



华润水泥控股有限公司  
China Resources Cement Holdings Limited

# 润心为您 丰业为家

Our Values for You

Our Harvest for All

2017年 社会责任报告

Social Responsibility Report





1	导读 / ABOUT THIS REPORT
3	董事局致辞 / STATEMENT OF THE BOARD
5	关键绩效速读 / SUMMARY OF KPIs
8	2017 年里程碑 / MILESTONES IN 2017
9	企业荣誉 / CORPORATE RECOGNITIONS
11	关于我们 / ABOUT US
16	责任管治 / CSR MANAGEMENT
<hr/>	
34	第一章 价值创造 / CHAPTER I. VALUE CREATION
42	第二章 精益品质 / CHAPTER II. EXCELLENT QUALITY
50	第三章 竭诚服务 / CHAPTER III. DEDICATED SERVICE
58	第四章 以人为本 / CHAPTER IV. PEOPLE-ORIENTED CULTURE
66	第五章 安全生产 / CHAPTER V. PRODUCTION SAFETY
80	第六章 绿色发展 / CHAPTER VI. GREEN DEVELOPMENT
96	第七章 合作共赢 / CHAPTER VII. CO-OPERATION FOR MUTUAL GAINS
102	第八章 公益慈善 / CHAPTER VIII. COMMUNITY AND CHARITY
<hr/>	
111	2018 年展望 / 2018 OUTLOOK
112	绩效指标列表 / TABLE OF PERFORMANCE INDICATORS
118	环境、社会及管治指标索引 / REFERENCE TABLE OF ESG INDICES
126	意见反馈表 / FEEDBACK

## 导读

### 时间范围

本报告涉及的时间范围为 2017 年 1 月 1 日至 2017 年 12 月 31 日。

### 发布周期

本报告为年度报告，本年度报告获得董事局批准发布。

### 称谓说明

为便于表达，本报告中提及的“华润水泥”、“公司”、“我们”等均指作为一个整体的“华润水泥控股有限公司”及附属公司。

### 报告目的

本报告旨在对公司社会责任理念、实践和绩效与利益相关方进行坦诚沟通，回应利益相关方关注的问题。

### 数据来源

本报告包含信息以华润水泥成立以来至 2017 年 12 月 31 日的统计数据 and 正式文件为主。

### 参考标准

本报告主要参照香港联合交易所有限公司（“联交所”）证券上市规则（“上市规则”）附录二十七《环境、社会及管治报告指引》、中国社会科学院《中国企业社会责任报告编制指南（CASS-CSR4.0）》以及《华润集团社会责任工作管理办法》等标准进行编制。

### 编制流程

本报告的编写流程参考上述标准的要求，按照同业对标、问卷调查、利益相关方访谈、社会责任调研、信息收集、信息复核、报告写作、管理层审定等步骤进行，以确保报告内容的完整性、实质性、真实性和平衡性。

### 报告获取

本报告提供中英文合订版电子文件，可在联交所网站及公司网站获取。

### 联系方式

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## About this Report

### Reporting period

This report covers the sustainability performance of China Resources Cement Holdings Limited for the year from 1 January 2017 to 31 December 2017.

### Frequency of publication

This report is published on an annual basis with the approval of the board ("Board") of directors ("Directors") of the Company.

### Description of references

For easy reference, "China Resources Cement Holdings Limited" and its subsidiaries are abbreviated as "CR Cement", "the Company" or "we" in this report.

### Objectives of the report

This report aims to enhance open communications with stakeholders on the Company's philosophy, implementation and performance of social responsibility, and to address the issues of our stakeholders' concern.

### Sources of data

The information in this report is mainly derived from statistics and formal documents dated from the incorporation of the Company to 31 December 2017.

### Standards of reference

The Report is prepared with reference to standards mainly including Appendix 27 "Environmental, Social and Governance Reporting Guide" to the Rules Governing the Listing of Securities ("Listing Rules") on The Stock Exchange of Hong Kong Limited ("HK Stock Exchange"), China Corporate Social Responsibility Reporting Guidelines (CASS-CSR4.0) of the Chinese Academy of Social Sciences and the Social Responsibility Management Approach for China Resources Group.

### Preparation procedures

To ensure completeness, materiality, authenticity and balance of contents, this report was prepared with reference to the requirements of the abovementioned standards by taking such steps as industry benchmarking, questionnaire surveys, interviews with stakeholders, social responsibility research, information gathering and review, report drafting and approval by the management.

### Availability of the report

The Chinese-English bilingual version of this report is available on the websites of HK Stock Exchange and the Company.

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Official website for corporate communications: http://www.irasia.com/listco/hk/crcement/index.htm

## 董事局致辞 / Statement of the Board

2017年，中国水泥行业需求平稳，新增产能持续减少，水泥大型企业整合提升了行业集中度，竞争环境进一步改善。

在深化供给侧改革、坚持转型发展的进程中，华润水泥秉持“转型创新、共赢发展”的年度管理主题，开展星级基地建设，加快润丰品牌推广，培育业务一体化模式，加速产品创新，拓宽融资渠道，一如既往、辟径前行。

华润水泥始终将践行企业社会责任作为崇高追求，积极响应国家节能减排政策，把握协同处置和装配式建筑的行业趋势，致力转型成为环境友好型企业。同时，华润水泥专注于新产品、新材料、新技术的研发和推广，持续推动水泥行业的绿色健康发展，共创大众美好生活。

In 2017, the cement demand in China remained stable while new production capacity continued to decline. Large-scale cement enterprises had increased their market share by consolidation of the cement industry. As a result, the competitive landscape has been further improved.

As the Chinese government continues to intensify supply-side structural reform and persistently promote industry transformation and development, the Company abides by its annual management theme of "transformation with innovation, development for mutual gains". The Company aims to utilize the star-rating system across production plants, strengthen Runfeng brand promotion, develop an integrated business model, expedite product innovation and broaden channels of financing, all with the continuous goal of paving the way for further development.

The Company is in sublime pursuit of fulfilling its corporate social responsibility by proactively supporting the national policies of energy saving and emission reduction. Seizing the industry trends of waste co-processing projects and prefabricated construction, the Company is dedicated to transformation into an environmentally-friendly enterprise. In the meantime, CR Cement focuses on the research and development ("R&D") and promotion of new products, new materials and new technologies for the green and healthy development of the cement industry and building better lives for all.

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OUR VALUES FOR YOU  
OUR HARVEST FOR ALL



## 经济责任 Economic Responsibilities



## 客户及 伙伴责任 Responsibilities to Customers and Business Partners



## 员工责任 Responsibilities to Employees



## 公共责任 Responsibilities to Public



## 环境责任 Responsibilities to Environment

营业额 (百万港元)  
Turnover (HK\$ million)

29,958

除税前盈利 (百万港元)  
Profit before tax (HK\$ million)

4,884

产品合格率 (%)  
Pass rate of product quality (%)

100

新增专利证书 (项)  
Number of new patent certificates

33

员工总数 (人)  
Number of employees

20,592

女性管理者比例 (%)  
Proportion of female managerial staff (%)

11

安全培训覆盖率 (%)  
Safety training coverage rate (%)

100

税项 (百万港元)  
Taxation (HK\$ million)

1,291

万元产值可比价综合能耗  
(吨标煤/万元人民币)  
Consolidated energy consumption per RMB10,000 output (ton standard coal/RMB10,000)

3.03

综合能源消费量 (千吨标煤)  
Consolidated energy consumption (thousand tons standard coal)

7,732

年度盈利 (百万港元)  
Profit for the year (HK\$ million)

3,593

资产总值 (百万港元)  
Total assets (HK\$ million)

56,527

客户投诉处理率 (%)  
Customer complaint handling rate (%)

100

研发人员数 (人)  
Number of R&D employees

41

社会保险覆盖率 (%)  
Social insurance coverage rate (%)

100

员工培训覆盖率 (%)  
Employee training coverage rate (%)

100

安全应急演练数 (次数)  
Number of safety contingency drills

625

安全管理人员持证人数 (人)  
Number of licensed safety management personnel

1,068

万元增加值可比价综合能耗  
(吨标煤/万元人民币)  
Consolidated energy consumption per RMB10,000 value addition (ton standard coal/RMB10,000)

8.61

包装材料总计 (吨)  
Total consumption on packaging materials (tons)

74,059

## 2017 年里程碑 / Milestones in 2017

3月19日，由华润水泥与山东大学共同研发的“岩溶地区复杂条件下凹陷式开采矿山突涌水治理关键技术”通过项目成果鉴定，技术成果达到国际领先水平，可望在岩溶地区突涌水灾害治理中进一步推广应用。

On 19 March, "Key Technology of Water Inrush Control for Pit Mining in Karst Areas under Complicated Conditions" jointly developed by CR Cement and Shandong University passed the evaluation of project achievements. The technological achievements are at world-class pioneer standard. Its further application in karst areas is expected for emergent control of water inrush.

12月16日，华润水泥（合浦）有限公司一条熟料生产线及两条水泥粉磨线投产（各自年产能分别约为1,600,000吨及2,000,000吨）。

On 16 December, one clinker production line and two cement grinding lines of China Resources Cement (Hepu) Limited commenced operation, with respective annual production capacities of approximately 1.6 million tons and 2.0 million tons.

11月13日，华润水泥第二届“润丰杯”创新竞赛圆满落幕。竞赛充分利用创新平台，营造全员创新氛围。参赛项目涉及产品技术创新、管理创新和商业模式创新等多项内容。

On 13 November, the second "Runfeng" Innovation Competition of CR Cement was successfully completed. The competition made full use of the digital innovation platform in creating an ambience of all-staff innovation. The entries covered various topics including product technology innovation, management innovation and business model innovation.

On 28 April, CR Cement launched a high-end renovation cement product branded "Wang Pai Gong Jiang" under our national unified brand "Runfeng Cement", targeting the major market in Southern China.

4月28日，华润水泥面向华南主要市场，推出旗下全国统一品牌“润丰水泥”的子品牌——“王牌工匠”高端装修专用水泥。

On 28 June, CR Cement held a celebration event in Guangzhou for the first anniversary of CR Cement's official launch of the brand "Runfeng Cement".

6月28日，“润丰水泥”品牌正式上市一周年，华润水泥在广州举行润丰品牌周年庆活动。

On 23 August, China Resources Cement (Nanning) Limited and China Resources Cement (Tianyang) Limited were selected as the first batch of "Green Factories" by the Ministry of Industry and Information Technology of China in 2017.

8月23日，华润水泥（南宁）有限公司、华润水泥（田阳）有限公司入选国家工信部发布的2017年第一批绿色工厂名单。

On 14 September, construction of the urban sludge co-processing project of a joint venture in Guangzhou, Guangdong with a daily processing capacity of 300 tons was completed.

9月14日，合营公司位于广东广州市的市政污泥协同处置项目（日处置能力300吨）建成。

## 企业荣誉 / Corporate Recognitions

华润水泥控股有限公司荣获香港工业总会“中银香港企业环保领先大奖2016年”制造业银奖  
China Resources Cement Holdings Limited was honoured "BOCHK Corporate Environmental Leadership Awards 2016 - Manufacturing Sector" - Silver Award by the Federation of Hong Kong Industry

华润水泥（南宁）有限公司、华润水泥（田阳）有限公司列入国家工业和信息化部批准的第一批“绿色工厂”  
China Resources Cement (Nanning) Limited and China Resources Cement (Tianyang) Limited were listed in the first batch of "Green Factories" approved by the Ministry of Industry and Information Technology of China

华润水泥（封开）有限公司获得香港环境保护署与广东省经济和信息化委员会颁发的2017年度“粤港清洁生产卓越伙伴（制造业）”标志  
China Resources Cement (Fengkai) Limited was recognized as "Hong Kong - Guangdong Cleaner Production Excellent Partners (Manufacturing)" by the Environmental Protection Department of Hong Kong and Economic & Information Technology Commission of Guangdong

华润水泥（金沙）有限公司荣获香港环保促进会主办的“香港绿色企业大奖2017-超卓环保安全健康奖”（大型企业）银奖  
China Resources Cement (Jinsha) Limited was honoured "Hong Kong Green Awards 2017 - Environmental, Health and Safety Award (Large Corporation) - Silver Award" by the Green Council of Hong Kong

华润水泥（罗定）有限公司荣获香港环保促进会主办的“香港绿色企业大奖2017-卓越环保管理奖”（大型企业）优异奖  
China Resources Cement (Luoding) Limited was honoured "Hong Kong Green Awards 2017 - Green Management Award (Large Corporation) - Merit Award" by the Green Council of Hong Kong

华润水泥（田阳）有限公司获中国安全生产协会授予“2017全国安全文化建设示范企业”称号  
China Resources Cement (Tianyang) Limited was honoured "Pilot Corporate 2017 for National Safety Culture Building" by the China Association of Work Safety

华润环保工程（宾阳）有限公司荣获中国建筑材料联合会和中国水泥协会联合颁发“中国水泥工业水泥窑协同处置示范工程奖”  
China Resources Environmental Protection Engineering (Binyang) Limited was honoured "Pilot Project of Co-processing by Use of Cement Kilns in the Chinese Cement Industry" by the China Building Material Federation and China Cement Association

华润水泥（鹤庆）有限公司列入国家工业和信息化部批准的第二批“绿色工厂”  
China Resources Cement (Heqing) Limited was listed in the second batch of "Green Factories" approved by the Ministry of Industry and Information Technology of China

华润水泥控股有限公司入选《机构投资者》“2017年亚洲最佳行政团队”基本原材料类别荣誉获奖公司及最佳首席财务官（第二位）

China Resources Cement Holdings Limited was granted an Honored Company and the Best CFO (Second Place) in Basic Materials Sector in the "2017 All-Asia Executive Team" organized by "Institutional Investors"

华润水泥控股有限公司荣获《资本壹周》“杰出上市企业大奖2017——业绩表现大奖”  
China Resources Cement Holdings Limited was awarded "The Listed Enterprise Excellence Awards 2017 - Outstanding Corporate Results Performance Award" by "Capital Weekly"

华润水泥控股有限公司荣获《中国融资》“2017中国融资上市公司大奖”之“年度最佳企业管治奖”  
China Resources Cement Holdings Limited was honoured "the Best Corporate Governance Award" in "2017 China Financial Market Listed Company Award" held by "China Financial Market"

华润水泥控股有限公司荣获《智通财经》和《同花顺财经》2017年度“金港股”评选之“最具价值能源与资源股公司大奖”  
China Resources Cement Holdings Limited was awarded "the Most Valuable Energy and Resources Company" in the "Golden Hong Kong Stock Awards 2017" co-organised by Shenzhen Zhitong Caijing Information Technology Service Co., Ltd. and Hithink RoyalFlush Information Network Co., Ltd.



## 关于我们 / About Us

### (一) 公司概况 / Corporate Profile

华润水泥控股有限公司成立于2003年，是华润集团旗下香港上市公司（香港联合交易所股份代号：1313.HK）。依托独特的资源布局优势及水泥和商品混凝土纵向一体化的生意模式，围绕“十三五”战略规划，着力打造“系统成本最低、区域市场领先、创新驱动发展”三大能力，以“润丰水泥”为全国统一品牌，华润水泥已发展成为华南区域最大及最具竞争力的水泥、熟料和混凝土生产商，在中国水泥行业中具有重要地位。

华润水泥十分重视企业社会责任，积极参与企业公民建设，持续推进安全生产和环境保护，长期践行循环经济、协同处置和节能减排等对社会、生态环境有益的事业。

China Resources Cement Holdings Limited was incorporated in 2003 and is a listed company in Hong Kong (stock code at The Stock Exchange of Hong Kong Limited: 1313.HK) under China Resources Group. Taking advantages of our unique resources distribution and vertical integration business model for cement and commercial concrete, and in line with the "Thirteenth Five-Year" strategic plan, we focus on developing three key strengths in "achieving the lowest total cost, with a leading market position in the region, and driving for development with innovation". With the national unified brand "Runfeng Cement", we have become the largest and the most competitive producer of cement, clinker and concrete in Southern China with a high standing in the cement industry in China.

CR Cement places strong emphasis on corporate social responsibility and plays an active role in the construction of corporate citizenship. We continuously promote production safety and environment protection, and put social and eco-friendly business into practice including circular economy, waste co-processing, energy saving and emission reduction.

### (二) 产品服务 / Products and Services

华润水泥积极探索骨料与装配式建筑业务发展机会，并加大技术研发力度，先后研发、推出装修水泥、海工水泥、核电水泥与透水混凝土等新型产品。

公司积极推进水泥窑协同处置项目，并积极探索协同处置的新技术和新工艺。目前，位于广西宾阳县的生活垃圾协同处置项目、合营公司位于广东广州市的市政污泥协同处置项目、位于广西南宁市的市政污泥协同处置项目、和位于海南昌江的危废协同处置项目已建成，成为中国水泥行业拥有协同处置生活垃圾、市政污泥、工业危废三类固废能力的企业之一。

未来华润水泥将继续保持稳健及可持续发展的良好态势，为客户提供优质产品及服务，推动行业创新，引领绿色发展，实现基业长青。

We have been proactively exploring business development opportunities in aggregate and prefabricated construction, and strengthening R&D on technology. New products such as renovation cement, cement for marine engineering, Portland cement for nuclear power engineering and pervious concrete have been developed and launched.

We have also been proactively rolling out waste co-processing projects by use of cement kilns and proactively exploring new technology and new workmanship of waste co-processing projects. The construction of the municipal waste co-processing project in Binyang of Guangxi, the urban sludge co-processing project in Nanning of Guangxi and the

hazardous waste co-processing project in Changjiang of Hainan had been completed. We have become one of the enterprises in the cement industry in China with waste co-processing capabilities in municipal solid waste, urban sludge and industrial hazardous waste.

In the future, the Company will keep up its good momentum of steady and sustainable development, provide quality products and services to customers, promote innovation and lead the green development of the industry, thereby building an everlasting business.

### (三) 组织架构 / Organization Structure

华润水泥坚持“总部强、大区实、基地精”的管理理念，逐步健全和强化总部职能，采取3级管理，发挥大区管理职能。截至2017年末，华润水泥总部共有17个职能部室、7个大区。

CR Cement upholds the management philosophy of "Strong Headquarter, Solid Regions, Lean Production Plants". We gradually fine-tuned and strengthened the functions of our headquarter by adopting a 3-tier management to emphasize the regional management roles. As of the end of 2017, CR Cement had a total of 17 functional departments in its headquarter and 7 operating regions.



(四) 业务分布 / Our Business

依托完善的水路、铁路及公路物流网络，华润水泥的产品主要在广东、广西、福建、海南、云南、贵州及山西销售。我们的产品主要用于修建建设工程如铁路、公路、地铁、桥梁、机场、港口、水坝、水电站及核电站等，并用于建造高层建筑物以及市郊与乡镇发展。

截至 2017 年 12 月 31 日，公司经营 95 条水泥粉磨线及 45 条熟料生产线，水泥及熟料的年产能分别为 8,330 万吨及 6,130 万吨，拥有 60 座混凝土搅拌站，混凝土年产能 3,650 万立方米。此外，透过拥有若干联营公司及合营公司的股权权益，我们合共拥有 80 条水泥粉磨线、34 条熟料生产线及 21 座混凝土搅拌站，总年产能可为水泥 5,810 万吨、熟料 3,860 万吨及混凝土 950 万立方米，该等产能主要位于广东、福建、云南及内蒙古。根据于该等联营公司及合营公司的股权权益，公司应占的相关年产能分别为水泥 1,940 万吨、熟料 1,270 万吨及混凝土 440 万立方米。

Our products are mainly sold in Guangdong, Guangxi, Fujian, Hainan, Yunnan, Guizhou and Shanxi through our well-established waterway, railway and road logistics networks. Our products are primarily used in the construction of infrastructure projects such as railways, highways, subways, bridges, airports, ports, dams, hydroelectric power stations and nuclear power stations, as well as the construction of high-rise buildings and development of suburban and rural areas.

As at 31 December 2017, we had 95 cement grinding lines and 45 clinker production lines in operation, with annual production capacity of 83.3 million tons of cement and 61.3 million tons of clinker respectively. We also owned 60 concrete batching plants with annual production capacity of 36.5 million m<sup>3</sup> of concrete. In addition, through our equity interests in certain associates and joint ventures, we owned a total of 80 cement grinding lines, 34 clinker production lines and 21 concrete batching plants with total annual production capacities of 58.1 million tons of cement, 38.6 million tons of clinker and 9.5 million m<sup>3</sup> of concrete. These production capacities are mainly located in Guangdong, Fujian, Yunnan and Inner Mongolia. The respective annual production capacities attributable to the Company according to our equity interests in these associates and joint ventures were 19.4 million tons of cement, 12.7 million tons of clinker and 4.4 million m<sup>3</sup> of concrete.



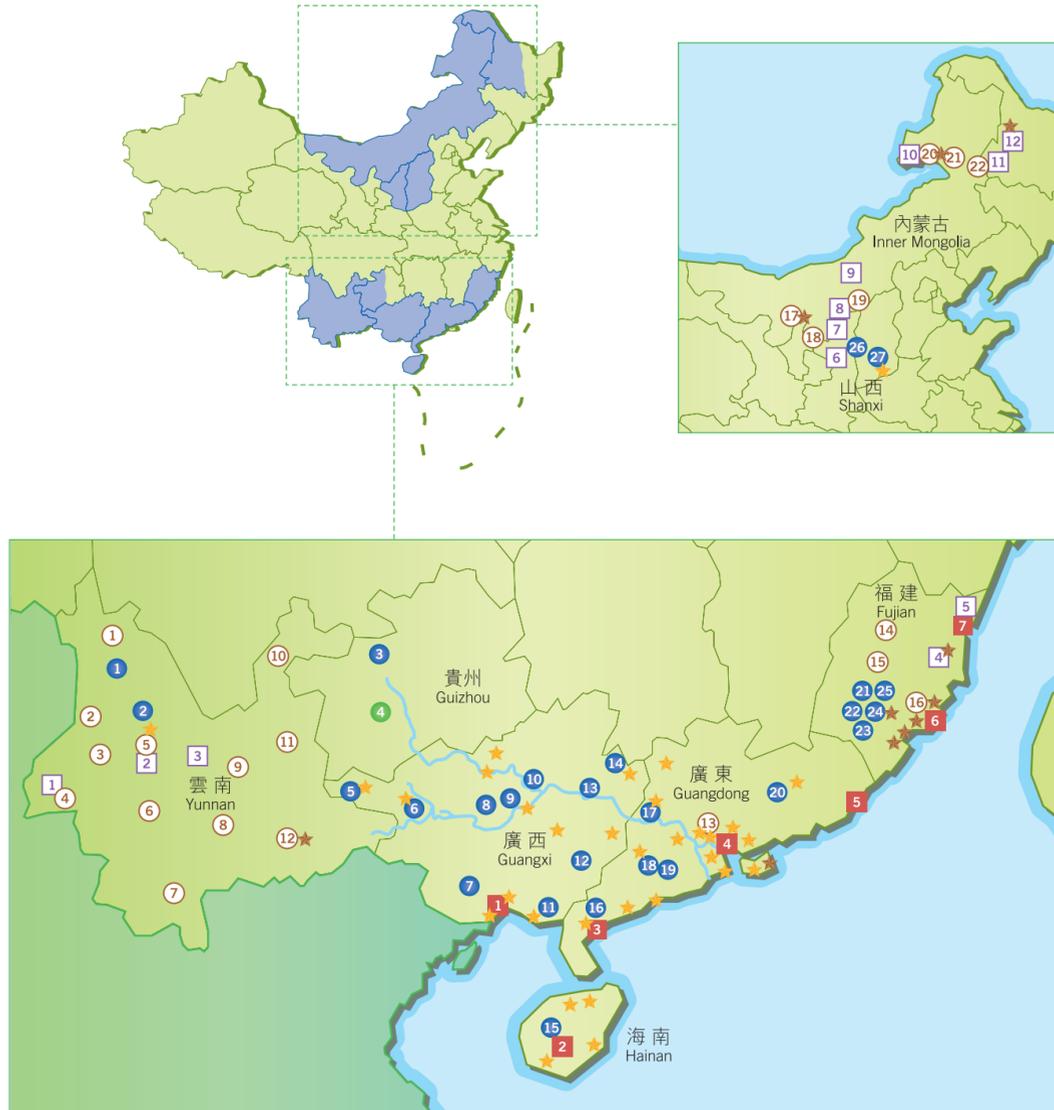
截至 2017 年末，公司经营

95 条水泥粉磨线

45 条熟料生产线

60 座混凝土搅拌站

As at 31 December 2017, we had 95 cement grinding lines and 45 clinker production lines in operation. We also owned 60 concrete batching plants



● 运营中设有水泥粉磨线及熟料生产线的生产基地

The production plants with cement grinding lines and clinker production lines in operation

- |               |                  |                 |                        |
|---------------|------------------|-----------------|------------------------|
| 1 鹤庆 Heqing   | 2 弥渡 Midu        | 3 金沙 Jinsha     | 5 田阳 Tianyang          |
| 6 南宁 Nanning  | 7 上思 Shangsi     | 8 宾阳 Binyang    | 9 贵港 Guigang           |
| 10 武宣 Wuxuan  | 11 合浦 Hepu       | 12 陆川 Luchuan   | 13 平南 Pingnan          |
| 14 富川 Fuchuan | 15 昌江 Changjiang | 16 廉江 Lianjiang | 17 封开 Fengkai          |
| 18 罗定 Luoding | 19 阳春 Yangchun   | 20 惠州 Huizhou   | 21 龙岩雁石 Longyan Yanshi |
| 22 曹溪 Caoxi   | 23 永定 Yongding   | 24 龙岩 Longyan   | 25 漳平 Zhangping        |
| 26 柳林 Liulin  | 27 长治 Changzhi   |                 |                        |

● 在建中设有水泥粉磨线及熟料生产线的生产基地

The production plants with cement grinding lines and clinker production lines under construction

- 4 安顺 Anshun

■ 运营中的水泥粉磨线

The cement grinding lines in operation

- |                     |                 |                |               |
|---------------------|-----------------|----------------|---------------|
| 1 防城港 Fangchenggang | 2 五指山 Wuzhishan | 3 湛江 Zhanjiang | 4 东莞 Dongguan |
| 5 汕头 Shantou        | 6 泉州 Quanzhou   | 7 连江 Lianjiang |               |

★ 运营中的混凝土搅拌站

The concrete batching plants in operation

○ 联营公司及合营公司拥有运营中设有熟料生产线的生产基地

The production plants with clinker production lines in operation owned by associates and joint ventures

- |                 |                  |                  |               |
|-----------------|------------------|------------------|---------------|
| 1 迪庆 Diqing     | 2 怒江 Nujiang     | 3 保山 Baoshan     | 4 德宏 Dehong   |
| 5 大理 Dali       | 6 临沧 Lincang     | 7 普洱 Puer        | 8 玉溪 Yuxi     |
| 9 昆明 Kunming    | 10 昭通 Zhaotong   | 11 曲靖 Qujing     | 12 红河 Honghe  |
| 13 广州 Guangzhou | 14 顺昌 Shunchang  | 15 永安 Yong'an    | 16 德化 Dehua   |
| 17 乌海 Wuhai     | 18 棋盘井 Qipanjing | 19 清水河 Qingshuhe | 20 海拉尔 Hailar |
| 21 牙克石 Yakeshi  | 22 阿荣旗 Arongqi   |                  |               |

□ 联营公司及合营公司拥有运营中的水泥粉磨线

The cement grinding lines in operation owned by associates and joint ventures

- |                       |                     |                 |                 |
|-----------------------|---------------------|-----------------|-----------------|
| 1 德宏梁河 Dehong Lianghe | 2 大理巍山 Dali Weishan | 3 楚雄 Chuxiong   | 4 福州 Fuzhou     |
| 5 宁德 Ningde           | 6 榆林 Yulin          | 7 双岭 Shuangling | 8 东胜 Dongsheng  |
| 9 包头 Baotou           | 10 满洲里 Manzhouli    | 11 大庆 Daqing    | 12 齐齐哈尔 Qiqihar |

★ 联营公司及合营公司拥有运营中的混凝土搅拌站

The concrete batching plants in operation owned by associates and joint ventures

## 责任管治 / CSR Management

### (一) 责任战略 / Strategy for Responsibility

在创造经济价值的同时，华润水泥十分重视并积极参与社会责任实践，将企业社会责任融入安全、环境、员工、客户、合作伙伴和社区中，持续夯实厂区安全管理，提升环保管理水平，优化节能减排改造措施，实施健康管理，推广协同处置项目，以创新的精神、务实的态度不断推动中国水泥行业的转型升级。

2017年华润水泥社会责任报告以“经济责任、客户责任、员工责任、伙伴责任、公共责任、环境责任”为维度，以“润心为您 丰业为家”为主题，通过展示华润水泥对利益相关方的社会责任实践，详实披露了企业履责情况。

While creating economic value, CR Cement places strong emphasis on and actively puts into practice social responsibility by integrating corporate social responsibility with safety, environment, employees, customers, business partners and communities. We continue to consolidate safety management for production plants, improve levels of environmental protection management, and optimise transformational measures for energy saving and emission reduction. We also implement health management and promote waste co-processing projects, thereby accelerating the transformation and upgrade of the cement industry in China with an innovative spirit and a pragmatic approach.

