🛟 本报告采用环保再生纸制作



· 国 铁 建2019年社会责任报告 CHINA RÞ CO₂

中

中国铁建股份有限公司

China Railway Construction Corporation Limited

地址:中国・北京复兴路40号 邮编: 100855 电话: 86-10-51888114 传真: 86-10-68217382 网址: www.crcc.cn 电子信箱: webmaster@crcc.cn

Address: No.40 Fuxing Road, Beijing, China Post code: 100855 Tel: 86-10-51888114 Fax: 86-10-68217382 Website: www.crcc.cn Email: webmaster@crcc.cn

报告出版的环境考虑 纸张:采用环保纸张印刷 油墨:采用环保油墨以减少空气污染



中国铁建官方微博 中国铁建官方微信

Ô.





CHINA RAILWAY CONSTRUCTION CORPORATION LIMITED SOCIAL RESPONSIBILITY REPORT

报告说明 **REPORT SPECIFICATION**

报告组织范围

中国铁建股份有限公司及下属机构。

报告时间范围

本报告为公司第12份社会责任报告,报告时间范 围为2019年1月1日至12月31日,部分内容及数据 超出上述范围。

报告发布周期

年度报告。

报告参考标准

本报告依据国务院国资委《关于中央企业履行 社会责任的指导意见》、上海证券交易所《公司 履行社会责任报告》编制指引,参照全球报告倡 议组织(GRI)《可持续发展报告指南》(G4)、 国际标准化组织《ISO26000:社会责任指南 (2010)》、香港联交所《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 任报告指南(CASS-CSR4.0)》编制。

报告说明

本报告披露的财务数据如与年度报告有出入, 以年度报告为准,其他数据来自公司内部统计。 本报告中所涉及货币金额以人民币作为计量币 种,特别说明的除外。在报告中,为了便于表述 和阅读,中国铁建股份有限公司还以"中国铁 建""公司""我们"等表示。

报告发布形式

本报告以印刷版和电子版两种形式发布,以网络 发布的电子版为主。欲获取报告电子版,请登陆中 国铁建网站:www.crcc.cn。

报告反馈联络方式

名称:中国铁建股份有限公司 地址:北京市海淀区复兴路40号 邮政编码: 100855

Reporting Scope

China Railway Construction Corporation Limited and its subordinate organizations.

Reporting Period

The report is the 12th Corporate Social Responsibility Report issued by China Railway Construction Corporation Limited to the society, ranging from January 1st to December 31st, 2019, and some contents and data of the report are beyond this range.

Release Cycle

Annual report.

Reference Standard

This report is formulated in accordance with Guideline on Fulfilling Social Responsibility by Central SOE issued by State-owned Assets Supervision and Administration Commission and Guidelines for Preparing Corporate Social Responsibility Report issued by Shanghai Stock Exchange, and prepared in reference to Sustainability Reporting Guidelines (G4) issued by Global Reporting Initiative (GRI), ISO 26000: Guidance on Social Responsibility (2010) issued by International Standardization Organization, the Environmental, Social and Governance Reporting Guide issued by the Stock Exchange of Hong Kong Limited and the Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences (CASS).

Report Description

In case of any discrepancy between the financial data disclosed by this report and the Company's annual report, the latter shall prevail. Other data are based on the Company's internal statistics. In this report, all currency units quoted for measurement are RMB unless otherwise stated. For convenience of indication and reading, China Railway Construction Corporation Limited is also abbreviated as "CRCC", the "Company," "We," and so on.

Release Form

This report is issued in both printed and electronic versions, the latter being the dominant form and available on the website. To obtain the electronic version of this report, please visit CRCC website: www.crcc.cn.

Contact Us

Name: China Railway Construction Corporation Limited Address: No. 40, Fuxing Road, Haidian District, Beijing, China Postal Code: 100855

个别及连带责任。

The Board of Directors and all the directors of China Railway Construction Corporation Limited (CRCC) guarantee that the content of the report carries no false recordings, misleading statements or major omissions, and undertake individual and joint liability for the authenticity, accuracy and integrity.

本公司董事会及全体董事保证本报告内容不 存在任何虚假记载、误导性陈述或重大遗漏, 并对其内容的真实性、准确性和完整性承担

目录 CONTENTS

	报告说明	Report Specification
04	领导致辞	Leader's Speech
	董事长致辞 总 裁 致 辞	Message from the Chairman Message from the President

12 / 关于我们

About Us 公司概况 Corporate Profile 企业理念 Corporate Philosophy 组织架构 Organizational Structure 主要子公司 Main Subsidiaries

16 社会评价 Honors and Awards

8 责任聚焦 Social Responsibility Features

19 专题一 兴轨道 建新国门第一线 Features 1: Developing Urban Rail Transit and Building First Line of New National Gateway

24 专题二 心相连 打赢脱贫攻坚战 Features 2: Striving to Win the Fight against Poverty

30 专题三 新理念 推动高质量发展 Features 3: Promoting High-Quality Development with New Ideas

Laying Solid Foundation for Sustainable Development

- 38优化公司治理Optimizing Corporate Governance
- 43服务国家战略Serving National Strategies

48 / 品"质"致胜 匠心建造未来

Building Future with Excellent Quality and Craftsmanship Spirit

- 50 全心奉献精品工程 Building Excellent Engineering Projects
- 54 全面实施创新驱动 Implementing Innovation-Driven Development
- 60全力保障安全生产Guaranteeing Safety Production



64 / 品"贤"思齐 携手一路前行

Achieving Win-Win Results with Stakeholders

66 人尽其才谋发展

Pursuing Development through Talented People

74 携手合作享共赢

Achieving Win-Win Cooperation with Partners

78 / 品"德"共荣

同筑美好家园

Acting as Good Corporate Citizen

- 80 助力精准扶贫 Helping Promote Targeted Poverty Alleviation
- 82 倾情奉献社会 Making Contributions to Society
- 86 践行海外责任 Performing Social Responsibilities in Overseas Market
- 90 守护绿水青山 Protecting Lucid Waters and Lush Mountains

98 / 责任管理

Social Responsibility Management

99	责任战略	Social Responsibility Strategy
99	责任治理	Social Responsibility Governance
100	责任沟通	Social Responsibility Engagement

108 / 附录 Appendix

108	关键绩效表	Table of Key Performance Indicators
111	指标索引	Indicator Index
112	意见反馈	Suggestions and Feedback

董事长致辞



2019年,是中国铁建改革发展进程中极不平凡的一年。 面对严峻形势和艰巨任务,中国铁建紧紧围绕打造"品 质铁建"中心工作和"稳增长、高质量"工作主题,抢抓 机遇,开拓进取,稳中快进、进中提质、质中增效,各项 工作取得了明显成效。

这一年,公司坚持"三转四做"的经营理念,年度指标 全面超额完成。公司积极践行国家战略,坚持做优做强 主业,布局企业高质量发展产业链,扎实推进创新驱动 发展,企业主要经济指标均实现两位数增长,安全生产 和质量水平总体平稳,品质发展成效显著。

这一年,公司推进"放管结合"的改革举措,资源配置 效率明显提升。混合所有制改革迈开步伐,分拆上市、 市场化债转股、兼并收购多措并举,取得突破进展。瘦 身健体、机关机构改革扎实推进,管理架构持续优化。 转型升级稳步推进,产业结构日趋优化。

这一年,公司实践"海外优先"的发展战略,海外市场 拓展成绩斐然。构建了3+5+N的海外经营发展体系,新 签订单同比增长一倍。海外优先战略形成共识,海外协 同力度持续加强,境外项目管控平稳有序,投资引领作 用快速显现,风险管控能力不断提升。

这一年,公司致力于履行政治责任和社会责任,以卓越 品质的建筑精品向世界展示中国精神和中国力量。在 新中国成立70周年之际,被誉为"新国门第一线"的北 京大兴国际机场的快速轨道交通专线建成通车;打造 扶贫"中国铁建模式",在3个定点扶贫区县和13个省 市帮扶点探索乡村振兴之路;中土集团承建的"吉布提 鲁班工坊"正式揭牌运营,成为中国在非洲建设的第一 家鲁班工坊;2020年新冠疫情发生以来,作为建筑企 业的国家队、主力军,驰援火神山、雷神山、方舱医院 建设,积极筹措、捐赠防疫物资,一次次刷新让世界瞩 目的"中国速度"。

2020年伊始,新冠肺炎疫情肆虐全球,经济增长不确 定性加剧,建筑市场面临的形势依然复杂,但市场规模 平稳向好的基本面没有改变。2020年,公司将推进"四 个坚持"。坚持打造"品质铁建"工作总方针,坚持以提 高发展质量和效益为中心,坚持以改革创新和转型升 级为重点,坚持以建成世界一流企业为目标,为全面建 成小康社会和"十三五"圆满收官、"十四五"顺利开局 奠定基础。2020年,公司将放飞铁建梦想。围绕"品质 铁建"、世界一流、永续发展目标,推进改革创新,加快 转型升级,加快海外拓展,强化管理提升。2020年,公 司将实施创新发展。理念、管理、产品、技术、营销全 面创新,让创新融入发展的每一个角落,伴随发展的每 一个时刻。2020年,公司将践行实于兴企。坚持实于精 神,强化党建引领;激发实干动能,深化改革创新;弘扬 实干作风,加强基础管理;聚焦实干要务,解决发展难 题;践行实干行动,实现海外飞跃;锻造实干队伍,注入 蓬勃力量;弘扬实干文化,谱写精彩华章。

大道至简,实干为要。2020年,中国铁建将以坚如磐 石的信心、只争朝夕的劲头、坚韧不拔的毅力,扎实推 动企业实现品质发展,为社会勇担责任、为股东实现 价值、为员工谋求幸福,奋力谱写新时代改革发展新 篇章!

MESSAGE FROM THE CHAIRMAN

The year 2019 has been an extraordinary one in the course of reform and development of CRCC. Facing serious situations and arduous tasks, the Company has focused on the central work of building a "High-Quality CRCC" and the work theme of "stabilizing growth and pursuing high-quality development," seized opportunities, blazed new trails in a pioneering spirit, and strove to make accelerated progress in a steady, quality and efficient manner, achieving remarkable results in various fields.

In 2019, adhering to the operation philosophy of "three transformations and four roles," the Company has overfulfilled the annual corporate targets in an all-around way. It has taken initiative to implement national strategies, insisted on optimizing and strengthening core business, developed an industry chain featuring high-quality growth, effectively promoted innovation-driven development, achieved double-digit growth rates in all major economic indicators, maintained a generally stable trend in terms of safety production and quality enhancement, and realized remarkable results in the aspect of quality development.

In 2019, the Company has promoted reform measures combining of delegation and regulation and made significant achievements in terms of efficiency of resource allocation. It has launched mixed-ownership reform, and taken several measures including spin-off IPOs, market-oriented debt-to-equity swaps, and mergers and acquisitions, achieving breakthroughs. It has also taken measures to make the enterprises leaner and healthier, effectively advanced institutional reform, constantly optimized management structure, steadily boosted corporate transformation and upgrading, and continuously upgraded industrial structure.

In 2019, the Company has implemented the development strategy of giving priority to overseas business, and made great achievements in expanding overseas market. It has developed the 3+5+N overseas operation and development system, and the intake of new orders has been doubled from a year earlier. It has reached consensus on the development of overseas market, constantly enhanced overseas coordination, and strengthened management on overseas projects, achieving stable and orderly development. The guiding role of investment has emerged in a highly dynamic manner, and the risk management and control has been continuously improved.

