

Corporate Social Responsibility 2013

Better Life Together





Social Welfare 21





1. About the Company

China Resources Cement Holdings Limited (SEHK stock code: 1313.HK; the Company) was incorporated in 2003, which is one of the large cement enterprise groups that are strongly supported by the Chinese government. Relying on its unique resource distribution advantages and vertical integrated business model for cement and ready-mixed concrete, as well as the "3+2" growth strategy which means resource control, resource transformation, resource distribution, we established the lowest system cost and regional market leadership. The Company has become the largest and most competitive supplier of cement and ready-mixed concrete in Southern China, with the well-established brand name of "Runfeng Cement", gaining an important position in the cement industry in China.



As of 31 December 2013, the operation of the Company has covered Guangdong, Guangxi, Fujian, Hainan, Shanxi, Yunnan, Guizhou, Inner Mongolia, Hong Kong and Macau. The annual production capacities of cement, clinker and concrete in operation held by our subsidiaries, joint ventures and associated companies has reached 57.5 million tons, 87.0 million tons and 36.4 million cubic meters respectively, which makes us a leader in the country for the production of cement and concrete products. In the future, the Company would continue to maintain stable growth and sustainable development. It would provide customers with quality products and services, promote restructuring and innovation, to lead green development in the industry and build a business that would last for the long term.

2. Philosophy of Responsibility

China Resources Cement Holdings Limited is committed to fulfilling its corporate social responsibility, through continuously improving its product quality system and customer service system, providing excellent products and services to customers. Through continually increasing its investment into technological research and development, it is actively promoting technological innovation in the industry, taking the lead in green development in the industry. The Company views employees as the most valuable resources in corporate survival and development, and diligently creates safe and harmonious working environment and ample space for development for the employees. The Company shall continually strengthen the communication and cooperation with the stakeholders, incorporate the concept of social responsibility into business management, and work together with the stakeholders to maximize the corporate social value.



3. Key Performance Table

Indicator	Unit	2011	2012	2013
Total assets	million RMB	40,906.16	42,293.23	42,597.68
Turnover	million RMB	19,285.91	20,624.00	23,436.11
Profit before tax	million RMB	4,071.45	2,338.21	3,446.23
Taxation	million RMB	1,791.75	1,900.20	2,774.29
Return on total assets	%	13.0	7.3	9.4
Number of employees		21,844	23,296	23,889
New jobs created		4,661	1,452	593
Labour contract signing rate	%	100	100	100
Social insurance coverage rate	%	100	100	100
Proportion of female executives	%	16.94	11.62	13.02
Number of employees with disabilities		8	8	13
Number of annual leave per employee	days	8	8	8
Employee training coverage rate	%	100	100	100
Training cost per employee	RMB	900	1,100	1,000
Training time per employee	hours	55	60	65
Medical examination coverage rate	%	100	100	100
Number of occupational disease occurrences		0	0	0
Safety training	frequency	53,814	71,960	91,952
Investment for safe production	million RMB	36.50	42.26	106.68
Safety emergency response drills	frequency	161	215	302
Investment for environmental protection	million RMB	600.00	600.00	574.64
Investment for energy conservation, emission reduction and technological upgrade	million RMB	600.00	309.80	223.67
Charity donation	million RMB	2.94	5.72	3.34
Customer satisfaction	%	87	85	84
Customer complaints handling rate	%	100	100	100
Employee satisfaction	%	43	62	69
Employee engagement	%	57	68	73



4. Value Creation

1. Business Performance



2. Product Innovation

The Company holds on strongly to its value of "innovation and pursuing changes". Our product mix structure is adjusted continuously to fulfill the need of product applicability in the market. The Company has been investing in research and development for product innovation in order to develop new cement products for its customers. On top of the original 42.5 and 52.5 ordinary Portland cement products, different types of cement products including rapid-hardening, medium-heat, low-heat, low-alkali, composite, slag and masonry cement are continually being researched and developed.

The company's P.C cement and P.S cement utilizing industrial waste and residue from coal-fired power plants are environmentally-friendly products developed by the Company in the recent years. These two cement product series are reliable and cost efficient with lower pricing.

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The Company upholds the philosophy of "customer first", develops a professional service team and continually improves its product quality in order to promote the level of customer satisfaction.