Themed with "our values for you, our harvest for all", the Social Responsibility Report of CR Cement ("CSR Report") in 2017 makes a detailed and authentic disclosure of our practice in fulfilling corporate social responsibility to our stakeholders in terms of "responsibilities to economy, customers, employees, business partners, public and environment".

“润心为您”——秉持诚实守信的核心理念，以脚踏实地、坚韧不拔的精神，用一流的产品和服务，为社会大众创造高品质的生活空间，铸造美好生活。

"Our Values For You" - Upholding the core values of honesty and trust, with grounded and indomitable spirit, we use first-class products and services to create for the people a high quality living environment and the foundations for a beautiful life.

“丰业为家”——坚持创新驱动的核心能力，引领行业变革，推动社会环境的可持续健康发展。

"Our Harvest For All"- Adhering to innovation-driven core competencies, leading industry-wide transformation and promoting sustainable and healthy societal development.

使命 / Mission

为客户提供优质产品及服务，推动行业创新，引领绿色发展，实现基业长青。

To provide customers with quality products and services, promote innovation and lead green development in the industry, thereby to build an everlasting business.

愿景 / Vision

成为受人尊重的世界一流水泥企业。

To become a respected world-class cement company.

### (二) 责任治理 / Governance of Responsibility

#### · 完善社会责任管理制度 / Improving the system of social responsibility management

##### 1. 组织体系 / Organization

华润水泥坚持履行企业社会责任，为进一步加强公司企业文化与社会责任工作，提升企业形象，推动相关工作有序开展，成立了“华润水泥企业文化与社会责任指导委员会”以及“华润水泥社会责任报告编制委员会”，负责对公司社会责任战略方向进行决策、领导和推进，并编制年度社会责任报告。

CR Cement strives to fulfill its corporate social responsibility. In order to further reinforce our corporate culture and social responsibility work, enhance our corporate image and promote relevant work in an orderly manner, we established "the CR Cement Corporate Culture and Social Responsibility Steering Committee" and "the CR Cement CSR Report Preparation Committee". The committees are responsible for decision-making, leadership and promotion of the Company's strategic direction in corporate social responsibility, as well as annual preparation of the CSR Report.

##### 2. 制度体系 / System

依据香港联交所上市规则附录二十七《环境、社会及管治报告指引》(HK-ESG)、中国社会科学院《中国企业社会责任报告编写指南(CASS-CSR4.0)》等标准、以及《华润集团社会责任工作管理办法》的要求，启动对公司《社会责任工作管理办法》的梳理和修编，确保公司社会责任工作的规范化、体系化。

To ensure standardization and systemization of corporate social responsibility work, the Company reviewed and revised the "Social Responsibility Management Approach" with reference to the "Environmental, Social and Governance Reporting Guide" (HK-ESG) of Appendix 27 of the Listing Rules of HK Stock Exchange, the "Chinese CSR Report Preparation Guide" (CASS-CSR4.0) issued by the Chinese Academy of Social Sciences and the "Social Responsibility Management Approach for China Resources Group".

##### 3. 报告编写体系 / Report preparation

华润水泥连续五年编制社会责任工作报告，公司各单位均设相应工作联络人，形成由控股总裁办牵头、各单位共同参与的报告编写体系。

CR Cement has prepared the CSR Reports for five consecutive years. The CEO's Office co-ordinates various departments of all levels with relevant contact persons to involve in preparing CSR Report.

##### 4. 责任融合 / Responsibility integration

公司将公司治理、经营效益、安全生产、节能减排、转型创新、协同处置、关爱员工、公益慈善等社会责任工作融入公司发展战略。

Our development strategy has been integrated with social responsibility including corporate governance, operational efficiency, production safety, energy saving and emission reduction, transformation and innovation, waste co-processing, care for employees, community work and charity.

#### · 加强社会责任宣传教育 / Reinforcement of advocacy and education of social responsibility

华润水泥举办了2017年社会责任报告编制培训，普及社会责任报告编制知识，进一步提升公司内部社会责任管理意识。培训过程中，社会责任领域专家从社会责任基础理论及实务，联交所对环境、社会及管治报告的披露要求，行业相关案例分享，社会责任报告指标统计方法等方面进行了分享。来自华润水泥各部室、各大区的社会责任报告编制人员参与了培训，并分享了责任故事及社会责任工作心得体会。

CR Cement held training sessions for preparing the 2017 CSR Report, in order to disseminate the knowledge of CSR Report preparation and further reinforce the awareness of social responsibility management within the Company. During the training, experts in social responsibility shared fundamental theories and practice of social responsibility, the disclosure requirements of HK Stock Exchange on environmental, social and governance report, case



studies of the cement industry and the statistical methods for CSR reporting indicators. Staff from various departments and major regions of CR Cement, who involved in preparation of the CSR Report, participated in the training and shared responsibility stories and their experience in social responsibility work.

#### · 参与社会责任行业标准制定 / Participation in the formulation of industrial standards of social responsibility

作为“中国水泥协会团体标准”《水泥企业社会责任准则》《水泥企业社会责任报告编写指南》《水泥企业社会责任评价指标体系》的主要起草单位，华润水泥与中国水泥协会、北京东方君和管理顾问有限公司、尧柏特种水泥集团有限公司共同开展课题研究，编制团体标准，为建立行业社会责任践行标准献计献策。

As the main drafting unit of the "Group Standards for China Cement Association", namely, "Standards of Cement Corporate Social Responsibility", "Guidelines on Preparation of Cement Corporate Social Responsibility Report" and "System of Evaluation Indicators for Cement Corporate Social Responsibility", CR Cement jointly carried out project research and prepared group standards with China Cement Association, Beijing Dongfang Junhe Management Consultant Co., Ltd. and Yaobai Special Cement Group Co, Ltd. in order to contribute plans and strategies for the establishment of industry practice standards in social responsibility.

### (三) 责任沟通 / Communication of Responsibility

#### · 重大性议题识别 / Identification of major issues

公司通过多种渠道积极获取各利益相关方意见，了解他们对华润水泥可持续发展工作的看法，并以此作为我们此次报告信息披露与未来可持续发展战略决策的重要参考。

为此公司通过问卷调查、面对面沟通、电话访谈、现场调研等多种形式与各利益相关方群体进行全面沟通。通过952份问卷调查、2家基地现场调研及14个部门26名人员访谈，充分了解了公司管理层以及各利益相关方的需求与期望，并根据对问卷调查数据的分析结果，绘制出华润水泥可持续发展议题重大性分析矩阵，为华润水泥2017年度社会责任报告选取36个最受利益相关方关注的重大性议题进行披露。

The Company actively solicited opinions from various stakeholder groups through various channels in order to understand their views on the sustainable development of CR Cement, which in turn have become important references for the information disclosure in this report and our strategic decisions in future sustainable development.

For this purpose, we have engaged a professional third-party agency to communicate comprehensively with various stakeholder groups through questionnaires, face-to-face communications, telephone interviews and on-site research. Through 952 questionnaires, on-site research in two production plants and interviews with 26 staff from 14 departments, the needs and expectations of our management and various stakeholders have been fully understood. According to the analysis results of the questionnaire data, the top 36 issues of our stakeholders' concern have been disclosed in the 2017 CSR Report in the form of an analysis matrix portraying the materiality of sustainable development issues of CR Cement.



952 份问卷调查

2 家基地现场调研

14 个部门

26 名人员访谈

952 questionnaires,

On-site research in

2 production plants

Interviews with

26 staff from 14

departments

华润水泥可持续发展议题重大性分析

Analysis on the materiality of issues on sustainable development of CR Cement



序号 No.	责任领域 Areas of responsibility	议题 Issues	重要性排序 Importance
1	环境责任 Responsibilities to Environment	<b>严格管理污染物</b> (确保排放物达到国家环境标准, 并且不断降低对环境的影响) <b>Strict management of pollutants</b> (ensure that emissions of pollutants meet the national environmental standards, and impacts on the environment are continuously reduced)	高 High
2	公共责任 Responsibilities to Public	<b>落实安全生产责任制</b> (避免安全事故发生, 保障内部员工以及外部供应商等安全) <b>Implementing production safety accountability system</b> (prevent the occurrence of accidents, and ensure the safety of internal employees and external suppliers)	高 High

序号 No.	责任领域 Areas of responsibility	议题 Issues	重要性排序 Importance
3	环境责任 Responsibilities to Environment	<b>制定并执行环境管理体系</b> (如环境管理体系、环境管理战略、环保预警及应急机制) <b>Formulating and implementing environmental management systems</b> (for example, environmental management systems, environmental management strategies, environmental protection precaution alerts and contingency mechanisms)	高 High
4	员工责任 Responsibilities to Employees	<b>重视员工诚信建设和廉洁工作</b> <b>Keen attention to integrity education for employees</b>	高 High
5	环境责任 Responsibilities to Environment	<b>加大节能环保投入</b> (如环保技术投资、减排技术改造、研发与创新) <b>Increasing investment in energy saving and environmental protection</b> (for example, investment in environmental protection technology, technological transformation in emission reduction, R&D and innovation)	高 High
6	客户责任 Responsibilities to Customers	<b>强化产品质量管理</b> (建立质量管理体系、标准, 强化日常监管评估) <b>Enhancing product quality management</b> (establish quality management systems and standards while enhancing daily control assessments)	高 High
7	员工责任 Responsibilities to Employees	<b>关注员工健康</b> (预防职业病) <b>Care for the health of employees</b> (prevent occupational diseases)	高 High
8	伙伴责任 Responsibilities to Business Partners	<b>规范采购</b> (加强供应商合规管理, 定期审查, 建立反腐败政策) <b>Regulating procurement</b> (strengthen supplier compliance management, conduct regular reviews, and formulate anti-corruption policies)	中 Moderate
9	环境责任 Responsibilities to Environment	<b>降低能源消耗</b> (应用清洁能源) <b>Reducing energy consumption</b> (use clean energy)	中 Moderate
10	环境责任 Responsibilities to Environment	<b>节约水资源</b> (提高水的循环利用, 降低水消耗, 规范污水排放) <b>Water resources conservation</b> (improve water recycling, reduce water consumption, and regulate sewage discharge)	中 Moderate

序号 No.	责任领域 Areas of responsibility	议题 Issues	重要性排序 Importance
11	经济责任 Economic Responsibilities	<b>提升公司管理效益</b> (如业务创新、结构优化) <b>Improving corporate management efficiency</b> (for example, business innovation and structure optimization)	中 Moderate
12	员工责任 Responsibilities to Employees	<b>合规用工</b> (确保合理工作时长、杜绝强制劳工、提供平等无歧视的工作环境等) <b>Employment compliance</b> (ensure reasonable working hours, eliminate forced labour, and provide an equal and discrimination-free workplace)	中 Moderate
13	经济责任 Economic Responsibilities	<b>创造经济价值</b> (扩展市场份额) <b>Creating economic value</b> (expand market share)	中 Moderate
14	员工责任 Responsibilities to Employees	<b>保护员工权益</b> (完善工会职能,为员工提供权益保障及民主管理制度等) <b>Protecting rights and interests of employees</b> (improve the functions of labour unions, provide employees with protection of their rights and interests as well as a democratic management system)	中 Moderate
15	员工责任 Responsibilities to Employees	<b>关注员工职业发展</b> (为员工提供培训,打造员工晋升通道,跟进员工满意度调查) <b>Care for career development of employees</b> (provide training for employees, build a path of career progression for employees, and follow up on employee satisfaction surveys)	中 Moderate
16	环境责任 Responsibilities to Environment	<b>保护生态</b> (实施矿山复绿以及生物多样性保持等工作) <b>Ecology protection</b> (implement ecological restoration of mines and biodiversity protection)	中 Moderate
17	公共责任 Responsibilities to Public	<b>开展安全生产专项活动</b> (如风险识别、风险意识宣传以及演练等) <b>Launching special campaigns for production safety</b> (for example, risk identification, promotion of risk awareness and drills)	中 Moderate
18	客户责任 Responsibilities to Customers	<b>产品创新</b> (以客户需求角度出发研发创新产品) <b>Product innovation</b> (continuous R&D of innovative products in anticipation of customers' needs)	中 Moderate

序号 No.	责任领域 Areas of responsibility	议题 Issues	重要性排序 Importance
19	环境责任 Responsibilities to Environment	<b>助力环境改善</b> (协同处置外部产生的固体废弃物) <b>Facilitating environmental improvement</b> (co-process solid waste generated externally)	中 Moderate
20	客户责任 Responsibilities to Customers	<b>保护客户权益</b> (公平交易,保护客户信息与隐私) <b>Protecting rights and interests of customers</b> (fair trade, protect customers' data and privacy)	中 Moderate
21	经济责任 Economic Responsibilities	<b>保护股东及投资者权益</b> (规范大股东行为,建立投资者沟通机制,规范信息披露) <b>Protecting rights and interests of shareholders and investors</b> (regulate the behaviours of major shareholders, build a communication mechanism for investors, and regulate information disclosure)	中 Moderate
22	客户责任 Responsibilities to Customers	<b>完善客户服务</b> (提供投诉渠道,进行有效反馈,回收存在质量问题的产品) <b>Improving customer service</b> (provide complaint channels and effective feedback, and recall products with quality issues)	中 Moderate
23	员工责任 Responsibilities to Employees	<b>关爱员工</b> (帮扶困难员工、开展丰富的员工活动等) <b>Care for employees</b> (help the employees in need, and organize a wide variety of activities for employee)	中 Moderate
24	经济责任 Economic Responsibilities	<b>建立良好企业管治规范</b> (持续检讨董事局及其辖下各委员会情况) <b>Establishing good corporate governance practices</b> (continuously review the conduct of the Board and its committees)	中 Moderate
25	客户责任 Responsibilities to Customers	<b>知识产权管理</b> (完善管理、保护自身知识产权,同时不侵犯他人知识产权) <b>Intellectual property management</b> (improve management and protection of our intellectual property rights without infringing the others')	中 Moderate
26	环境责任 Responsibilities to Environment	<b>应对气候变化</b> (管控及减少温室气体排放,应用可再生能源) <b>Addressing climate change</b> (manage, control and reduce greenhouse gas emissions, and use renewable energy)	中 Moderate

序号 No.	责任领域 Areas of responsibility	议题 Issues	重要性排序 Importance
27	环境责任 Responsibilities to Environment	<b>支持环境公益</b> (举办环保培训, 进行宣传教育, 组织参与环保行动) <b>Support on environmental community work</b> (organize environmental trainings, promotions and education, and participate in environmental protection activities)	中 Moderate
28	客户责任 Responsibilities to Customers	<b>提供多元化产品</b> (拓宽产品应用范围) <b>Providing diversified products</b> (broaden the scope of product application)	中 Moderate
29	环境责任 Responsibilities to Environment	<b>优化包装材料使用</b> (如减少水泥包装材料或使用再生包装材料) <b>Optimizing the usage of packaging materials</b> (for example, reduce packaging materials for cement in bags, or use recyclable packaging materials)	中 Moderate
30	环境责任 Responsibilities to Environment	<b>践行绿色办公</b> (提倡使用环保纸、双面打印, 无纸化网络办公, 节电节水等) <b>Green office in practice</b> (promote the use of environmentally friendly paper, double-sided printing, paperless and Internet office, and conservation of electricity and water)	中 Moderate
31	伙伴责任 Responsibilities to Business Partners	<b>绿色采购</b> (采购过程考虑供应商的环境合规) <b>Green procurement</b> (take supplier's environmental compliance into consideration in our procurement process)	中 Moderate
32	伙伴责任 Responsibilities to Business Partners	<b>促进行业发展</b> (加强同行交流、参与行业组织) <b>Promoting industry development</b> (enhance experience sharing within the industry, and participate in industry organizations)	中 Moderate
33	伙伴责任 Responsibilities to Business Partners	<b>采购考虑供应商安全管理</b> (如安全生产的表现等) <b>Taking suppliers' safety management into consideration in our procurement process</b> (for example, performance in production safety)	中 Moderate

序号 No.	责任领域 Areas of responsibility	议题 Issues	重要性排序 Importance
34	伙伴责任 Responsibilities to Business Partners	<b>本地化采购</b> (使用本地供应商, 提高社区经济效益并减少运输成本) <b>Local procurement</b> (engage local suppliers, increase economic benefits to local communities, and reduce transportation costs)	低 Low
35	公共责任 Responsibilities to Public	<b>公益捐赠</b> (资金或者物资(水泥产品等)支持需要地区/群体) <b>Charitable donations</b> (support regions/groups in need with funds or supplies such as cement products etc.)	低 Low
36	公共责任 Responsibilities to Public	<b>社区服务</b> (关注社区弱势群体、志愿者参与等) <b>Community service</b> (care for the underprivileged in the community, and participate in volunteer work)	低 Low

通过整合 36 个最受利益相关方关注的重大性议题, 我们发现利益相关方高度重视议题主要集中在环境责任、公共责任及员工责任。

By consolidating the top 36 issues of our stakeholders' concern, we found that our stakeholders mainly concerned the issues of our responsibilities to environment, public and our employees.

· **加强责任沟通 / Strengthening accountable communications**

作为香港上市公司, 华润水泥一贯重视与利益相关方的沟通, 听取各方意见、关注事项和期望, 积极改善企业经营和管理。通过信息报送、专题汇报、股东会议、参观考察、公益活动、员工集体活动、公司网站等方式, 严谨、及时、准确地提供公司业绩、重要活动等方面的信息, 促进彼此沟通了解、达成共识。

We attach great importance to stakeholder communication as a listed company in Hong Kong. We proactively strive to improve our corporate operation and management by listening to the opinions, concerns and expectations of our stakeholders. Through information reporting, special reports, shareholders' meetings, visits, charity events for the community, employees' group activities and company website, the Company discloses its information including performance results and significant events in a rigorous, timely and accurate manner for facilitating communications, mutual understanding for consensus.

利益相关方类别 Categories of stakeholders	诉求与期望 Aspirations and expectations	沟通与回应 Communications and responses
政府及监管机构 Government and regulatory bodies	<ul style="list-style-type: none"> <li>· 守法合规经营</li> <li>· 支持地区发展</li> <li>· 贯彻国家政策</li> <li>· Legal and compliant operations</li> <li>· Supporting regional development</li> <li>· Implementing national policies</li> </ul>	<ul style="list-style-type: none"> <li>· 持续强化企业合规管理</li> <li>· 参与政府相关会议及合作</li> <li>· 响应相关国家政策</li> <li>· Continuously strengthening corporate compliance management</li> <li>· Participating in relevant meetings and co-operation with the government</li> <li>· Responding to relevant national policies</li> </ul>
股东 Shareholders	<ul style="list-style-type: none"> <li>· 创造经济价值</li> <li>· 加强信息披露</li> <li>· Creating economic value</li> <li>· Strengthening information disclosure</li> </ul>	<ul style="list-style-type: none"> <li>· 持续提升经营业绩</li> <li>· 提升公司管治及风险管理水平</li> <li>· 定期发布报告，及时披露信息</li> <li>· 召开股东大会，加强投资者关系管理</li> <li>· Continuously improving operating results</li> <li>· Raising the standards of corporate governance and risk management</li> <li>· Regularly publishing reports, and disclosing information in a timely manner</li> <li>· Convening shareholders' meetings to strengthen investor relations management</li> </ul>
客户或产品使用者 Customers or product users	<ul style="list-style-type: none"> <li>· 产品服务品质</li> <li>· 保护合法权益</li> <li>· Quality of products and services</li> <li>· Protecting legal rights and interests</li> </ul>	<ul style="list-style-type: none"> <li>· 建立健全客户服务体系</li> <li>· 完善客户意见反馈及投诉处理机制</li> <li>· Establishing and improving customer service system</li> <li>· Perfecting the mechanism for customer feedback and complaint handling</li> </ul>
员工 Employees	<ul style="list-style-type: none"> <li>· 保障员工权益</li> <li>· 促进员工发展</li> <li>· 关爱员工健康</li> <li>· 聆听员工意见</li> <li>· Protecting rights and interests of employees</li> <li>· Promoting staff development</li> <li>· Care for employees' health</li> <li>· Listening to employees' opinions</li> </ul>	<ul style="list-style-type: none"> <li>· 制定有竞争力的薪酬体系和福利保障机制</li> <li>· 组织员工培训，完善晋升机制，搭建发展平台</li> <li>· 改善工作条件，关爱困难员工</li> <li>· 开展员工活动，加强员工沟通</li> <li>· Formulating competitive compensation system and welfare protection mechanism</li> <li>· Organizing staff training, perfecting promotion mechanism, and building development platform</li> <li>· Improving working conditions, and caring for employees in need</li> <li>· Launching staff activities, and strengthening communications with staff</li> </ul>

利益相关方类别 Categories of stakeholders	诉求与期望 Aspirations and expectations	沟通与回应 Communications and responses
供应商及合作伙伴 Suppliers and business partners	<ul style="list-style-type: none"> <li>· 促进行业发展</li> <li>· 合作互利共赢</li> <li>· Promoting industry development</li> <li>· Win-win co-operation for mutual gains</li> </ul>	<ul style="list-style-type: none"> <li>· 实施阳光采购，打造责任供应链</li> <li>· 参与行业组织，推动水泥行业可持续发展</li> <li>· Implementing sunshine procurement, and creating an accountable supply chain</li> <li>· Participating in industry organizations to promote sustainable development of cement industry</li> </ul>
科研院所、行业组织、媒体与社会团体 Research institutes, industry organizations, media and social groups	<ul style="list-style-type: none"> <li>· 遵守行业规范</li> <li>· 推进行业创新</li> <li>· 信息透明公开</li> <li>· Compliance with industry standards and regulations</li> <li>· Promoting innovation in the industry</li> <li>· Transparency and openness of information</li> </ul>	<ul style="list-style-type: none"> <li>· 加强对外交流与合作，参与产业创新研究</li> <li>· 参与行业评优，对行业规范提出建议</li> <li>· 完善信息披露制度，优化舆情反馈机制</li> <li>· Strengthening external exchanges and co-operation, and participating in innovation and research of the industry</li> <li>· Participating in industry appraisal, and making recommendations on industry standards and regulations</li> <li>· Improving the information disclosure system, and optimizing the feedback mechanism for public opinions</li> </ul>
社区 Community	<ul style="list-style-type: none"> <li>· 支持社区公益</li> <li>· 提供就业机会</li> <li>· Supporting community charity</li> <li>· Providing employment opportunity</li> </ul>	<ul style="list-style-type: none"> <li>· 积极参与慈善捐赠，投身社会公益活动</li> <li>· 校园招聘与社会招聘</li> <li>· Actively participating in charitable donations, and being devoted to charity events for the community</li> <li>· Campus recruitment and public recruitment</li> </ul>
环境 Environment	<ul style="list-style-type: none"> <li>· 合理利用资源</li> <li>· 保护生态环境</li> <li>· Reasonable use of resources</li> <li>· Protecting the ecological environment</li> </ul>	<ul style="list-style-type: none"> <li>· 提高能源和资源使用效率，落实节能减排</li> <li>· 加强环境数据披露，管理并降低环境风险</li> <li>· Improving efficiency of energy and resources usage, and implementing energy saving and emission reduction</li> <li>· Strengthening disclosure of environmental data, managing and reducing environmental risks</li> </ul>

## （四）责任故事 / CSR Stories

### 责任故事一：为港珠澳大桥提供定制化产品及服务

#### CSR Story I: Customizing products and services for Hong Kong-Zhuhai-Macao Bridge

2009年12月15日，全长55公里，连接香港、珠海、澳门的超大型跨海通道—港珠澳大桥正式开工建设。

2012年，大桥进入海底沉管施工阶段。然而，它处在一个洋流、航道、海床、气候等自然条件极其复杂、需重度防腐的海域，这种高温高湿多盐的海洋环境，对混凝土的抗海水渗透性、耐腐蚀性等方面有着极高的要求；且大体积大方案混凝土模块必须一次浇筑成型，对水泥质量的要求也达到了近乎苛刻的程度，中国在这一建设领域的空白亟待打破。

岛隧施工单位试图通过邀请招标，让行业翘楚集思广益，扩大供应产品择取范围，攻克这一难关。这一消息引起了中铁物资集团和华润水泥的关注。

通过沟通，双方决定共同合作攻克难关，调集科研人员，迅速进入紧锣密鼓的研发攻坚阶段。针对招标文件对于产品质量的特殊要求，专门选矿，专库专磨，专线试产，并在华润水泥华南地区的各大基地逐一进行烧制。经过反复试验生产，最终在华润水泥（平南）有限公司取得成功，产出的水泥不仅能够达到设计要求，很多关键指标更已超出同类产品。施工单位通过配比核验得出最后结论，新研发产品质量符合要求、技术稳定可控，一定程度上甚至超过此前认可产品。

为保证大桥120年使用寿命要求，华润水泥开辟独立生产线进行专产专供，整个生产运输流程按照国际质量体系进行严格管理。最终，通过稳定过硬的产品质量和定向专供的生产设计，以及从中展现出的央企担当和责任意识，华润水泥在此次邀请招标中脱颖而出，成功入围。在大桥珠海段的主体工程建设中，主要选用了华润水泥出品的“润丰”牌P.II 42.5R、P.O 42.5(R)、P.II 52.5(R)等级的高性能硅酸盐水泥。

华润水泥还根据工程要求，对港珠澳大桥不同部位如岛隧工程、沉管预制件、桩基桩等部位混凝土采取定制化的生产控制流程和原料质量监控，采用最新工艺和配比，设计出满足供应项目特定要求的高性能海工水泥；同时，对施工质量进行严格控制、加强后期养护，最大限度地提高混凝土的密实性，使混凝土构件的性能得到大幅提升，确保满足工程建造的要求。

2017年，华润水泥仍持续向港珠澳大桥建设提供优质产品及服务。

On 15 December 2009, construction work officially commenced for the mega cross-harbour tunnel, Hong Kong-Zhuhai-Macao Bridge with a total length of 55 km, which connects Hong Kong, Zhuhai and Macau.