In 2019, the Company has been committed to fulfilling political and social responsibilities, and used firstrate and high-quality construction projects to demonstrate the "Chinese spirit" and the "Chinese strength" to the world. On the occasion of the 70th anniversary of the founding of the People's Republic of China, the Beijing Daxing International Airport Express, which is recognized as the "First Line of New National Gateway," has been opened to traffic; "CRCC Model" for poverty alleviation has been established, and the rural revitalization path has been explored in 3 fixed-pointed poverty alleviation counties, as well as the assisted areas in 13 provinces and municipalities; Djibouti Luban Workshop undertaken by China Civil Engineering Construction Corporation has been formally lunched, which is the first of its kind in Africa; and since the outbreak of the COVID-19, CRCC, one of the national team members and main forces of China's construction industry, has rushed to build Huoshenshan Hospital, Leishenshan Hospital and module hospitals, and taken initiative to raise and donate epidemic-prevention supplies and materials, deeply impressing the world with the "Chinese speed."

With the dawn of the year 2020, a serious public health crisis has occurred in the world with the spreading of COVID-19, which intensifies the uncertainty of economic growth. Though the construction market has still faced complicated situation, the fundamentals of steady and sound growth in terms of market size have not changed. In 2020, the Company will insist on the general principle of building a "High-Quality CRCC," continue to improve the quality and efficiency of development, focus on reform, innovation, transformation and upgrading, and adhere to the goal of building a world-class enterprise, laying a solid foundation for the building of a moderately prosperous society in all respects, a successful completion of the "13th Five-Year Plan" (2016-2020), and a good beginning of the "14th Five-Year Plan" (2021-2025). In 2020, the Company will continue to pursue the dream of CRCC. Centering on the building of a worldclass and sustained "High-Quality CRCC," the Company will promote reform and innovation, accelerate transformation and upgrading, speed up development of overseas market, and enhance management improvement. In 2020, the Company will future boost innovation-driven growth, conduct innovations in idea, management, product, technology and marketing in an all-around way, and integrate innovation into the whole process of development. Only through down-to-earth effort can we build a strong enterprise. In 2020, the Company will insist on enterprising spirit and enhance guidance of Party building; work solidly to deliver development momentum and deepen reform and innovation; press ahead with concrete efforts and enhance fundamental management; focus on pragmatical development and solve difficulties in growth; conduct practical actions and make leap progress in overseas market; build a high-caliber talent team and inject vitality into the business; carry forward the culture of doing and write a splendid chapter.

A great vision, simple and pure, requires credible actions. In 2020, with rock-solid confidence and racing against time with unwavering determination will, CRCC will effectively promote the enterprise to achieve high-quality development, and take initiative to fulfill social responsibilities, to create value for shareholders and to seek happiness for employees, striving to open a new chapter of reform and development for a new era!

Chen Fenjian

总裁致辞



2019年,是新中国成立70周年,也是中国铁建改革发展 成效显著的一年。面对严峻形势和艰巨任务,我们坚持 以习近平新时代中国特色社会主义思想为指导,持续完 善公司治理,加快改革创新,积极履行社会责任,企业核 心竞争力和可持续发展能力不断增强。

一年来,我们紧紧围绕"品质铁建"中心工作和"稳增 长、高质量"工作主题,各项工作取得新成效,全年新 签合同额、营业收入、利润总额分别为20068.5亿元、 8304.5亿元、280.3亿元,分别同比增长26.7%、13.7%、 11.6%,企业发展迈上新的台阶。中国铁建在2019年《财 富》"世界500强企业"排名第59位、"全球250家最大承 包商"排名第3位、"中国企业500强"排名第14位。

一年来,我们秉承"诚信创新永恒、精品人品同在"的 价值观, 竭力为客户提供高质量产品和服务, 坚决守住 "安全、质量、效益、工期、环保、信誉"六条底线。备 受瞩目的川藏铁路、京张高铁、京雄城际、莫斯科地铁、 卡塔尔世界杯体育场等重大工程项目进展顺利,浩吉铁 路、郑阜高铁、济青高速公路等一系列重难点项目优质 高效建成,受到社会各界的高度赞誉。全年获得鲁班奖 11项, 詹天佑奖9项, 国家优质工程奖41项。

一年来,我们大力实施"科技兴企、科技强企"战略,完 善科技创新体制机制,着力打造科技创新平台,有效激 发科技创新活力。新增劳模和工匠创新工作室8个,新增 专利3349件,荣获中国专利奖9项,荣获国家科技进步 特等奖1项、二等奖3项,新增国家级科研项目2个,摘得 "十三五" 期间城市地下大空间国家级课题主要代表项 目,成为"交通强国建设试点单位"。

一年来,我们积极践行"绿水青山就是金山银山"发展 理念,坚持绿色规划、绿色设计、绿色施工、绿色运营, 大力拓展生态环保产业布局,坚定走绿色发展之路。企 业万元营收综合能耗与2018年相比下降6.59%。

一年来,我们大力实施"海外优先"战略,抢抓"一带一 路"机遇,海外业务已覆盖全球129个国家和地区。我 们坚持融入属地、扎根属地,与所在国人民共享发展成 果;优先聘用当地员工,大力开展教育培训,积极为当地 解决就业问题;加强属地化采购,有效带动当地产业发 展;保护自然环境,投身救灾抢险,开展公益活动,展现 了铁建担当。

一年来,我们秉持"真心扶贫、精准扶贫、共赢扶贫、创 新扶贫、干净扶贫"理念,聚焦"两不愁三保障",通过 产业扶贫、就业扶贫、教育扶贫、消费扶贫等多种方式, 全力投身精准扶贫攻坚战,取得阶段性成效。全年投入 帮扶资金5671.6万元,物资折款282万元。

一年来,我们坚持"以人为本"理念,推动员工和企业 共同成长、共同发展。加强民生福祉建设,构建公平合 理薪酬福利体系,推行灵活休假制度,加强员工民主管 理,有效保障员工合法权益;关注员工职业发展,强化员 工教育培训,年度培训51万人次;真情关爱员工,救助慰 问困难职工家庭、劳模先进、生产一线员工等63996户 次,职工群众获得感、幸福感不断增强。

2020年是决胜全面建成小康社会、决战脱贫攻坚之年, 也是"十三五"规划收官之年。面对突如其来的新冠肺 炎疫情冲击,中国铁建将牢记使命与担当,充分发挥中 央企业战疫"顶梁柱"和经济"压舱石"作用,统筹抓好 疫情防控与生产经营工作,持续改革创新,提升发展质 量,为实现"品质铁建"发展目标,夺取"十三五"收官 之战全面胜利做出应有的贡献!

MESSAGE FROM THE PRESIDENT

The year 2019 marked the 70th anniversary of the founding of the People's Republic of China, and was a year in which remarkable achievements have been made by CRCC in reform and development. Facing serious situations and arduous tasks, we following the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, have constantly perfected corporate governance, accelerated reform and innovation, actively fulfilled social responsibilities, and continuously enhanced core competitiveness and sustainable development capability of the Company.

Over the past year, focusing on the central work of building a "High-Quality CRCC" and the work theme of "stabilizing growth and pursuing high-guality development", we have made remarkable achievements in various fields. The amount of newly-signed contracts, operating revenue and total profits of the Company reached 2.00685 trillion yuan, 830.45 billion yuan and 28.03 billion yuan respectively, up 26.7 percent, 13.7 percent and 11.6 percent year-on-year separately. The development of the Company has been lifted to a new level. In 2019, CRCC ranked 59th among Fortune Global 500, 3rd among ENR's Top 250 Global Contractors, and 14th among China's Top 500 Enterprises.

Over the past year, adhering to the values of "Sincerity and innovation for ever, guality and character at once," we have spared no effort to offer high-guality products and services to clients, firmly held the six bottom lines of "safety, quality, efficiency, project duration, environmental protection and reputation." The high-profile construction projects including Sichuan-Tibet Railway, Beijing-Zhangjiakou High-Speed Railway, Beijing-Xiongan Intercity Railway, Moscow Metro and Qatar World Cup Stadium have been implemented smoothly, and the successful completion of a series of major projects including Haolebaoji-Ji'an Railway, Zhengzhou-Fuyang High-Speed Railway and Jinan-Qingdao Expressway has been highly recognized by all sectors of society. The Company won 11 prizes of Luban Awards, 9 prizes of Zhan Tianyou Awards and 41 prizes of National Quality Engineering Awards in 2019.

Over the past year, we have vigorously implemented the strategy of invigorating and developing the enterprise through science and technology, perfected the systems and mechanisms for science and technology innovation, and made special effort to build science and technology innovation platform, effectively inspiring the vitality of science and technology innovation. In 2019, the Company established 8 new studios for model workers and craftsmen; obtained 3,349 new patents; won 9 prizes of China Patent Awards, and 1 special prize and 3 second prizes of National Science and Technology Progress Awards; undertaken 2 new national scientific research projects, and won the major sub-project of the national scientific project on large-scale urban underground space; and was included into the pilot organizations for implementing the Program of Building National Strength in Transportation.

Over the past year, we have taken initiative to implement the development concept of "lucid waters and lush mountains are invaluable assets," insisted on green planning, green design, green construction and green operations, energetically developed ecological and environmental protection industries, and resolutely followed the path of green development. The comprehensive energy consumption per 10,000 yuan in output value in 2019 reduced by 6.59 percent compared with 2018.

Over the past year, we have vigorously implemented the strategy of giving priority to overseas business, seized the opportunities brought by the Belt and Road Initiative, and established business presence in 129 countries and regions around the world. We have insisted on integrating ourselves into local operations, focused on developing local businesses, and shared development achievements with the people of the countries and regions where the business is conducted; given priority to employ local employees, vigorously carried out education and training, and actively created job opportunities for local people; enhanced local procurement, and effectively boosted the development of local industries; strengthened environmental protection, rushed to conduct emergency rescues and disaster reliefs, and carried out public welfare activities, fully demonstrating the responsibility CRCC ought to shoulder.

Over the past year, we have insisted on the concept of "sincere poverty alleviation, targeted poverty alleviation, win-win poverty alleviation, innovative poverty alleviation and transparent poverty alleviation," focused on resolving the prominent problems in assuring the rural poor population that their food and clothing needs will be met and guaranteeing that they have access to compulsory education, basic medical services, and safe housing ("two assurances and three guarantees"), made decisive efforts to combat poverty, and carried out targeted poverty alleviation through, among others, industrial development, job creation, education and consumption, securing important achievements. In 2019, CRCC invested 56.716 million yuan in poverty alleviation, and the mount of assistance materials (converted into money) was 2.82 million yuan.

Over the past year, we have adhered to the idea of putting people first, and promoted common growth and development of the enterprise and employees. We have improved the well-being of the people, built fair and reasonable remuneration and benefits system, implemented flexible vacation system, enhanced democratic management, and effectively maintained the lawful rights and interests of employees; paid attention to career development of employees, strengthened employee education and training, and a total of 510,000 personnel have been trained; enhanced employee care, and assisted and visited 63,996 households including families of needy worker, model workers and front-line workers. The sense of gain and feeling of happiness of the staff have been continuously enhanced.