1. Maintain Good Communication with Customers

The Company has set up a customer classification system since 2008. This is to provide professional services for different types of customers and to resolve technical issues. The Company pays regular visits to customers to understand their needs, which helps us to continuously improve our products and services quality. The Company also regularly organizes activities such as client meetings, cement production plant visits and technological exchanges workshop to help customers better understand the Company's production, service quality and corporate culture, thereby strengthening customers' confidence in entering into long term cooperation with the Company.



On 4-7 March 2013, the Company's Shanxi office arranged 26 customers to visit the production facilities in Guangdong and Guangxi and the China Resources Hope Town, enabling the customers in the Shanxi region to obtain a more comprehensive understanding of the Company.

2. Implementing the Protection of Consumer Rights

The Company places strong emphasis on protection of consumer rights and protection of trademarks, and actively cooperates with local government authorities to carry out anti-counterfeiting operations, and to provide consumers with long-term support and assistance for the protection of rights. In October 2013, the Company worked with the Audit Department of the Administration of Quality and Technology Supervision of Guangdong Province to jointly carry out anti-counterfeiting operations at the Fuyong Pier in Shenzhen, Guangdong. The investigation targeted 4 companies that were involved in counterfeiting operations, and seized about 225,000 pieces of PC 32.5 "Runfeng" cement packaging bags and almost 50 tons of counterfeit PC 32.5 "Runfeng" cement, with a total value of over RMB4.8 million (based on the Company's Shenzhen market prices over the same period). On-site investigations were also performed and a large number of exhibits and equipment of counterfeiting were seized and sealed up. This effectively safeguarded the orderliness in the Shenzhen market, and helped consumers to avoid building quality issues and rights enforcement predicaments due to buying counterfeits of the Company's products, and effectively protected the legitimate rights and interests of the consumers.



The Company's customers in Shanxi region visiting the Xijiang Pier of China Resources Cement (Guigang) Limited











6. Partner Responsibility

1. Strengthening of Multi-channels Communication with Investors

The Company is committed to protecting the rights of investors and shareholders, and believes that the relationship with investors and shareholders is critical to its future success. Through effective corporate governance, the Board of Directors is responsible to create and bring value to the shareholders. As the core principle of corporate governance, the Board of Directors is committed to maintaining constant and constructive communication with shareholders and investors, and will promote mutual understanding and direct communication through increasing interactions.

To enable shareholders to exercise their rights in an informed manner, the Company has established a shareholder communications policy. The Company promptly responds to daily queries from shareholders and investors, and publishes important information about the Company through the official website for corporate communications and the website of the Company. The Company also holds investors presentation after the release of the annual results and interim results, and broadcasts them via the internet for overseas shareholders and investors in order to improve the transparency of corporate governance in the Company.

In 2013, through participating in different activities, we increased the opportunities of interaction with shareholders and investors. During the year, approximately 300 one-to-one, small group and conference call meetings were carried out which enabled direct communications with fund managers and analysts around the world. Apart from carrying out non-deal roadshow after the release of results, we also participated in 15 investor forums in Hong Kong and overseas which were organized by various investment banks, and had in-depth discussions with global institutional investors about China's economy and the trends of development of the industry.





Note: The ordinary investor telephone enquiry have been consolidated since April 2013





The entire procurement staff signed the "Sunshine Declaration", and took a solemn oath

2. Fair and Open Procurement

China Resources Cement Purchasing Company Limited is a specialized sourcing company under the Company, responsible for 75% of the raw materials procurement, as well as the management and establishment of the entire specialized procurement system of the Company. Credibility is the foundation of China Resources' culture, and also a top priority in procurement management. Through establishing an effective internal procurement control system, China Resources Cement Purchasing Company carries out ongoing promotion of values and regular education on business integrity, so as to prohibit any deviations in employee behavior and firmly adhere to a fair and open procurement process.





3. Positive Acceptance of Media Scrutiny

The Company places high focus on its social reputation and brand image, and positively accepts media scrutiny. Through setting up the public feedback monitoring system, appraisals and suggestions from media reports and public opinion are collected. This is an important means for the Company to perform scientific decisions, improve customer service levels and enhance product quality.