In 2012, the construction progressed to immersed tunnel building in deep seawater. However, due to the extremely complicated natural conditions of the maritime site such as ocean currents, waterways, seabed and climate, the construction in such a hot humid and hypersaline marine environment stringently required anti-seawater permeability and corrosion resistance for the concrete. Besides, casting and molding of concrete blocks in huge volume and large quantity had to be completed in the first attempt, which also imposed nearly harsh requirements on the quality of cement. It was imperative for China to break through in this aspect.

In order to overcome such difficulties, the construction contractor of the island tunnel attempted to invite the top players in the industry for their ideas through tender and to expand the range of products supplied. This had attracted the attention of China



Railway Material Group and CR Cement.

After communications, both parties agreed to co-operate in overcoming such difficulties. They mobilized scientific research staff for swift and intensive R&D. To meet the special requirements for product quality in the tender documents, special raw materials from dedicated mines were stored in dedicated silos, processed in dedicated grinders, and used for trial production in dedicated cement production lines of every major production plant of CR Cement in Southern China. After repeated trials of production, China Resources Cement (Pingnan) Limited successfully produced cements not only with all the design requirements but also exceeding similar products in terms of various key indicators. After examining the production formula, the construction contractor reached the final conclusion that the quality of the newly-developed product had met their requirements, with a stable and controllable technology, which had surpassed the previously accredited products to a certain extent.

In order to guarantee a useful life of 120 years for the Bridge, we have designated independent cement production lines for exclusive production and exclusive supply, where the entire processes from production to transportation were strictly managed according to the international quality system. CR Cement finally distinguished itself from others in the tendering and was successfully selected thanks to its stable product quality and tailored production design with exclusive supply. Portland cement of high performance and P.II 42.5R, PO 42.5(R) and P.II 52.5(R) grades under the "Runfeng" brand of CR Cement was mainly used in building the Zhuhai section of the Bridge.

In accordance with the project requirements, CR Cement also adopted customized production control procedures and monitor on the quality of raw materials for different parts of the Hong Kong-Zhuhai-Macao Bridge, such as the island tunnel project, prefabricated parts for immersed tube and concrete for pile foundation. It also adopted the latest technology and prescriptions, thus designing the high-performance marine cement that met the specific requirements of the supply project. At the same time, it strictly controlled construction quality and strengthened repairs and maintenance in the later stage to maximize the compactness of the concrete, significantly improving the performance of concrete components and ensuring fulfillment of the requirements of construction.

In 2017, CR Cement continued to provide quality products and services for the construction of the Hong Kong-Zhuhai-Macao Bridge.



## 责任故事二 矿山复绿

### CSR Story II: Ecological restoration of mines

华润水泥（龙岩）有限公司冬瓜仑矿山排土场占地约 56.7 万平方米，受土质沙化、保水能力差等因素影响，存在水土流失等风险隐患。为修复山体、消除隐患、绿化环境、恢复生态，建设绿色矿山，龙岩水泥与绿化公司、当地林业部门充分沟通，在土壤性质化验和鉴定的基础上，设计造林方案，选种木荷、香樟树种，组织员工开展复绿植树活动。截至 2017 年底，共种植树苗 10 万多株，实现排土场绿化覆盖率 90%，以实际行动践行企业社会责任，构建、维护和谐村企关系，努力打造绿色企业。

The Donggualun mine dump of China Resources Cement (Longyan) Limited ("Longyan Cement"), with a total area of approximately 567,000 m<sup>2</sup>, was subject to such potential risks as soil erosion due to soil desertification and poor water retention. Longyan Cement aimed to reinstate the mountains, eliminate potential risks, rehabilitate the environment, restore the ecology and build green mines. After thorough discussions with greening companies and the local forestry governmental department, Longyan Cement formulated afforestation plans of planting schima superba and camphor trees based on tests and identification of properties of the soil. Staff activities were organized to launch the greening work and plant trees. As of the end of 2017, more than 100,000 seedlings had been planted and the green coverage rate of the dumps had reached 90%. Striving to build a green enterprise, we fulfill corporate social responsibility with practical actions by building and maintaining a harmonious village-enterprise relationship.

矿山排土场占地 56.7 万平方米

The mine dump had a total area of approximately 567,000 m<sup>2</sup>

种植树苗 10 万多株 排土场绿化覆盖率 90%

More than 100,000 seedlings had been planted and the green coverage rate of the dumps had reached 90%

## 责任故事三 平南水泥矿山治水

### CSR Story III: Water control for mines at Pingnan Cement

华润水泥(平南)有限公司位于广西壮族自治区平南县,该地地处平原区内,且多属覆盖型岩溶区,易出现地面塌陷等地质灾害。平南水泥已开采的一二期露天矿山采用凹陷式开采方式,矿山三面邻水、地下岩溶地质发育,随着开采深度的加深,地下水越来越多的涌入矿坑,存在引发地面塌陷,建筑物地基沉降、结构开裂,沟渠干涸,农田与池塘漏水等次生地质灾害的风险。

为治理岩溶地区复杂条件下凹陷式开采矿山突涌水问题,华润水泥联合山东大学于2015年成立了联合创新项目攻关小组,以产学研联合创新的科研机制开展矿山治水工作,全力攻克这一难题。经过多次、反复技术方案论证,对比试验、效果检验,最终探索出地下岩溶水帷幕注浆治理技术,对涌水点实现成功封堵,彻底修复当地生态环境。

2017年3月,该项目所取得成果经多名中国工程院院士组成的项目鉴定委员会技术鉴定为达到国际领先水平,并建议在岩溶地区突涌水灾害治理中进一步推广应用。

项目的成功实施也为解决矿山凹陷开采涌水难题提供了示范和参考。

China Resources Cement (Pingnan) Limited ("Pingnan Cement") is located in Pingnan County, Guangxi Zhuang Autonomous Region. It lies in a flatland area covered with multiple layers of karst and prone to geological disasters such as ground collapse. The first and second phases of the exploited outdoor mines at Pingnan Cement adopted the cave mining method. Three sides of the mine are surrounded by water and the underground karst is active in development. There was inrush of more and more underground water into the mining pits as mining goes deeper, causing risks of secondary geological disasters such as ground collapse, subsidence of building foundations, structural cracks, dried-up ditches and water leakage of farmlands and ponds.

In order to control water inrush into mining pits caused by cave mining under complicated conditions in karst areas, CR Cement and Shandong University jointly established an innovation project research team in 2015 to launch water control work at mines through an innovative scientific research mechanism with the joint forces of the industry, universities and research institutes. Technology of water-curtain grouting treatment for underground karst was finally developed after numerous and repeated reasonings of technical proposals, comparative examinations and tests on results. The spots of water inrush had been successfully blocked off, and the local ecological environment was completely restored.

In March 2017, the project appraisal committee consisting of various scholars from the Chinese Academy of Engineering accredited the results of this project as achieving international pioneer standards, and recommended its further promotion and application for prevention of water inrush disasters in karst areas.

The successful implementation of this project had also set an example and reference for solving the problem of water inrush in cave mining.



# 丰业为家

## 第一章 价值创造

CHAPTER I. VALUE CREATION



辅导基地 23 个

Provided guidance to  
23 production plants



2017 年，国家稳步推进供给侧结构性改革，全国水泥需求保持平稳，新增产能持续减少；水泥大型企业整合提升了行业集中度，竞争环境进一步改善。华润水泥围绕“十三五”战略规划，着力打造“系统成本最低、区域市场领先、创新驱动发展”三大核心能力，提升公司管理水平，优化组织结构，改善运营指标，持续创造经济价值。公司积极贯彻落实国家供给侧改革工作要求，优化资源配置和资产质量，提升经营业绩和管理效益；以“转型创新、共赢发展”为管理主题，利用水泥窑协同处置城市固废，探索装配式建筑及产业链上下游延伸的机会，推动公司转型升级和创新发展。

在加强精益管理方面，华润水泥开展了多项精益改善项目，如降低煤耗、电耗以及辅材、备件、物料及配合比的成本等方面。此外，还通过建立公司内训制度培养了一批精益人才，夯实工匠队伍、实现卓越运营。

华润水泥结合公司运营及管理现状，设立了《星级管理评价体系》，从财务表现、生产运营等 10 余个方面对水泥及混凝土生产基地进行专业的评价。2017 年公司根据星级管理评价体系要求，全面推进标杆建设，辅导基地 23 个，研讨优秀实践，制定并下发《5S 及目视化》、《设备自主保全》等制度。

In 2017, with the Chinese government's stable implementation of the supply-side structural reform, the cement demand in China remained stable and new production capacity continued to decline. Large-scale cement enterprises had increased their market share by consolidation in the cement industry. The competitive landscape further improved. In line with the strategic plans of the "Thirteenth Five-Year", CR Cement focused on developing the top three core strengths in "achieving the lowest total cost, with a leading market position in the region, and driving for development with innovation". We raised the standards of corporate management, optimized organizational structure, improved operational indicators and continuously created economic values. The Company proactively implemented the requirements for national supply-side reforms, optimized resources allocation and asset quality, and improved operating results and management efficiency. With the management theme of "transformation with innovation, development with mutual benefits", we co-processed municipal solid wastes by use of cement kilns and explored the opportunities in prefabricated construction and upstream and downstream expansion of the industry chain to drive for transformation, upgrade and development of the Company with innovation.

To strengthen lean management, CR Cement launched various lean improvement projects, for example, reduction of coal consumption, electricity consumption, costs of auxiliary materials, spare parts, materials and mixture ratios. In addition, a group of lean talents have been developed through the Company's internal training system for building professional teams and achieving operational excellence.

Based on the status quo of operations and management, CR Cement established the "Star Rating Management and Evaluation System" to conduct professional evaluations on cement and concrete production plants in over 10 aspects including financial performance, production and operation. In 2017, according to the requirements of the "Star Rating Management and Evaluation System", the Company commenced the comprehensive construction of benchmarks and provided guidance to 23 production plants with case studies of excellent practices. Systems such as "5S and Visualization" and "Total Productive Maintenance" were formulated and issued.

## (一) 规范公司治理 / Regulating Corporate Governance

华润水泥及其董事局深知维持良好的企业管治水平对于长期健康稳定发展的重要性，始终致力于建立良好企业管治常规及程序。公司已采纳上市规则附录十四所载的企业管治守则，并持续检讨董事局及各董事委员会情况，以维持良好的企业营运状态。

CR Cement and the Board are fully aware of the importance of maintaining good standards of corporate governance for long-term healthy and stable development. We are always committed to establishing good corporate governance practices and procedures. The Company has adopted the corporate governance code set out in Appendix 14 of the Listing Rules and continuously reviews the status of the Board and each of its committees for maintenance of good conditions for corporate operation.

## (二) 价值共享 / Value Sharing

### · 经营业绩 / Financial Results

截至 2017 年 12 月 31 日止年度的综合营业额为 299.58 亿港元，较 2016 年增加 16.8%；本公司拥有人应占盈利为 36.17 亿港元，较 2016 年增加 172.8%。年度每股基本盈利为 0.554 港元。董事局已宣布派发每股末期股息 15.5 港仙，连同中期股息，2017 年全年每股股息为 27 港仙，派息率为 48.8%。

For the year ended 31 December 2017, the consolidated turnover amounted to HK\$29,958 million, representing an increase of 16.8% over 2016. The profit attributable to owners of the Company amounted to HK\$3,617 million, representing an increase of 172.8% over 2016. Annual basic earnings per share reached HK\$0.554. The Board declared final dividend payment of HK\$0.155 per share. Taking into account the interim dividend, the total dividend for 2017 would be HK\$0.270, with annual dividend payout ratio of 48.8%.

### · 保护股东及投资者权益 / Protecting the Rights and Interests of Shareholders and Investors

#### 1. 规范大股东行为 / Regulating the Behaviours of Major Shareholders

华润水泥按照上市规则要求，规范上市公司与关连人士之间的各项关连交易行为及相关安排，确保关连交易公平合理、符合上市规则及股东整体利益，并按上市规则进行披露，确保上市公司独立、规范运作，保障公司利益，维护股东及利益相关方的权益。

华润水泥具有独立的业务及自主经营能力，与控股公司及其关连公司在人员、资产、财务、机构和业务等方面均为独立运作，公司董事局和内部机构能够独立运作。控股公司通过股东大会行使权利，并无直接或间接干预公司的决策和经营活动。

CR Cement strictly regulates all connected transactions and the relevant arrangements between the Company and its connected persons in accordance with the requirements of the Listing Rules. This ensures that the connected transactions are fair and reasonable, in compliance with the disclosure requirements under the Listing Rules, and in the overall interests of the shareholders. This also ensures independent and standard operations of the Company, and safeguards the rights and interests of the Company, the shareholders and other stakeholders.

The Company possesses the capability of running the business independently and operating autonomously. Human resources, assets, finance, organization and business of the Company are all independent of the holding company and related companies. The Board and internal organizations of the Company are operating independently. The holding company exercises its rights at general meetings and does not directly or indirectly intervene with the decision making and operations of the Company.



2017 年

综合营业额

299.58 亿港元

较 2016 年增加

16.8%

本公司拥有人应占盈利

36.17 亿港元

较 2016 年增加

172.8%

In 2017, the consolidated turnover amounted to HK\$29,958 million, representing an increase of 16.8% over 2016. The profit attributable to owners of the Company amounted to HK\$3,617 million, representing an increase of 172.8% over 2016.



股东周年大会 / Annual General Meeting

2017 年 5 月，华润水泥召开股东周年大会。公司秘书在会议上向股东解释以投票方式进行表决的详细程序，并回答股东有关以投票方式表决的任何提问。公司同时聘用第三方独立机构监察股东大会程序。

In May 2017, the Company held its annual general meeting. The company secretary explained the detailed procedures of voting by poll to the shareholders at the meeting and answered any enquiry from the shareholders regarding voting by poll. The Company also engaged independent third-party institutions to supervise the procedures of the general meeting.

## 2. 建立投资者沟通机制 / Building a Communication Mechanism for Investors

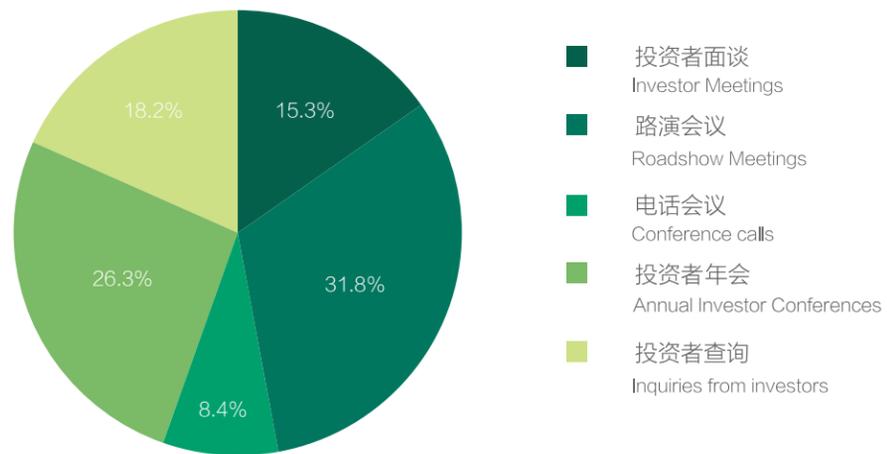
华润水泥董事局高度重视与股东及其他投资者维持高效、透明及具建设性的沟通，通过有效管治业务创造价值回馈股东。我们通过不同渠道与股东及其他投资者保持联络，以方便他们了解公司的表现、策略、前景及所在市场的经营环境。

公司积极响应股东及投资者日常查询，通过公司网站发布重要信息。公司于年度业绩及中期业绩公布后举行投资者推介会，并通过互联网转播，以确保海内外股东及投资者及时了解本公司的业务运营及未来发展策略；并在一季度和三季度业绩之后，举行投资者电话会议，与投资者进行交流。公司每年组织年度投资者反向路演活动，邀请投资者到公司的生产基地参观，加深投资者对公司运营以及最新业务发展的了解。此外，公司定期参与不同的活动，包括投资者会议、路演及投行举办的投资者论坛等，以增加股东及投资者与公司接触的机会。

CR Cement gives high priority to maintaining effective, transparent and constructive communications with shareholders and other investors, and creating value to reward our shareholders through effective governance of business. The Company keeps in touch with its shareholders and other investors through different channels to facilitate their understanding on the Company's performance, strategies, prospects and the market environment in which the Company operates.

The Company actively responds to daily inquiries from shareholders and investors, and publishes important information on its website. The Company holds results presentation meetings for investors after the release of annual results and interim results, which are broadcasted on the internet to ensure onshore and offshore shareholders and investors understand the Company's business operations and future development strategies in a timely manner. The Company also has conference calls with investors after publication of the Company's results for the first and third quarters. The Company organizes annual reverse roadshow for investors whereby investors are invited to visit the production plants of the Company for a better understanding of the operation and the latest business development of the Company. In addition, the Company regularly participates in different activities including investor meetings, roadshows and investor conferences held by various investment banks in order to increase interactions of shareholders and investors with the Company.

投资者沟通方式占比 / Breakdown of Investor Activities of CR Cement in 2017



投资者推介会 / Investors Presentation

2017年3月13日，公司在香港华润大厦举行2016年度业绩投资者推介会，共有约140位分析师及基金经理参加。  
On 13 March 2017, the Company held 2016 Annual Results Presentation at China Resources Building in Hong Kong with a total of approximately 140 analysts and fund managers in attendance.



投资者徒步体验封开水泥长皮带廊  
Investors hiked on the long conveyor belt of China Resources Cement (Fengkai) Limited



投资者参观广州技术研发中心实验楼  
Investors visited the Central Laboratory at our Research and Development Centre in Guangzhou

投资者反向路演活动 / Investor Reverse Roadshow

2017年11月，公司在广州技术研发中心及华润水泥（封开）有限公司举办了为期两天的投资者反向路演活动，共有29名分析师及银行代表参加。通过此次活动，令投资者更加了解公司的研发实力、新技术新产品开发情况、生产运营管理、节能减排以及物流优势。

In November 2017, the Company organized a two-day investor reverse roadshow at our Research and Development Centre in Guangzhou and cement production plant in China Resources Cement (Fengkai) Limited. A total of 29 analysts and representatives from banks participated in this event, which helped them build a better understanding of the Company's R&D capability, development of new technology and products, production and operational management, energy saving and emission reduction, as well as cutting-edge logistics.

### (三) 企业责任担当 / Commitments in Corporate Responsibility

华润水泥勇于承担社会责任，深入贯彻国家供给侧结构性改革，在节能减排方面，以节煤、节电、污染物减排、清洁生产为重点，以保护生态环境和发展循环经济为准则，努力将华润水泥建设为资源节约型、环境友好型企业。在绿色发展方面，公司顺应政策、抢抓机遇，致力于利用水泥窑“无害化、减量化、资源化”协同处置固体废弃物，积极推进水泥窑协同处置技术创新与工程应用，参与社会系统的大循环，履行企业公民的绿色发展责任，构建和谐城市共生体。

国家致力推动生态文明建设，坚持节约资源和保护环境的基本国策，践行绿水青山就是金山银山的理念。华润水泥将继续探索前行，持之以恒开展技术攻关，加强在节能减排、矿山生态恢复等战略性新兴产业的投入力度；加快新型产品的研究开发步伐；推进利用水泥窑协同处置城乡生活垃圾、市政污泥及危废项目，实现企业绿色转型，引领行业进步，助力建设美丽中国。

CR Cement proactively fulfills its social responsibility and implements the national supply-side structural reforms in a comprehensive manner. As for energy saving and emission reduction, we focus on reduction of coal consumption, electricity saving, pollutant emission reduction and clean production. On the basis of ecological environmental protection and development of circular economy, we strive to be a resource-saving and environment-friendly enterprise. In terms of green development, by following the relevant policies and seizing the opportunities, we are devoted to co-processing solid waste by use of cement kilns on the principles of "hazard-free, mass reduction and recycling" and proactively promoting the technological innovation and engineering application of waste co-processing by use of cement kilns. Moreover, we engage in the giant social circular system by fulfilling the green development responsibility as a corporate citizen with an aim to build a harmonious urban symbiosis.

The Chinese government is committed to promoting the construction of ecological civilization, abides by the fundamental national policies of resources saving and environmental protection with an objective of "Lucid Waters and Lush Mountains Are Invaluable Assets". CR Cement will continue to explore and move forward, persistently launch technological development, and increase investments in strategic and new technologies including energy saving, emission reduction and ecological restoration of mines. We will expedite R&D of new products, promote co-processing of municipal solid waste, urban sludge and hazardous waste by use of cement kilns, thereby achieving green transformation of enterprises, leading advancement in the industry and facilitating the construction of a beautiful China.



# 丰业为家

第二章 精益求精  
CHAPTER II. EXCELLENT QUALITY

华润水泥认为，商誉的基础建立在品质之上，公司持续优化生产管理系统，完善生产过程和工艺，投入资金研发新产品，提升产品品质，多角度打造精益求精的品牌。

CR Cement believes that goodwill is built on the basis of quality. With the aim of multi-faceted excellence in brand building, the Company continuously optimizes its production management systems, improves production process and technology, invests in R&D of new products and improves product quality.

### (一) 多元产品 / Diversified Products

华润水泥了解市场需求，为满足不同工程所需，推出多元化的水泥、熟料及混凝土等产品，可用于修建高层建筑及基建工程，如水电站、水坝、桥梁、港口、机场、铁路及公路等。

2017年，公司的水泥、熟料及混凝土对外销量分别为7,590万吨、795万吨及1,346万立方米，较2016年分别减少5.2%、增加63.6%及增加8.6%。另外，公司针对袋装市场进一步细分，推出新产品——“王牌工匠”高端装修专用水泥，已在广东、广西上市并实现销售。

With an in-depth understanding of the market demand, CR Cement launches diversified cement, clinker and concrete products to cater the needs of various projects for construction and repairs of high-rise buildings and infrastructure projects such as hydroelectric power stations, dams, bridges, ports, airports, railways and roads.

In 2017, our external sales volumes of cement, clinker and concrete were 75.90 million tons, 7.95 million tons and 13.46 million m<sup>3</sup>, representing a decrease of 5.2%, an increase of 63.6% and an increase of 8.6% over 2016 respectively. In addition, for further market segmentation of cement sold in bags, the Company had launched a new and high-end renovation cement product branded "Wang Pai Gong Jiang" in Guangdong and Guangxi.

### (二) 创新智造 / Innovative and Intelligent Production

#### · 产品创新 / Product innovation

2017年，华润水泥着眼于市场需求和行业前景，持续推广并优化“王牌工匠”装修水泥、透水混凝土，启动了预拌水泥、低钙熟料、装饰混凝土、海工水泥等新产品的研发。

In 2017, focusing on market demand and industry prospects, CR Cement continued to promote and optimize the renovation cement branded "Wang Pai Gong Jiang" and pervious concrete. We also commenced R&D of new products including ready-mix cement, low-calcium clinker, decorative concrete and cement for marine engineering.



2017年，公司产品对外销量

水泥 7,590 万吨

熟料 795 万吨

混凝土 1,346 万立方米

In 2017, our external sales volumes of cement, clinker and concrete were 75.90 million tons, 7.95 million tons and 13.46 million m<sup>3</sup>



“王牌工匠”装修水泥  
Renovation Cement branded "Wang Pai Gong Jiang"

“王牌工匠”装修水泥已于2017年4月28日在广东的珠三角市场和广西的南宁市场全面上市。该产品具有“专业配方、省心省力、绿色环保”等特点，受到客户好评。

Renovation cement branded "Wang Pai Gong Jiang" was officially launched in the markets of Pearl River Delta market in Guangdong and Nanning in Guangxi on 28 April 2017. We received positive feedbacks from customers on its "professional formula, highly efficient, environmentally friendly" attributes.

高抗蚀海工水泥研发  
R&D of cement for marine engineering with high resistance to corrosion

该产品是国家“十三五”重大研究项目的核心产品，由我司与中国建筑材料科学研究总院有限公司、华南理工大学、中交第四航务工程局有限公司等单位联合开发，目标是研发、生产出高抗蚀的海工水泥并应用到国家重点海洋工程。2017年已完成部分基础研究。

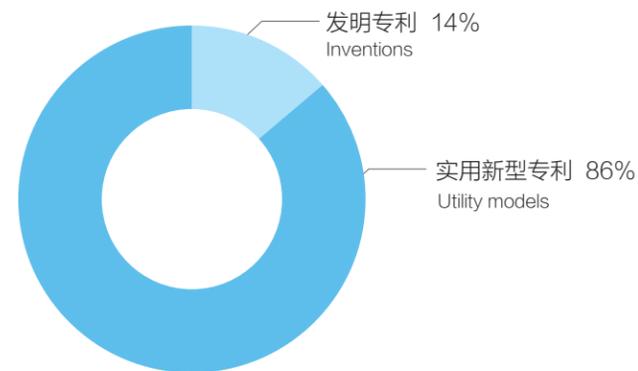
It is the core product under the major research project during the "Thirteenth Five-Year". The Company, China Building Materials Academy Co., Ltd, South China University of Technology and CCCC Fourth Harbor Engineering Co., Ltd. jointly launched the R&D of cement for marine engineering with high resistance to corrosion with an aim of mass production and application to core national marine engineering projects. In 2017, part of the fundamental research had been completed.

· 专利发明 / Patented inventions

为了进一步激发员工创新热情，推动技术进步，华润水泥重新修编了《华润水泥专利管理办法》(2017年版)。2017年申请专利69项，已获得专利证书33项。截至2017年12月底，公司共持有专利证书110项(其中发明专利15项，实用新型专利95项)，并在内部应用率高达90%，主要应用于节能减排、效率提升和新材料等方面。

In order to stimulate the staff's enthusiasm for innovation and promote technical advancement, CR Cement had revised the Patent Management Measures of CR Cement (2017 version). In 2017, we applied for 69 patents and had been granted 33 patent licenses. As of the end 2017, we also held a total of 110 patent licenses, including 15 inventions and 95 utility models. 90% of the patent licenses had been applied internally, mainly for energy saving, emission reduction, efficiency enhancement and new raw materials.

持有专利证书 (截至2017年底) / Patent Licenses (as of the end of 2017)



· 知识产权保护 / Protection of intellectual property

华润水泥既充分尊重他人的知识产权，也高度重视自身知识产权保护。2017年公司积极开展知识产权工作，持续向《中华人民共和国反不正当竞争法(修订草案)》反馈意见，内部修订《华润水泥专利管理办法》《华润水泥控股有限公司品牌建设操作指引》。

CR Cement not only fully respects others' intellectual property rights, but also pays keen attention to the protection of its own intellectual property. In 2017, the Company proactively commenced work on intellectual property by continuously providing

feedbacks on the Anti-Unfair Competition Law of the PRC (Revised Draft) and by revising the internal policies of Patent Management Measures of CR Cement and Operation Guideline for Brand Building of CR Cement.

· 全员创新 / All-staff innovation

2017年5月，公司发布《华润水泥创新管理体系建设规划》，规范创新流程管理，进一步系统化创新工作。同时期望增强跨行跨界交流，借鉴及优化项目运作机制，完善创新平台，形成全员创新良好氛围。

In May 2017, the Company promulgated the Construction Plans for Innovation Management System of CR Cement to regulate the management of innovation processes and further systematize its innovation work. Meanwhile, it is expected to create a positive ambience for all-staff innovation by strengthening inter-sector exchanges, learning past experience from others, optimizing mechanisms for project operation, and improving the innovation platform.



