deeply integrated

into the capital development, and proactively undertook the social responsibilities as a state-owned enterprise in transferring the non-capital functions of Beijing City. In April 2016, the Company entered into a strategic cooperation agreement with the Government of Dongcheng District, Beijing City to jointly implement the “protection, renovation and rejuvenation” plan for the historical and cultural blocks of South Luogu Lane. Beijing BBMG Dongcheng Real Estate was formally established in June 2016 as the implementation subject of the project to explore new modes of comprehensive environmental improvement and new development in the urban conservation area.

### ***Synergetic Disposal for the Environmental Protection Transformation and Upgrading of the Enterprise***

Following the development concept of “transformation & upgrading, innovative development, opening, integration and shared results”, the Company greatly promoted the development of environmental protection projects, enhanced the industrial transformation and upgrading, and created the environmental protection industry model centered on the coordinated waste disposal in the cement kiln, with the purpose of exploring the value of waste and recycling the waste by means of project contracting, technical service and operation management. BBMG has applied the synergetic use of cement kiln for the waste disposal in several aspects such as industrial waste, domestic sludge, fly ash and repair of polluted soil, formed the leading edge in the synergetic use of cement kiln for the waste disposal, realized the integrated development of the circular economy of cement enterprises, and built the “BBMG environmental protection” brand with great competitiveness and influence.

Since 2013, BBMG has closed down four cement enterprises in Beijing, i.e. Shunfa, Pinggu, Xingfa and Qianlian in advance; in response to arrangements and requirements of the municipal Party committee and municipal government, it closed down Qianjing Cement Company, accumulatively reducing the production capacity by nearly 4,000,000 tons, and transformed two cement enterprises in the south and north of Beijing City into environment-friendly high-tech companies, responsible for the harmless disposal and recycling of a great amount of hazardous waste as the urban infrastructure facilities. Cement enterprises subordinate to BBMG also took initiative to explore the restructuring and transformation, and made contributions to the development of China’s cement industry as “a good helper of the government and city purifier”.

## ***Coordinated Development of the Beijing, Tianjin, and Hebei region***

2017 was the first anniversary of the strategic restructuring between BBMG and Jidong Cement. BBMG Jidong Cement made in-depth integration in Beijing, Tianjin and Hebei Province, lifted the influence of BBMG Jidong Cement in the cement and concrete markets in Beijing, Tianjin and Hebei Province, made full use of market-based means to eliminate low-efficiency, high-pollution and outdated production capacity, and adopted measures such as production capacity replacement, acquisition of high-quality production capacity and market-based competition to further enhance the industrial concentration, optimize regional production capacity structure, improve the supply-demand relationship, establish sound competition order, and promote the sustainable and healthy development of the cement market in Beijing, Tianjin and Hebei Province. It aimed to turn the “low-lying land” in Beijing, Tianjin and Hebei Province into the highland in the country with great impacts on the cement price in the national market.

### **▲ Case: The Project Signing Ceremony of BBMG & Caofeidian Coordinated Development Demonstration Industry Park Was Held in Tangshan City**

On June 8, 2017, the project signing ceremony of BBMG & Caofeidian Coordinated Development Demonstration Industry Park was held in Tangshan City. Present at the ceremony were relevant leaders from Tangshan Municipal Party Committee, Municipal Government and Caofeidian District, persons in charge of relevant financial institutions in Tangshan, leaders of the Company and leaders above the middle level of some enterprises.

BBMG & Caofeidian Coordinated Development Demonstration Industry Park is another important project invested by BBMG in Tangshan, which displayed the restructuring effect of BBMG Jidong.

The park planning and construction complies with the synergetic development strategy of Beijing, Tianjin and Hebei Province, and conforms to the basic concept of Tangshan City to “take the lead in the mode transformation, structure adjustment and reform promotion”, and



realize development in both coastal areas and Beijing & Tianjin”. High-standard planning and high-quality construction of the park is BBMG’s mission to fulfill the social responsibilities as a state-owned enterprise and realize the rapid development, and the key work task to be shouldered by Jidong Development Group in a long time.