In March 2013, the "Marine Sand Incident" which caused significant impact occurred in Shenzhen. After thorough investigation, the Housing and Construction Bureau of Shenzhen Municipality issued a statement that the Company's products were fully compliant with the quality standards. In the "Marine Sand Incident", the Company had always cooperated fully with the investigation by the government departments and the supervision by the media and different sectors of the community. The Company always maintains control over its technical production processes and product quality, and continually strives to provide better products and services to the community.



7. Care for Employees

The Company views its employees as the most valuable resources for the survival and development of the company, and regards the peace and happiness of its employees and their families as the Company's foundation. It continuously improves the working environment and remuneration and provide a broad developmental platform for the employees to display their individual talents.

In 2013, the survey conducted by an authoritative agency, Aon plc, reviewed that the Company's employee engagement reached 73%, which was at the level of high-performance/best employers.



Employee's respect for employment

1. Training of Personnel

In 2013, the Company seriously fulfilled its social responsibilities, set up training systems for personnel, launched different training and development projects at various levels. The Cement College of China Resources University divides the talent development plan into three career paths:

1. Management path: Emphasizing on the model of leadership qualities, and based on the leadership requirements at all levels, training programs are organized at different grades, such as line managers' training, training of qualified middle management, training of qualified general managers at the facilities, training on excellence in leadership, and the China Resources management path.

2. Professional path: Professional training which reflects the characteristics of the industry and the profession. Through gradually setting up a comprehensive qualification system, combined with considerations of the employees' job competency, work performance and career development aspirations, a stepped training system is formed. The system comprises elementary professional technical training, intermediate professional technical training and advanced professional technical training.

3. Operation skills path: Based on the technical competence level, a series of knowledge and skills training are organized, together with on-the-job practice.

4. Support platforms: Knowledge management platform, E-learning platform, training delivery platform, training management system, etc.





2. Care for Employees

Case study

In order to put into practice of the corporate culture of caring for employees, the Company has adopted a series of measures related to caring for its staff. For instance, commercial insurance are purchased for employees and two immediate family members annually, non-local employees are given annual leave and travel allowances for visiting relatives. Through multi-level training system, it is aimed to improve employees' technical skills.

In order to promote fraternity, team effort is used to resolve the major crises encountered by the individual, and thereby forming a long-term mechanism of helping one another in times of distress. The Company set up the "Thanks Giving Fund". In 2013, the "Thanks Giving Fund" helped 17 employees who were in difficulties, and the total assistance payments to the employees amounted to over RMB510,000.

Zhang Xiufeng, an employee of Shanxi China Resources Fulong Cement Limited, suffered from acute lymphoblastic leukemia and was in urgent need of a bone marrow transplant. However, due to the enormous costs of treatment and his family poverty, he was unable to secure treatment and post-treatment rehabilitation. Zhang Xiufeng and his family suddenly found themselves in a state of despair.

After learning of this employee's plight, the Company's "Thanks Giving Fund" allocated a one-time assistance payment in the amount of RMB150,000. At the same time, Shanxi Region and Guangxi Region also organized special fund raising event for Zhang Xiufeng. On 20 September 2013, Zhang Xiufeng successfully underwent bone marrow transplant surgery.

After the surgery, Zhang Xiufeng expressed his gratitude to the company in a thank-you letter: "20 September was the date of my rebirth. I am grateful to all the leaders, colleagues and friends who have helped me! I would not be here today if it were not for your generous donations! With all your love and support, I know I will make a full recovery, and soon be able to rejoin the family at China Resources."



The Shanxi region organized donation activities



Zhang Xiufeng is recovering well after the operation





3. Comprehensive Employee Activities





The friendly basketball match has become the Company's important annual staff activity







8. Safe Production

(1) China Resources Cement's Environmental Health and Safety (EHS) Management System

1. China Resources Cement's Safety Culture System

Safety vision

Safe China Resources, Blessed Home

- $\sqrt{}$ Establishing value-added safety management system with distinctive characteristics of China Resources, and creating a safe environment in the Company
- $\sqrt{10}$ Paying attention to the employees' safety and health, enabling the Company to become a safe and happy home

Safety and health policy

Safety first, prevention is critical, comprehensive treatment

- Compliance with the laws and regulations, scientific management, continuous improvement
- Safety and health objectives
 - Major critical safety accidents: 0
 - Accidents with minor injuries under control:
 - Target injury per 1,000 people: <5%
 - Occupational diseases (diagnosed):0
 - Safety and health philosophy Accidents are preventable I want to be safe, I will be safe Concern for health, care for lives