创新主题培训  
Innovation-themed training

为培育创新系统思维，公司举办了创新主题培训，课程涵盖《创新思维系统》等相关内容，各单位关键岗、创新负责人等50位学员参加了培训。

In order to cultivate innovative system thinking, we organized innovation-themed training with courses covering the Innovative Thinking System and other relevant contents. 50 students from key positions and persons-in-charge of innovation of each department participated in the training.



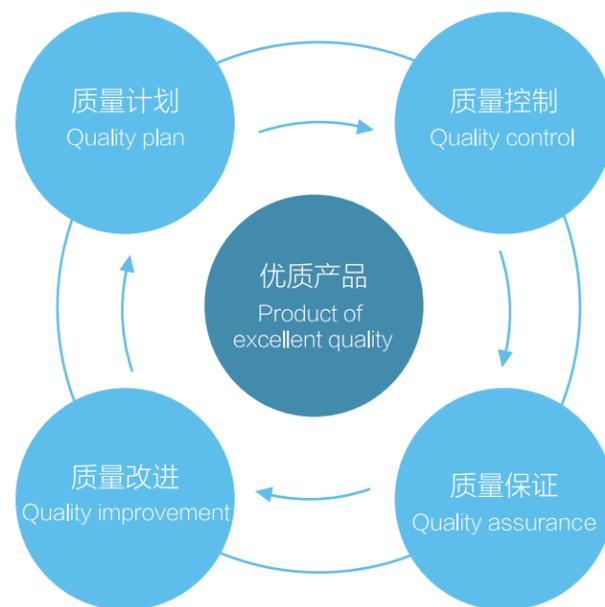
第二届华润水泥创新大会  
The Second Innovation Conference of CR Cement

2017年，公司举办了第二届华润水泥创新大会，分享行业前瞻研究及产品、技术创新规划，邀请10家外部合作单位介绍最新创新成果，并评选、颁发创新成果相关奖项。

In 2017, the Second Innovation Conference of CR Cement was organized to share industry outlook for researches, products and plans for technological innovation. 10 external partners were invited to introduce the latest innovations, adjudicate innovation achievements of the Company and presented relevant awards.

- 根据市场需求生产水泥产品，合理安排混合材资源。
- To produce cement products according to market demand, and reasonably arrange resources of mineral admixture.
- 每批进厂原材料检测。
- To test each batch of raw materials.
- 对生产基地原材料资源质量情况进行普查，建立完善的资源档案。
- To carry out general surveys on the quality of raw material resources at the production plants, and build a comprehensive record of the resources.

- 市场调研，为生产提供前端服务。
- To conduct market research to provide front-end services for production.
- 根据客户使用反馈，不断改善产品。
- To continuously improve the products based on customers' feedback.
- 技术研发中心开展创新研究。
- To conduct innovation research at Research and Development Centre.



- 质管部 24 小时对熟料、水泥的生产过程进行监督检测。
- To supervise and test the production process of clinker and cement on a 24-hour basis by quality control department.
- 生产过程层层把关，实行质量考核。
- To evaluate quality throughout the production process.
- 与国家水泥质量监督检验中心合作，对比验证。
- To conduct comparative tests in co-operation with the National Quality Supervision and Testing Center for Cement
- 每年组织两次从原料到产品全覆盖的质量专项抽查，重点排查和治理氯离子、六价铬、放射性等毒害物质。
- To conduct special sample inspections on quality covering from raw materials to products twice every year, and focus on investigation and control of toxic substances including chloride ions, hexavalent chromium and radioactive substances.

### (三) 卓越品质 / Excellent Quality

#### · 质量管理 / Quality control

公司在《华润水泥管理手册》之质量管理篇中对生产流程各细节管理均有清晰及严格要求，包括原料管理、煤炭管理、生料、熟料管理等质量标准，确保管理到位，每步骤达至合格要求。化验室设备、维修保养、检定要求、操作指引、环境配置、档案纪录亦一概标准化列入管理手册，为产品质量鉴定赋予保证，助力产品质量达到标准。另外，设立质量事故管理标准，对事故作出判定，提供不合格产品处理方案、赔偿标准、召回机制及处理流程等。

公司依托完整有效的质量管理体系对基地产品质量进行管理和评价，将生产过程及产品的关键质量指标纳入大区、基地业绩考核范畴，以绩效管理不断推动各单位的质量建设，为消费者提供优质产品。

此外，华润水泥还通过开展多项精益改善项目，持续提升质量、工艺、节能减排等方面的管理水平。在平南、弥渡、合浦等基地开展了生料在线分析技术的试点工作，使配料的合格率得到进一步提高，为下一步生料配料无人值守奠定了基础。更于 2017 年底，完成第 100 台包装机的技术升级改造，改善员工现场工作环境安全的同时，为公司创造了较大的经济价值。

完成第 100 台包装机的技术升级改造  
The technological upgrade of the 100th packaging machine was completed

Pursuant to the Quality Management Chapter in Management Manual of CR Cement, the Company maintains clear and strict requirements for management of every details in production process including quality standards for management of raw materials, coal, raw materials and clinker to ensure appropriate management and compliance with the quality requirements in each step. Laboratory equipment, repairs and maintenance, inspection requirements, operating instructions, environmental configuration and filing records are all standardized and covered in the management manual to guarantee the verification results of product quality and ensure up-to-standard product quality. In addition, management standards for quality incidents have been established to identify and diagnose the accidents, and provide handling proposals, compensation standards, recall mechanisms and handling procedures for unqualified products.

The Company relies on a comprehensive and effective quality management system to manage and evaluate the quality of the products from its production plants. It incorporates the key quality indicators of the production process and products into the performance appraisal of the operating regions and production plants as a continuous drive for better quality of all departments through performance management, so as to provide consumers with products of excellent quality.

In addition, CR Cement continued to enhance its management levels in terms of quality, technology, energy saving and emission reduction through implementation of various lean improvement projects. We carried out pilot work of online analysis technology of raw materials at our production plants in Pingnan, Midu and Hepu etc.

to further increase the passing rate of batching, which had laid a solid foundation for unmanned batching of raw materials for the next step. At the end of 2017, the technological upgrade of the 100th packaging machine was completed, creating greater economic value for the Company whilst improving production safety in the staff's onsite working environment.

#### · 标准研究及应用 / Research and application of standards

华润水泥充分利用广州技术研发中心在助磨剂有效成份检测方面取得的技术突破，制定了《华润水泥控股有限公司助磨剂管理办法》，定期对各基地进厂助磨剂进行质量抽查，促使供应商稳定生产助磨剂产品，在稳定基地水泥生产、提升产品质量、降低助磨剂使用成本方面取得了良好的效果。同时，公司联合湖南大学等高校和科研机构共同起草了国家标准《水泥助磨剂生产用液体原材料测定方法 - 气相色谱法》。

为解决镍铁冶炼产生的废渣占用土地、污染土壤、污染水体等一系列的社会问题，公司开展对镍铁渣综合利用的研究，并与中国建筑材料科学研究总院等单位和企业，共同起草了国家标准《用于水泥和混凝土中的镍铁渣粉》，在实现资源开发良性循环可持续发展方面做出了积极的贡献，打造企业品牌的同时，提高了企业在同行业和市场的知名度。

CR Cement had fully utilized the technological breakthroughs achieved by the Research and Development Centre in Guangzhou in testing the effective ingredients of grinding agents, and formulated the Administrative Measures for Grinding Agents of China Resources Cement Holdings Limited. We would regularly conduct sample checks on the quality of the incoming grinding agents of each production plants and procure the suppliers' stable production of grinding agent products, thereby achieving sound results in stabilizing cement production at the production plants, improving product quality and reducing costs of using grinding agents. At the same time, we have drafted the national standard Testing Methods of Liquid Raw Materials for Use in Production of Cement Grinding Agents—Gas Chromatography in co-operation with universities and research institutes such as Hunan University.

In order to solve a series of social issues including land occupation, soil contamination and water pollution by slag from ferronickel smelting, the Company conducted research on the comprehensive utilisation of nickel-iron slag, and drafted the national standard Nickel-iron Slag Powder for Use in Cement and Concrete in co-operation with relevant units and enterprises such as China Building Materials Academy, in order to make positive contributions to the virtuous cycle of resources exploitation and sustainable development while building our corporate brand and enhancing our corporate recognition in the industry and the market.



# 润心为您

## 第三章 竭诚服务

CHAPTER III. DEDICATED SERVICE

华润水泥以客户至上为原则，秉承诚实守信的核心价值观，严守商业道德，竭诚为客户提供优质服务。通过加强客户沟通，悉心维护客户和消费者权益，满足并超越客户期望，提升客户满意度。

We wholeheartedly provide quality service on a customer-oriented principle, whilst upholding the core values of integrity and strictly abiding by business ethics. By improving communications with customers and taking the utmost care of the rights and interests of our customers and consumers, we have met and exceeded our customers' expectations with a better customer satisfaction rate.



### （一）保障客户权益 / Protecting the Rights and Interests of Customers

在保障客户权益方面，华润水泥将客户信息纳入公司核心商业秘密范围，并依据《华润水泥控股有限公司保密工作管理规定》及《华润水泥控股有限公司商业秘密管理办法》等相关管理要求对客户信息进行严密保护。

In terms of protecting the rights and interests of our customers, CR Cement constantly treats customer data as core business secrets and in strict confidentiality pursuant to the relevant management requirements including "Regulations on the Management of the Confidentiality Work of China Resources Cement Holdings Limited" and "Management Measures on Trade Secrets of China Resources Cement Holdings Limited".

#### · 按合同规定交付 / Delivery in accordance with contractual requirements

华润水泥严格依照《合同法》的相关法律法规制定购销合同，并严格按照合同要求切实履行产品交付标准，对供应产品实行严格的质量管理，确保产品的高质量。

CR Cement prepared the sale and purchase contracts in strict compliance with the Contract Law of PRC as well as other relevant laws and regulations. We effectively meet the standards of product delivery in strict compliance with the contractual requirements. Excellent product quality is ensured by implementing strict quality management on our supplied products.

#### · 客户信息保护 / Customer data protection

华润水泥所有客户信息独立建档，由专人负责信息的收集、归档、更新，并设定相应的信息查询权限管理。同时，信息系统中客户交易数据的查询与导出均有严密的系统权限分配管理，确保客户信息安全。

We create independent files for all customer data with designated staff in charge of data collection, filing and update. We also set up management of access rights to make enquiry on the relevant data. At the same time, to ensure security of customer data, we strictly manage the grant of access rights of making inquiries and exporting information of our customers' transactions in our information systems.

### （二）贴心服务客户 / Attentive Customer Service



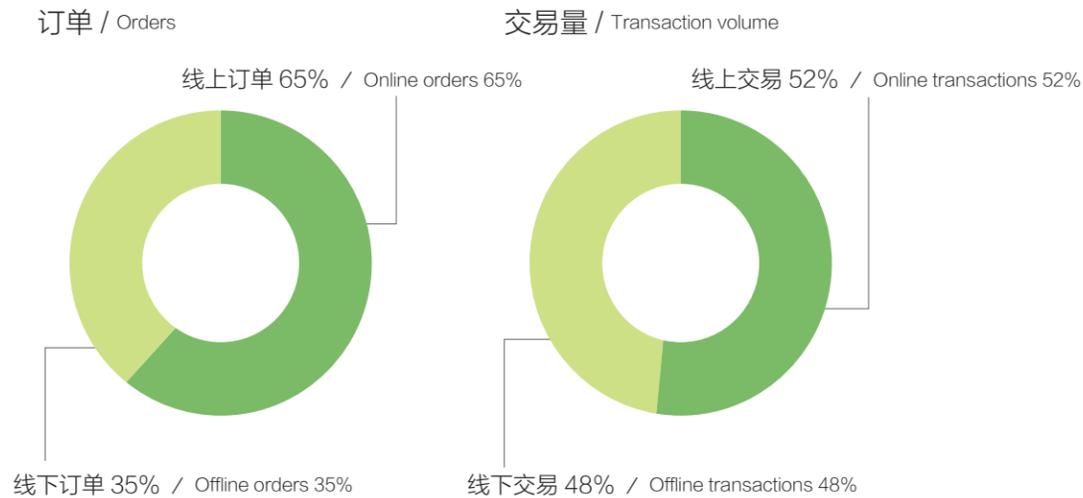
#### · 客户服务体系 / Customer service system

##### 1. 客户下单及物流信息化建设 / Digitalization of customer orders and logistics

2017年销售移动APP(应用程序)系统在广东大区正式运行且效果良好，可为客户提供快速下单、余额查询、销量查询、物流查询等高效、便捷的在线服务，极大提高了客户下单效率和满意度，也增强了订单的追踪能力。

In 2017, the mobile APP (applications) for placing sales orders was officially launched in Guangdong with good results. The APP offers highly efficient and

convenient online customers services such as speedy order placing, balance inquiry, sales inquiry and logistics tracking, which has greatly enhanced the efficiency of customer order placing and capability of order tracking.



2017年，一卡通无人值守智能发运系统已在广东大区成功上线，实现了货物发运自动化、智能化，提高了发运效率，改善了客户提货体验，此系统后期将继续向其它水泥基地推广。截至2017年底，汽运调度管理系统已接入车辆1万余台，掌控运力资源，实时监控货物流向，确保为客户提供优质的物流服务。

In 2017, our unmanned "Smart Card" system was launched in Guangdong, which has achieved the automation and intelligentization of product delivery, increased the efficiency of delivery and improved our customers' experience of taking delivery of goods from us. The system will be rolled out to other cement production plants of the Company. As of the end of 2017, the truck transportation scheduling management system was connected to over 10,000 trucks, which had enabled control of transportation capacity resources and real-time monitor of flow directions of goods, for ensuring quality logistics services to our customers.

## 2. 客户服务前置化 / Prepositioning customer services

围绕客户获悉产品性能波动不及时、民用混凝土施工不够规范、客户投诉预防工作不足等痛点，2017年华润水泥提出了客户服务前置化理念及一系列解决方案，致力于提供更多“事前、事中”服务工作，从而有效减少客户投诉，提高客户满意度。其中“事前支持”部分，华润水泥31家基地公司自2017年下半年开始，在原材料掺量、水泥主要指标波动超出约定范围时及时反馈至销售人员及客户，便于客户及时调整应对。“事中支持”部分，2017年大区/基地公司客服人员走访客户超3,500名，同比增加1,400名，广泛收集客户意见和建议，推动生产、销售及服务工作改善。2018年客户服务前置化项目将重点从“规范民用混凝土搅拌、施工”等方面推进。



2017年大区/基地公司客服人员走访客户超3,500名，同比增加1,400名

Customer service staff of our regional offices and production plants visited over 3,500 customers in 2017, representing an increase of 1,400 over 2016

In 2017, for effective reduction of customer complaints and better customer satisfaction, CR Cement proposed the concept of prepositioning our customer services and a series of solutions by providing more services "prior to and during" the process, in order to address the issues of late notice to customers on volatile functionality of product, inadequate standardization of concrete for civil construction and inadequate precautions against customers' complaints. In terms of "support in advance", since the second half of 2017, 31 production plants of CR Cement had been providing timely feedback to sales staff and customers when the amounts of raw material admixtures and major cement indicators were not within the agreed ranges, which made it more convenient for customers to adjust and respond in a timely manner. In terms of "support during the process", customer service staff of our regional offices and production plants visited over 3,500 customers in 2017, representing an increase of 1,400 over 2016. Customers' opinions and suggestions are widely collected to motivate work improvements on production, sales and services. In 2018, the project for prepositioning customer service will focus on the promotion of "standardization of concrete for civil use in batching and construction".



## 3. 客户投诉及意见处理机制 / Mechanism for handling customers' complaints and opinions

2017年，华润水泥收到客户投诉后均在24小时内响应，并由大区客服、基地公司质管部等专人负责处理，投诉处理率达100%。公司每月汇总分析客户投诉问题及其意见，从产品质量、使用性能、交付服务三个方面重点跟进，并针对多发、集中发生的问题成立专家小组重点攻克，不断提升产品质量，改善客户体验。

In 2017, we designated professional staff from quality control department of our major regions and production plants to respond to customers' complaints within 24 hours, and achieved a handling rate of 100%. We compiled and analyzed customers' complaints and opinions on a monthly basis, and focus on following up with three aspects including product quality, performance, and delivery of services. We have set up expert teams to resolve the recurring and frequently occurred problems, for better product quality and better customers' experience.

## 4. 客户与消费者权益保障 / Protecting the rights and interests of customers and consumers

华润水泥秉承客户至上的经营理念，坚持为客户提供优质产品及服务；公司各层级人员加大客户拜访力度，倾听客户声音。2017年，公司进一步丰富产品种类，新增7家基地公司生产“王牌工匠”装修水泥，满足客户需求。

CR Cement persistently provides our customers with products and services of excellent quality on a customer-oriented operation philosophy. Staff at all levels have been visiting our major customers more frequently to listen to their needs. In 2017, to meet our customers' demand, we had further enriched our product range by getting 7 production plants to produce the renovation cement "Wang Pai Gong Jiang".

定制化提供解决方案——华润水泥（上思）有限公司

Customized solutions offered by China Resources Cement (Shangsi) Limited

2017年，广西崇左左区域两个重点工程反映使用上思水泥42.5等级散装水泥打盖板时出现浮浆、气泡过多问题。上思水泥管理层、部门负责人非常重视，与崇左左区域销售同事多次到工地施工现场调研，还邀请华润混凝土（防城港）有限公司实验室主任、外加剂供应商技术工程师到现场试配与问题排查，在排查工程标段使用的砂、石、外加剂等材料的同时也主动对水泥所用混合材、石膏等原材料进行排查。最后判断为工程项目所使用的砂、石及外加剂等材料与水泥相容性欠佳，上思水泥主动调整配方并试产，最后一个批次试产产品经工程项目试配证实浮浆明显减少。当月上思水泥按照该配比实现批量生产、专库存储、专供两个重点工程使用。目前，两个重点工程各标段浮浆问题已解决，客户满意度明显提高。

In 2017, we received reports from two key projects in the Chongzuo region of Guangxi that problems of laitance and air bubbles occurred when they used our bulk cement of Grade 42.5 in cover plating. The management and department heads of China Resources Cement (Shangsi) Limited ("Shangsi Cement") paid keen attention to the issues by paying several visits to the construction sites with sales associates of the Chongzuo region to carry out field research. We also invited the laboratory director of China Resources Concrete (Fangchenggang) Limited and the technical engineers of the admixture supplier to perform on-site tests and troubleshooting. Besides, we investigated the sand, stones and admixtures used in the project segments as well as the raw materials such as mixes and gypsum used in the cement. Finally, it was found that the compatibility between sand, stones and admixtures of one part and the cement of the other part was not satisfactory. Shangsi Cement took the initiative to adjust the formula and conduct trial production. Laitance of the cement produced in the last batch of trial products had been significantly decreased with the new trial formula confirmed by the construction project. In the same month, Shangsi Cement underwent mass production according to that formula, designated specific silos for storage and made exclusive supply to the two key projects. At present, laitance problem in every segment of the two key projects had been solved and customer satisfaction significantly improved.



· 客户增值服务活动 / Value-added services and activities for customers

华润水泥通过丰富的客户增值服务活动，在树立品牌形象的同时，增强客户认同度。

Through extensive value-added services and activities for customers, CR Cement has strengthened customer recognition while building a distinguished brand image.

润丰品牌周年庆

Anniversary of Runfeng Brand

2017年6月28日，为庆祝润丰品牌正式启用一周年，华润水泥举办了“润丰品牌周年庆”活动，各大区同步开展。周年庆活动邀请近90家客户代表出席，参与人数逾1,500人。

On 28 June 2017, in order to celebrate the first anniversary of the official launch of the Runfeng brand, CR Cement organized the event "Anniversary of Runfeng Brand". It was launched simultaneously in all our operating regions. Representatives of about 90 customers were invited, and over 1,500 people were in participation of the event.



“润丰水泥”主题推广

Themed promotion of "Runfeng Cement"

2017年各大区开展“润丰水泥”主题推广，以组织或冠名的形式举办“抢一”（针对春节第一波复工所开展的一系列促销活动）、“送温暖”、“送清凉”、促销活动、关键用户活动、客户答谢、客户座谈会等多形式客户活动近70场，为客户提供了丰富的增值服务。

In 2017, themed promotion of "Runfeng Cement" was rolled out in all our operating regions. To provide extensive value-added services to our customers, we organized or sponsored approximately 70 customer events in various forms, including the "first grab" (a series of promotional events for the first wave of resumption of construction after the Chinese New Year), events themed with "gifting warmth" and "gifting coolness", promotional events, events for key users, customer appreciation meetings and customer seminars.



2017年3月3日广东大区2016年度客户答谢会

The 2016 Customer Appreciation Meeting in Guangdong on 3 March 2017.

# 润心为您

第四章 以人为本  
CHAPTER IV. PEOPLE-ORIENTED  
CULTURE

华润水泥视员工为企业生存和发展最宝贵的资源，把员工及其家人的安宁幸福作为公司努力的立足点，为员工提供、创造广阔的发展平台和施展个人才华的机会。

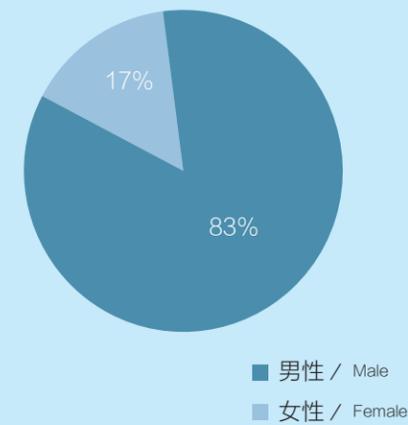
We view our employees as the most valuable resources for our corporate survival and development, and are committed to creating peace and bliss for our employees and their families. We provide and create a broad career development platform for the employees to display their individual talents.

### （一）员工雇佣概况 / Employment Information

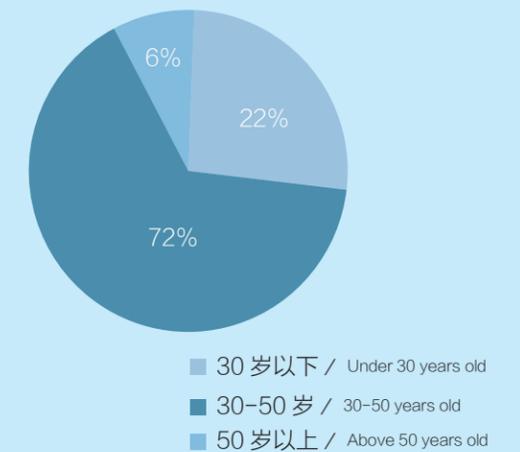
截至 2017 年末，华润水泥全职员工总人数为 20,592 人，女性员工比例为 17%，管理层当中的女性比例为 11%。少数民族员工比例为 21%，残疾人雇佣人数为 57 人，员工流失率 7.8%。

As of the end of 2017, the Company employed a total of 20,592 full-time employees, among which 17% were female. 11% of our managerial staff were female. 21% were of ethnic minorities, and we had 57 employees with disabilities. Employee turnover rate was 7.8%.

按性别划分 / By Gender



按年龄划分 / By Age



### （二）保护员工权益 / Protecting the Rights and Interests of Employees

华润水泥贯彻执行《中华人民共和国劳动法》《中华人民共和国劳动合同法》《职工带薪年休假条例》《中华人民共和国未成年人保护法》《女职工劳动保护特别规定》等相关法律法规，并依据法规建立了完善的内部人力资源制度和管理体系，保障员工在招聘、薪酬、福利、晋升、休假、离职等各方面的合法权益，反对任何形式的歧视、使用童工或强制劳工。2017 年，华润水泥全体员工劳动合同签订率 100%，社会保险覆盖率 100%。

在保障员工基本权益的同时，华润水泥还持续为员工提供多元化的体检套餐，给员工提供更有针对性的体检项目，并为员工及其两位直系亲属购买商业保险。

We fully comply with relevant laws and regulations such as the "Labour Law of the People's Republic of China", the "Labour Contract Law of the People's Republic of China", the "Regulations on Paid Annual Leave for Employees", the "Juvenile Protection Law of the People's Republic of China" and the "National Special Provisions on the Labour Protection for Female Workers". In accordance with these laws and regulations, we have formulated a well-established internal human resources system and management system to protect the legal rights and interests of our employees in every aspect such as recruitment, remuneration, welfare, promotion, vacation and departure. We explicitly prohibit any form of discrimination, employment of underage workers or forced labour. In 2017, the employment contract execution rate of the Company and social insurance coverage rate both reached 100%.

While protecting the basic rights and interests of our employees, we also continuously provide diversified body check packages with more customized items for employees, and offer commercial insurance to each employee along with two of their immediate family members.

### (三) 助力职业发展 / Facilitating Career Development

华润水泥根据人力资源管理战略和人才培养实践经验，建立了由培养内容、培养对象、培养平台、培养方法和责任主体组成的人才培养体系，明确三级培养分工，形成完整清晰的人才培养职责权限。针对不同层级人员，以打造领导力、专业能力和技术能力提升为核心，形成了“高级经理人发展项目”“卓越关键岗培养项目”“关键岗培养温故知新项目”“卓越中层培养项目”“合格中层培养项目”等系列培训项目。

According to our human resources management strategies and practical experiences in talent development, we had established a talent development system consisting of training contents, training targets, training platforms, training methods and subjects of responsibility. The three-tiered training functions had fully and clearly defined the duties and rights of talent development. With core focuses on building leadership, professional capabilities and technical capabilities, we offered series of training projects for various levels of staff such as the "Senior Manager Development Project", the "Excellent Key Position Training Project", the "Key Position Refresher Project," the "Excellent Middle-level Training Project" and the "Qualified Middle-level Training Project".



班组建设培训暨基层主管现场管理技能认证活动  
Team building training and certification of basic supervisors' on-site management skills



混凝土 C100 基层管理人才培养项目  
Talent development project for Concrete C100 basic supervisors



卓越关键岗一期 80KM 徒步挑战赛

The 80 km Expedition Challenge for Excellent Key Positions (phase one)

2017 年，组织开展培训班 47 个，参训学员 2,800 人次

In 2017, China Resources Cement College organized a total of 47 training courses with 2,800 participants

i-learning 平台开发课程 490 门  
培训员工逾 11,000 人，总学习时长约 47,000 小时

490 online courses has been developed on the i-learning platform over 11,000 online learners studied on the i-learning system for approximately 47,000 hours in total

### 华润水泥学院 / China Resources Cement College

- 为全面实现公司战略目标，打造领导力、专业能力和技术能力等符合企业特色的人才培养体系而设立的内部培训机构；
- An internal training institute set up for achieving corporate strategic goals of building a talent development system consistent with corporate features in terms of leadership, professional capabilities and technical capabilities.
- 通过邀请国内外咨询机构、培训机构及科研机构的专家学者授课，配合部门主管指导和解决实际工作难题，为公司业务发展提供人才保障；
- Experts and scholars from local and overseas consultancy firms, training institutions and scientific research institutions were invited to give lectures. Department supervisors also provided guidance and helped to solve practical problems at work. These have secured talents in coping with the business development of the Company.
- 2017 年，华润水泥学院组织开展培训班共计 47 个，参训学员 2,800 人次，较 2016 年分别增加 20.5% 及 56.3%。
- In 2017, China Resources Cement College organized a total of 47 training courses with 2,800 participants, representing increases of 20.5% and 56.3% respectively over 2016.