The year 2020 is crucial for securing a decisive victory in building a moderately prosperous society in all respects and the fight against poverty, as well as the concluding year of the "13th Five-Year Plan" (2016-2020). Facing the unexpected COVID-19, we will keep our mission and responsibility firmly in mind, give full play to the role of a central SOE in fighting against the epidemic and stabilizing economy, enhance epidemic prevention and control while conducting business regularly, continuously boosted reform and innovation, and improve the guality of development, making due contributions to the building of a "High-Ouality CRCC" and the successful completion of the "13th Five-Year Plan."

Zhuang Shangbiao

The President

关于我们 ABOUT US

公司概况 CORPORATE PROFILE

中国铁建股份有限公司前身是铁道兵,由中国铁道建筑总公司(改制更名为中国铁道建筑集团有限公司)独家发起设立,于2007年11月5日在北京成立,为国资委管理的特大型建筑企业。2008年3月10日和3月13日,公司人民币内资股 (A股)和境外上市外资股(H股)分别在上海证券交易所和香港联交所上市。

China Railway Construction Corporation Limited (hereinafter referred to as "CRCC"), whose predecessor was the Railway Engineering Corps, is solely initiated by China Railway Construction Corporation (which was restructured into China Railway Construction Co., Ltd.). Established on November 5th, 2007 in Beijing, CRCC is a mega size construction corporation under the administration of the State-owned Assets Supervision and Administration Commission of the State Council of China. On March 10th and March 13th, 2008, the Company's domestic shares (A shares) and overseas listed foreign capital shares (H shares) were listed on the Shanghai Stock Exchange and the Hong Kong Stock Exchange, respectively.

公司业务涵盖工程承包、勘察设计咨询、工业制造、房地产开发、物流与物资贸 易等,具有科研、规划、勘察、设计、施工、监理、维护、运营和投融资等完善的 行业产业链。在高原铁路、高速铁路、高速公路、桥梁、隧道和城市轨道交通工 程设计及建设领域,确立了行业领导地位。

With its businesses covering project contracting, survey design consultation, industrial manufacturing, real estate development, logistics, trade of goods and materials, and so on, CRCC has developed into a complete and comprehensive industrial chain of scientific research, planning, survey, design, construction, supervision, maintenance, operation, investment and financing, etc. Today, the Company has established its leadership position in project design and construction fields including plateau railways, high-speed railways, expressways, bridges, tunnels and urban rail transit.

公司是中国乃至全球最具实力、最具规模的特大型综合建设集团之一,经营业务遍及包括台湾在内的全国32个省、自治区、直辖市和香港、澳门特别行政区,以及世界127个国家。

CRCC is one of the most powerful and largest integrated construction groups in China and even in the world, with business presence in 32 provinces (including Taiwan), autonomous regions, municipalities, and the Hong Kong and Macao special administrative regions (SARs), as well as 127 countries around the world.

企业理念 CORPORATE PHILOSOPHY

企业价值观 Corporate Values

诚信创新永恒 精品人品同在

Sincerity and Innovation for Ever, Quality and Character at Once

企业精神

Corporate Spirit

不畏艰险 勇攀高峰 领先行业 创誉中外

Fearless of Danger, Bold in Scaling Heights, Leading the Industry, Generating Prestige Home and Abroad

管理方针

Management Guidelines

以人为本 诚信守法 和谐自然 建造精品

People Orientation, Honesty and Law-abiding, Harmony and Nature, Competitive Product Manufacturing

关于我们 About Us

总体发展战略

Overall Development Strategy

建筑为本、相关多元、协同一体、转型升级,发展成为技术创新国际领先、竞争能力国际领先、经济实力国际领先,最 具价值创造力的综合建筑产业集团。

Construction Orientation, Diversified Development, Integrated Operation, Transformation and Upgrading, Striving to be an Integrated Construction Group with World-class Technological Innovative Strength, Competitiveness, Economic Strength, and Value Creativity.



主	要子公司 MAIN SUBSIC
	中国土木工程集团有限公司(北京) China Civil Engineering Construction Corporation (Beijing)
	中铁十一局集团有限公司 (武汉) China Railway 11 th Bureau Group Co., Ltd. (Wuhan)
	中铁十二局集团有限公司 (太原) China Railway 12 th Bureau Group Co., Ltd. (Taiyuan)
	中国铁建大桥工程局集团有限公司 (天津) China Railway Construction Bridge Engineering Bureau Group Co., Ltd. (Tianjin)
	中铁十四局集团有限公司 (济南) China Railway 14 th Bureau Group Co., Ltd. (Jinan)
日田 China Railway C	中铁十五局集团有限公司(上海) China Railway 15 th Bureau Group Co., Ltd. (Shanghai)
	中铁十六局集团有限公司 (北京) China Railway 16 th Bureau Group Co., Ltd. (Beijing)
	中铁十七局集团有限公司 (太原) China Railway 17 th Bureau Group Co., Ltd. (Taiyuan)
L Sonstruct 股	中铁十八局集团有限公司 (天津) China Railway 18 th Bureau Group Co., Ltd. (Tianjin)
中国铁建股份有限公司	中铁十九局集团有限公司(北京) China Railway 19 th Bureau Group Co., Ltd. (Beijing)
	中铁二十局集团有限公司 (西安) China Railway 20 th Bureau Group Co., Ltd. (Xi'an)
imited	中铁二十一局集团有限公司 (兰州) China Railway 21 st Bureau Group Co., Ltd. (Lanzhou)
	中铁二十二局集团有限公司(北京) China Railway 22 nd Bureau Group Co., Ltd. (Beijing)
	中铁二十三局集团有限公司(成都) China Railway 23 rd Bureau Group Co., Ltd. (Chengdu)
	中铁二十四局集团有限公司(上海) China Railway 24 th Bureau Group Co., Ltd. (Shanghai)
	中铁二十五局集团有限公司(广州) China Railway 25 th Bureau Group Co., Ltd. (Guangzhou)
	中铁建设集团有限公司(北京) China Railway Construction Group Co., Ltd. (Beijing)
	中国铁建电气化局集团有限公司(北京) China Railway Construction Electrification Bureau Group Co., Ltd. (Beijing)

DIARIES

中国铁建港航局集团有限公司 (珠海) CRCC Harbour and Channel Engineering Bureau Group Co., Ltd. (Zhuhai)

> 中国铁建房地产集团有限公司(北京) China Railway Construction Real Estate Group Co., Ltd. (Beijing)

中铁第一勘察设计院集团有限公司 (西安) China Railway First Survey and Design Institute Group Co., Ltd. (Xi' an)

中铁第四勘察设计院集团有限公司(武汉) China Railway SIYUAN Survey and Design Group Co., Ltd. (Wuhan)

中铁第五勘察设计院集团有限公司(北京) China Railway Fifth Survey and Design Institute Group Co., Ltd. (Beijing)

中铁上海设计院集团有限公司(上海) China Railway Shanghai Design Institute Group Co., Ltd. (Shanghai)

中铁物资集团有限公司(北京) China Railway Materials Group Co., Ltd. (Beijing)

中国铁建重工集团股份有限公司(长沙) China Railway Construction Heavy Industry Group Co., Ltd. (Changsha)

中国铁建高新装备股份有限公司(昆明) CRCC High-Tech Equipment Corporation Limited (Kunming)

中国铁建国际集团有限公司(北京) China Railway Construction Corporation (International) Limited (Beijing)

中铁城建集团有限公司(长沙) China Railway Urban Construction Group Co., Ltd. (Changsha)

> 中国铁建投资集团有限公司(珠海) China Railway Construction Investment Group Co., Ltd. (Zhuhai)

中国铁建财务有限公司(北京) CRCC Finance Company Limited (Beijing)

中铁建资产管理有限公司(北京) China Railway Construction Asset Management Co., Ltd. (Beijing)

中铁建重庆投资集团有限公司 (重庆) CRCC Chongqing Investment Co., Ltd. (Chongqing)

中国铁建昆仑投资集团有限公司(成都) China Railway Kunlun Investment Group Co., Ltd. (Chengdu)



社会评价 HONORS AND AWARDS

《财富》"世界500强"排名,列第59位 Ranking 59th among Fortune Global 500

'中国企业500强"排名,列第14位 Ranking 14th among China's Top 500 Enterprises

> 《工程新闻记录》(ENR)"全球250家最大承包商"排名,列第3位 Ranking 3rd among ENR's Top 250 Global Contractors

在第九届中国证券"金紫荆"奖评选中,荣获"新中国成立七十周年卓越贡献企业"

Awarded the "Outstanding Contribution Enterprise for the 70th Anniversary of the Founding of New China" at the 9th China Securities Golden Bauhinia Awards Ceremony



Awarded the titles of "Top 100 - Comprehensive Strength in Top 100 Hong Kong Listed Companies," "Top 50 - Mainland-Hong Kong Stock Connect in Top 100 Hong Kong Listed Companies" and "Top 10 - Turnover in Top 100 Hong Kong Listed Companies" at the 7th Top 100 Hong Kong Listed Companies Selection



Won the "Tianma Award – Best Board of Listed Company" at the 10th China Listed Company Investor Relations Selection





在第八届中国上市公司诚信高峰论坛上,荣获"2019中国上市 公司诚信企业百佳""2019最佳公司治理董事会"

Awarded the title of "2019 Top 100 Chinese Listed Companies of Integrity" and the "2019 Best Board of Directors for Corporate Governance" at the 8th China Listed Company Integrity Summit Forum



Exchange Meeting

奖""中国道德企业奖"

Won the "Top 100 Chinese Enterprises Award," "China Star Enterprise Award" and "China Ethical Enterprises Award" at the 19th China Top 100 Listed Companies Summit Forum



公益先锋"

关于我们 About Us

在第十四届中国上市公司董事会"金圆桌"论坛上 荣获"最佳董事会奖"

Won the "Best Board of Directors Award" at the 14th Gold Round Table Forum of the Chinese Boards of Listed Companies

在第十届中国上市公司与城市商会投资交流会上, 荣获"中国上市公 司最具投资价值领军企业""中国上市公司最具核心竞争力100强"

Won the "Best Investment Value Award for Leading Chinese Listed Companies" and the title of "Top 100 Chinese Listed Companies with Core Competitiveness" at the 10th Chinese Listed Companies & City Commerce Chamber Investment



在第三届新时代资本论坛上,荣获"最具社会责任

Won the "Pioneer for Social Responsibility and Public Welfare Award" at the 3rd New Era Capital Forum









"城市轨道交通是现代大城市交通的发展方向。发展轨道交 通是解决大城市病的有效途径,也是建设绿色城市、智能城 市的有效途径。北京要继续大力发展轨道交通,构建综合、绿 色、安全、智能的立体化现代化城市交通系统,始终保持国际 最先进水平,打造现代化国际大都市。"

"Urban rail transit marks the direction for future transport development in large modern cities, and the development of rail transit is an effective way to solve "big city malaise" and to build green and smart cities. Beijing should continue to develop rail transit in a bid to construct integrated, green, safe, intelligent, three-dimensional and modern transport systems, maintain the most advanced international standards, and build a modern international metropolis."

— Xi Jinping, General Secretary of the Communist Party of China (CPC) Central Committee, President of the People's Republic of China and Chairman of the Central **Military Commission**

建新国门第一线

DEVELOPING URBAN RAIL TRANSIT AND BUILDING FIRST LINE OF NEW NATIONAL GATEWAY

——中共中央总书记、国家主席、中央军委主席 习近平

9月25日,中共中央总书记、国家主席、中央军委主席习近平来到北京轨道交通大兴机场 线草桥站,在草桥站进行值机体验后,乘坐新机场线"白鲸号"列车前往大兴国际机场剪 彩。由此,大兴国际机场张开翅膀,凌空飞翔!