2. Establishment of Management System

In 2013, the Company successively issued the "China Resources Cement Organization Structure and Responsibilities for Safety and Environmental Management" and the "Notice on Adjustments to the Organization Structure on Safety and Environmental Protection at the Production Plant". This was to sort out the three-level management and control of safety and environmental protection, clearly define the organization structure and demarcation of responsibilities, and strengthen the management functions. Through signing of the letters of responsibility by all levels, the safety and environmental protection objectives and indicators were gradually disintegrated and incorporated into the performance appraisals of the employees at various units, departments and positions, which enforced the level of assessments.

At the same time, the Company also promulgated and implemented two specialized management system for safe mine production and delivery of concrete in 2013, to actively promote an effective implementation, continual optimization and improvement of the operation.







(2) Establishment of Emergency Response System

1. Emergency Response System

The Company has established an emergency response management organization and clearly defined responsibilities of different departments for coordination in time of emergency. It also specifies the responsibilities of different departments for different categories of emergency incidents such as natural disaster, safe production, public health and community safety.

The Company promulgated and implemented the "Comprehensive Emergency Response Plan for Production Safety Accidents", "Emergency Response Plan for Mine Production Safety Accidents" and "Natural Disasters Information Transmission and Early Warning Procedures". The emergency response plans formulated for the various production plants based on risk management include, among others, fire and explosion, falls from height, hit by objects, electrocution, landslides, food poisoning, scalding and natural disasters. In 2013, the Company organized a total of 302 emergency response drills, of which 173 were practical emergency response drills, and 7,724 employees participated in the drills.

2. Emergency Response Training and Drills

On 26 June 2013, China Resources Cement (Huizhou) Limited, Office of Emergency Response Management of Longmen County People's Government and Longmen Mine Safety Supervision Bureau jointly conducted an emergency rescue drill for a collapsed platform at the 615 operations platform at the Xiannvniang quarry. Over 120 leaders and safety managers from more than 20 mines and 30 companies in Longmen County participated in and observed this drill. Various rescue teams participated in the drill and achieved an integrated and coordinated action. The result was effective integration of the enterprise self-help and society's rescue forces.

On 27 June 2013, China Resources Cement (Pingnan) Limited together with 5 units including the Pingnan County Safety Supervision Bureau, Maritime Bureau and Shipping Bureau jointly carried out the "Pingnan County 2013 Maritime Incident Emergency Response Drill". A total of 5 vessels participated in the drill, and 183 people participated in and observed the drill. The drill included the three scenarios of "crew overboard emergency rescue", "sailing ship encountering an early warning of strong wind and lightning, and implementing emergency landing" and "emergency rescue when cargo ship encounters fire in its cabin and loses power". All participating units in the drill were able to perform their duty, closely coordinated with each other, and carried out work according to the drill program, thereby effectively improving the emergency response ability and on-site emergency handling ability of the various parties.



China Resources Cement (Huizhou) Limited, worked together with the government and relevant units to conduct emergency response drills for mining accidents

In 2013, the Company organized a total of 302 emergency response drills, of which 173 were practical emergency response drills, and 7,724 employees participated in the drills.

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On 17-21 June 2013, the Company organized the safety management officers from the headquarters, regions and production plants to participate in 3 batches in the emergency response management training, thereby effectively improving the preparation standard, assessment level and the abilities of conducting emergency response drill at various levels.

In November 2013, the Company arranged for safety managers at all the cement production plants to conduct emergency response management knowledge training.



China Resources Cement (Pingnan) Limited and Pingnan County Safety Supervision Bureau, Maritime Bureau and Shipping Bureau. Site jointly conducted the emergency response drill for emergency maritime incidents



(3) Supervision and Management of Safe Production

1. Implementing the Establishment of a First-Class Enterprise which Achieves the Target of the China's National Safe Production Standardization

In 2013, the Company fully implemented the establishment of a first-class enterprise to achieve targets of the China's safe production standardization. At the end of the year, there were 14 cement production plants which have passed the assessment for the first-class enterprises for the China's safe production standardization, and another 8 cement production plants have passed the preliminary assessments. More than 70% of the production plants have passed the first-class safety standard assessment and pre-assessment, and improvement and establishment of the production standardization is also being carried out actively at the rest of the cement production plants. In 2013, the safety-related expenses of the Company (including safety standard input and safety investments for concrete companies) exceeded RMB100 million.