### 培训资讯化和 i-learning 在线学习平台 / Optimization of Information System for Training and the I-learning Online Learning Platform

- i-learning 平台共计开发课程 490 门；
- 490 online courses has been developed on the i-learning platform.
- 2017 年培训员工逾 11,000 人，总学习时长约 47,000 小时；
- In 2017, over 11,000 online learners studied on the i-learning system for approximately 47,000 hours in total.
- 推动培训 APP 开发及应用，鼓励员工通过移动平台进行自主学习及培训。
- The development and application of mobile training application was promoted for encouraging staff's initiatives to self-study through the mobile platform.

“卓越工匠”  
"Excellent Craftsmen"

2017年，华润水泥开展了针对基层管理者的“卓越基层管理培训系列项目”。各大区、基地积极开展技术大比武、技能竞赛等“卓越工匠”系列项目，培育新时代“工匠”。

In 2017, we launched the "Excellent Basic Supervisor Management Training Series Project" for basic supervisors. All major regions and production plants have proactively organized series of projects of "Excellent Craftsmen" such as technical contests and skill competitions to develop "craftsmen" in the new era.



“卓越工匠”设备维修（机械）技能大赛  
Equipment maintenance (machinery) talent competition

(四) 诚信建设 / Integrity Cultivation

华润水泥一贯重视并持续强化员工诚信建设和廉洁教育工作。在2017年2月、11月分别组织集体廉政谈话，共有246名晋升或调整职务的经理人参与。2017年2月开始组织“廉洁教育送上门”活动，深入各大区和基地开展廉洁教育宣贯，受众合计约1,500人次，基本实现关键岗、敏感岗位和重点基地的全覆盖。公司还进一步落实经理人述职述廉工作，2017年度共有352名经理人递交述廉报告。

公司致力于维护良好的企业管治，强调问责精神及高度透明度，制定了《举报政策》并通过公司网站对外发布，鼓励员工及与公司有往来者（如客户、承办商、供应商、债权人、债务人等）对公司内的不当行为作出举报。同时，持续畅通来电、来访、网络等举报渠道，坚持“有权必有责、有责要担当、失责必追究”，对违纪违规问题严肃查处。

CR Cement always places strong emphasis on and continuously strengthens the work for integrity cultivation and probity education. We organized group discussions on integrity in February and November 2017 respectively with a total of 246 promoted or relocated managers in attendance. In February 2017, we organized the "Door-to-Door Delivery of Integrity Education" events, conducting in-depth integrity education in all major regions and production plants with a total of approximately 1,500 participants, which basically achieved full coverage of key positions, sensitive positions and key production plants. We also further implemented the integrity report work of managers. In 2017, a total of 352 managers submitted their integrity reports.

We are committed to maintaining good corporate governance with an emphasis on the spirit of accountability and a high level of transparency. We formulated the

246名晋升或调整  
职务的经理人参与集  
体廉政谈话

246 promoted  
or relocated  
managers in  
attendance

组织“廉洁教育送  
上门”活动，受众合  
计约1,500人次

We organized the  
"Door-to-Door  
Delivery of Integrity  
Education" events,  
conducting in-  
depth integrity  
education in all  
major regions  
and production  
plants with a total  
of approximately  
1,500  
participants

2017年度共有  
352名经理人递交  
述廉报告

In 2017, a total of  
352 managers  
submitted their  
integrity reports

Whistleblowing Policy and published it on the Company's website to encourage employees and parties who deal with us (for example, customers, contractors, suppliers, creditors and debtors) to report any misconducts within the Company. At the same time, we maintain smooth channels of whistle-blowing including telephone, visits and the internet. We would take all non-compliance issues seriously in our investigations on the principle that "power comes with responsibility, responsibility comes with commitment, and any default must be investigated".

集体廉政谈话

Group discussion on integrity

2017年11月28日，华润水泥在广州华润水泥学院组织召开了年度第二次集体廉政谈话。

总裁纪友红作了专题报告，全面阐述了反腐败斗争最新形势，回顾了华润水泥2017年廉政建设工作成果，对今后工作提出了新的要求。

On 28 November 2017, we organized the second annual group discussion on integrity at China Resources Cement College in Guangzhou.

Our CEO, Mr. Ji Youhong, delivered a special speech to elaborate on the latest status of our anti-corruption performance, review the performance of our integrity cultivation work in 2017, and made new requirements for future work.



(五) 悉心关爱员工 / Care for Employees

华润水泥为保障员工工作与生活平衡，开展了多种文体活动，丰富员工业余生活；为了使员工感受到家的温暖，积极创新每月生日会主题和形式，包括组织美诗美文朗读会、纪念屈原诗朗诵、古筝和小提琴欣赏、草地生日会等形式多样的生日会活动。

To ensure work-life balance for employees, we launched various recreational and sports activities which enriches employees' leisure lives. To make employees feel the warmth at home, we have been innovative in creating a wide variety of themes and forms of the monthly birthday parties, such as organizing poetry and article reading club, poetry reading in memory of Qu Yuan, Chinese zither and violin concerts, and lawn birthday parties.



国际妇女节花艺活动  
Floral arrangement activity on International Women's Day



美诗美文朗读会  
Poetry and article reading club



重阳节登山活动  
Hiking at Double-Ninth Festival



员工家庭日游园  
Park-tour for employees' family day



户外拓展活动  
Outward bound activity



华润深圳南山半程马拉松赛  
China Resources Group Shenzhen Nanshan half marathon

# 润心为您

第五章 安全生产  
CHAPTER V. PRODUCTION SAFETY

华润水泥严格遵守《中华人民共和国安全生产法》，持续开展安全生产标准化建设，不断夯实基础管理、创新管理模式，提升本质安全和总体安全管理水平。以完善管理体系、落实高风险作业管控、加大相关方安全管理为抓手，通过开展帮扶指导、监督检查、培训和文化实践及责任考核等活动推进公司安全发展、持续发展，实现利润之上的追求；同时不断加强安全风险管控，通过管理及技术手段防范安全风险。

CR Cement strictly abides by the "Production Safety Law of the People's Republic of China", continuously implements the standardization of production safety, and constantly consolidates foundational management and innovative management models, for improving the intrinsic safety and overall safety management level. By virtue of improving management system, implementing management control over high-risk operation and enhancing the safety management of stakeholders, we promote safe and sustainable development of the Company as well as pursuit beyond profits through activities such as assistance guidance, supervision, inspection, training, cultural practices and responsibility assessment. In the meantime, we constantly strengthen our safety risk management and control for achieving prevention of safety risks through management and technology.

### (一) 坚守安全文化 / Upholding Safety Culture

#### 践行以人为本的安全愿景和理念

#### Put the People-Oriented Safety Vision and Philosophy into Practice

健康安全愿景 Vision of Safety and Health	健康安全理念 Philosophy of Safety and Health	健康安全方针 Policy of Safety and Health
平安华润，幸福家园。 Safe China Resources, Blissful Home	以人为本，安全发展，一切事故都是可以预防的。 People-oriented and safety development; all accidents are preventable	安全第一、预防为主、综合治理； Safety first, with a focus on prevention and composite treatment
创建有华润特色的价值创造型安全管理体系，营造平安华润； Construction of a value-creation type of safety management system with distinctive characteristics of China Resources and a safe working environment in China Resources 关注员工的安全与健康，使华润水泥成为平安幸福的家园。 Care for employees' safety and health, making CR Cement a safe and blissful home	不以牺牲员工健康和生命来换取企业发展和经济效益； Never pursue business development and economic benefits to the detriment of employees' health and lives 不以经济效益来掩盖安全生产管理方面存在的问题。 Never compromise issues of safety production management for economic benefits	遵纪守法、科学管理、持续改进。 Compliance with laws and regulations, scientific management, and continuous improvement

## (二) 完善安全体系 / Improving Safety System

### · 具有华润水泥特色的安全管理制度体系 / CR Cement-featured safety management system

华润水泥持续完善管理体系，在《华润水泥管理手册》EHS（环境、健康、安全）管理篇的基础上，通过分析安全管理的薄弱环节，针对性建立制度标准。

公司不断完善安全生产相关的规章制度。2017年制定了《华润水泥控股有限公司岗位EHS责任制度》《华润水泥控股有限公司EHS事件责任追究条例（2017版）》《华润水泥控股有限公司职业健康管理规定》《华润水泥控股有限公司高处作业安全管理规定》《安全生产事故现场应急处置方案（二）》五个制度规程，进一步完善安全生产管理体系。

CR Cement continuously improves the management system based on the EHS (Environment, Health, Safety) Management Section in the "Management Manual of CR Cement" and establishes targeted systems and standards after analysis on the loopholes of safety management.

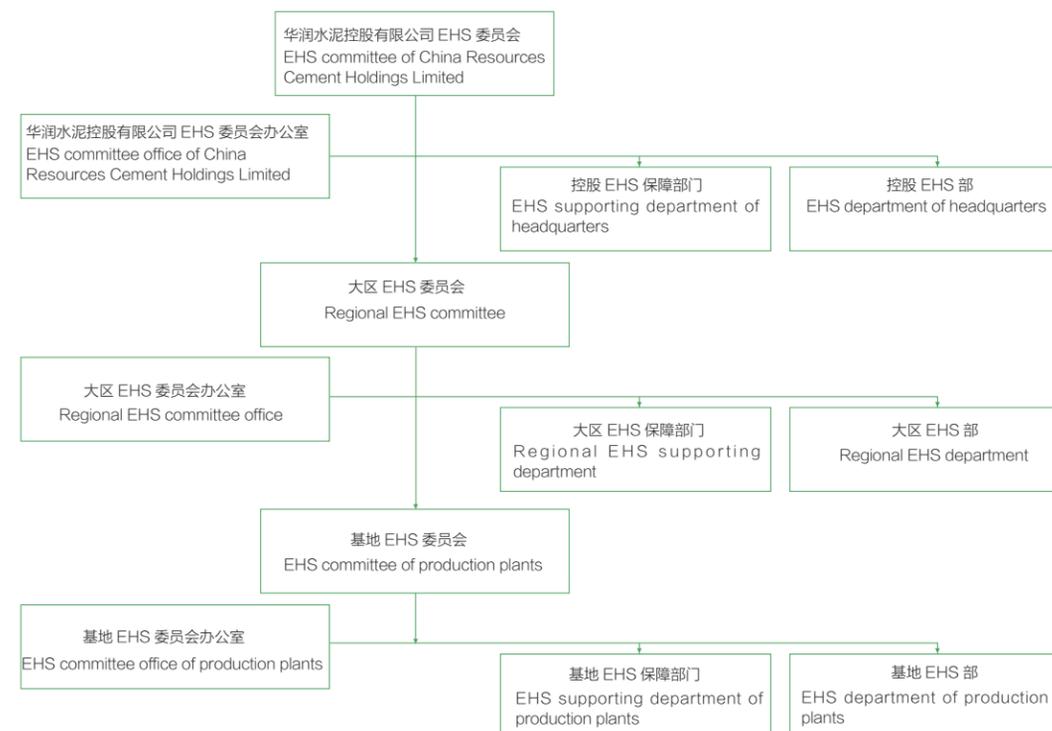
The Company continuously improves relevant production safety regulations. In 2017, 5 systems and regulations were promulgated in 2017, namely, "EHS Accountability System for EHS Positions", "Regulations on Accountability of EHS Incidents (2017 Edition)", "Regulations of Occupational Health Management", "Regulations on the Safety Management of Operations at Height", and "On-site Contingency Plan for Production Safety Accidents (II)", further improving our production safety management system.

### · 安全生产管理架构 / Management structure of production safety

华润水泥设有EHS管理委员会，由总裁担任委员会主任。“控股—大区—基地”三级管控，安全生产管理架构层层深入，其中基地EHS部门由基地负责人直接管理。2017年，公司共有专职安全管理人员205人。

CR Cement maintains an EHS management committee which is chaired by the CEO. The management structure of production safety features with three tiers including headquarters, major regions and production plants, EHS department of a production plant is directly managed by the person in charge of that production plant. In 2017, the Company had a total of 205 specialised safety management staff.

华润水泥EHS组织体系 / EHS organizational system of CR Cement



公司EHS组织体系执行“三级管控”原则，由控股、大区、基地的EHS组织机构组成；各级组织的EHS组织机构包括本单位EHS委员会、EHS监督管理部门和EHS保障部门。

The EHS organization system of the Company follows the principle of "three-tiered management and control", which consists of EHS organizations in the headquarters, major regions and production plants. EHS organizations at each level include EHS committee, EHS supervision and management department and EHS supporting department.



### · 安全业绩考核落地 / Implementation of safety performance assessment

华润水泥根据集团安全生产责任书要求制定了“安全生产目标”一包括死亡率、重伤事故、确诊职业病、千人伤害率等目标，并通过签署责任书进行考核。

2017年1月，公司根据2016年签订的EHS责任书进行考核，将结果作为安全系数纳入年度业绩合同，推动安全业绩考核落地；2017年初，公司总裁分别与大区负责人、部室负责人签署了《2017年EHS责任书》。

华润水泥EHS责任书考核实行系数制，考核大区负责人、部室负责人和大区安全环保负责人等。各大区、基地也层层签订责任书，执行责任全员分解，落实“一岗双责”的要求。

According to the "Production Safety Accountability Statement of the Group", we stipulate "production safety goals", including fatalities rate, serious injuries, confirmed occupational diseases and rate of injuries per one thousand people, which are subject to regular assessments.

In January 2017, an assessment was conducted based on the EHS accountability statement entered into in 2016. The results were included in the annual performance contract as safety coefficients to promote implementation of safety performance assessment. In early 2017, the CEO entered into "2017 EHS Accountability Statement" with persons in charge of regional offices and departments.

CR Cement EHS Accountability Statement adopts the coefficient system in assessing persons in charge of major regions, departments and regional EHS offices. All major regions and production plants also entered into accountability statements at each level such that the implementation responsibilities are divided among all staff and the requirement of "one post with dual responsibilities" is satisfied.

### · 安全生产水平不断升级 / Constantly upgrading our production safety level

华润水泥持续开展安全生产标准化一级企业建设，继续夯实基础管理，增强设备设施本质安全防护设施，有效预防安全事故，推进班组建设和岗位达标，促进自我安全行为习惯的养成；组织开展安全标准化体系运行外部审计（中国建材检验认证集团，简称CTC），不断固化创建成果并持续改进。

同时，通过安全生产一级标准化企业建设，提升整体安全管理水平和影响力，其中华润水泥（田阳）有限公司获中国安全生产协会授予的“2017年全国安全文化建设示范企业”称号。

CR Cement continuously carries out the construction of first-class enterprise in terms of production safety standardization. We keep reinforcing foundational management, enhance intrinsic safety protection facilities, effectively prevent safety accidents, promote team building and satisfaction of job requirements, and build the habit of self safety practice. Besides, we organise external audits on safety standardization system by China Building Material Test & Certification Group Company Limited ("CTC") for constant consolidation of our achievements and continuous improvement.



At the same time, CR Cement improves the overall safety management level and influence through construction of first-class standardized enterprise in terms of production safety. China Resources Cement (Tianyang) Limited was honoured "Pilot Corporate 2017 for National Safety Culture Building" by the Association of Work Safety of China.

华润水泥安全生产标准化成果 / Results of Production Safety Standardization of CR Cement

截至 2018 年 3 月，旗下有 25 家水泥基地通过安全生产标准化一级企业评审

As of March 2018, a total of 25 cement production plants have passed the assessment as the First-Class Enterprise in Production Safety Standardization.

安全生产标准化一级企业创建评审 The assessment as construction of the First-Class Enterprise in Production Safety Standardization	安全生产标准化一级企业复审 The review as the First-Class Enterprise in Production Safety Standardization	2017 年全国安全文化建设示范企业 Pilot Corporate 2017 for National Safety Culture Building	安全生产标准化示范企业 The Pilot Corporate in Production Safety Standardization
华润水泥（金沙）有限公司、华润水泥（罗定）有限公司 China Resources Cement (Jinsha) Limited, China Resources Cement (Luoding) Limited	华润水泥（贵港）有限公司、华润水泥（阳春）有限公司、华润水泥（武宣）有限公司等 11 家水泥基地 11 cement production plants including China Resources Cement (Guigang) Limited, China Resources Cement (Yangchun) Limited and China Resources Cement (Wuxuan) Limited	华润水泥（田阳）有限公司 China Resources Cement (Tianyang) Limited	华润水泥（封开）有限公司 China Resources Cement (Fengkai) Limited

2017 年华润水泥提升全公司安全生产水平实践

Practice on Improving the Production Safety Level of CR Cement in 2017

找准薄弱环节开展指导 / Providing guidance on identification of weaknesses

- 对基地开展安全调研检查和帮扶指导工作，2017 年对 12 家水泥基地矿山开展调研指导；
- 对部分基地进行 EHS 标杆基地创建辅导；
- 开展安全标准化创建指导；
- 对 27 个混凝土基地进行交通安全检查和指导。
- CR Cement carried out safety investigations, assistance and guidance in production plants. In 2017, we conducted research and provided guidance on 12 cement mines;
- Providing guidance for EHS benchmark setting of some production plants;
- Developing guidelines on establishment of safety standards;
- EHS department of controlling companies conducted traffic safety inspections and provide guidance for 27 concrete production plants.

落实监督检查工作 / Implementing supervision and inspection

- 组织多种形式的安全监督检查；
- 采取突击检查形式对 5 家水泥、8 家混凝土基地开展了半年度专项检查，检查覆盖矿山、交通、危化品等内容；
- 对 12 家水泥基地的检维修作业现场进行督查；
- 对 4 家基地的协同处置项目建设开展专项检查；
- 对福建大区 8 个矿山排土场进行专项检查。
- CR Cement organised various forms of safety supervision and inspection in 2017:
- A semi-annual special inspection was conducted on 5 cement production plants and 8 concrete production plants on ad hoc basis, covering cave mines, traffic and hazardous chemicals;
- Examining the inspection, repairs and maintenance work site of 12 cement production plants;
- Carrying out special inspections on the construction of co-processing projects at 4 production plants;
- Conducting special inspection on the dumping sites of 8 cave mines in Fujian region.

加强相关方监管 / Strengthening supervision over related parties

- 2017 年，华润水泥加大相关方安全管理；
- 严格执行相关方资质准入审查、落实过程管控和后期考核，并执行“黑名单”机制；
- 先后对 14 家水泥基地的相关方管理情况进行了检查，对 4 家基地相关方清库的高风险作业进行专项督查。
- In 2017, CR Cement enhanced safety management of related parties;
- Strict implementation on entry review regarding relevant party qualifications, implementation of process control and post-assessment, and "black list" mechanism.
- Inspecting the management of related parties in 14 cement production plants and conducting special inspections on risky cleaning operations of related parties in 4 production plants.

（三）管控安全风险 / Managing and Controlling Safety Risks

推进“岗位安全告知卡”落实风险识别和安全防范

Promoting "Safety Notice Card of Job Position" to implement risk identification and safety precautions

2017 年公司根据事故原因分析，提出了推进员工编制学习“岗位安全告知卡”的工作思路，让每位员工通过参与编制和制作本岗位的安全告知卡，熟悉岗位上的作业安全风险和安全措施。同时，让员工在“岗位安全告知卡”上签名，并组织培训学习，使其真正熟知岗位安全风险，承诺未落实措施不开展作业，杜绝违规、违章行为。

In 2017, based on the analysis on the causes of accidents, we proposed to encourage the staff to prepare and study the "Safety Notice Cards of Job Positions". Through the preparation and production of safety notice cards of their own job positions, every staff familiarised themselves with the operational safety risks and safety measures at their job positions. At the same time, by signing on the "Safety Notice Cards of Job Positions" and attending the relevant training organised by the Company, the staff would fully understand the safety risks at their job positions and undertake not to commence work without implementing safety measures, thereby eliminating violations of regulations and policies.

## 推进包装发运粉尘治理和机械清库工作

### Promote dust management in packaging and delivery, and mechanical clearing

#### · 粉尘治理工作 / Dust control

2017年, 华润水泥(金沙)有限公司根据公司要求落实包装、装车粉尘系统治理, 保护岗位人员的身心健康、落实职业健康工作要求。金沙公司对1#水泥装车机移动收尘系统进行技改: 包括包装机、接风管、正袋机、转包点、收尘器方案、软管连接、装车收尘罩技改等, 使收尘效果不断改善。

经第三方机构贵州大学化工及环境研究测试中心检测, 粉尘总限值以及呼吸限制均满足国家职业健康对包装发运粉尘排放要求。

In 2017, in order to protect physical and mental health of our staff and fulfill the work requirements for occupational health, China Resources Cement (Jinsha) Limited implemented dust control on packaging and loading according to the Company's requirements. In order to constantly improve the effectiveness of dust collection, Jinsha Company made technological reforms on the mobile dust collection system of 1# cement loading machine, including packaging machines, air ducts, bag machines, points for changing packages, dust collector proposals, hose connections and technological reforms on dust collection hoods of loading machines.

According to the tests conducted by a third-party organization, namely Research and Testing Centre for Chemical Engineering and Environment of Guizhou University, total dust limit and respiratory restriction met the dust emission requirements of national occupational health on packaging and delivery.

#### · 机械清库工作 / Mechanical clearing work

为管控水泥清库工作的安全风险, 避免人员进入高风险区域, 降低清库风险。龙岩水泥对水泥库进行机械清库改造, 替代人工清库。清库作业先使用磁力声能技术将水泥挂壁粉料进行清理, 再使用空气炮振打库壁结料使其松动掉落, 消除库壁挂料垮塌可能造成的风险。

In order to manage and control the safety risks of clearing work at cement silos, staff are prevented from entering high-risk areas to reduce the risks of silo clearing. Longyan Company launched reforms on mechanical silo clearing by replacing manual clearing. During silo clearing operation, we firstly use magnetic sound energy technology to clear the powders stuck on the walls, and then shake and hit the silo walls with air cannon to loosen and drop the cement, thus eliminating the potential risk of collapse of materials hung on walls.

## (四) 树立安全意识 / Establishing Safety Awareness

#### · 安全培训 / Safety training

华润水泥高度重视安全培训工作, 控股总部及下属大区、基地均定期制定安全生产培训计划, 并考核具体培训落实情况。

2017年制作实战应急演练培训视频(10个), 为基地提供应急处置演练的培训资源; 年内, 公司举办了生产、矿山、交通等安全专项培训班, 131人参加了培训; 先后组织参加外部培训活动7次, 共有278人参加。

CR Cement attaches great importance to safety training. The holding headquarters and its subordinate regions and production plants regularly formulate production safety training plans and assess the implementation of specific training.

In 2017, 10 training videos of practical emergency drills were produced to provide training resources for emergency drills in production plants. During the year, special training classes covering safety on production, mining and transportation were conducted, with 131 participants in attendance. 7 training activities organized by external parties and 278 people participated.



应急演练培训视频拍摄  
Shooting of training videos for emergency drills



矿山安全培训  
Safety Training for Mines

## 安全生产培训绩效 / Achievements of Production Safety Training

员工和相关方人员安全培训 208,744 人次;  
培训时间达 382,900 学时;  
208,744 staff from the Company and our counterparties participated in our safety training for 382,900 hours in total.

其中, 组织员工安全培训 182,207 人次, 培训时间 336,800 学时;  
Among which, attendance of staff safety training reached 182,207 with an aggregate training duration of 336,800 hours.

组织相关方人员培训 26,537 人次, 培训时间 46,100 学时。  
26,537 staff of counterparties have been trained for 46,100 hours in total.

2017年华润水泥完成《现场应急处置方案演练培训视频(二)》等10个视频制作;  
In 2017, CR Cement accomplished the production of 10 videos including "Training Video (II) of On-site Emergency Drill".

一套完整的安全培训链条:

应知应会的安全准则→水泥企业典型事故案例原因剖析和防范措施→事故防控失效的应急处置;

A complete chain of safety training:  
Acquiring knowledge and skills of safety rules → Analysis on the causes and precautions of typical accidents in cement companies through case study → Emergency handling in case of invalid prevention of accidents

目前制作完成安全教育培训视频51个。  
51 training videos on safety education have been produced so far.



2017年共开展应急演练

625次

12,400人参加

625 emergency drills with a total of 12,400 participations have been conducted in 2017.

#### 应急演练 / Emergency Drills

各基地生产部门以工段、班组为单位, 全面开展现场应急处置预案演练活动, 取得明显效果。全年共开展应急演练625次, 12,400人参加。

Production departments of each production plant fully launched on-site emergency drilling events by units of sections and groups, achieving significant results. 625 emergency drills with a total of 12,400 participants were conducted for the year.

福建大区开展氨水泄漏应急救援演练  
Emergency rescue drills of ammonium hydroxide leakage in Fujian Region

- 2017年6月29日，福建大区在华润水泥（龙岩雁石）有限公司组织开展氨水泄漏事故应急救援演练；
- 本次应急演练联合福建龙岩新罗区安监局、环保局三方联动开展，是突发安全和环境事件交叉处置的演练活动，共200多人参加了演练及观摩活动。
- On 29 June 2017, China Resources Cement (Longyan Yanshi) Limited organized and conducted emergency drills of ammonium hydroxide leakage in Fujian region;
- These emergency drills were jointly conducted by the safety supervision bureau and the environmental protection bureau of Xinluo District at Longyan City of Fujian Province, which were rehearsal activities combining safety and environmental incidents with over 200 people in participation and observation;

上思水泥开展矿山溶洞事故现场处置演练  
On-site drills of handling accidents at mines and caves at cement production plant in Shangsi

- 2017年5月19日，华润水泥（上思）有限公司在采矿区现场开展“矿山溶洞事故现场处置方案”应急演练，该演练活动和一般演练活动不同，防城港市领导把此次演练作为市非煤矿山应急救援演练的专项观摩学习项目；
- 市安监局组织辖区各市、区、县安监局的相关负责人及非煤矿山企业安全管理负责人共46人莅临现场观摩演练活动。
- On 19 May 2017, China Resources Cement (Shangsi) Limited conducted on-site emergency drills at its mining area based on the "on-site handling proposal of incidents at mines and caves". Different from ordinary drills, these drills were regarded by the leaders of Fangchenggang City as a special project of observation and learning for emergency drills at non-coal mines of the City;
- The municipal safety supervision bureau arranged a total of 46 visitors to observe the on-site drills, including relevant persons in charge of the safety supervision bureaus of various cities, districts, and counties within its jurisdiction and persons in charge of safety management of non-coal mining enterprises.

红水河水泥开展矿山坍塌事故应急救援演练  
Emergency rescue drills of mine collapse at cement production plant in Hongshuihe

- 2017年7月25日，广西华润红水河水泥有限公司本着“实战从演练出发，演练指导实战”的安全理念，以溶洞发生坍塌为事故假想，开展矿山坍塌事故应急救援演练；
- 演练中，各应急小组在公司应急救援指挥部的领导下，迅速采取报警、现场警戒、人员设备清点、边坡勘察、信息沟通、抢救伤员、现场抢险等应急措施，按要求顺利完成了演练任务。
- On 25 July 2017, Guangxi China Resources Hongshuihe Cement Co., Ltd. conducted emergency rescue drills of mine collapse based on the hypothetical incident of cave collapse by adhering to the safety philosophy of "practices starting from drills, drills guiding practices";
- Under the leadership of the Company's emergency rescue headquarters, each emergency team took immediate contingency measures during the drills, such as calling the police, on-site cordon, counting staff and stock-taking equipment, slope survey, information communication, rescuing the injured and on-site rescue. Drilling tasks were completed smoothly in accordance with the requirements;

- 2017年8月30日，华润水泥（平南）有限公司组织开展煤磨火灾事件应急处理与救援专项演练，共25人参加演练活动，部门各工段、班组人员40多人进行观摩。
- On 30 August 2017, China Resources Cement (Pingnan) Limited conducted special emergency drills on handling and rescuing fire incidents at coal mill with a total of 25 participants and over 40 observers including staff from each sections and groups of the department;

平南水泥开展煤磨火灾应急处置演练  
Emergency drills of fire accidents at coal mills of cement production plant in Pingnan

· **多元化专项活动 / Diversified special events**

华润水泥积极组织开展各类安全活动，各大区、基地组织开展安全开放日、交通安全宣传周等活动近百场，安全活动有效推动全员参与安全管理、提升企业安全文化，将安全管理深入员工、家庭及社会。

CR Cement proactively organized various types of safety events. Approximately 100 events including safety open day and road safety week were launched at each major region and production plant. Safety events have effectively encouraged all-staff participation in safety management, improved corporate safety culture, and infiltrated safety management in staff, their families and the society.