On September 25th, 2019, Xi Jinping, General Secretary of the CPC Central Committee, President of the People's Republic of China and Chairman of the Central Military Commission, arrived at Caoqiao Station of Beijing rail transit Daxing Airport Express. After experiencing the checkin process at Caoqiao Station, Xi took the subway trains, which were named after "Baijing," or "White Whale," heading for the Beijing Daxing International Airport to attend the operation ceremony of the airport. Since then, the Beijing Daxing International Airport went into official operation. 中国铁建参与投资、建设、运营的北京大兴国际机场线为连接北京市中心城和大兴国际机场的快速轨道交通专 线,全长41.36公里,是北京市轨道交通"十三五"规划中的一条骨干线路和落实北京城市总规划、促进京津冀协 同发展的重要组成部分,也是北京大兴国际机场"五纵两横"配套交通工程中的快速、直达、大运量的公共交通服 务专线、快线,被称为"新国门第一线"。

The 41.36-kilometer-long Daxing Airport Express, formally known as the Beijing Daxing International Airport Express, is a backbone line in Beijing's "13th Five-Year Plan" for rail transit, and an integral part of implementing the overall urban planning of Beijing and promoting the coordinated development of Beijing-Tianjin-Hebei region. CRCC has been involved in the investment, construction and operation of the express line. As the special and express line for public transport of the so-called "five-vertical and two-horizontal" integrated transport network of the Beijing Daxing International Airport, the Daxing Airport Express, which features high-speed, direct connection and large transport volume, is recognized as the "First Line of New National Gateway."



北京大兴国际机场线草桥站建成通车 Caogiao Station on the Beijing Daxing International Airport Express was completed and open to traffic 面对艰巨的工程,为确保大兴国际机场在新中国成立70周年大庆 之际通航,中国铁建讲政治、讲大局,充分发挥铁道兵"特别能吃 苦,特别能战斗"的精神,全力以赴投入到保开通大战中,勇于创 新,攻坚克难,出色地完成了新机场线的建设任务,并打破诸多纪 录,向世界充分展现了中国工程建筑的雄厚实力,充分体现了中 国精神和中国力量。新机场线与大兴国际机场空铁联手通航投运 后,强大的吞吐能力,对加快京津冀一体化,增强国际国内交流往 来起到极大促进作用,为更加开放的新时代中国特色社会主义经 济建设注入新的活力。

In face of the big challenges of such a huge project and to guarantee the formal operation of the Daxing Airport Express, which connects the urban area of Beijing to the Beijing Daxing International Airport, ahead of the 70th anniversary of the founding of the People's Republic of China, CRCC, who dares to overcome obstacles with new ideas, has firmly kept politics in mind, stressed the overall interests, given full play to the hard working and fighting spirit of the Railway Engineering Corps, and spared no effort to ensure the opening of the express line, successfully completing the construction of the Daxing Airport Express. The project broke several records, fully demonstrating the solid strength of China's engineering construction, as well as the Chinese spirit and the Chinese strength to the world. With large transport capacity, the joint operation of the Daxing Airport Express and the Beijing Daxing International Airport will accelerate the integration of Beijing-Tianjin-Hebei region, greatly promote the international and domestic exchanges, and inject new vitality into the development of a more open socialist economy with Chinese characteristics for a new era.

创新纪录 **NEW RECORDS**

时速最高 Highest speed

E1

刷新了国内城市轨道交通最高时速,每小时可达160公里,从草 桥站到新机场仅需19分钟。

Daxing Airport Express has set a new record for the speed of urban rail transit in China, which reaches 160 kilometers per hour and takes only 19 minutes to arrive at the Beijing Daxing International Airport from Caoqiao Station.

尺寸最大 -

Largest size

第一次面对无人驾驶和列车自动唤醒、检测、休眠等通信信号 安装要求,研发出重达22吨的国内尺寸最大的区间隔断门。

CRCC has researched and developed the largest interval partition gate in China which weigh 22 tons in order to meet the installation requirements of communication signal for, among others, driverless operation, automatic wake-up, test, and sleep for the first time.

体量最大 — Largest scale

草桥站建筑面积66253平方米,为北京市目前建成体量最大的 地铁站,可以值机、安检、行李托运,直通机场候机楼。

With a construction area of 66,253 square meters, Caoqiao Station is so far the largest subway station in Beijing, which provides airport checkin, security check, and baggage check-in services and connects directly with the airport terminal.

线路最多 Biggest interchange

在草桥站外修建了5条交通接驳线路,创造了北 京市一座车站接驳线路最多的纪录。

Caogiao Station is connected with 5 transfer lines, being the biggest interchange station in Beijing in terms of number of transfer lines.

首次铺设

New standard

国内首次在地铁中按照高铁标准铺设无砟轨道 板道床和轨道。

Daxing Airport Express is the first metro line in China that uses non-ballasted bed and track according to the construction standard of high-speed rails.

首个施工 ———

New technology

北京市第一个地铁大尺寸盾构施工,外径为8.8 米,远大于以往6米的地铁隧道空间。

Daxing Airport Express is the first metro line that uses large-size tunnel boring machine (TBM) in construction with an external diameter of 8.8 meters, far exceeding the previous subway tunnel size of 6 meters.

攻坚克难 DIFFICULTIES IN CONSTRUCTION

风险源极多 ———

Numerous risk sources

草桥站实际有效施工期591天,面临79个风险源,包含5个特级 风险源、26个一级风险源。

The actual effective construction period of Caogiao Station was 591 days, during which the project confronted 79 risk sources, including 5 super-level risk sources and 26 first-level risk sources.

上下穿频繁 ——

Frequent over-cross tunneling

不足2000米长的草桥站标段内,2线4轨道10次下穿、1次上穿。

Within the Caogiao Station project section of less than 2,000 meters, the 2 train lines including 4 tracks run through 10 underneath passes and 1 overpass.

创造掘进佳绩 New excavation record

盾构机连续掘进3847.4米,独头掘进长度为国内现有地铁隧道 施工之最。

The record of 3.847.4 meters of continuous TBM excavation has been created, being the longest single heading excavation length in subway tunneling at home.

尝新 PPP

TRIALS OF THE PPP MODE

首条全周期PPP线路

The first whole-cycle PPP line

CRCC cooperated with other 7 organizations to form 北京市首条"投资+建设+运营"全周期采用PPP模式(政府和 a consortium for joint bidding and brought in social 社会资本合作)的城市轨道交通线路。 capitals to the project that exceeded 50 percent of Daxing Airport Express is the first Public-Private Partnership project the total investment, making Daxing Airport Express in Beijing urban rail transit system that involves government and the most extensive PPP project in the area of urban social capital cooperation during the whole cycle of investment, rail transit in Beijing.

construction, and operation.

多项技术创新 —— Multiple technology innovations

开创了"场地仿真模拟系统""盾构机和连续皮 带双称重系统""大尺寸竖井定点检修工法"和

"双同步注浆技术"4项国内第一。

4 new technologies have been created, namely, "site simulation system," "TBM and belt conveyor dual weighing system," "large-size shaft fixed-point maintenance technology", and "double synchronous grouting technology," all for the first time in China.

克服修井难题 Manhole problem

在全国率先应用装配式竖井开挖工法,将检修 井的占地面积减少到50平方米,施工时间减少到 20天。

The pioneering application of prefabricated shaft technology has helped decrease the floor area of manholes to 50 square meters and the construction period to 20 days.

联合体共同投标 Consortium bidding

中国铁建与其他7家单位组成联合体中标,为项 目注入的社会资本超过总投资的50%,是目前北 京市轨道交通领域合作范围最广的PPP项目。





STRIVING TO WIN THE FIGHT AGAINST POVERTY

"脱贫攻坚越到紧要关头, 越要坚定必胜的信心, 越要有一鼓作气的决心, 尽锐出战、迎难而上, 真 抓实干、精准施策,确保脱贫攻坚任务如期完成。"

---中共中央总书记、国家主席、中央军委主席 习近平

"The more critical the moment is, the more confidence we must have in winning the final phase of the war on poverty. We must leap into action, forge ahead, and, with concerted efforts and targeted measures, make sure poverty alleviation is fully accomplished as scheduled."

> — Xi Jinping, General Secretary of the Communist Party of China (CPC) Central Committee, President of the People's Republic of China and Chairman of the Central Military Commission

中国铁建切实贯彻党中央关于打好脱贫 攻坚战的决策部署, 真抓实干, 与各地方 政府、机构密切合作,全面推进精准扶贫 各项工作,坚决打赢脱贫攻坚战。公司持 续帮扶河北省万全区、河北省尚义县、青 海省甘德县3个定点扶贫区县,并在新疆 维吾尔自治区伊吾县、甘肃省定西市、陕 西省会宁县、四川省甘洛县、重庆市云阳 县、广西壮族自治区隆安县等13个省、自 治区、直辖市的贫困地区开展帮扶工作。 2019年,河北省万全区正式脱贫摘帽,河 北省尚义县、青海省甘德县顺利通过省级 脱贫验收。公司进一步探索稳定脱贫长效 机制,多措并举巩固扶贫成果,扎实推进 脱贫攻坚与乡村振兴的统筹衔接,确保高 质量完成脱贫攻坚目标仟务。

CRCC has effectively implemented the decisions and plans of the CPC Central Committee for fighting against poverty, established close cooperation relations with local governments and institutions, and with concerted efforts and hard work, fully promoted the tasks of targeted poverty alleviation, striving to win the final phase of the war on poverty. The Company has continued to provide assistance for the 3 fixed-point poverty alleviation areas - Wanquan District and Shangyi County in Zhangjiakou City, north China's Hebei Province, and Gande County in northwest China's Qinghai Province. It has also assisted poverty-stricken areas in 13 provinces, autonomous regions and municipality including Yiwu County in northwest China's Xinjiang Uygur Autonomous Region, Dingxi City in northwest China's Gansu Province, Ganluo County in southwest China's Sichuan Province, Yunyang County in southwest China's Chongqing Municipality, and Longan County in south China's Guangxi Zhuang Autonomous Region. In 2019, Wanquan District was formally lifted out poverty; Shangyi County of Hebei Province and Gande County of Qinghai Province were successfully passed the provincial-level acceptance inspection for poverty alleviation. In addition, the Company has further explored the long-term poverty alleviation mechanism, taken various measures to consolidate the achievements in poverty alleviation, and effectively promoted the integration of poverty alleviation and rural revitalization in a coordinated way, ensuring that the target of eradicating poverty is met as planned.

打造扶贫"中国铁建模式"

BUILDING "CRCC MODEL" FOR POVERTY ALLEVIATION



产业扶贫

development

持续帮扶贫困地区发展村集体企业、农业合作社、养殖专业合作社,支持定 点扶贫区县企业发展,通过做强产业、加大产品销售,拉动当地百姓就业。 2019年,开展各类产业扶贫项目50个,投资金额3166万元,带动建档立卡贫 困人口3660人脱贫。

of poverty.