2. Safe Production Month Special Activities

In June 2013, the Company earnestly organized the "National Safe Production Month" activities. Through a series of initiatives including publicity posters, banners, safety warning videos, safety banquets and "Safety Day", a strong safety culture was formed within the Company. The activities were extended to the family members of the employees and even the society at large. Details of the various activities for the theme activities carried out by the Company during the Safe Production Month in 2013 are as follows: 8,836 people watched the safety warning film; 13,597 people participated in the employee safety training; 11,825 people participated in the accident case study warning training; 8,175 copies of promotional materials were distributed; 48 "Safety Days" were organized, and 6,120 people participated in the "Safety Open Days", and 81 discussion forums were organized for the family members of the employees, and 2,885 family members participated in the forums.



Photo showing China Resources Cement (Yongding) Limited organizing the firefighting drill in the "National Safe Production Month"



3. Safety Training for Relevant Parties

Apart from performing its own safety management work, the Company also actively promoting safety management work of relevant parties. The Company requires all related parties to sign a safety agreement together with the sub-contracting agreement, which clearly defines the corresponding safety management responsibilities and requires safety training and management contents to be included in the safety agreement.



China Resources Cement (Nanning) Limited organized the safety knowledge competition in the "National Safe Production Month"



All production plants of the Company conduct three levels of training and assessment to employees, and categorize all personnel under work groups and work teams who are required to attend safety training and activities. Apart from training on the safety management system of the personnel of relevant parties, the safety training records of relevant companies are also acquired. The personnel of the relevant parties who have not undergone the safety training are prohibited from working inside the Company. In 2013, 91,952 employees of the Company have gone through safety training, and 8,021 personnel of relevant parties were also trained.





9. Green Development

(1) Environmental Protection Begins from the Production Plants

The Company has always been actively promoting green production resources conservation and environmental protection. The various cement production plants and cement grinding stations of the Company have implemented the ISO14001 environmental management system and engaged third-party auditors to carry out external inspections and audits, thereby improving the level of environmental protection management at the production plants. All of the Company's production lines are New Suspension Preheater (NSP) production equipped with residual heat recovery generators. The cement grinding lines are all capable of handling industrial waste. The high-efficiency production lines have established a foundation of the Company to build a resource-saving, environmentally-friendly and green enterprise.

(2) Co-chaired the "World Cement Sustainability Initiative (CSI)" in China, Promoting the Green Development of China's Cement Industry

In 2010, the Company joined the "Cement Sustainability Initiative" (CSI), and served as co-chairman of CSI in China. The Company organized and participated in the energy conservation and collaborative disposal activities in the domestic cement industry for a number of times. Through this, the Company, the world's leading cement producers, international experts and national counterparts had extensive discussions and experience sharing about the issues of solid waste treatment, energy reservation, environmental protection and safety. Through learning advanced experiences from overseas, it promoted the sustainable development of the domestic cement industry in the areas of technology, environmental protection and management, thereby enhancing the influence and status of China cement industry in the world.

On 13-14 May 2013, the Company hosted an experience sharing activity of the CSI Safety Work Group of China. More than 50 leaders and industry representatives from the State Administration of Work Safety, China Cement Association, China Safety Association and CSI jointed the meeting. At the meeting, the Company shared about its experiences of building the national first-class safe production standardization, and organized discussions on the common problems encountered during the implementation process with all participants.



Photo showing the discussion forum of the 2013 CSI China Region Safety Work Group organized by the Company



(3) Energy Saving and Emission Reduction

1. Technological Upgrade to Reduce Nitrogen Oxide Emission

As at the end of 2013, the Company completed denitrogenation technological upgrades on 37 clinker production lines. The technological upgrades adopted the Selective Non-Catalytic Reduction (SNCR) technology, where the ammonia water was mixed with flue gas under certain conditions, and nitrogen oxide was reduced to nitrogen and water without the use of a catalyst, thereby effectively reducing nitrogen oxide emission.

At present, all of the Company's clinker production lines have been equipped with denitrogenation systems, and the nitrogen oxide emission can meet the new emission standards.