EHS 知识竞赛  
EHS Quiz Competition

- 华润水泥控股总部在华润水泥（封开）有限公司举办了第二届 EHS 知识竞赛，共有 11 支队伍参赛，安全征文环节还收到投稿 480 篇。
- 各大区、基地举办知识竞赛 77 场次，参加竞赛人数 3,767 人次。
- The headquarters of China Resources Cement Holdings Limited held the second EHS Quiz Competition at China Resources Cement (Fengkai) Limited, with 11 teams in participation. In addition, 480 entries were contributed in the essay competition on safety.
- 77 quiz competitions were held at major regions and production plants with

安全生产月  
Production Safety Month

- 开展安全活动项目 18 项，62,000 多人参加了安全座谈会、安全开放日、安全微视频拍摄评比、EHS 知识竞赛等活动。
- 18 safety events were launched. Patronage in participation of our safety seminars, safety open days, and safety micro video shooting competition and EHS quiz competitions were over 62,000.

外部技术交流和培训  
External Exchange and Training on Technology

- 华润水泥控股总裁、安全环保官、大区总经理及 EHS 管理人员 12 人参加安监总局在北京举办的“中央企业主要负责人和安全管理培训”并通过考核获取培训合格证；
- 控股 EHS 部、大区基地安全管理人员参加由中国建材检验认证集团股份有限公司等单位主办的第四届国内外水泥行业安全生产技术交流会，并撰写安全管理论文，其中两篇论文获得了三等奖。
- 组织基地负责人、安全经理 20 余人参加国家安全生产协会在北京举办的安全生产标准化知识培训；
- 12 participants, including the CEO, Chief Safety and Environmental Protection Officer, general managers of regional offices and EHS managerial staff from CR Cement attended the "training class for major persons-in-charge and safety managerial staff of state-owned enterprises" held by State Administration of Work Safety in Beijing. They all passed the examination and obtained passing certificates of the training;
- Safety managerial staff from the EHS Department of headquarters and production plants of major regions attended the Fourth Seminar on Production Safety Technology of Domestic and Foreign Cement Industries sponsored by China Building Material Test & Certification Group Company Limited, and prepared theses on safety management, two of which won the third prize.
- Over 20 participants, including general managers and safety managers, attended the training on production safety standardization held by China Association of Work Safety in Beijing;

参加行业标准研  
讨修订工作  
Participation  
in Discussions  
and Revisions  
of Industry  
Standards

- 2017年8月，华润水泥专业人员应邀参加了中国建材检验认证集团组织的《安全生产标准化实施指南》研讨和编制工作；
- 2017年11月，华润水泥专业人员应邀参加了中国建材检验认证集团组织的《水泥企业安全生产标准化评定标准》研讨和修订工作。
- In August 2017, professionals from CR Cement were invited to participate in the discussion and preparation of the "Guide on Implementation of Production Safety Standardization" organized by China Building Material Test & Certification Group Company Limited;
- In November 2017, professionals from CR Cement were invited to participate in the discussion and revision of the "Evaluation Criteria for Production Safety Standardization of Cement Enterprises" organized by China Building Material Test & Certification Group Company Limited.



安全开放日  
Safety Open Day



知识竞赛  
Quiz Competition



参加中国安全生产监督管理局组织的央企安全管理培训班  
Attend the Safety Management Training for Central State-owned Enterprises organized by State Administration of Work Safety of China

(五) 员工安全与健康 / Safety and Health of Staff

· 职业健康保障 / **Guaranteeing occupational health**

华润水泥严格遵守《中华人民共和国职业病防治法》，针对性制定了《职业健康管理规定》。OHSAS18000 职业健康安全管理体系覆盖率 100%；员工健康体检率 100%。

CR Cement strictly abides by the "Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases" and formulated the "Management Regulations of Occupational Health" accordingly.

100% coverage rate of OHSAS18000 Occupational Health and Safety Management System;

100% coverage rate of staff body checks.

· 全员大健康活动 / **All-staff health events**

2017年，华润水泥积极组织开展形式多样的全员大健康活动，组织员工和家属参与家庭日、健康徒步等活动，组织开展“润丰杯”篮球赛及羽毛球比赛、开展办公室工间操等活动，营造了良好的公司氛围，增强了团队凝聚力，倡导健康的生活理念。

In 2017, CR Cement actively organized a wide variety of health events for all our staff. We organised our staff and their family members to participate in activities such as Family Day and healthy hiking. We held activities such as "Runfeng Cup" basketball games, badminton competitions as well as exercises at work, thereby creating a good corporate atmosphere which enhanced team cohesion while advocating concepts of healthy life.

员工健康体检率  
**100%**  
100% coverage  
rate of staff body  
checks



华润水泥深港总部员工家庭日暨润丰品牌宣传徒步活动  
Family day with "Runfeng" brand promotion hiking event for staff from headquarters of CR Cement in Shenzhen and Hong Kong



“润丰杯” 第一届篮球赛决赛  
Final of the First "Runfeng Cup" Basketball Game



春季员工健康日暨润丰水泥品牌宣传徒步活动  
Hiking event for staff health day in spring with Runfeng cement brand promotion



南宁共享服务中心员工徒步活动  
Hiking event for staff from the shared service centre in Nanning

# 丰业为家

## 第六章 绿色发展

### CHAPTER VI. GREEN DEVELOPMENT

华润水泥积极履行企业公民的环境责任，大力推行绿色生产，降低污染物排放，严格遵循《环境保护法》《大气污染防治法》《水污染防治法》以及《固体废物污染环境防治法》等法律法规。根据国家、行业、地方法律法规要求，开展大气、废水以及噪声等污染防治工作，所有生产线的污染物排放值达到或优于国家、地方污染物标准限值。此外，华润水泥还大力推动资源综合利用，致力于资源节约型、环境友好型企业建设。

CR Cement proactively fulfills its environmental responsibilities as a corporate citizen, vigorously implements green production, reduces emission of pollutants and strictly complies with laws and regulations including the "Environmental Protection Law", the "Law on the Prevention and Control of Atmospheric Pollution", the "Law on the Prevention and Control of Water Pollution" and the "Laws on the Prevention and Control of Environmental Pollution by Solid Waste". According to the requirements of national, industrial and local laws and regulations, the Company carried out prevention and control on pollutants such as exhaust gas, sewage and noise. The pollutant emission levels at all production lines met or were better than the national and local standard limits of pollutant emission. In addition, CR Cement strongly promoted composite utilization of resources and was committed to building a resource-saving and environment-friendly enterprise.

#### （一）立足绿色管理 / Green Management Positioning



华润水泥在《华润水泥管理手册》中专设“EHS篇”，严格执行及监控环境管理体系，尽力发掘提升机会，紧贴市场需求，确保可持续发展理念有效落实，保持华润水泥在行业内的领先地位及声誉。

2017年，公司不断推动环境保护和节能减排技改、运营工作及水泥窑协同处置废弃物项目工作。得益于完善的管理架构，公司所有熟料生产线和水泥粉磨站均取得了ISO14001环境管理体系认证及清洁生产审核认证，保障环境管理体系工作行之有效。此外，2017年，华润水泥还建立了一套系统完整的星级管理评价体系，基于行业对标或内部对标结果设定目标值，对环境、健康和安全等进行多维度、全面评价，以评定星级，进而促进管理提升，推动发展。

The specific "EHS chapter" in the "Management Manual of CR Cement" requires CR Cement to strictly enforce and monitor the environmental management system. We use our best endeavours to explore opportunities for improvement and keep abreast of market demand to ensure effective implementation of the concept of sustainable development and maintain a leading position and reputation of CR Cement in the industry.

In 2017, the Company continued to promote technological transformation and operation of environmental protection, energy saving and emission reduction, as well as waste co-processing projects by use of cement kilns. Thanks to the sound management structure, all clinker production lines and cement grinding stations of the Company achieved ISO14001 environmental management system certification and clean production audit certification, which secured that our environmental management systems work effectively. In addition, in 2017, CR Cement also established a complete and systematic star-rating management system, setting target values based on industry benchmarks or internal benchmarks results for multi-dimensional and comprehensive evaluations on environment, health and safety in order to assess the star rating and promote management upgrade to drive for development.

## (二) 落实达标排放 / Compliance with Emission Standards

华润水泥按照《水泥工业大气污染物排放标准》等国家、地方大气污染物、水污染物环境保护规范及环保方面的各项法律法规管控污染物排放。

公司持续增加技术研发资金，特别针对在水泥生产过程中的大气污染物如氮氧化物、二氧化硫、粉尘等，全力推动脱硝、脱硫、除尘设备改造，以先进的工艺技术减轻生产活动对环境可能造成的影响，确保各类污染物达标排放。2017 年华润水泥主要排放口二氧化硫排放量 2,726 吨、颗粒物排放量 2,472 吨、氮氧化物排放量 41,513 吨。

另外，华润水泥还升级了污染物排放监控平台。目前在水泥基地的窑头、窑尾排放口均安装了在线监测系统，并与地方环境监督部门联网，对污染物排放实时监控。在此基础上，利用信息技术将所属基地污染物排放数据采集到总部，通过污染物排放监控平台实现总部对各基地污染物排放指标的实时监控、主动预警。

CR Cement controls emission of pollutants in accordance with the national and local environmental laws and regulations on air pollutants and water pollutants including "Emission Standards of Air Pollutants for Cement Industry".

The Company continuously increases the funding for technological research and development for fully promoting transformation of equipment which especially removes air pollutants such as nitrogen oxides, sulphur dioxide and particulate matters generated in the process of cement production. By applying advanced technology, we minimize potential environmental impacts caused by production activities and ensure compliance with emission standards for all types of pollutants. In 2017, the major discharge points of CR Cement emitted 2,726 tons of SO<sub>2</sub>, 2,472 tons of particulate matters and 41,513 tons of NO<sub>x</sub>.

In addition, CR Cement upgraded the monitor platform for pollutant emission. At present, online monitor systems have been installed at the discharge points of the front and the rear of cement kilns and connected to the local environmental supervision department for real-time monitor and control of emission levels of pollutants. Data on pollutants emission is collected from our production plants and sent to headquarters by utilizing information technology. Headquarters managed to implement real-time monitor and control of pollutant emission indicators of each production plants through the monitor platform for pollutant emission, and proactively issue pre-warning.

### 全面建成配套脱硝系统

#### Comprehensive construction of denitration systems

- 华润水泥所有生产线均建成配置 SNCR（选择性非催化还原）脱硝系统，在国内各大水泥集团中率先实现所有熟料生产线脱硝系统全覆盖，实现了氮氧化物末端减排的目标。
- All production lines of CR Cement had been equipped with SNCR (Selective Non-Catalytic Reduction) denitration systems. We are at a leading position among various domestic cement groups in achieving full coverage of denitration systems at all clinker production lines and the objective of emission reduction of nitrogen oxides.
- 同时组织团队探索水泥窑分级燃烧技术，从源头降低氮氧化物产生量，解决脱硝系统运行成本较高和能源浪费问题，确保水泥企业能够长期有效地满足氮氧化物减排的需求。
- Meanwhile, the Company organized teams to explore multi-tiered combustion technology at cement kilns and reduce the volume of nitrogen oxides generated from the sources, in order to resolve the issues of high operational cost of denitration systems and energy wastage and ensure the cement enterprises' requirements for long-term and effective emission reduction of nitrogen oxides.

2017 年华润水泥主要排放口

二氧化硫排放量

2,726 吨

颗粒物排放量

2,472 吨

氮氧化物排放量

41,513 吨

In 2017, the major discharge points of CR Cement emitted

2,726 tons of

SO<sub>2</sub>, 2,472 tons

of particulate matters

and 41,513 tons

of NO<sub>x</sub>.



### 创新脱硫改造

#### Innovative transformation of desulphurization systems

- 对生产线进行复合脱硫技术改造，系统脱硫效率可达 98%，二氧化硫排放浓度可控制在 50mg/Nm<sup>3</sup> 以下，远低于国家排放标准限值。
- Upon the technological transformation of composite desulphurization systems at our production lines, the desulphurization efficiency of the system could reach 98% and emission density of sulphur dioxide could be controlled within 50mg/Nm<sup>3</sup>, which is far lower than the national emission standard limits.
- 截至 2017 年 12 月华润水泥共完成 9 套烟气脱硫系统的建设，确保二氧化硫达标排放，居业内领先水平。
- As of the end of December 2017, CR Cement had completed the construction a total of 9 sets of exhaust gas desulphurization systems in order to ensure the emission level of sulphur dioxide is in compliance with standards and at a leading position in the industry.

### 实施“电改袋”工程

#### Project for "replacing the static electricity dust collection systems with bag filter systems"

- 袋收尘与电收尘相比，其排放浓度更低，运行稳定性更高。
- Compared to static electricity dust collection systems, bag filter dust collection systems enable dust emission of lower concentrations and higher operational stability.
- 2017 年 6 月底，公司实现所有窑头 / 窑尾收尘全部为袋式除尘器，累计完成 65 台除尘器的技改，改造后收尘效率可达 99.99%，粉尘排放浓度优于国家标准，稳定性得到有力保证。目前，华润水泥所有生产线的颗粒物排放浓度居业内领先水平。
- By the end of June 2017, the Company had equipped the front/rear of all cement kilns with bag filter dust collection systems and completed the technological upgrade of 65 dust collection systems in total. Upon the upgrade, the dust collection efficiency reached 99.99% and the concentration of particulate matters emitted is better than the national emission standard with secured stability. Currently, the emission concentrations of particulate matters of all the production lines of CR Cement are at a leading position in the industry.

### 绿色工厂示范企业

#### Pilot corporate with green factories

- 2017 年华润水泥（南宁）有限公司、华润水泥（田阳）有限公司获得国家工业和信息化部批准的第一批绿色工厂示范企业，华润水泥（鹤庆）有限公司获得云南省绿色制造示范单位。
- In 2017, China Resources Cement (Nanning) Limited and China Resources Cement (Tianyang) Limited were awarded the first batch of pilot corporates with "Green Factories" by the Ministry of Industry and Information Technology of China. China Resources Cement (Heqing) Limited was awarded the green manufacturing pilot corporate by Yunnan provincial government.

华润水泥长期以来高度重视水资源的保护工作，积极倡导节约用水、循环用水。所有生产线生活废水均配套生物化学深度水处理系统，处理后再进行厂内绿化或达标排放。余热发电系统及生产冷却水系统全部循环利用，无污水外排。

水泥生产过程中可消纳工业废弃物，如脱硫石膏、粉煤灰、铁尾矿等，有利于社会总体废弃物的减量化、无害化、资源化处置，对环境保护做出积极贡献。

熟料生产线在物料处理、输送过程中均采用全封闭式传送，物料装卸过程均在封闭的室内进行，同时采用密闭方式收集颗粒物。对各有组织排放的含尘废气均采用高效袋式除尘器进行除尘处理，颗粒物的排放浓度均优于《水泥工业大气污染物排放标准》（GB4915-2013）。除尘器收集的粉尘均返回原料、半成品、成品中再次利用，循环利用生产过程产生的废弃物。

CR Cement has always placed strong emphasis on protection of water resources and actively promotes conservation and recycling of water. Domestic wastewater from all production lines equipped with intensive biochemical wastewater treatment systems are treated, and used for gardening in the factories or discharged in compliance with standards. Water from heat recovery generators and cooling water systems are all recycled and no sewage is discharged.

Industrial waste such as de-sulphur gypsum, fly ash and iron ore tailings can be consumed in the cement production process, which is conducive to processing of aggregate wastes in the society in a mass-reducing, hazard-free and recyclable manner with positive contribution to environmental protection.

Our clinker production lines adopt totally sealed transmission during the processes of handling and conveying of materials. The processes of loading and unloading materials are carried out in a sealed indoor cell, and particulate matters are collected in a sealed condition at the same time. Highly effective bag filter systems have been adopted for dust collection at every component of production line which emits exhaust gas with dust. The concentration of particulate matters emitted is better than that of the "Emission Standards of Air Pollutants for Cement Industry" (GB4915-2013). Dust collected by dust collectors are recycled for raw materials, semi-finished products and finished products, and the wastes generated during production process are recycled.

#### 推动资源综合利用

Promoting composite utilization of resources

华润水泥长期研究和探索工业废渣在水泥生产中的应用，所处置的工业废渣包括脱硫石膏、磷石膏、粉煤灰、湿煤渣、炉底渣和矿渣等。目前，华润水泥的所有基地均能大量消纳工业废弃物，2017年共消纳工业废渣超过2,147万吨。

CR Cement has always been researching and exploring the application of industrial waste in cement production. Industrial waste processed includes de-sulphur gypsum, phosphogypsum, fly ash, wet coal slag, furnace slag and mineral slag. Currently, all cement production plants of CR Cement can consume a considerable amount of industrial waste. In 2017, over 21,470,000 tons of industrial waste had been consumed.

#### 矿山复绿行动

Ecological restoration to the mine

华润水泥确立了科学规划、合理开采、节约资源、促进人与自然和谐发展，建设绿色生态型、环境友好型矿山企业的工作思路。将矿山恢复纳入公司生产运营及长期发展规划，为转变单纯以消耗资源、破坏生态为代价的开发利用方式提供了现实途径。

公司矿区采用无废或少废工艺，基本无废水排放。废渣、夹石全部综合利用，实现废渣零排放，部分堆存含泥石料后期可全部搭配生产。在矿山开采结束后进行覆土，种上藤类植物，逐步恢复植被，使地表的植被覆盖率达到或基本接近矿山开发前的植被覆盖率，逐步恢复生态平衡。

2017年，华润水泥（贵港）有限公司、华润水泥（富川）有限公司、华润水泥（罗定）有限公司、合营公司广州市越堡水泥有限公司通过了省级绿色矿山的现场评审工作。

CR Cement has confirmed the approach of building a green ecological and environment-friendly mining enterprise through scientific planning, reasonable mining, resources conservation, promotion of harmonious development between human beings and the nature. Restoration of mine is included in production operations and long-term development plans of the Company, offering a practical solution to transforming from development and exploitation at the expense of simply consuming resources and destroying the ecology.

We adopt waste-free or less-waste technology at our mines with virtually no discharge of wastewater. In order to achieve zero discharge of waste residue, we compositely utilize all waste slag and stones, and some argillaceous aggregates stacked up could be completely mixed and used in production later on. After completion of mining, the soil shall be recovered by planting rattan plants for gradual restoration of vegetation such that the surface vegetation coverage rate reaches or is basically close to that prior to mining for restoration of ecological balance.

In 2017, China Resources Cement (Guigang) Limited, China Resources Cement (Fuchuan) Limited, China Resources Cement (Luoding) Limited, and our joint venture Guangzhou Heidelberg Yuexiu Cement Company Limited passed the on-site assessment of provincial-level green mines.

### （三）推动节能环保 / Promoting Energy Saving and Environmental Protection

#### · 环保技术研发及应用 / R&D and application of environmental protection technology

华润水泥一直努力提升研发水平及应用新环保技术，在节能、减排、管控等方向探索新的生产流程、策略和技术。

公司借鉴电力行业成熟的“石灰石-石膏湿法脱硫技术”，升级引进针对水泥行业特点的脱硫技术，研发出具有行业特色的湿法脱硫工艺。从2016年底开始，根据脱硫系统运行情况，升级引进复合脱硫技术。新复合脱硫技术的脱硫反应快且效率高，拥有工期短、建设、运行成本低等特点，有效控制二氧化硫排放强度，排放浓度进一步降低。

在协同处置技术方面，公司通过几年的探索与研究，充分借鉴欧洲、日本等发达国家固废处置经验，与国内、国外相关单位合作，开发出“机械生物法预处理+热盘炉焚烧”“污水厂内干化+水泥窑焚烧”“机械破碎搭配预处理+成浆泵送入窑焚烧”协同处置生活垃圾、城市污泥和工业危险废弃物的三大技术路线。据此将城市废弃物“无害化、减量化、资源化”处理，使企业、社区及环境实现共赢发展。

CR Cement has been striving to improve the R&D standards and apply new environmental protection technologies to explore new production processes, strategies and technologies in terms of energy saving, emission reduction, management and control.

With reference to the mature "Limestone - Gypsum Wet Desulphurisation Technology" in the power industry, the Company upgrades and introduces the desulphurisation technology by R&D of wet desulphurisation technology which caters the features of the cement industry. Since the end of 2016, we upgraded and introduced composite desulphurisation technology based on the operation of our desulphurisation systems.

The new composite desulphurisation technology is swift and highly efficient in desulphurisation, featuring with short construction period, low construction and operating costs, which effectively controls the emission intensity of sulphur dioxide and further reduces the emission concentration.

In terms of waste co-processing technology, through years of exploration and research and with reference to the experience of solid waste processing in developed countries such as Europe and Japan, the Company developed top three technological paths of "mechanical biological pre-treatment + HOTDISC incineration", "in-plant drying of sewage water + cement kiln incineration" and "pre-treatment with mechanical crushing + pumping slurry into kiln for incineration" in co-operation with domestic and international relevant organizations to co-process municipal waste, urban sludge and industrial hazardous waste. In this regard, municipal waste is treated in a "hazard-free, mass-reducing and recyclable" manner so that enterprises, communities and the environment achieve development with mutual gain.

#### · 节约能源消耗 / Reducing energy consumption

华润水泥建立了能源管理系统以及《节能减排监督管理》制度，对公司生产过程中所耗能源、所耗资源均计量统计，用于评估生产表现及找出可改善空间。2017年，华润水泥综合能源消费量为773.2万吨标煤，万元产值可比价综合能耗及万元增加值可比价综合能耗分别为3.03吨标煤/万元人民币及8.61吨标煤/万元人民币，指标持续改善。2017年，公司还持续推进能源节约工作，主要包括能源的运用、节约和循环利用，节能环保技术投资，减排技术改造、研发与创新等。

CR Cement established an energy management system and the policy "Supervision and Management of Energy Saving and Emission Reduction". All energy and resources consumed during the production process of the Company are measured for the assessment of production performance and identification of room for improvement. In 2017, CR Cement's comprehensive energy consumption was 7.732 million tons of standard coal. The consolidated energy consumption per RMB10,000 output and consolidated energy consumption per RMB10,000 value addition was 3.03 tons of standard coal/RMB10,000 and 8.61 tons of standard coal/RMB10,000 respectively, which had been continuously improving. In 2017, the Company also continued to promote energy conservation, which mainly included utilization, conservation and recycling of energy, investment in energy-saving and environmental protection technologies, technological transformation, R&D and innovation of emission reduction.



2017年，华润水泥综合能源消费量  
773.2万吨标煤  
In 2017, CR Cement's comprehensive energy consumption was  
7.732 million tons of standard coal

2017年，公司生产过程温室气体排放  
5,712.9万吨二氧化碳当量  
温室气体排放密度  
0.8574吨二氧化碳当量/吨熟料  
The Company's total greenhouse gas emissions during the production process was 57,129,000 tons of carbon dioxide equivalent, and the greenhouse gas emission density was 0.8574 tons of carbon dioxide equivalent per ton of clinker.

#### · 减少温室气体排放 / Reducing greenhouse gas emissions

华润水泥通过配套余热发电系统、辊压机粉磨技术、实施窑炉技改、开展高压变频改造、提高水泥窑磨操作水平，以及开展各种节能降耗精益项目等方式实现节能减排。2017年，公司生产过程温室气体排放合计为5,712.9万吨二氧化碳当量，温室气体排放密度为0.8574吨二氧化碳当量/吨熟料。

此外，华润水泥还积极配合广东省、福建省政府开展碳排放权配额管理试点工作（广东省从2013年开始试点、福建2016年开始试点），采用中国核证减排量（CCER）配额置换等方式实现低成本履约。所属广东省区域的工厂已全部完成2013-2016年度碳排放权配额的清缴，所属福建省区域的工厂已全部完成2016年度碳排放权配额的清缴。

CR Cement achieves energy saving and emission reduction by implementing residual heat recovery generation systems, roller press grinding technology, technological transformation of kiln furnaces, high-voltage frequency-conversion transformation, improvement on operation capabilities of cement kilns and grinding facilities, and various lean projects on energy saving and consumption reduction. In 2017, the total greenhouse gas emissions during the Company's production process was 57,129,000 tons of carbon dioxide equivalent, and the greenhouse gas emission density was 0.8574 tons of carbon dioxide equivalent per ton of clinker.

In addition, CR Cement actively collaborated with Guangdong and Fujian provincial governments in carrying out the pilot work of carbon emission quota management (the pilot work has commenced since 2013 in Guangdong and since 2016 in Fujian) and achieved low-cost contract performance by adopting quota replacement of the Chinese Certified Emission Reduction (CCER). All our factories in Guangdong have completed settlement of carbon emission quota for years 2013-2016, while all our factories in Fujian have completed settlement of carbon emission quota for year 2016.

配套余热发电  
Residual Heat Recovery Generation  
华润水泥各基地均配置了余热发电机组，2017年实现并网电量20.47亿千瓦时，相当于节约25.15万吨标准煤，减少排放二氧化碳69.18万吨，节能减排效果显著。  
All the production plants of CR Cement are equipped with residual heat recovery generators. In 2017, our residual heat recovery generators generated 2,047 million kWh of electricity, representing a saving of 251,500 tons of standard coal and a reduction of CO<sub>2</sub> emission by 691,800 tons, with significant results in energy saving and emission reduction.

#### （四）开展协同处置 / Launching Waste Co-Processing



利用水泥窑协同处置固体废弃物，较传统填埋方式大幅节约土地资源，而且有效利用窑内高温去除二噁英等有毒污染物，实现“无害化、减量化、资源化”处置，为当地居民创造更健康的居住环境。

Compared to traditional landfilling, solid waste co-processing by use of cement kilns could substantially conserve land resources and eliminate poisonous pollutants such as dioxin by effective use of heat inside cement kilns for achieving waste treatment in a "hazard-free, mass-reducing and recyclable" manner and creating a healthier living environment for local residents.

· 开展协同处置，与城市共生共存 / Launching co-processing for co-existence with cities

目前，位于广西宾阳县的生活垃圾协同处置项目，合营公司位于广东广州市的市政污泥协同处置项目、位于广西南宁市的市政污泥协同处置项目，位于海南昌江的危废协同处置项目已建成；位于广西田阳县和云南弥渡县的2个生活垃圾协同处置项目预计于2018年上半年建成。华润水泥成为了中国水泥行业同时拥有三类固废协同处置项目的企业之一。

Currently, the construction of the municipal waste co-processing project in Binyang County, Guangxi, the urban sludge co-processing project of joint venture in Guangzhou City, Guangdong, the urban sludge co-processing project in Nanning City, Guangxi and the hazardous waste co-processing project in Changjiang, Hainan have been completed. The two municipal waste co-processing projects in Tianyang County, Guangxi and Midu County, Yunnan are expected to complete construction in the first half of 2018. CR Cement has become one of the enterprises in the cement industry in China possessing three types of solid waste co-processing projects.