## **8.2 Public welfare activities**

The Company has actively participated in various charity donations and focused on the investment in the public-welfare education field. The Company has included the donation for education and incentive fund into the annual public-welfare program, and encouraged and recognized outstanding university students and excellent teaching staff in the Company, with an aim to support the development of the all types and levels of education in China. By leveraging its strengths and resources, the Company has successively established several production-study-research bases, so as to provide teaching and employment services for the colleges and universities.

## **8.3 Voluntary activities**

Following the principle of “dedication, friendship, mutual assistance and progress”, the Company has established BBMG Young Volunteer League composed of more than 30,000 young employees in and outside Beijing of the Company. In 2017, voluntary activities have been serving the important channel of ideological and moral education of the subsidiaries of the Company as we had organized over 200 voluntary activities in various forms such as renovation of workshop environment, charitable donation, and visits to elderly people without family and disabled children, with the participation of BBMG Young Volunteer amounting to 12,000 person-time. We also have called for all the young employees to devote themselves to the public welfare undertakings and direct them to firmly establish the voluntary service spirits of “dedication, friendship, mutual assistance and progress”.

**▲ Case: BBMG youth provided volunteer service for Chairman Mao Memorial Hall for six consecutive years**



On September 1, 2017, the commencement ceremony of the first group of volunteers in 2017 was successfully held. 46 youths from BBMG and

Beijing Holdings were lucky to become the first group of young volunteers of Beijing City after the Memorial Hall was opened after re-decoration. During the volunteer service for 15 days, the youth provided volunteer service such as audience guidance, flower platform guidance, assistance for the elderly and disabled, team appointment, and service at the blue cube.

The Company has organized such volunteer service for six consecutive years. This year, 23 young people from eight cities and provinces became the first group of volunteers for the Memorial Hall in 2017. Representing nearly 30,000 BBMG youth, they inherited fine traditions, displayed the elegant demeanor, implemented core values of socialism, tempered their character in the volunteer service, and made contributions to the fulfillment of social responsibilities by BBMG.

**▲ Case: The Voluntary Service of BBMG Property Management Was Successfully Honored as the Micro and Small Volunteer Service Project of Beijing City**

In September 2017, the defense review of the finals of the Micro Volunteer Service Project Support Plan of Beijing City was successfully held at the Municipal Volunteer Service Guidance Center. The “BBMG keeps you



company in green trips” Volunteer Service Project recommended by BBMG Property Management was successfully honored as the Micro and Small Volunteer Service Project of Beijing City. Since this May, Beijing City has initiated the application for the Micro and Small Volunteer Service Project Support Plan of Beijing City in 2017. The Youth League Committee of BBMG Property Management successfully applied for two micro and small projects last year, and continued to apply for the “BBMG keeps you company in green trips”. The Youth League Committee of BBMG Property Management will continue to lead young league members to engage in the volunteer service, fulfill corporate social responsibilities and gather the positive energy of the society.



## ◆ Readers' Feedback Form

In order to make continuous improvement in the disclosure and preparation of social responsibilities of the Company, your opinions and suggestions are welcomed. Please complete relevant questions in the feedback form, and fax to +8610-66410889.

1. Overall appraisal of report (please mark “√” in the corresponding position)

Option: Excellent/good/average/bad/worse

2. Does the report reflect the current status of the social responsibilities of the Company in a comprehensive and accurate manner?
3. Does the report respond to and disclose the problems that the stakeholders are concerned about?
4. Are the information and data disclosed in the report clear, accurate and complete?
5. Specify the readability of the report, namely, the logic thread, content design, language and pattern design of the report.
6. With which aspects of the report are you most satisfied?
7. Which information that you want to know is not reflected in the report?
8. Please specify your suggestions on our future work of social responsibilities and release of social responsibility report.

### **Please kindly provide your information if possible:**

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Employer:	Contact address:
Post code:	E-mail:
Tel:	Fax:

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