2. Low-Temperature Electric Generation by Residual Heat for Coal Conservation and Emission Reduction

The low-temperature power generation project fully utilizes the medium and low temperature residual heat resources that are emitted from the cement production lines to generate power, thereby improving energy utilization efficiency, conserving energy, lowering exhaust gas temperatures, reducing air pollution and greenhouse effect, reducing production costs with better economical returns and social and environmental benefits. In 2013, the total amount of residual heat power generation delivered to the grid was 1.767 billion kwh, equivalent to a saving of 567,000 tons of standard coal and reducing carbon dioxide emissions of 1,486,000 tons. (Calculated in the coal consumption rate of 321g/kwh as published by the National Energy Administration of China in 2013)



The SNCR denitrogenation system installed at China Resources Cement (Longyan) Limited



Photo showing the residual heat power generation system

(4) Circular Economy and Renewable Resources

1. Circular Economy and Green Development

The circular economy demonstration zone is a new environmental-friendly industrial development model. Through cross-industry clusters, the recycling aim of "turning waste into treasure" is achieved which brings great environmental and social benefits. The Company has been actively participating in the construction of the circular economy demonstration zone and the Hezhou Circular Economy Demonstration Zone, which comprises cement plants, power plants and breweries, has commenced operation. Through sharing resources and recycling waste, carbon dioxide emissions and sulphur dioxide emissions can be reduced by 730,000 tons and 60,000 tons respectively, integrated use of 1.02 million tons of ash, 440,000 tons of gypsum and 400 tons of waste diatomite can be performed, 780,000 tons of water can be conserved, and 2.63 million tons of wastewater can be recycled in the demonstration zone annually. The project has achieved significant energy conservation and emission reduction benefits.

3. Four Facilities Obtained Accreditation of the "One Hundred Energy-Saving Model Enterprises"

In June 2013, the China Building Materials Federation launched the "One Hundred Energy-Saving Model Enterprises" promotion activity in the building materials industry and arranged experts to carry out assessments based on evaluation criteria. The scope of assessment included the degree of technological advancement, completeness of the energy-saving infrastructure, current status of the energy-saving infrastructure, current status of the energy management system. Four subsidiaries of the Company, namely China Resources Cement (Guigang) Limited, China Resources Cement (Nanning) Limited, China Resources Cement (Fengkai) Limited and Guangzhou Heidelberg Yuexiu Cement Company Limited, have passed the first batch of assessment.

4. Actively Co-operating in the Trading of Carbon Emission Quota

Carbon emission quota management is an important measure promoted by the government to reduce carbon emission. In order to coordinate with the local government to reduce carbon emission and to control atmospheric pollution, the Company earnestly coordinates and participates in carbon emission trading.



Currently, leveraging on China Resources Group's coal, electricity and real estate businesses, the Company is actively involved in the construction of circular economy projects such as the circular economy project in Bijie region, Guizhou.





2. Integrated Usage of Industrial Waste and Exploration of Alternative Fuel

The Company has long been committed to researching and exploring the application of industrial waste in cement production process. In terms of integrated utilization of industrial waste, the waste that is handled includes FGD gypsum, fly ash, wet cinder, bottom ash and slag. Currently, all the production plants of the Company can consume industrial waste on a large scale, and there is annual integrated utilization of 2.66 million tons of gypsum and 2.06 million tons of fly ash.

In terms of alternative fuel, Guangzhou Zhujiang Cement Co., Ltd., which is a joint venture of the Company and Cimenteries CBR S.A., has constructed a cement kiln to assist in the treatment of waste leather which can treat 28,000 tons of waste leather per annum and achieve a saving of 14,000 tons standard coal.

In order to deal with the land occupied by phosphorous slag from fertilizer plants and pollution of the environment, in 2013, the Company arranged for its cement production plants in Guangdong and Guangxi to carry out researches on the use of phosphorus gypsum to replace natural gypsum, and achieved a success. The application of phosphorus gypsum to replace natural gypsum has alleviated the pressure on land occupied by the accumulation of industrial waste and secondary pollution to the environment. The industrial waste was successfully applied to the production of P.C42.5 cement and the mixture constituted more than 27% of the total content, which significantly reduced costs and increased production effectiveness.