近三年协同处置固体废弃物量 / Amount of solid wastes co-processed in the past 3 years



广西田阳县日处置500吨生活垃圾协同处置项目（预计2018年上半年建成）  
The municipal waste co-processing project in Tianyang County, Guangxi with a daily processing capacity of 500 tons (expected completion of construction in the first half of 2018)



合营公司位于广东广州市日处置300吨干化污泥的市政污泥协同处置项目（2017年9月建成）  
The urban sludge co-processing project of joint venture in Guangzhou City, Guangdong with a daily processing capacity of 300 tons of dried sludge (construction completed in September 2017)



海南昌江年处置三万吨危废协同处置项目（2018年2月建成）  
The hazardous waste co-processing project in Changjiang, Hainan with an annual processing capacity of 30,000 tons (construction completed in February 2018)

研究协同处置前沿技术 / Research on advanced technologies of waste co-processing

创新发展大会  
Conference for Innovation and Development

作为协同处置领域的优秀企业代表，华润水泥应邀出席“首届全国水泥窑协同处置创新发展大会”。

会上，华润环保工程（宾阳）有限公司获大会颁发的“中国水泥工业水泥窑协同处置示范工程奖”，华润水泥与合作方共同获大会颁发的“中国水泥窑协同处置技术推广应用先进典型奖”。

As the outstanding corporate representative in the field of waste co-processing, CR Cement was invited to attend the "First National Conference for Innovation and Development of Co-Processing by Use of Cement Kilns".

In the conference, China Resources Environmental Protection Engineering (Binyang) Limited was honoured the "Pilot Project of Co-Processing by Use of Cement Kilns in the Chinese Cement Industry", while CR Cement and business partners were jointly awarded the "Advanced Model for Promotion and Application of Technologies in Co-Processing by Use of Cement Kilns in China".



行业交流  
Experience Sharing within the Industry

2017年第十五届中国国际环保展览会上，华润水泥与合作方在展会上共同设置展位，以利用水泥窑协同处置城乡生活垃圾项目为依托，展示共同研发的具有国际先进水平的“机械生物法预处理+热盘炉焚烧”水泥窑协同处置城乡生活垃圾技术，并与参会的各单位、专家进行广泛技术交流，取得了良好的宣传推广效果。

In 2017, at the 15th China International Environmental Protection Exhibition, CR Cement and business partners jointly set up a booth to display the "mechanical biological pre-treatment + HOTDISC incineration" technology at a leading international position, which had been based on and applied in the municipal waste co-processing project by use of cement kilns. The Company had extensive exchange on technologies with all units, companies and experts in attendance, which achieved excellent effect on promotion.

科技成果鉴定  
Technology Appraisal

4月27日，中国建筑材料联合会与中国水泥协会在南宁市联合组织召开了科技成果鉴定会，“机械生物法预处理+热盘炉焚烧”水泥窑协同处置城乡生活垃圾技术通过科技成果鉴定，项目成果的整体技术达到国际先进水平。

On 27 April, China Building Materials Federation and China Cement Association jointly organized a technology appraisal meeting in Nanning City. The "mechanical biological pre-treatment + HOTDISC incineration" technology applied in the municipal waste co-processing project by use of cement kilns passed the appraisal and achieved a leading international position.



## (五) 践行绿色办公 / Implementation of Green Office

华润水泥在保护环境的每个细节上不遗余力，上至生产营运，下至一般办公均提倡节能理念。公司倡导员工在日常工作中积极践行绿色办公，发出《关于提倡绿色环保办公的温馨提示》，呼吁员工多使用环保纸、双面打印，鼓励无纸化网络办公，多利用电子邮件、视频会议，减少一次性办公用品消耗等；公司公文审批及流转也主要通过公司 OA（办公自动化）、SRM（供应商关系管理系统）等信息化系统实现。

其他措施包括倡导 4 楼以下步行上下楼、维持空调温度设置为摄氏 26°、离开前检查照明“人走灯灭”等节电生活方式；以及提醒员工定时检查水龙头滴漏情况，坚决避免“长流水”现象发生。

CR Cement devoted great effort in every details to promoting the concepts of environmental protection and energy saving, from production and operation to general offices. The Company advocated proactive implementation of green office in daily operation by issuing "Kind Reminder on the Promotion of Green Office", and promoting the use of environment-friendly paper, double-sided printing, paperless and Internet office, frequent use of email and video conference, and reducing consumption of disposable office supplies. The Company also used digital systems like OA (Office Automation) and SRM (Supplier Relationship Management) for internal approval and operation.

The Company also advocated other measures for power saving including use of stairs to/from the fourth floor or below, setting the air conditioning temperature at 26 degrees Celsius and switching off lights before leaving our office. Employees are reminded to conduct regular inspection on dripping taps to prevent "persistent water dripping".



无纸化办公  
Paperless office

节电温馨提示  
Kind Reminder for Energy Saving

## (六) 环保公益倡导 / Environmental Protection Advocacy

### · 内部环保意识增进 / Stimulating internal awareness of environmental protection

华润水泥充分调动全体员工积极参与节能减排绿色低碳活动，在全公司范围内宣传节能低碳意识，广泛宣传生态文明、绿色低碳发展理念，努力建设绿色华润。

CR Cement fully mobilise all employees to proactively participate in green and low-carbon activities for energy saving and emission reduction. In striving to build a green China Resources, we promote the awareness of energy saving and low carbon across the Company and widely advocate the concept of ecological civilization, green and low-carbon development.

### 1. 强化宣传力度 / Strengthening promotion efforts

根据公司环保现状，结合节能宣传周和全国低碳日宣传主题，各基地组织员工开展了形式多样的节能环保宣传活动。通过深入生产现场、制作横幅标语、张贴宣传画、撰写板报海报、编制 EHS 简报节能低碳宣传特刊、张贴节电节水标识、发放宣传单，借助 LED 显示屏、QQ 和微信平台，员工班前班后讨论、电视推送知识及视频等多种方式，深化宣传力度，使得各层级员工均能通过不同的渠道获知节能降碳、工业低碳发展的理念和意义；时刻提醒员工，合理使用资源，保护环境，倡导节约光荣、浪费可耻的观念，全面提高员工的节能环保意识。

Based on the Company's current status of environmental protection, and incorporating the promotion themes of the energy conservation week and the National Low Carbon Day, each production plant organized a wide variety of publicity activities of energy saving and environmental protection. We acquaint staff of every level with the concepts of significance of energy saving and industrial low-carbon development through difference channels including intensive visits to production sites, producing banner with slogans, posting promotion materials, preparing display boards of news and posters, compiling special issues for EHS briefings on energy saving and low carbon, posting energy-saving and water-saving signs, distributing leaflets, leveraging on LED display, QQ and WeChat platforms, discussions among staff before and after work, knowledge provided on TV and videos etc. Staff are constantly reminded to use resources reasonably for environmental protection. We advocate the virtue of saving and discourage shameful wastage, so as to raise the staff's all-rounded awareness on energy saving and environmental protection.



廉江水泥环保宣传栏  
Environmental Protection Billboard at Lianjiang Cement

2. 开展环保知识培训 / Launching training on environmental protection knowledge

各基地结合“安全生产月”活动，组织员工及家属参与安全环保知识有奖竞赛等活动，在活动的设计中，巧妙加入日常生活、工作中涉及的节能降耗、污染物排放相关设备和行为，强调节约环保意识的重要性和必要性。通过增强活动的趣味性和参与度，增强员工对国家节能减排政策的认知，提高节能、环保、低碳意识。

Incorporating the "Work Safety Month" event, each production plant organized its staff and their families to participate in activities such as safety and environmental protection quiz competitions. In designing the activities, each production plant skillfully incorporated energy saving and consumption reduction in daily lives and at work, as well as equipment and behavior relating to pollutant emission, with emphasis on the importance and necessity of the awareness for conservation and environmental protection. Through enhancing fun and participation level in the activities, we have facilitated staff's awareness of the national policies on energy saving and emission reduction, which help to raise their awareness on energy saving, environmental protection and low carbon.



基地安全开放日活动  
Safety Open Day Event at production plant



EHS 知识竞赛  
EHS Quiz Competition

· 助力社区环保公益 / Assisting in environmental protection and community charity

1. 组织环保活动 / Organizing environmental protection activities

倡导从身边的小事做起，倡导步行、骑自行车、乘坐公司班车或公共交通工具等低碳出行方式；组织开展“绿色出行、低碳生活”为主题的徒步远足宣传活动；在厂区、矿区、生活区等地开展植树活动，宣传倡导绿色环保理念。

The Company encourages its staff to start with minor daily matters by promoting low-carbon commuting modes such as walking, cycling, taking the Company's shuttle bus or public transportation. We also organize jogging and hiking promotional activities themed with "Green Commute, Low-Carbon Life" and tree planting activities at factory areas, mining areas and living areas for advocacy of the green concept of environmental protection.



贵港水泥员工绿色出行活动  
Staff of Guigang Cement in Green Commuting Event



龙岩水泥员工义务植树活动  
Staff of Longyan Cement in the Voluntary Tree-Planting Event



2. 参加当地活动 / Participating in local activities

组织员工参加所在市县的节能宣传周、世界环境日等相关活动。如华润水泥（昌江）有限公司与当地环保局共 80 人到海边捡拾垃圾和植树等，体现出企业对节能低碳环保工作的重视，同时积极宣传了公司的环保理念，提高公司的影响力。

The Company organises staff to participate in relevant activities of energy-saving promotion weeks in their cities and counties, as well as world environment day. A total of 80 people from China Resources Cement (Changjiang) Limited and local environmental protection bureaus collected rubbish at the seaside and planted trees, which reflected the Company's keen attention to energy saving and low-carbon environmental protection. At the same time, the Company proactively promoted our environmental protection concept for enhancing the Company's influence.

### 3. 参加低碳行动 / Participating in low carbon activities

华润水泥持续践行水泥行业“低碳技术合作伙伴倡议”，积极参与由水泥可持续发展倡议行动组织和联合国工业发展组织共同发起的“水泥可持续发展知识中心”项目，并成功承办水泥可持续发展倡议行动组织中国区联络代表工作会议，努力推动水泥行业的转型发展和可持续发展，提升中国水泥工业在世界水泥工业中的地位和影响力。

CR Cement persistently puts into practice the "Low-Carbon Technology Partnerships Initiative" of the cement industry and actively participates in the project of "Cement Sustainable Development Knowledge Centre" jointly initiated by Cement Sustainability Initiative and United Nations Industrial Development Organization. We successfully organized work conferences for the representatives of Cement Sustainability Initiative in China, and have been committed to fostering the transforming and sustainable development of the cement industry as well as enhancing the positions and influences of the Chinese cement industry in the global cement industry.



CSI 中国区联络代表会议

Conference for the Representatives of Cement Sustainability Initiative in China

# 丰业为家

## 第七章 合作共赢

CHAPTER VII. CO-OPERATION  
FOR MUTUAL GAINS

华润水泥倡导“共赢发展”的理念，通过制定有效沟通机制，开展战略合作等形式稳定合作关系，形成与合作伙伴携手共同发展的良好局面。

CR Cement advocates the concept of "development for mutual gains". Through the establishment of stable co-operative relationship such as effective communication mechanism and strategic co-operation, we have formed positive joint development with business partners.

## (一) 打造责任供应链 / Creating Responsible Supply Chain

### · 规范采购 / Regulating procurement

#### 供货商基本权益维护 / Protection of basic rights and interests of suppliers

华润水泥从供货商考察、准入、选择、评价、维护五个方面，对供应商进行全生命周期的管理，并嵌入自主开发的SRM（供应商关系管理）信息化系统，标准化审批流程，打造公平、公开、公正的竞争环境，切实维护供货商基本权益。

CR Cement formulated a supplier management mechanism for the whole cycle from five aspects including inspection, eligibility, selection, evaluation and maintenance of suppliers. With a view to ensure equal, open and fair competition landscape, we had installed our independently developed information systems such as SRM (Supplier Relationship Management) for standardization of the approval procedure, which is important for us to protect basic rights and interests of suppliers.

#### 反对商业舞弊 / Combatting commercial fraud

公司持续完善供应商管理制度，建立覆盖供应商黑名单库，通过SRM系统在各采购环节进行实时管理，若发现“向采购人员、招标人员、评委、收货基地相关人员等行贿或提供其他不正当利益”、“因行贿、受贿、串通投标、转包或暴力抗法而受到有关政府部门通报或处罚”等情形将永不合作，同时防止进入黑名单库的供应商重新注册新公司继续合作，杜绝供应商的不诚信行为。此外，公司还规范招标管理，招标工作小组成员及评委均须签署《廉洁从业准则》，并将其固化到SRM系统流程中。

华润水泥所有采购人员均须签署《阳光宣言》，每年接受至少两次的廉政教育培训，并执行《华润水泥采购人员与供应商接触的注意事项》。采购合同均增加附则《供应商诚信条款》并形成固定模板，要求所有供应商签署并遵守相关规定。

We continuously improve our supplier management system by establishing a blacklist database of suppliers, and conducting real-time management on every step of procurement through the SRM system. If cases of "bribing or providing other improper benefits to procurement staff, tenderers, adjudicators or relevant staff in the production plants" are found, the suppliers "being reported or punished by relevant government departments for bribery, accepting bribes, collusion for tendering, sub-contracting or violent violation of law" will be banned from any further business co-operation. At the same time, in order to eradicate dishonest behaviour of suppliers, we prevent suppliers in the blacklist database from re-registering a new company to continue co-operation with us. In addition, we also regulated the tendering process management, where the members of the tendering team and the adjudicators had to sign the "Integrity Practice Guideline" and consolidate this process into the SRM system.

All procurement staff of CR Cement are required to sign the "Sunshine Declaration", attend anti-corruption training at least twice a year, and implement the "Things to Note when CR Cement Procurement Staff are in Contact with Suppliers". All procurement contracts have incorporated the standard template of "Integrity Terms of Suppliers", which have to be signed and abided by all suppliers.



阳光宣言签署仪式 Signing Ceremony of Sunshine Declaration

### 帮助供应商成长 / Support for suppliers' development

在诚信合规及尊重市场规律的原则下，华润水泥关注供应商持续成长，对合作供应商开展定期绩效评价，从价格、质量、交期、服务四方面全方位进行评估并分级（优秀、合格、待整改、待淘汰），对不同级别的供应商差异化管理，查找差距并加以改进：优秀供应商在符合目标成本的前提下优先采购；对待整改供应商及时反馈待整改问题，给予相应协助，限期核查整改结果；将不合格供应商调离合格供应商库。

Under the principles of integrity, compliance and respect for market regulations, CR Cement pays keen attention to the development of suppliers. We regularly evaluate our suppliers' performance based on four aspects including price, quality, delivery time and quantity as well as services, with four grades (excellent, passed, to be rectified and to be eliminated). This enables differentiated supplier management in accordance with their different grades, identifies their weakness and let them make improvements. We would procure from the excellent suppliers on a priority basis provided that their prices are consistent with our target costs. For suppliers which require rectifications, we would provide timely feedback on their weaknesses, offer relevant assistance and examine their rectification results upon the deadline, we would remove the failed suppliers from our eligible supplier list.

### 推动供应商履职 / Suppliers' performance of duties

华润水泥对供应商或合作伙伴提出的责任要求包括遵守法规、保护环境、诚信经营和质量保证等。与供应商在合作关系发生前，实行严格的供应商准入审核，审查内容包含经营资质、行业证书、人员从业资格认证、质量体系，视实际情况辅以现场考察，包括矿山、货场管理，主要设备设施情况等，并将相关条款落实到合同。如果涉及到在厂内有作业行为的，均必须签署《安全环保协议》。

在合作期间，采购人员必须随时关注合作供应商的公司动态，主要考察供应商在诚信经营方面是否遵守国家相关法律法规；此外还要不定期拜访客户，对供应商经营情况、现场情况进行回访，以确保双方履行自身的社会责任。

CR Cement requires its suppliers or business partners to be responsible for compliance with regulations, environmental protection, integrity management and quality assurance. Before establishing any co-operation relationship with suppliers, a strict review of supplier's eligibility would be implemented, which covers the qualification of operation, industry certification, personnel qualification certification and quality system. On-site inspection on mine and warehouse management, major equipment and facilities may be required subject to actual situation. Relevant terms will be incorporated in the contracts. All suppliers involving operating activities at our plants would be required to sign the Safety and Environmental Protection Agreement".

During the co-operation, our procurement staff have to pay attention to the latest development of the suppliers any time, mainly to inspect whether the supplier complies with the relevant national laws and regulations in terms of integrity operation. In addition, we visit our customers from time to time and visit supplier's sites to inspect their operating conditions and site conditions, in order to ensure that both customers and suppliers fulfill their social responsibilities.

## （二）促进行业发展 / Promoting Industry Development

### · 推动行业合作 / Promoting industry co-operation

华润水泥积极开展行业的广泛合作，2017年，在装配式建筑、协同处置等业务层面与合作伙伴签署了多项战略合作协议，充分利用产业协同优势和合作伙伴的资源优势，推动行业技术创新，实现合作共赢。

CR Cement actively initiates extensive co-operation within the industry. In 2017, we entered into numerous strategic co-operation agreements with business partners on prefabricated construction and waste co-processing businesses. We promote technological innovation in the industry and achieve co-operation with mutual gain by making full use of advantages on industrial synergies and resources of business partners.

### · 促进产学研结合 / Promoting the co-operation of industry, university and research

2017年，华润水泥技术研发中心完善研发平台建设，成立了技术研发中心实验室，全年检测各类样品共达2,682项。截至2017年底，共有研发中心人员41人，其中博士3人、硕士15人。

In 2017, CR Cement Research and Development Center has improved the construction of the R&D platform and set up a laboratory. A total of 2,682 various samples were tested throughout the year. As of the end of 2017, the Center had 41 staff, among which there were 3 holders of doctoral degrees and 15 holders of master's degrees.

截至2017年底，华润水泥技术研发中心共有研发中心人员41人，其中博士3人，硕士15人。

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华润水泥技术研发中心实验室揭牌仪式  
Unveiling ceremony at the laboratory of CR Cement Research and Development Center

#### 对外产学研合作

External industry-academic-research co-operation

#### 与湖南大学合作

开展石灰石粉在混凝土中的作用机理以及对C40混凝土耐久性能的影响研究

#### Co-operation with Hunan University

Conducting research on the functioning mechanism of limestone powder in concrete and the effect of durability of C40 concrete

#### 对内产学研合作

Internal industry-academic-research co-operation

#### 与平南水泥合作

对生产中的工艺质量问题进行诊断，改善生料易烧性、进行热工标定、检测冷却风机效能等

#### Co-operation with Pingnan Cement

Diagnosing technology issues in production, improving combustibility of raw materials, performing thermal calibration, testing on performance of cooling fans, etc.

# 润心为您

## 第八章 公益慈善

### CHAPTER VIII. COMMUNITY AND CHARITY

**与中国建材总院、华南理工大学、中交四航局等合作**  
国家十三五项目:《高抗蚀硅酸盐水泥制备技术及工业应用》

**Co-operation with China Building Materials Academy, South China University of Technology and CCCC Fourth Harbour Engineering Co., Ltd.**  
National Thirteenth Five-Year Project: "Preparation Technology and Industrial Application of High-Corrosion-Resistance Portland Cement"

**与清华大学、苏博特公司等合作**  
国家十三五项目:《高抗裂预拌混凝土关键材料及指标技术》

**Co-operation with Tsinghua University and Sobute New Materials**  
National Thirteenth Five-Year Project: "Key Materials and Benchmark Technology for Highly Crack-Proof Ready-mixed Concrete"

**与广西大学合作**  
开发项目:《低品位石灰石煅烧硅酸盐水泥熟料试验研究》

**Co-operation with Guangxi University**  
Development Project: "Experimental Study on Low-Grade Limestone Calcined Portland Cement Clinker"

**与昌江水泥合作**  
推动《低品位石灰石煅烧低钙水泥试验研究及产业化项目》的研究开发工作

**Co-operation with Changjiang Cement**  
Promoting R&D of "Experimental Research and Industrialization Project of Low-Grade Limestone Calcined Low-Calcium Cement"

**红水河掺合料示范项目**  
支持完成红水河掺合料示范项目的可研、立项及示范生产线设备选型、生产线的建设、安装、调试工作

**Hongshuihe Additives Model Project**  
Supporting the completion of feasibility studies, project initiation and equipment selection of model production line, construction, installation and commissioning of production line for the Hongshuihe Additives Demonstration Project

#### · 参与行业组织 / Participating in industry organizations

结合企业自身实际情况,华润水泥对中国水泥协会主导编制的《水泥产能核定标准》征求意见稿)提供意见建议;2017年12月23日,公司参与由中国建筑材料联合会和中国水泥协会联合主办的首届全国水泥窑协同处置创新发展大会,公司获得大会颁发的“中国水泥工业水泥窑协同处置示范工程奖”,以及“中国水泥窑协同处置技术推广应用先进典型奖”;12月28日,参与中国水泥协会主办的全国建材行业(回转窑)职业技能竞赛总决赛,参赛员工获得“银牌窑操能手”以及“铜牌窑操能手”等多个称号。

Based on the actual circumstances of the corporate, we provided comments and suggestions on the "Standards for Verification of Cement Production Capacity" (Draft for Soliciting Opinions) prepared by the China Cement Association. On 23 December 2017, we participated in the first National Conference for Innovation and Development of Co-Processing by Use of Cement Kilns jointly held by China Building Materials Federation and China Cement Association. We were awarded the "Model Project of Co-Processing by Use of Cement Kilns in the Cement Industry of China" and "Advanced Model for Promotion and Application of Technology of Co-Processing by Use of Cement Kilns in China". On 28 December, we participated in the finals of National Building Materials Industry (Rotary Kiln) Vocational Skills Competition hosted by China Cement Association, and our staffs won various awards including "Kiln Master (Silver Medal)" and "Kiln Master (Bronze Medal)".

2017年，华润水泥慈善捐助总额

223.7 万港元

In 2017, we made donations in the total amount of approximately HK\$2,237,000

华润水泥坚持常怀“感恩之心”，将企业发展与社会责任、环境友好和可持续发展融为一体，积极参与各项公益事业。通过发挥下属各生产企业优势，帮助邻里乡亲修桥筑路，支持教育事业，为贫困地区和居民进行捐赠，营造健康、稳定、和谐的社区环境，以实际行动回报社会。

2017年，华润水泥以现金及不同形式的原材料和制成品作出的慈善捐助总额为223.7万港元。其中，向井冈山华润希望小镇捐赠人民币21.1万元，不断履行企业社会责任。

Abiding by the principle of "gratitude", CR Cement has integrated social responsibilities, environmental friendliness and sustainable development into corporate development. We proactively participate in various charity activities. Through utilising the strengths of each production subsidiaries, we have assisted our neighbouring towns and villages in the construction and repairs of roads and bridges, supported education development and made donations to the areas and families in poverty, thereby creating a healthy, stable and harmonious community environment and making contributions to the society with practical actions.

In 2017, we made donations in cash and in various forms of raw materials and finished goods in the total amount of approximately HK\$2,237,000. Among which, we donated RMB211,000 in cash to China Resources Jinggangshan Hope Town for continuous fulfillment of our corporate social responsibility.

#### (一) 员工互助关爱 / Mutual Help and Care Among Staff

为大力弘扬互助友爱精神，以群体的力量化解个人遭遇的重大危难，形成扶危济难、互助互爱的长效机制，华润水泥成立了“华润水泥感恩之心基金”，每年组织员工自愿捐款，同时公司等额拨付，所筹款项用于为困难和病患员工提供爱心帮扶。2017年，华润水泥“感恩之心基金”共筹集人民币101.2万元，发放救助金人民币26万元。

In order to promote mutual help and care, we established the "China Resources Cement Gratitude Fund" to help resolving substantial crises of our staff in their personal lives with teamwork. A long-term mechanism of mutual help and mutual love in times of distress has been formed. We encourage our staff to make voluntary donations every year for which we will match the donations in equal amount. The funds raised are used for caring support to staff facing difficulties or with illness. In 2017, "China Resources Cement Gratitude Fund" raised a total amount of RMB1,012,000, and subsidies of RMB260,000 were granted.

爱心募捐  
fundraising for care

潞城混凝土一名前员工于2015年3月在家中整修房子时不幸摔伤，导致身体瘫痪，生活不能自理，家庭极其困难。自该员工2015年7月份离职后，公司每年组织两次慰问并进行捐款，为其送去米、面、油等生活用品及慰问金。

A former staff at Lucheng Concrete was unfortunately injured when renovating his home in March 2015, resulting in paralysis and inability to take care of himself. His family was in extreme difficulty since then. Since the staff left the Company in July 2015, we have been visiting him twice a year, and made donations of subsidies and daily necessities including rice, noodles and oil.



潞城混凝土 爱心募捐  
Love fundraising Lucheng concrete

## (二) 支持社区建设 / Support for Community Building

华润水泥各下属企业充分利用自身优势，为所在社区的基础设施建设提供支持，修建村镇道路和危房改造，为创造良好的社区环境而不断努力。

- 华润水泥（罗定）有限公司共捐赠 160 吨袋装水泥用于协助运营区域的地方政府等基础设施；
- 华润水泥（惠州）有限公司捐赠水泥 40 吨，帮助当地新农村建设；
- 华润水泥（龙岩曹溪）有限公司捐赠 60 吨水泥协助运营区域地方政府主干道路拓宽、硬化工程和环境整治等基础设施改造；
- 华润水泥（鹤庆）有限公司为扶贫集体经济项目捐赠水泥 80 吨。

Each subsidiary of CR Cement makes full use of its own advantage to provide support for the infrastructure construction in local community. Roads are built and repaired, and dilapidated buildings are altered. We make continuous effort in creating a healthy community environment.

- China Resources Cement (Luoding) Limited donated 160 tons of cement in bags to assist the infrastructure of local government;
- China Resources Cement (Huizhou) Limited donated 40 tons of cement to help the construction of local new villages;
- China Resources Cement (Longyan Caoxi) Limited donated 60 tons of cement to assist the infrastructure upgrade of the local government such as the expansion of main roads, hardening work and environmental remediation;
- China Resources Cement (Heqing) Limited donated 80 tons of cement to the collective economic project for poverty alleviation.

### 社区共建 Community building

华润水泥（罗定）有限公司为爱心安居建筑工程捐助所需全部水泥，目前已经援助了三间爱心之家，活动仍在持续推进中。

China Resources Cement (Luoding) Limited donated all the cement needed for the construction of charitable and affordable housing project. It has provided assistance to three caring homes up to now. The activities are ongoing.



### 社区共建 Community building

华润水泥（封开）有限公司在厂区至 321 国道沿江路段加装便民路灯，保障员工及周边村民出行安全。

China Resources Cement (Fengkai) Limited installed street lamps along the riverside from the plant to National Highway 321, in order to protect the safety of our staff and villagers living in neighbouring areas as they travel.

华润水泥（长治）有限公司成立帮扶工作队，为五户贫困户修缮了房屋，整理了环境卫生，改善了居住环境。

China Resources Cement (Changzhi) Limited established a support team to carry out renovation work for five impoverished households, sanitize the environment and improve their living environment.