开展各类产业扶贫项目 **50**⁺ 投资金额 3166 万元

> In 2019, the Company assisted **50** industry-based poverty alleviation projects with a total investment of **31.66** million yuan



▶ 援建光伏发电站 CRCC-aided PV power station

Poverty alleviation through industrial

CRCC has constantly assisted poverty-stricken areas to develop village-based collectively-owned enterprises, agricultural cooperatives and specialized breeding cooperatives, and supported enterprises in fixed-point poverty alleviation counties to accelerate development. Through vigorously developing industries and expanding product sales, it has created job opportunities for local people. In 2019, the Company assisted 50 industry-based poverty alleviation projects with a total investment of 31.66 million yuan, helping lift 3,660 people registered as living in poor conditions out





基建扶贫

Poverty alleviation through infrastructure construction

发挥基建优势,积极参与扶贫县基础设施建设,为贫困群众提供良好的生产 生活条件。2019年,公司开展了大量的基建扶贫工作,积极参与河北省尚义县 "空心村"治理,将安置搬迁人口5936人;参与张尚高速公路建设,建成后将 结束河北省尚义县不通高速公路的历史;帮助四川省凉山州甘洛县特克村修 建出行道路,通过"三建四改"使村容村貌得到极大改善。

CRCC has given play to its advantages in infrastructure construction field, and actively participated in the construction of infrastructure projects in poverty-stricken counties, providing good working and living conditions for poor people. In 2019, the Company carried out a lot of poverty alleviation work through infrastructure construction, took initiative to participate in the rectification work of "hollow villages" in Shangyi County of Hebei Province, resettling 5,936 villagers. It took part in the construction of Zhangbei-Shangyi Expressway project, and with the completion of the project, the history of no expressway in Shangyi County would come to end. It also helped Teke Village in Ganluo County of Sichuan Province build roads, and with large-scale construction and rebuilding, the conditions of the village were greatly improved.

积极参与河北省尚义县"空心村" 治理,将安置搬迁人口 **5936**

In 2019, the Company took initiative to participate in the rectification work of "hollow villages" in Shangyi County of Hebei Province, resettling 5,936 villagers



▶ 为贫困村铺就"幸福路" "Happiness Road" built by CRCC in poverty-stricken village



就业扶贫

作为全球最大工程总承包商之一,公司积极发挥劳务用工需求量大的优势,通 过大规模劳务输出促进就业,实现"一人就业、全家脱贫"。2019年,招收青海 省、河北省等地贫困大学生384人,一线作业人员上千人。

front-line workers.





在贫困区县新建、修缮村党群服务中心,帮扶规范村党支部"三会一课"制度, 抓好基层党建工作,提高村两委人员能力和素质。

villagers' committees.



教育扶贫

重视贫困群众的智力帮扶,2019年出资100万元新建河北省万全区"铁建阳光" 幼儿园,投资40万元帮助河北省万全区设计第四小学迁址新建规划,出资63万 元帮助河北省、陕西省、湖南省等地的贫困家庭学生499人次。

CRCC has focused on providing intelligence support for poor people. In 2019, the Company contributed 1 million yuan to build a new kindergarten named "CRCC Sunshine" in Wanguan District of Hebei Province, contributed 400,000 yuan to help the No. 4 Primary School in Wanguan District develop the relocation plan, and contributed 630,000 yuan to help 499 persons-times of poor students in Hebei, Shaanxi, Hunan and other provinces.



Poverty alleviation through job creation

As one of the largest general contractors in the world, CRCC has actively leveraged the advantages of large labor demand, and created job opportunities through largescale labor export service, helping realize the goal of "one member gets employed, the whole family gets lifted out of poverty." In 2019, the Company recruited 384 poor college graduates in Qinghai and Hebei provinces, and employed more than 1,000

Poverty alleviation through Party building

CRCC has built new Party-masses service centers and repaired old ones in povertystricken counties, helped regulate the "three meetings and one course" system of the village-level Party branches, enhanced the community-based Party building work, and improved the ability and quality of the members of the Party branch committees and

Poverty alleviation through education

医疗扶贫

Poverty alleviation through medical care

积极推进医疗帮扶,帮助广大村民就近享受优质的医疗卫生服务,落实"医疗 卫生有保障"。2019年,援助452万元为河北省尚义县新建了27所标准化村级 卫生室,购置7辆流动医疗服务车;对河北省尚义县下马圈乡卫生院进行全面 改造修缮;帮助湖南省怀化市戴帽坡村重病大病贫困人口17人,实现家庭医 牛签约率100%。

CRCC has actively promoted medical assistance to help villagers enjoy high-quality and guaranteed medical and health services at their backyards. In 2019, the Company contributed 4.52 million yuan to assist Shangyi County in Hebei Province to build 27 new standardized village-level clinics, bought 7 mobile medical service vehicles, and rebuilt and repaired the township hospital in Xiamaquan of Shangyi County. It also provided financial support for 17 poor people suffering serious illnesses in Daimaopo Village, Huaihua City in Hunan Province, and the signing rate of family doctors reached 100 percent.

探索乡村振兴路 EXPLORING RURAL REVITALIZATION STRATEGY



计乡村更宜居

利用好扶贫资金,精心整治乡村居住环境,为定点扶贫的村庄修建卫生间、建造恒温库、 安装太阳能路灯、打造农村文化墙、硬化乡村道路等,为补齐乡村建设短板竭尽所能。

CRCC has made good use of poverty alleviation funds, and carefully improved the living conditions in rural areas. The Company has built toilets and constant temperature storage facilities, installed solar street lights, made rural cultural publicity walls, and paved road for the villages in fixed-point poverty alleviation areas, trying the best to boost rural construction and development.

让产业更兴旺 Make industry more prosperous

结合北京冬奥会契机,稳步推进河北省万全区卫城房地产开发项目设计工作,力争在 2022年前将该项目打造成全国首家"边塞历史文化"旅游城。

CRCC, taking the 2022 Olympic Winter Games as opportunity, has steadily promoted the design work of Weicheng Real Estate Development Project in Wanguan District of Hebei Province and spared no effort to build the project as China's first tourist zone featuring historical frontier culture by 2022.

让治理更有效 Make governance more effective

启动"干部能力提升计划",对河北省万全区部分县处级干部、各乡镇党委书记和乡镇长 等开办农村精准扶贫与乡村振兴战略领导干部培训班,邀请武汉大学知名教授就国家 乡村振兴战略规划、美丽乡村建设的思路与实践、乡村旅游创新与实施等开展专题讲 座,促进基层干部解放思想、开拓视野、提升基层治理能力。

CRCC has launched the capacity improvement scheme for leading cadres and conducted training programs on targeted poverty alleviation and rural revitalization strategy for cadres of division level, as well as Party secretaries and mayors of towns. The Company has invited professors from Wuhan University to conduct special-topic lectures on national rural revitalization strategies, ideas and practices of beautiful countryside construction, and innovation and implementation of tourism in rural areas, aiming at promoting grassroots cadres to emancipate the mind, expand the horizon, and improve the grassroots governance capacity.

援助 452 万元 为河北省尚义县新建 27 所标准化村级卫生室 四晋 7 辆流动医疗服务车

In 2019, the Company contributed **4.52** million yuan to assist Shangyi County in Hebei Province to build **27** new standardized village-level clinics, bought **7** mobile medical service vehicles



▼ 流动的医疗服务车 Mobile medical service vehicles



Make rural areas more livable



新理念 推动高质量发展

PROMOTING HIGH-QUALITY DEVELOPMENT WITH NEW IDEAS

"'品质铁建'宏伟目标要如期实现,就必须以激流勇进的 决心和勇气,把握发展大势,在不断自我改革与突破中,闯 出一条独具中国铁建特色的发展之路。"

——中国铁建董事长 陈奋健

"To achieve the ambitious goal of building a 'High-Quality CRCC' as scheduled, we must, in a more determined and courageous spirit, grasp the trend of global development, continuously deepen reform and break through our own boundaries, blazing a path of development with the characteristics of CRCC."

> ----- Chen Fenjian, Chairman of China Railway **Construction Corporation Limited**

1月17日,中国铁建2019年工作会议正式提出"品质铁建",以全新的经营理 念、管理模式和组织架构,为企业发展翻开崭新一页,并在全国组织42场巡 回宣讲,引发全体员工并肩偕行、逐梦未来的时代共鸣。各单位通过开展"领 导带头讲""道德讲堂""质量提升年"等活动,全面践行"品质铁建",迸发 出推动企业高质量发展的磅礴力量。

On January 17th, the 2019 work conference of CRCC put forward the idea of "High-Quality CRCC," turning to a new page in enterprise development with new operation concept, management mode, and organizational structure. CRCC organized 42 campaign events, which had a resonance for the staff in their joint pursuit of dreams. Each unit carried out various activities such as "leader's talk," "moral classroom," and "year of quality improvement" to implement "High-Quality CRCC" in an all-round way, giving the impetus for high-quality development of the Company.



▼"品质铁建"巡回宣讲 Lecture tours themed "High-Quality CRCC"

"品质铁建"指明新航向 "HIGH-QUALITY CRCC": NEW DIRECTION



战略发展层面 Strategic development

从工程经营型、投资拉动型向创新驱动型转型;从重规模、速度向重质量、效益转型;从 传统的产品和服务的质量、价格等方面竞争,向品牌、价值链和商业模式的竞争转型;从 资源型、粗放式、低质量建造模式向生态型、精细化、高质量模式转型;从立足国内发展 向"海外优先"、提升国际竞争力转型;从低成本优势领先向综合实力提升转型。

CRCC will make the transition from project-operation-based investment-driven development to innovation-driven development; shift focus from scale and speed to quality and efficiency; transfer from the traditional product-and-service-based competition in areas of quality and price to that of brand, value chain, and business mode; transform from the resource-based, extensive, low-quality construction mode to environmentallyfriendly, intensive, high-quality construction; shift target of development from China-based to "priority of overseas market" and improvement of international competitiveness; and transform the leading advantage of low cost to that of comprehensive strength upgrade.



企业管理层面

Enterprise management

从立足职能的管理向基于流程、板块的管理转型;从局限于企业内部的管理向扩展企 业价值链管理转型;从习惯于依靠经验决策的管理向建立在大数据模型基础上的科学 分析决策的管理转型。

The enterprise management will transform from function-based to process- and unit-based management; expand from limited internal management enterprise to the one focus entire value chain of the enterprise; transit from experience-based decision-making to big-databased analytical decision-making.



产品服务层面 Products and services

创造有中国铁建特色的低耗、环保、科技含量高、代表中国建筑水平的"铁建制造"和 "铁建创造"。

CRCC aims to establish the name of "Made in CRCC" and "Created in CRCC" with low-energyconsumption, environmentally-friendly, and high-tech products and services with CRCC characteristics that can represent the construction quality of China.



经济效益层面 Economic efficiency

综合平衡地关注市场份额、营业收入、利润总额、盈利能力、偿债能力、抗风险能力、 成长能力等指标,改善资产质量,增加运营性资产,寻找新的经济增长点。

CRCC pays equal attention to various indexes including market share, operating revenue, total profits, profitability, solvency, anti-risk capacity, and ability to grow in a comprehensive and balanced way to improve asset quality, increase operating assets, and look for new sources of economic growth.



社会贡献层面 Social contributions

为国增光,服务国家战略,为股东创造价值,为社会发展添彩,让中国铁建的产品和服 务满足人们对美好生活不断增长的需要。

CRCC is dedicated to winning honor for the country, serving the national strategy, creating value for shareholders, and contributing to social development with CRCC products and services to satisfy people's increasing demand for better life.