3. Collaboration in Urban Sewage Sludge Treatment and Renewable Energy Generation

Guangzhou Heidelberg Yuexiu Cement Company Limited, a joint venture of the Company and Cimenteries CBR S.A., is a NSP cement production plant. The collaborative treatment of urban sewage sludge by the cement kiln of Guangzhou Heidelberg Yuexiu Cement Company Limited is a key strategic science and technology project that is supported under the China's 11th 5-year plan, and is also named as "Guangdong Province's cement kiln pilot project for solid waste treatment." The project is designed to handle on a daily basis 600 tons of sludge with 80% of water content.

The project is an environmentally-friendly project for pollution control, and is also a renewable energy project, and as at the end of 2013, it had successfully treated more than 400,000 tons of sludge. The implementation of the project reduced the amount of sludge going into the landfill, extended the useful life of the landfills and achieved reduction in the quantity of sludge treatment. It has also reduced uncontrolled accumulation of sludge that occupied land, killed pathogenic microorganisms to control the spread of disease, and achieved treatment of sludge harmlessly. At the same time, the cement kiln's treatment of sludge discharged from wastewater plants has the inherent advantage of a "one stop" treatment. There is no risk resulted from multiple treatments and disposals, and the disposal is clean and thorough with significant environmental benefits.





Photo showing the Urban Sewage Sludge Project in Guangzhou Heidelberg Yuexiu Cement Company Limited

4. Implementing Ecological Restoration to the Mines; Building "Green Mines"

The Company places great emphasis on restoring the greenery at the mines. The Company has, in accordance with the "green mines" standard, incorporated and implemented the restoration of the mines into its production and development plan to promote the sustainable development. For mining areas, through measures such as recycling the water resources at the mines, zero discharge of wastewater, timely recycling of waste oil, and the use of shock-blasting and weak shock-blasting technology, the impact of production activities on the biological habitat is reduced, thereby effectively ensuring that the species in the region continue to exist and survive. For the final slopes and permanent regions, the Company adopts timely restoration of the greenery, conserves water and solidifies the earth, and reduces the ecological damage while gradually carrying out the restoration. For non-mining regions, areas are designated for protection and prohibited from entry, thereby protecting native vegetation and animal species, reducing migration of species caused by human factors.



Case study







The mine prior to restoration

The mine after ecological restoration

The Company's subsidiary, China Resources Cement (Heqing) Limited, has started its green restoration work since May 2013. After six months of construction, as at the end of 2013, the Company's mine has been planted with over 10,000 ivy plants, 1,000 poplars, 1,700 evergreen trees, over 10,000 oleander trees, and 150kg of seeds have been sown. Green area of over 50,000 square meters has been constructed and the greening effect is obvious. The Company plans to carry out ecological restoration treatment of about 20,000 square meters at the two platform slopes in 2014. In the future, the Company will carry out timely restoration of the greenery at the newly formed platform slopes, achieving the goal of "mining and timely restoration at the same time".



Full view of the mine after ecological restoration



In April 2013, a technological project for "Mine Geology, Lithological Modeling, Optimizing of Resources Utilization and Increasing of the Restoration Rate" carried out by Guangzhou Zhujiang Cement Co., Ltd., a subsidiary of the Company, was awarded the "Model Mine for Mineral Resources Conservation and Comprehensive Utilization of Advanced Technology" by the Ministry of Land and Resources of the People's Republic of China. In October 2013, it was declared as a State-level green mine pilot unit, and in November it passed the audit carried out by the Department of Land and Resources of Guangdong Province.



10. Social Welfare

The Company has been actively participated in social welfare works, and its subsidiary production plants have been actively donated cement materials to help the neighboring towns and villages in the construction and repair of roads and bridges, and improving basic infrastructure. The Company also makes donations in cash or in kind to poor areas and families in hardship, thereby solving their practical difficulties. In 2013, the total external donations made by the Company amounted to RMB3.34 million. At the same time, through measures such as partnering with village enterprises and sending volunteer to do community services, the Company actively builds community, and promotes the harmonious partnership between the Company and the community.



Nursing home at Xiawan Village, Liujia Town



(incorporated in the Cayman Islands with limited liability)

Room 4606-08, China Resources Building, 26 Harbour Road, Wanchai, Hong Kong Website: www.crcement.com Website for Corporate Communications:www.irasia.com/listco/hk/crcement/index.htm