## (三) 公益慈善实践 / Community Charity in Practice

在扶贫助困和支持乡镇文化教育方面，华润水泥通过多种形式进行公益活动，包括为贫困地区、困难户捐赠现金或实物解决其实际困难；慰问走访周边村镇的敬老院、孤寡老人及有困难群众；关注贫困山区儿童的教育，通过捐赠衣物、文具、书本、助学金及安排助学活动，协助创造良好的学习环境及氛围。

In terms of poverty alleviation and support for township's cultural education, we conduct charitable activities in various forms, including donations in cash or in kind to underprivileged regions and impoverished families to solve their practical difficulties. We organize visits and express solicitude to households for the elderly, the elderly without family and the general public in need in the neighbouring villages. We are concerned about education for the underprivileged children in the mountainous regions and help with creating a better learning environment through donations of clothes, stationery, books, study grants and arranging subsidized schooling.

扶贫助困

Poverty alleviation and help to the needy

封开县平凤镇农民数十万斤香蕉滞销，华润混凝土（封开）有限公司工会购买 2,000 斤香蕉作为员工福利，帮助当地农民度过难关。

Farmers in Pingfeng Town, Fengkai County encountered difficulty in selling hundred thousands of kilograms of bananas. The Trade Union of China Resources Cement (Fengkai) Limited purchased around 1,000 kg of bananas as employee benefits to help local farmers overcome their difficulties.



扶贫助困

Poverty alleviation and help to the needy

华润水泥（平南）有限公司成立志愿者协会，每季度在社区开展免费理发、免费维修家用电器、修自行车、电脑等活动。

China Resources Cement (Pingnan) Limited established a volunteer association to provide the community with free haircuts and free repairs of household electrical appliances, bicycles and computers on a quarterly basis.



华润水泥香港总部参与“香港小母牛”活动，捐助（工艺）礼品作慈善拍卖，为国内农户扶贫项目募集善款。自 2012 年起，已连续六年参与该项目活动。

The Hong Kong headquarters of CR Cement participated in the "Heifer - Hong Kong" campaign and donated handcrafted gifts for charitable auctions to raise funds for domestic farmers' poverty alleviation projects. We have participated in the project for six consecutive years since 2012.

扶贫助困

Poverty alleviation and help to the needy

东莞华润水泥厂有限公司于重阳节到福祿沙村开展送温暖慰问活动。

Dongguan China Resources Cement Manufactory Company Limited visited the Fulusha Village on the Double-Ninth Festival to send their warmest regards and solicitude.



文化教育

Cultural education

华润水泥（南宁）有限公司设立“润苗”捐资助学基金。

"Run Miao" Subsidised Schooling Fund set up by China Resources Cement (Nanning) Limited.

文化教育  
Cultural education

华润水泥（平南）有限公司关爱“蒲公英”志愿者协会开展一年一度资助贫困儿童活动。  
Annual subsidization event for underprivileged children organized by the "Dandelion" care volunteers association of China Resources Cement (Pingnan) Limited.



文化教育  
Cultural education

廉江市丰诚水泥有限公司分别在长山镇路带小学和廉江营仔小学开展“润心助学，情暖童心”活动。  
China Resources Cement (Lianjiang Fengcheng) Limited launched the "study grants by China Resources with Touch with Love" activity at Ludai Primary School and Lianjiang Yingzai Primary School in Changshan town.



文化教育  
Cultural Education

贵州大区在仁怀市龙源小学举行公益助学捐助活动。  
Charitable study grant and fund-raising activity organized by our Guizhou subsidiaries at Longyuan Primary School in Renhuai City.



文化教育  
Cultural education

中港混凝土有限公司义工团队带领东华三院方树泉幼儿园的小朋友到汇丰智乐游戏馆、绿田园基金有机农场体验各项游乐设施及参与农耕活动。  
The volunteer team of Redland Concrete Limited led the children of Tung Wah Group of Hospitals Fong Shu Chuen Nursery School to experience various amusement facilities at the HSBC Playright PlayScope and participate in farming activities at the organic farm of Produce Green Foundation.



## 2018 年展望 / 2018 Outlook

2018 年是中国改革开放 40 周年，是实施“十三五”规划承上启下的关键一年，也是华润水泥“成为受人尊重的世界一流水泥企业”征程上的重要历史节点。

展望未来，在国家供给侧结构性改革的大背景下，水泥行业将迎来新的机遇与挑战。我们将积极把握粤港澳大湾区、海南自由贸易试验区建设及装配式行业发展的机会，探寻商机；通过资源掌控、资源转化及资源分销，强化系统成本最低，区域市场领先，以及创新驱动发展的核心竞争力。我们将坚定不移地履行企业社会责任，推广水泥窑协同处置项目，加强品牌建设，提升产品、技术及材料的研发能力，打造差异化竞争优势，积极推动环保转型及探索产业上下游延伸机会，并寻求与国内外领先水泥企业间的战略合作，携手推动中国水泥行业的可持续发展。

2018 is the 40th anniversary of reform and opening-up of China and the critical year in transition between the first and second halves of the "Thirteenth Five-Year" Plan, it is also an important milestone of CR Cement's journey of "becoming a respected world-class cement company".

Looking ahead, under the supply-side structural reform in China, the cement industry will encounter new opportunities and challenges. We will seek the business opportunities and proactively seize the opportunities in the construction of the Guangdong-Hong Kong-Macau Greater Bay Area, Hainan pilot free trade zone and the development of the prefabrication industry. Through the control, conversion and distribution of resources, we will strengthen the core competitiveness to strive for the lowest total cost with a leading market position in the region and innovation-driven development. We will persistently fulfill corporate social responsibility and promote waste co-processing projects by use of cement kilns. We will strengthen brand building and enhance the capability in research and development of products, technologies and materials in order to create competitive advantage by differentiation. We will actively promote environmental transformation, explore the opportunities of upstream and downstream expansion in the industry, seek strategic co-operation with domestic and international leading cement enterprises for joint promotion of the sustainable development of the cement industry in China.

## 绩效指标列表 / Table of Performance Indicators

责任模块 Section	统计指标 Statistical Indicators	2015	2016	2017
经济责任 Economic Responsibilities	营业额 (百万港元) Turnover (HK\$ million)	26,779	25,648	29,958
	除税前盈利 (百万港元) Profit before tax (HK\$ million)	984	2,158	4,884
	年度盈利 (百万港元) Profit for the year (HK\$ million)	937	1,262	3,593
	本公司拥有人应占盈利 (百万港元) Profit attributable to owners of the Company (HK\$ million)	1,015	1,326	3,617
	本公司拥有人应占权益 (百万港元) Equity attributable to owners of the Company (HK\$ million)	26,557	26,007	30,309
	资产总值 (百万港元) Total assets (HK\$ million)	54,217	52,157	56,527
	资产净值 (百万港元) (注 1) Net assets (HK\$ million) (Note 1)	26,986	26,252	30,482
	净资产收益率 (%) (注 2) Return on net assets (%) (Note 2)	3.4	4.7	12.7
	总资产报酬率 (%) (注 3) Return on total assets (%) (Note 3)	2.8	5.4	10.2
国有资产保值增值率 (%) (注 4) Ratio of value maintenance and appreciation of state-owned capital (%) (Note 4)	103.9	105.4	113.5	

责任模块 Section	统计指标 Statistical Indicators	2015	2016	2017
经济责任 Economic Responsibilities	息税前利润 (百万港元) (注 5) EBIT (HK\$ million) (Note 5)	1,550	2,851	5,522
	成本费用利润率 (%) (注 6) Ratio of profit to cost (%) (Note 6)	3.9	9.3	18.9
	销售成本 (百万港元) Cost of sales (HK\$ million)	20,361	18,622	20,728
	销售及分销费用 (百万港元) Selling and distribution expenses (HK\$ million)	1,757	1,676	1,784
	一般及行政费用 (百万港元) General and administrative expenses (HK\$ million)	2,440	2,302	2,676
	财务费用 (百万港元) Finance costs (HK\$ million)	566	692	638
	行业排名 (注 7) Industry ranking (Note 7)	3	5	3
	提出或已审结的贪污诉讼案件数目 Number of corruption lawsuits filed or concluded	0	0	0

注 / Notes:

1. 净资产等于资产总值减负债总值。
  2. 净资产收益率乃以年度盈利除以平均净资产计算。
  3. 总资产报酬率乃以息税前利润除以平均资产总值计算。
  4. 国有资产保值增值率乃当年本公司拥有人应占权益与当年分红之和除以上年本公司拥有人应占权益，并考虑汇率影响。
  5. 息税前利润等于除税前盈利及财务费用总额。
  6. 成本费用利润率乃以除税前盈利除以销售成本、销售及分销费用、一般及行政费用以及财务费用总额计算。
  7. 行业排名的数据来源为中国水泥协会，2017 年评选指标包括水泥销量、利润、市值、资产、满意率、关注度。
1. Net assets equal to total assets less total liabilities.
  2. Return on net assets is calculated by dividing profit for the year by average net assets.
  3. Return on total assets is calculated by dividing EBIT by average total assets.
  4. Taking the effect of exchange rate into consideration, ratio of value maintenance and appreciation of state-owned capital is calculated by dividing the sum of equity attributable to owners of the Company and dividend paid for the year by equity attributable to owners of the Company for the previous year.
  5. EBIT equal to total profit before tax and finance costs.
  6. Ratio of profit to cost is calculated by dividing profit before tax by total cost of sales, selling and distribution expenses, general and administrative expenses and finance costs.
  7. Industry Ranking is from China Cement Association, which is based on a comprehensive assessment of sales volume of cement, profit, market capitalization, assets, satisfaction and attention of the market in 2017.

责任模块 Section	统计指标 Statistical Indicators	2015	2016	2017
客户及伙伴责任 Responsibilities to Customers and Business Partners	合同履约率 (%) Contract compliance rate (%)	98.7	95.6	93.0
	客户投诉处理率 (%) Customer complaint handling rate (%)	100	100	100
	产品合格率 (%) Pass rate of product quality (%)	100	100	100
	研发投入额 (百万元人民币) R&D investment (RMB million)	4.3	16.8	14.3
	研发人员数 (人) Number of R&D employees	36	38	41
	参与形成国际、国家或行业标准数 (个) Number of international, national or industrial standards contributed	5	5	3
	新增专利证书 (项) Number of new patent certificates	43	24	33
	战略合作协议签订数 (份) Number of strategic co-operation agreements executed	6	4	9
	产学研合作支出额 (百万元人民币) Expenditure on production-academia- research co-operation (RMB million)	0.46	0.56	0.15

责任模块 Section	统计指标 Statistical Indicators	2015	2016	2017
员工责任 Responsibilities to Employees	员工总数 (人) Number of employees	23,663	21,897	20,592
	中国内地雇员人数 (人) Number of employees in Mainland China	23,497	21,738	20,433
	香港雇员人数 (人) Number of employees in Hong Kong	166	159	159
	劳动合同签订率 (%) Employment contract execution rate (%)	100	100	100
	社会保险覆盖率 (%) Social insurance coverage rate (%)	100	100	100
	体检覆盖率 (%) Medical examination coverage rate (%)	100	100	100
	健康体检人数 (人) Number of employees attending health body check	23,663	21,897	20,592
	职业病发生次数 (人) Number of occupational disease occurrences	0	0	0
	女性管理者比例 (%) Proportion of female managerial staff (%)	11	10	11
	残疾人雇佣人数 (人) Number of employees with disabilities	43	52	57
	人均带薪休假天数 (天) Average duration of annual leave per employee (days)	10	8	13
	员工培训覆盖率 (%) Employee training coverage rate (%)	100	100	100
	人均培训投入 (元人民币 / 人) Average training investment per employee (RMB per person)	433	324	381
	员工培训投入总额 (万元人民币) Total investment on employee training (RMB 10,000)	1,023	709	784
	员工流失率 (%) Employee turnover rate (%)	7.1	7.5	7.8

责任模块 Section	统计指标 Statistical Indicators	2015	2016	2017
公共责任 Responsibilities to Public	新增就业人数 (人) Number of new recruitments	2,418	1,353	1,404
	慈善捐助总额 (百万港元) Charitable donations (HK\$ million)	3.9	6.1	2.2
	税项 (百万港元) Taxation (HK\$ million)	48	897	1,291
	本地化采购比率 (%) Proportion of local procurement (%)	45	41	49
	工伤事故发生数 (次) Number of industrial accidents	13	10	10
	一般及以上事故发生数 (次) Number of general and above accidents	1	1	1
	事故死亡数 (人) Fatalities	1	1	1
	安全培训人次 (人次) Number of participants of safety training	125,169	199,785	208,744
	安全生产投入 (百万元人民币) Investment on production safety (RMB million)	109	104	130
	安全培训覆盖率 (%) Safety training coverage rate (%)	100	100	100
	安全应急演练数 (次数) Number of safety contingency drills	373	474	625
	专职安全管理人员数量 (人) Number of specialized safety management personnel	195	233	205
	安全管理人员持证人数 (人) Number of licensed safety management personnel	832	863	1,068

责任模块 Section	统计指标 Statistical Indicators	2015	2016	2017
环境责任 Responsibilities to Environment	综合能源消费量 (千吨标煤) Consolidated energy consumption (thousand tons standard coal)	7,296	7,958	7,732
	万元产值可比价综合能耗 (吨标煤/万元人民币) Consolidated energy consumption per RMB10,000 output (ton standard coal/ RMB10,000)	2.81	3.24	3.03
	万元增加值可比价综合能耗 (吨标煤/万元人民币) Consolidated energy consumption per RMB10,000 value addition (ton standard coal/RMB10,000)	9.37	10.68	8.61
	节能减排技术改造投入 (百万元人民币) Investment on energy-saving and emission reduction technological reforms (RMB million)	363	223	432
	水泥袋装率 (%) Proportion of cement products sold in bag (%)	52.5	49.9	45.0
	包装材料总计 (吨) Total consumption on packaging materials (tons)	84,278	84,379	74,059
	包装材料密度 (千克/吨水泥) Density of consumption on packaging materials (kg per ton of cement)	1.10	1.05	0.98
	环保总投入 (百万元人民币) Total investment on environmental protection (RMB million)	521	401	675

## 环境、社会及管治指标索引 / Reference Table of ESG Indices

指标 Index	详情 Details	章节 Chapter	页码 Page
A. 环境 / A. Environmental			
层面 A1: 排放物 / Aspect A1: Emissions			
一般披露 General Disclosure	有关废气及温室气体排放、向水及土地的 排污、有害及无害废弃物的产生等的: (a) 政策; 及 (b) 遵守对发行人有重大影响的相关法律 及规例 的资料。 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	第六章 绿色发展 Chapter VI. Green Development (一) 立足绿色管理 (I) Green management positioning	82
关键绩效 指标 A1.1 Key Performance Index (KPI) A1.1	排放物种类及相关排放数据。 The types of emissions and respective emission data.	第六章 绿色发展 Chapter VI. Green Development (二) 落实达标排放 (II) Compliance with emission standards	83
关键绩效 指标 A1.2 KPI A1.2	温室气体总排放量及密度。 Greenhouse gas emissions in total and intensity.	第六章 绿色发展 Chapter VI. Green Development (三) 推动节能环保 (III) Promoting energy saving and environmental protection	88
关键绩效 指标 A1.3 KPI A1.3	所产生有害废弃物总量及密度。 Total hazardous waste produced and intensity.	生产过程产生的废机油循环利 用于机械润滑, 废机油桶交由 有资质机构进行处理。 The waste oil generated in the process of production is recycled for lubrication of production equipment, and the oil barrels are handled by qualified institutions.	

指标 Index	详情 Details	章节 Chapter	页码 Page
关键绩效 指标 A1.4 KPI A1.4	所产生无害废弃物总量及密度。 Total non-hazardous waste produced and intensity.	生产过程产生的无害固体废弃物均循环利用。 The non-hazardous solid wastes generated in the process of production are all recycled.	
关键绩效 指标 A1.5 KPI A1.5	描述减低排放量的措施及所得成果。 Description of measures to mitigate emissions and results achieved.	第六章 绿色发展 Chapter VI. Green Development (二) 落实达标排放 (II) Compliance with emission standards	83-84
关键绩效 指标 A1.6 KPI A1.6	描述处理有害及无害废弃物的方法、减低产生量的措施及所得成果。 Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	第六章 绿色发展 Chapter VI. Green Development (二) 落实达标排放 (II) Compliance with emission standards (四) 开展协同处置 (IV) Launching waste co-processing	85-86 88-90

A. 环境 / A. Environmental

层面 A2: 资源使用 / Aspect A2: Use of Resources

一般披露 General Disclosure	有效使用资源(包括能源、水及其他原材料)的政策。 Policies on the efficient use of resources, including energy, water and other raw materials.	第六章 绿色发展 Chapter VI. Green Development (三) 推动节能环保 (III) Promoting energy saving and environmental protection	86-87
关键绩效指标 A2.1 KPI A2.1	按类型划分的直接及/或间接能源总耗量及密度。 Direct and/or indirect energy consumption by type in total and intensity.	第六章 绿色发展 Chapter VI. Green Development (三) 推动节能环保 (III) Promoting energy saving and environmental protection	87
关键绩效指标 A2.2 KPI A2.2	总耗水量及密度。 Water consumption in total and intensity.	华润水泥重视水资源管理,正在建立水资源智能监控系统,计划未来披露此项指标。 CR Cement pays keen attention to water resources management. An intelligent monitor system for water resources is being constructed for disclosure of this KPI in the future.	

指标 Index	详情 Details	章节 Chapter	页码 Page
关键绩效指标 A2.3 KPI A2.3	描述能源使用效益计划及所得成果。 Description of energy use efficiency initiatives and results achieved.	第六章 绿色发展 Chapter VI. Green Development (三) 推动节能环保 (III) Promoting energy saving and environmental protection	87
关键绩效指标 A2.4 KPI A2.4	描述求取适用水源上可有任何问题,以及提升用水效益计划及所得成果。 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	第六章 绿色发展 Chapter VI. Green Development (二) 落实达标排放 (II) Compliance with emission standards	85
关键绩效指标 A2.5 KPI A2.5	制成品所用包装材料的总量及每生产单位占量。 Total packaging material used for finished products and with reference to per unit produced.	绩效指标列表 Table of Performance Indicators	117

A. 环境 / A. Environmental

层面 A3: 环境及天然资源 / Aspect A3: The Environment and Natural Resources

一般披露 General Disclosure	减低发行人对环境及天然资源造成重大影响的政策。 Policies on minimising the issuer's significant impact on the environment and natural resources.	第六章 绿色发展 Chapter VI. Green Development (二) 落实达标排放 (II) Compliance with emission standards	85-86
关键绩效指标 A3.1 KPI A3.1	描述业务活动对环境及天然资源的重大影响及已采取管理有关影响的行动。 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	第六章 绿色发展 Chapter VI. Green Development (二) 落实达标排放 (II) Compliance with emission standards	85-86

指标 Index	详情 Details	章节 Chapter	页码 Page
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B. 社会 / B. Social

层面 B1: 雇佣 / Aspect B1: Employment

一般披露 General Disclosure	有关薪酬及解雇、招聘及晋升、工作时数、假期、平等机会、多元化、反歧视以及其他待遇及福利的： (a) 政策；及 (b) 遵守对发行人有重大影响的相关法律及规例的资料。 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	第四章 以人为本 Chapter IV. People-Oriented Culture (二) 保护员工权益 (II) Protecting the rights and interests of employees	60-61
关键绩效指标 B1.1 KPI B1.1	按性别、雇佣类型、年龄组别及地区划分的雇员总数。 Total workforce by gender, employment type, age group and geographical region.	第四章 以人为本 Chapter IV. People-Oriented Culture (一) 员工雇佣概况 (I) Employment information 绩效指标列表 Table of Performance Indicators	60 115
关键绩效指标 B1.2 KPI B1.2	按性别、年龄组别及地区划分的雇员流失比率。 Employee turnover rate by gender, age group and geographical region.		

B. 社会 / B. Social

层面 B2: 健康与安全 / Aspect B2: Health and Safety

一般披露 General Disclosure	有关提供安全工作环境及保障雇员避免职业性危害的： (a) 政策；及 (b) 遵守对发行人有重大影响的相关法律及规例的资料。 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	第五章 安全生产 Chapter V. Production Safety (二) 完善安全体系 (II) Improving safety system	69-72
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指标 Index	详情 Details	章节 Chapter	页码 Page
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关键绩效指标 B2.1 KPI B2.1	因工作关系而死亡的人数及比率。 Number and rate of work-related fatalities.	绩效指标列表 Table of Performance Indicators	116
关键绩效指标 B2.2 KPI B2.2	因工伤损失工作日数 Lost days due to work injury.		
关键绩效指标 B2.3 KPI B2.3	描述所采纳的职业健康与安全措施，以及相关执行及监察方法。 Description of occupational health and safety measures adopted, how they are implemented and monitored.	第五章 安全生产 Chapter V. Production Safety (三) 管控安全风险 (III) Managing and controlling safety risks (五) 员工安全与健康 (V) Safety and health of staff	72-73 78-79

B. 社会 / B. Social

层面 B3: 发展及培训 / Aspect B3: Development and Training

一般披露 General Disclosure	有关提升雇员履行工作职责的知识及技能的政策。描述培训活动。 Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	第四章 以人为本 Chapter IV. People-Oriented Culture (三) 助力职业发展 (III) Facilitating career development	61-63
关键绩效指标 B3.1 KPI B3.1	按性别及雇员类别划分的受训雇员百分比。 The percentage of employees trained by gender and employee category.		
关键绩效指标 B3.2 KPI B3.2	按性别及雇员类别划分，每名雇员完成受训的平均时数。 The average training hours completed per employee by gender and employee category.		

B. 社会 / B. Social

层面 B4: 劳工准则 / Aspect B4: Labour Standards

一般披露 General Disclosure	有关防止童工或强制劳工的： (a) 政策；及 (b) 遵守对发行人有重大影响的相关法律及规例的资料。 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	第四章 以人为本 Chapter IV. People-Oriented Culture (二) 保护员工权益 (II) Protecting the rights and interests of employees	60-61
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指标 Index	详情 Details	章节 Chapter	页码 Page
关键绩效指标 B4.1 KPI B4.1	描述检讨招聘惯例的措施以避免童工及强制劳工。 Description of measures to review employment practices to avoid child and forced labour.	第四章 以人为本 Chapter IV. People-Oriented Culture (二) 保护员工权益 (II) Protecting the rights and interests of employees	60-61
关键绩效指标 B4.2 KPI B4.2	描述在发现违规情况时消除有关情况所采取的步骤。 Description of steps taken to eliminate such practices when discovered.	第四章 以人为本 Chapter IV. People-Oriented Culture (二) 保护员工权益 (II) Protecting the rights and interests of employees	60-61

B. 社会 / B. Social

层面 B5: 供应链管理 / Aspect B5: Supply Chain Management

一般披露 General Disclosure	管理供应链的环境及社会风险政策。 Policies on managing environmental and social risks of the supply chain.	第七章 合作共赢 Chapter VII. Co-operation for mutual gains (一) 打造责任供应链 (I) Creating responsible supply chain	98-99
关键绩效指标 B5.1 KPI B5.1	按地区划分的供应商数目。 Number of suppliers by geographical region.		
关键绩效指标 B5.2 KPI B5.2	描述有关聘用供应商的惯例，向其执行有关惯例的供应商数目、以及有关惯例的执行及监察方法。 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	第七章 合作共赢 Chapter VII. Co-operation for mutual gains (一) 打造责任供应链 (I) Creating responsible supply chain	98-99

B. 社会 / B. Social

层面 B6: 产品责任 / Aspect B6: Product Responsibility

一般披露 General Disclosure	有关所提供产品和服务的健康与安全、广告、标签及私隐事宜以及补救方法的： (a) 政策；及 (b) 遵守对发行人有重大影响的相关法律及规例的资料。 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	第二章 精益品质 Chapter II. Excellent Quality (三) 卓越品质 (III) Excellent quality	47-49
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指标 Index	详情 Details	章节 Chapter	页码 Page
关键绩效指标 B6.1 KPI B6.1	已售或已运送产品总数中因安全与健康理由而须回收的百分比。 Percentage of total products sold or shipped subject to recalls for safety and health reasons.		
关键绩效指标 B6.2 KPI B6.2	接获关于产品及服务的投诉数目以及应对方法。 Number of products and service related complaints received and how they are dealt with.	第三章 竭诚服务 Chapter III. Dedicated Service (二) 贴心服务客户 (II) Attentive Customer Service 绩效指标列表 Table of Performance Indicators	54 114
关键绩效指标 B6.3 KPI B6.3	描述与维护及保障知识产权有关的惯例。 Description of practices relating to observing and protecting intellectual property rights.	第二章 精益品质 Chapter II. Excellent Quality (二) 创新智造 (II) Innovative and intelligent production	45-46
关键绩效指标 B6.4 KPI B6.4	描述质量检定过程及产品回收程序。 Description of quality assurance process and recall procedures.	第二章 精益品质 Chapter II. Excellent Quality (三) 卓越品质 (III) Excellent quality	47-48
关键绩效指标 B6.5 KPI B6.5	描述消费者资料保障及私隐政策，以及相关执行及监察方法。 Description of consumer data protection and privacy policies, how they are implemented and monitored.	第三章 竭诚服务 Chapter III. Dedicated Service (一) 保障客户权益 (I) Protecting the rights and interests of customers	52

指标 Index	详情 Details	章节 Chapter	页码 Page
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## B. 社会 / B. Social

## 层面 B7: 反贪污 / Aspect B7: Anti-corruption

一般披露 General Disclosure	有关防止贿赂、勒索、欺诈及洗黑钱的： (a) 政策；及 (b) 遵守对发行人有重大影响的相关法律及规例的资料。 Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	第四章 以人为本 Chapter IV. People-Oriented Culture (四) 诚信建设 (IV) Integrity cultivation 第七章 合作共赢 Chapter VII. Co-operation for mutual gains (一) 打造责任供应链 (I) Creating responsible supply chain	63-64 98
关键绩效指标 B7.1 KPI B7.1	于汇报期内对发行人或其雇员提出并已审结的贪污诉讼案件的数目及诉讼结果。 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	绩效指标列表 Table of Performance Indicators	113
关键绩效指标 B7.2 KPI B7.2	描述防范措施及举报程序，以及相关执行及监察方法。 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	第四章 以人为本 Chapter IV. People-Oriented Culture (四) 诚信建设 (IV) Integrity cultivation	63-64

## B. 社会 / B. Social

## 层面 B8: 社区投资 / Aspect B8: Community Investment

一般披露 General Disclosure	有关以社区参与来了解营运所在社区需要和确保其业务活动会考虑社区利益的政策。 Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	第八章 公益慈善 Chapter VIII. Community and Charity	104-110
关键绩效指标 B8.1 KPI B8.1	专注贡献范畴。 Focus areas of contribution.	第八章 公益慈善 Chapter VIII. Community and Charity	104-110
关键绩效指标 B8.2 KPI B8.2	在专注范畴所动用资源。 Resources contributed to the focus area.	第八章 公益慈善 Chapter VIII. Community and Charity	104-110

尊敬的读者：

Dear readers:

您好！非常感谢您阅读《华润水泥控股有限公司 2017 年社会责任报告》。我们非常关注您对报告的意见。请您对本报告提出意见和建议并反馈给我们，以便我们对报告持续改进。

Thank you for reading the 2017 Social Responsibility Report of China Resources Cement Holdings Limited. Your feedback and suggestions on this report are held in high regard and much appreciated for our continuous improvement.

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# 华润水泥控股有限公司

## China Resources Cement Holdings Limited

(于开曼群岛注册成立之有限公司)

(incorporated in the Cayman Islands with limited liability)

股份代号 Stock Code: 1313

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