的高品质铁建人才。

the same ideal

企业文化层面 Corporate culture

继承发扬传统的铁道兵文化,形成以企为荣、以企为家、以人为本、关怀员工的自身优 秀文化,提高员工幸福感、获得感、安全感和自豪感。

CRCC will carry on the traditional culture of the Railway Engineering Corps and build an excellent people-oriented culture of taking pride in the enterprise, regarding the enterprise as family, and caring for the staff to improve the staff's feeling of happiness, sense of achievement, sense of security, and sense of pride.

推动"品质铁建"战略落地 "HIGH-QUALITY CRCC": IMPLEMENTATION





完成总部机构改革,职能部门由31个压减到21个,总部运行更加精干高效;完成国内经 营机构调整,"9个区域总部+1个专业总部"架构日趋完善,高端经营对接、区域经营统 筹效果更加明显;构建3+5+N的海外经营发展体系.国际业务覆盖全球129个国家和地 区;从战略高度加强顶层设计,进行系统部署,新兴产业、新兴业务发展进入快车道。

CRCC has completed the organizational reform of the headquarters to reduce the previous 31 functional departments to 21, enabling more concise and efficient operation; completed the adjustment of domestic business units, with the structure of "9 regional headquarters plus 1 professional headquarter" becoming increasingly perfect while high-level business networking and overall planning of regional operation turning out significant results; constructed the "3+5+N" overseas operation and development system, with international business covering 129 countries and regions; strengthened top-level design and conducted systematic deployment from a strategic height that carry emerging industries and emerging businesses to the fast track.



积聚一大批不同年龄层次,不同专业构成,不同国别,相同理想抱负,德智体全面发展

CRCC is committed to gathering a large group of high-quality talents with moral, physical and intellectual strengths, who are of varied ages, different professions, diversified nationalities and



企业管理层面 Enterprise management

推进"放管结合"的改革举措,迈开混合所有制改革步伐,扎实推进瘦身健体,持续优 化管理架构,多家子公司压缩管理链条;召开工程公司建设工作会和工程项目管理现 场会,出台一系列务实举措,工程公司"五化"建设和"1234+"工程项目管理思路更加 明确。

CRCC has pushed forward reform measures of "delegating power and strengthening oversight," carried out mixed ownership reform, firmly advance the "slimmer and fitter" reform to solve problems concerning redundancy and profitability, continuously optimized management structure, and compressed the management chains of several subsidiaries; held the construction work conference for engineering company and project management site conference to introduce a series of practical measures, further clarifying the "five objectives construction method" and the "1234+" project management concept.



产品服务层面 Products and services

加强安全监督制度和体系建设,全面开展安全生产大检查,深入推进铁路红线管理和 标准化建设,施工生产平稳有序,安全生产形势总体稳定;完善质量管理体系,落实项 目终端质量责任制,推进质量标准化建设,开展工程质量创优活动,质量水平总体平稳。

CRCC has strengthened the construction of safety supervision system, carried out comprehensive safety production inspection, improved the railway strict boundary management and standardization, and ensured construction process smooth and orderly, maintained the situation of safety production generally stable; improved quality management system, implemented the project endpoint quality responsibility system, pushed forward quality standardization, carried out "quality excellence" activities, and ensured generally stable qualities.



经济效益层面

Economic efficiency

统筹境内境外两个市场,不断强化区域经营、城市经营、高端经营、协同经营、属地 经营和滚动经营,新签合同额、营收、利润、产值、资产五大指标均创历史新高。

Through overall planning of domestic and overseas markets and continuously reinforcing regional management, urban management, high-end management, cooperative management, territorial management and progressive management, the indexes of contract value, revenue, profit, output value, and asset have achieved a new record.





继续开展援疆援藏、定点扶贫、抗灾抢险、应急救援等工作;定点帮扶的河北省万全区正式 脱贫摘帽,河北省尚义县和青海省甘德县顺利通过省级脱贫验收。

CRCC has made continuous efforts to provide aid in Xinjiang and Tibet, poverty alleviation for designated regions, disaster reliefs, and emergency rescues. CRCC-assisted Wanquan District was formally lifted out poverty and the other two fixed-point poverty alleviation counties named Shangyi and Gande counties were successfully passed the provincial-level acceptance inspection for poverty alleviation.



人才素质层面 Talent quality

健全完善首席专家、特级技师等管理机制,出台特级项目经理、一级项目经理管理办法;打 通"五支人才队伍"成长通道,不断加大专家培养、人才引进和教育培训力度。

CRCC has improved chief expert and top technician management mechanisms and issued top project manager and senior project manager management methods; established the growth paths for "five talent teams" and increased efforts in expert cultivation, talent introduction, and staff training.



企业文化层面 Corporate culture

提出"以国为荣、以法为循、以德为先、以企为家、以人为本"的新时代中国铁建文化价值取 向,丰富"首创""包容""协同""合规""实干"等文化新内涵,评选表彰第三届"永远的铁 道兵杯"十大楷模和第六届"十佳道德模范",开展庆祝新中国成立70周年系列活动,利用 展演活动和各种媒体平台讲好铁建故事,通过正面、深刻的影响和引导,进一步激发员工凝 聚力、向心力和行动力,形成推动公司高质量发展的精神力量。铁道兵纪念馆荣获"全国爱 国主义教育示范基地"称号,提升了企业员工荣誉感和使命感,为企业打造了高品质的文化 传播阵地和品牌展示窗口。

CRCC has established the corporate culture and value of "honoring the country, following law, prioritizing moral, regarding the enterprise as family, and orientation toward people" and enriched the connotation of "initiation," "tolerance," "cooperation," "compliance," and "earnest work." CRCC awarded ten models in the 3rd "Railway Engineering Corps Forever" Cup and the 6th "Ten Examples of Morals," carried out serial activities to celebrate the 70th anniversary of the founding of People's Republic of China, and made use of exhibitions and various media to showcase railway construction stories, so as to further stimulate team cohesion, execution, and spirit through such positive influence and guidance to promote the high-quality development of the Company. The Railway Engineering Corps Memorial Hall received the honorary title of "National Exemplary Base for Patriotic Education," which has elevated the employees' sense of honor and sense of mission, being a high-quality base for culture communicating and a display window for the brand.





LAYING SOLID FOUNDATION FOR SUSTAINABLE DEVELOPMENT 38优化公司治理
Optimizing Corporate Governance



服务国家战略 Serving National Strategies



优化公司治理 OPTIMIZING CORPORATE GOVERNANCE

公司持续完善法人治理结构,坚持合规运营,加强风险管控,规范信息披露,保护投资者权益,努力实现企业高质量发展。

CRCC has constantly perfected corporate governance structure, insisted on compliance operation, enhanced risk management and control, regulated information disclosure, and protected rights and interests of investors, striving to achieve high-quality development of the Company.

完善治理结构

Perfecting Governance Structure 公司根据《中华人民共和国公司法》《中华人民共和国证券法》《上市公司 治理准则》等法律法规及现代企业治理要求,持续完善由股东大会、董事 会、监事会、经理层构成的治理结构,确保分工明确、职责清晰、有效制衡、 协调运转,切实保障公司生产经营有序运营。2019年,公司召开股东大会2 次,对15项议案进行审议并形成决议;召开董事会18次,对124项议案进行 审议并形成决议;召开董事会各专门委员会28次,对103项议题进行审议并 形成专项意见。

CRCC, in accordance with the *Company Law of the People's Republic of China, Securities Law of the People's Republic of China, Code of Corporate Governance for Listed Companies* and other laws and regulations, as well as the requirements of modern corporate governance, has constantly improved the governance structure consisting of general meeting of shareholders, board of directors, board of supervisors and the managers, and ensured clear division of work, well-defined duties and functions, effective checks and balances, and coordinated operation, so as to guarantee the orderly production and operation of the Company. In 2019, CRCC held 2 general meetings of shareholders, deliberating 15 proposals and forming resolutions; held 18 meetings of the board of directors, deliberating 124 proposals and forming resolutions; held 28 meetings of special committees of the board of directors, deliberating 103 issues and forming specific opinions.



CRCC held **2** general meetings of shareholders

Held **18** meetings of the board of directors

Held **28** meetings of special committees of the board of directors

加强合规运营

Enhancing Compliance Operation

强化依法治企 Governing enterprise according to law

公司全面推进依法治企,贯彻落实企业主要负责人履行推进法治建设第一责任 人职责;制定"1+9"合规管理制度,建立合规宣贯培训制度化、常态化机制,多 措并举深入推进合规管理制度实施;牢固树立"一没四不"法治理念,加强四 项法律审核和重大项目法律参与;强化案件管理"五项机制",全面提升案件管 控水平和应对处置能力,为企业稳健发展提供坚实的法律合规保障。

CRCC has fully promoted the idea of governing enterprise according to law, and effectively implement the system whereby the principal heads of the enterprise shall bear the primary responsibility in promoting corporate governance guided by legal compliance; formulated the "1+9" compliance management system, established the mechanism for regular and systematical publicity and training on compliance operation, and taken measures to guarantee the implementation of compliance management system in a deep-going way; firmly established the "One Without, Four Don't" concept of rule by law, put legal compliance first, and enhanced the legal review on four types of documents and widened the participation of legal personnel in major projects; strengthened the five mechanisms on case management, and comprehensively improved case management and control level and handling ability, providing solid legal compliance guarantee for the steady development of the Company.

<mark>深化风险内控</mark> Deepening risk management and internal control

公司坚持"以风险管理为导向,以内部控制为手段"和"围绕企业战略,整体设 计、分步实施,全面与重点结合,与现行管理体系结合"的原则,探索建立系统 的风险预警指标体系,强化对海外风险、安全与质量风险、投资风险、现金流风 险等重大风险的管理;优化调整内部控制评价模式和方法,突出战略目标的引 领和责任主体的落实,强化内部控制的过程管理,保障了内部控制评价成果, 提升了内部控制工作水平。

CRCC has adhered to the principles of "taking risk management as guidance and internal control as approach" and "Running around corporate strategy, adopting overall design and step-by-step implementation, and focusing on the combination with key points and current management system," explored and established systematical risk warning indicator system, and enhanced management on major risks including risks in overseas market, as well as risks relating to safety and quality, investment, cash flow, and so on; optimized and adjusted assessment model and approach on internal control, highlighted the guiding role of strategic objectives and the implementation of responsibility subjects, and enhanced process management of internal control, so as to guarantee the evaluation results of internal control and improve the work level of internal control.

多举措防范"走出去"风险 案例

Case

Measures taken to prevent "going global" risks

中铁十四局集团有限公司海外工程公司应对海外建设市场可能出现的政治、经济、运营、法律、环境、社会、民意、 安全等风险,在10个主区域国别市场,从政治、法律、汇率、政策、劳工、宗教和文化等方面严格进行风险识别, 分国别建立项目风险库,列出防控清单、应对举措。该公司加大投标项目信息筛选力度,严格甄别虚假工程信息, 重点考察联合体成员资质和履约能力;注重做好工程地质勘查、环境调查和标前现场探勘,并与国内 11 家设计 院和国外1家咨询机构分别签订了战略合作协议,约定利益共享、风险共担、合作发展,有效降低了企业"走出 去"的风险。

In order to deal with the possible political, economic, operational, legal, environmental, social, public opinion and security risks in overseas construction market, International Engineering Branch of China Railway 14th Bureau Group Co., Ltd. has conducted strict risk identification from the aspects of politics, law, exchange rate, policy, labor, religion, culture, and so on in 10 major country markets, and in line with the identified risks, the branch has established country-based risk databases and listed risk prevention and control measures accordingly. The branch has also enhanced the information filtering of bidding projects, strictly screened fake information, and focused on the qualifications of consortium member and their contract performance capabilities; paid attention to engineering geological survey, environmental survey and pre-bid site exploration, and signed strategic cooperation agreements with 11 Chinese design institutes and 1 foreign consulting firm in line with the principle of "risk- and benefit-sharing and win-win results," effectively reducing the risks of "going global."

加强审计监督 Enhancing audit supervision

共完成审计项目 **3|94** The Company completed 3,194 audit projects

公司坚持以"13455+"审计总体规划为引领,强化问题、风险、价值和战略导 向,扎实履行审计监督、服务、增值职能,充分发挥审计在企业治理体系中的重 要作用。积极推进总审计师试点工作,构建完善"规定+办法+审计指南"的制度 体系,开展"审计工作质量提升"活动,建立"三表一单""两会一组"审计成果 运用机制,强化整改追责。2019年,共完成审计项目3194个,提交审计报告3174 份,提出意见和建议14391条,被采纳13675条,采纳率达95%。

CRCC has taken "13455+," the overall plan for audit, as guidance, focused on the problem-, risk-, value- and strategy-oriented principle, and effectively performed the functions of audit supervision and services, as well as the valueadded function, giving full play of the important role of audit in corporate governance system. The Company has actively promoted the chief auditor pilot work, established and perfected the institutional system of "Regulations + Rules + Audit Guidelines," carried out "Quality Improvement of Audit Work" campaign, built mechanism of "Three Forms & One Table" and "Two Meetings & One Team" for applying audit results, and enhanced rectification and accountability work. In 2019, the Company completed 3,194 audit projects, submitted 3,174 audit reports, and put forward 14,391 pieces of opinions and suggestions, among which 95 percent, 13,675 pieces, were adopted.

推进反腐倡廉 Fighting corruption and upholding integrity

公司以政治建设为统领,认真落实全面从严治党主体责任,强化政治监督,抓 好巡视整改,严肃执纪问责,构建"不敢腐、不能腐、不想腐"的体制机制,为企 业健康发展打下坚实基础。

CRCC has put the Party's political building first, earnestly implemented the primary responsibility of ensuring full and strict governance over the Party, enhanced political supervision, strengthened the inspection and rectification work, strictly enforced discipline and held people accountable, and established the systems and mechanisms that create enough deterrence so that officials neither dare, can nor even think of being corrupt, laying a solid foundation for the healthy development of the Company.

VR 虚拟体验让廉洁教育"活"起来

Virtual reality technology facilitates integrity education

中铁十一局集团有限公司六公司青岛四号线登瀛车辆段项目部坚持将廉洁风险防控工作与施工生产深度融合。为 深化廉洁风险防控效果,项目部结合实际,自制丰富廉洁教育素材,利用 VR 虚拟体验技术,打造了一座立体化、 形象化、趣味化的廉洁教育网络体验馆。员工可以根据自身需求和爱好自由选择体验主题,通过互动体验的学习 方式,达到掌握廉洁知识的目的。此举措的推广实施,既提升了广大员工的学习兴趣,也使廉洁教育取得良好的 效果。

The Dengying Metro Vehicle Depot Project Department of the Qingdao Metro Line 4 under The 6th Engineering Co., Ltd. of China Railway 11th Bureau Group insisted on integrating integrity risk prevention and control work into the construction

and production process in a deep-going way. To enhance the effect of integrity risk prevention and control, the project department, in combination with the actual situations, made rich materials and used virtual reality technology to build a threedimensional, visualized, and interested online experience hall for integrity education. Employees could freely choose the integrity themes in accordance with their own needs and interests, and with the learning style of interactive experience, they mastered the integrity knowledge. The implementation of this approach not only improved the learning interests of employees, but also achieved good results in conducting integrity education.





Employees used virtual reality equipment to learn integrity knowledge

增强股东回报

Increasing Returns for Shareholders

合规信息披露 Disclosing information according to law

公司严格按照上市地上市规 则的要求,真实、准确、完整、 及时、公平地向股东及中小投 资者披露信息,不断增强信息 披露内容的针对性和有效性, 增强信息诱明度。2019年,公 司在上海证券交易所、香港联 交所共披露各类中英文文件 503份。

CRCC has strictly followed the requirements for listed companies of stock exchanges, disclosed information to shareholders and medium and small investors truly. completely, timely and fairly, and increased the pertinency and effectiveness of the disclosed information, improving information transparency. In 2019, the Company disclosed 530 documents in Chinese and English at Shanghai Stock Exchange and Hong Kong Stock Exchange.

促进沟通交流

Promoting communication and exchanges

公司通过业绩说明会、投资者关系热线电话、专用邮箱、"上证 e 互动"平台、反 向路演等方式,及时回复投资者提出的问题,与中小投资者建立良性的互动关 系。2019年,公司安排投资者和分析师见面会及电话会88场,接待来访392人 次。积极参加国内外投资机构举办的现场交流活动,参加投资者和分析师会议 47次,接待投资者128场716人次。配合年报及半年报的披露,召开业绩发布 会5次,召开一对一及一对多会议38场,接待机构投资者112人次。参加嘉实基 金、工银瑞信等6家机构组织的反向路演活动,召开投资者会议6场、接待18人 次。通过多种渠道和方式,公司的投资者关系管理工作水平不断提升。

CRCC has responded to the questions of investors through, among others, performance statements, investor relations hotline, dedicated mailbox, SSE E-interactive platform, and reverse roadshows, and established good interactive relations with medium and small investors. In 2019, the Company arranged 88 meetings and teleconferences for investors and analysts, and received 392 visitors. It actively participated in the onsite exchange activities organized by institutional investors both in China and abroad, attended 47 meetings for investors and analysts, and received 716 investors at 128 meetings. With the release of the annual and semi-annual reports, the Company held 5 performance conferences, as well as 38 "one-to-one" and "one-to-many" meetings, receiving 112 person-times from institutional investors. It participated in the reverse roadshows organized by 6 institutional investors including Harvest Fund Management Co. and ICBC Credit Suisse Asset Management Co., and held 6 investor conferences, receiving 18 person-times. Through various channels and approaches, the investor relations management level of the Company has been constantly improved.

创造股东价值 Creating value for shareholders

公司紧紧围绕"品质铁建"中心工作和"稳增长、高质量"工作主题,深入落实 "两个贯穿、五个坚持"工作思路,开拓创新,锐意进取,实现各项经济指标稳 定增长。2019年,公司新签合同额20068.544亿元,同比增长26.66%;营业收入 8304.522亿元,同比增长13.74%;净利润226.237亿元,同比增长14.04%;资产 总额10812.392亿元,同比增长17.82%。

Focusing on the central work of building a "High-Quality CRCC," and the work theme of "stabilizing growth and pursuing high-quality development," CRCC has thoroughly implemented the working concepts of "two-penetrating and five-persisting," blazed new trails in a pioneering spirit, and forged ahead with determination, achieving steady growth in all economic indicators. In 2019, the value of newly-signed contracts of the Company reached 2,006.8544 billion yuan, up 26.66 percent from a year earlier; the operating revenue, net profits and total assets reached 830.4522 billion yuan, 22.6237 billion yuan and 1,081.2392 billion yuan respectively, up 13.74 percent, 14.04 percent and 17.82 percent year-on-year separately.

服务国家战略 SERVING NATIONAL STRATEGIES

公司积极融入国家发展大局,担当政治责任,服务雄安新区、京津冀协同发展、长三角一体化、粤港澳大湾区建设等重 大国家战略。

CRCC has actively integrated itself into the development of the country, and fulfilled political responsibilities, serving major national strategies including the Xiongan New Area, the coordinated development of Beijing-Tianjin-Hebei region, the integrated development of Yangtze River Delta, and the building of Guangdong-Hong Kong-Macao Greater Bay Area.

全力推进雄安新区交通建设

Promoting transportation construction of Xiongan New Area

京雄城际铁路是雄安新区首个重大交通项目,中铁十二局集团有限公司承担了全线最长桥梁---黄固特大桥的 建设任务。黄固特大桥从北京大兴黄村到河北固安,全长 28.03 公里,跨越双向六车道京开高速公路,紧邻京 沪高铁。特殊的地理位置和施工要求,对传统施工方法构成极大挑战。该项目部大胆创新,采用顶推方式推进 施工,将长114米、重3000多吨的桥梁建好放在桥尾,用十个一组的千斤顶把桥整体顶起,以每步90厘米 的速度推进,与已经建好的桥梁对接。2月3日,黄固特大桥顺利实现了合龙,为京雄城际铁路北京段与大兴 国际机场同时开通运营打下了基础。

Beijing-Xiongan Intercity Railway is the first major transportation project of Xiongan New Area, in which China Railway 12th Bureau Group Co., Ltd. undertook the construction of Huangcun-Gu'an Super-Large Bridge, the longest bridge along the line. Huangcun-Gu'an Super-Large Bridge is 28.03 kilometers in length, linking Huangcun at Daxing District of Beijing to Gu'an County, Hebei Province. It crosses the two-way six-lane Beijing-Kaifeng Expressway and adjoins Beijing-Shanghai High-Speed Railway. The special geographical location and construction requirement posed great challenge for traditional construction methods. The project department made bold innovation and adopted the incremental launching method at the intersection. During the construction, the prefabricated 114-meter-long 3,000-odd-ton girder deck was



▼ 京雄城际铁路黄固特大桥成功合龙 Closure of Huangcun-Gu'an Super-Large Bridge on Beijing-Xiongan Intercity Railway was successfully completed



Laying Solid Foundation for Sustainable Development

placed at the end of the bridge, and then the entire bridge structure was pushed outward with a group of ten jacks at a speed of 90 centimeters per step toward the already built girder. On February 3rd, the bridge segments were connected, laying down foundation for the smooth opening and operation of the Beijing-Xiongan Intercity Railway (Beijing Section) and the Beijing Daxing International Airport.

Case

Boosting transportation integration in Beijing-Tianjin-Hebei region

中铁十八局集团有限公司抢抓京津冀协同发展国家战略机遇,助力京津冀交通一体化。在京礼高 速公路兴延段白羊沟隧道施工中,积极响应绿色奥运号召,采用"隧道掘进节能环保水压爆破"新 工艺技术,成为全线首条双线贯通的特长隧道;在天津宝坻西环路地下综合管廊项目施工中,采用 BIM信息化技术和管廊施工"机器人",打造"智慧管廊";在我国自主研发修建的首条智能化高速 铁路——京张高铁建设中,研发出"自动控制降水与预警系统"和"自动喷涂机器人",攻克了东花 园隧道降水难题。该公司通过在公路、铁路、轨道交通、城市管廊、机场等领域的多轮驱动、精耕在 建工程,以现场赢市场,成为京津冀交通一体化的开路先锋。

China Railway 18th Bureau Group Co., Ltd. grasped the national strategic opportunity of collaborative development of Beijing, Tianjin, and Hebei region and contributes to transportation integration in the Beijing-Tianjin-Hebei region. In the construction of Baiyanggou Tunnel in Beijing-Chongli Expressway (Xingyan Section), the company actively responded to the call for Green Olympics and adopted the new technology of "energy-saving and environmentally-friendly hydraulic blast tunneling," completing the first super-long two-lane tunnel along the expressway; in the construction of the underground pipe gallery project at West Ring Road in Baodi, Tianjin, BIM information technology and gallery construction "robots" were used to build a "smart gallery"; in the construction of Beijing-Zhangjiakou High-Speed Railway, the first smart expressway with independent R&D and construction in China, they developed "automatic rainfall control and early warning system" and "automatic coating robot" to solve the problem of rainfall in Donghuayuan Tunnel. With business expansion in varied areas of expressway, railway, rail transit, urban pipe gallery, airport, and so on, the company commits itself to projects under construction to win the market with excellent site management, becoming a pioneer on the way to integrated transportation in the Beijing-Tianjin-Hebei region.



▶ 兴延高速白羊沟隧道施工 Construction site of Baiyanggou Tunnel on Xingyan Expressway

主动融入长三角一体化发展

案例

Case

Fostering integrated development of Yangtze River Delta

随着长三角区域一体化上升为国家战略,面对"畅通便捷长三角"综合交通体系互联互通"一张网"建设带来的广阔 市场机遇,中铁十五局集团有限公司先行先试,打造基础设施共同体,促进企业目标与国家战略深度融合。在上海 市,将"互联网+智慧工地"理念成功植入崇明明珠湖区域河道整治工程,有效提升了世界级生态岛的环保能级;在 浙江省,宁波海绵化改造项目发明8项实用新型专利,成功获得国家知识产权局授权,有力提升了海绵城市的创新能 级;在安徽省,参建的杭黄高铁串连起黄山、千岛湖等10多个5A级风景区和国家级森林公园,成功打造浙皖两地一小 时经济圈,成为享誉世界的中国最美高铁新名片;在江苏省,参建的宁启铁路南通段的正式开通和锡通高速与沪通大 桥的顺利合龙,为沿江、沿海开发和苏中苏北地区融入上海都市圈提供了更为快捷的交通保障。2019年,该公司已累 计在长三角区域基本构筑37个经营项目,18个经营城市,基本形成"以点连线、以线带面"的长三角经营布局。

With Yangtze River Delta Integration being elevated to a national strategy, in the face of broad market opportunity brought by the construction of interconnected comprehensive transportation network for "Smooth and Convenient Traffic in Yangtze River Delta," China Railway 15th Bureau Group Co., Ltd. took the initiative to build the community of shared infrastructure to promote the in-depth integration of enterprise objectives and national strategy. In Shanghai, they successfully implanted the concept of "Internet + smart construction site" in the river restoration project of Mingzhu Lake in Chongming, which effectively promoted the environmental protection level of the world-class ecological island; in Zhejiang Province, for the sponge city transformation project of Ningbo, they patented 8 practical inventions at the National Intellectual Property Administration, which effectively improved the innovation capacity of sponge city construction; in Anhui Province, they participated in the construction of Hangzhou-Huangshan High-Speed Railway, which connects a dozen of 5A-level tourism spots and national forest parks including Mountain Huangshan and Oiandao Lake, creates the one hour economic circle between Zhejiang Province and Anhui Province, and becomes the world-famous most beautiful highspeed railway line in China; in Jiangsu Province, they participated in the construction of Nanjing-Oidong Railway (Nantong Section) and the connection of Wuxi-Nantong Expressway to Shanghai-Nantong Bridge, the opening of which guarantees more convenient transportation for Yangtze River area and coastal area development and the integration of the middle and north areas of Jiangsu in Shanghai Metropolitan Area. In 2019, the company has established 37 projects and expanded businesses in 18 cities in the Yangtze River Delta area, which basically formed the operation network "from dots to lines and planes" in the Yangtze River Delta.



▼ 锡通高速公路 Wuxi-Nantong Expressway Laying Solid Foundation for Sustainable Development

Case

Building S&T innovation demonstration zone in Nansha

庆盛枢纽区块是广东省广州市南沙自贸区七大板块之一,被定位为粤港澳科技创新合作区,区块内已规划人工智 能、医疗健康、高等教育等产业项目,但缺乏成熟的基础设施配套。2019年,中铁建南沙投资发展有限公司牵头, 联合中国铁建所属多家单位推进人工智能产业园及配套工程开发建设,重点完善包含场地平整、市政道路及桥 梁、综合管廊、水务工程、绿地系统工程、公建配套等项目规划范围及周边区域的基础设施,总投资额约113亿元。 该项目建成后,将为区块内的新一代信息技术、人工智能、新材料等科技前沿产业提供完善的基础设施配套,吸引 更多科技创新产业聚集,为南沙自贸区创新粤港澳科技研发合作新模式,建设粤港澳创新成果产业化基地和国际 化科技创新服务中心打下良好基础。

Qingsheng Hub Cluster, one of the seven clusters in Nansha Free Trade Zone in Guangzhou, Guangdong Province, is oriented towards Guangdong-Hong Kong-Macao science and technology innovation cooperation area, the blueprint of which has included industrial projects in fields of artificial intelligence, medicine and health, and higher education; however, it lacked of mature supporting infrastructure. In 2019, China Railway Construction Nansha Investment Development Co., Ltd. has taken the lead on the cooperation with several subsidiaries of CRCC to promote the development and construction of the AI industrial park and supporting facilities. The project focuses on infrastructure improvement including ground leveling, municipal roads and bridges, pipe gallery, water works, green space, and public facilities in the planning area and the peripheral area, with a total investment amount of around 11.3 billion yuan. Once finished, the cluster area will be equipped with complete infrastructure facilities for frontier science and technology industries such as information technology, AI, and new materials, which will attract more science and technology innovation industries to come, laying down the foundation for Nansha Free Trade Zone to innovate in Guangdong-Hong Kong-Macao science and technology R&D cooperation mode and build industrial application base and international service center for science and technology innovation in the Guangdong-Hong Kong-Macao area.



▼ 庆盛枢纽区块综合开发项目正式开工 Qingsheng Hub Cluster Comprehensive Development Project was formally launched

"雄安新区、京津冀协同发展、长三角一体化、粤港澳大湾区等区域发 展为企业提供了广阔空间,中国铁建将继续抢抓机遇,积极作为,坚 持稳增长和高质量发展,以更加优异的业绩回报股东和社会。"

"The regional development of Xiongan New Area, Beijing-Tianjin-Hebei region, Yangtze River Delta, Guangdong-Hong Kong-Macao Greater Bay Area, and other areas has provided broad space for enterprises. CRCC will continue to seize opportunities, actively perform its duties, stabilize growth and achieve high-guality development, rewarding shareholders and society with better performance."

— Zhuang Shangbiao, President of China Railway Construction **Corporation Limited**



Laying Solid Foundation for Sustainable Development

——中国铁建总裁 庄尚标





BUILDING FUTURE WITH EXCELLENT QUALITY AND CRAFTSMANSHIP SPIRIT

50

全心奉献精品工程 Building Excellent Engineering Projects

54

全面实施创新驱动

Implementing Innovation-Driven Development



全力保障安全生产 Guaranteeing Safety Production



全心奉献精品工程 BUILDING EXCELLENT ENGINEERING PROJECTS

公司秉承"诚信创新永恒 精品人品同在"的核心价值观,致力于创造有公司特色的低耗、环保、科技含量高、代表中国 建筑水平的"铁建制造"和"铁建创造",提供高品质的产品与服务。

Adhering to the core values of "Sincerity and innovation for ever, quality and character at once," CRCC has been dedicated to building the brands of "Made in CRCC" and "Created in CRCC," both of which feature low consumption, environmental protection, high scientific and technological content, and represent the sophisticated level of China's construction industry, providing high-quality products and services for customers.

建造品质工程

Constructing High-Quality Projects 公司以质量为基石,以质量铸精品。建立并完善质量管理体系,大力推行项目 终端质量责任制,推动质量责任层层落实;深入贯彻"1234+"工程项目管理思 路,持续推进质量标准化建设,开展工程质量创优活动,促进质量管理水平不 断提升;定期开展质量培训,提升全员质量意识,营造"人人关心质量,人人重 视质量"的良好氛围。2019年,公司完成隧道1380折合公里、桥梁1423折合公 里、正线铺轨4489公里、站线铺轨885公里、通信线路4710条公里、供电线路 7564公里、公路2916公里、轻轨地铁453公里、房屋竣工面积2286万平方米、土 石方137001万立方米,所建工程一次交验合格率达100%;荣获中国建设工程 鲁班奖11项,国家优质工程奖41项,其中国家优质工程金奖4项。





Luban Awards

荣获国家优质工程奖 4 J 项

Won **41** prizes of National Quality Engineering Awards CRCC has taken guality as development foundation and been committed to building high-quality projects. The Company has established and perfected quality management system, vigorously promoted end-to-end quality responsibility system for projects, and effectively implemented the quality responsibility system at various levels; carried out the "1234+" management concept for engineering projects in a deep-going way, constantly boosted quality standardization construction, and conducted excellence competition activities in terms of project quality, achieving continuous improvement of quality management; conducted quality training regularly, and enhanced quality awareness of all employees, creating a good atmosphere of "everyone cares about and values quality." In 2019, the Company completed the construction of 1,380 equivalent kilometers of tunnels, 1,423 equivalent kilometers of bridges, 4,489 kilometers of main-line tracklaying, 885 kilometers of station-line track-laying, 4,710 kilometers of telecommunication lines, 7,564 kilometers of power supply lines, 2,916 kilometers of highways, 453 kilometers of light rail and subway lines, 22.86 million square meters of floor space of housing completed, and 1.37001 billion cubic meters of earthwork, and the one-time acceptance rate of projects reached 100 percent. It won 11 prizes of China Construction Engineering Luban Awards and 41 prizes of National Quality Engineering Awards, among which 4 was gold awards.



Chongqing West Railway Station wins Luban Awards

中铁十二局集团有限公司、中铁十八局集团有限公司参建的重庆西站,是以全新理念设 计、创新技术施工,科技含量高、功能设施完备的"标杆"车站。在施工中,建设者在国内首 次采用超长大跨度预应力结构的无站台柱清水混凝土雨棚,运用大跨空间钢结构全寿命 健康监测系统、复杂幕墙身份识别系统等29项绿色建造技术,全力提升工程质量水平。12 月10日,在2018-2019年度中国建设工程鲁班奖表彰大会上,该工程项目成为全国首个 获得鲁班奖的高铁站房工程。

Both China Railway 12th Bureau Group Co., Ltd. and China Railway 18th Bureau Group Co., Ltd. participated in the construction of Chongqing West Railway Station. The station, a benchmark of its kind with complete functions, used new design ideas and innovative construction technologies. CRCC teams used 29 green building technologies in building the station, such as the technologies to build the super-large span and pre-stressed structure fair-faced concrete rainshed without any pillar support, the life-cycle health monitoring system for large-span steel structures, and the identification system for complex curtain walls, which greatly improved the quality of the station. On December 10th, 2019, the project won the prize of China Construction Engineering Luban Awards for 2018-2019 and became the first high-speed rail station in China to be awarded.



▼ 重庆西站 Chongqingxi Railway Station Building Future with Excellent Quality and Craftsmanship Spirit

之 ation wins Luban Awards:

世界最大跨度铁路拱桥主体建成 案例

Case

Main works of arch bridge with longest span in the world completed

12月30日,由中铁十八局集团有限公司承建的世界上跨度最大的铁路拱桥——云南省大理市至瑞丽市铁路怒江特 大桥主体完工。铁路怒江特大桥全长1024.2米,桥面宽度25米。大桥主桁拱需由922根不同规格钢杆件像搭积木一 样,使用近80万颗螺栓在距离江面230米的高空悬空拼装组合,安装精度高,工序十分复杂;总用钢量超1.3万吨的主 梁要在怒江上空悬吊精准对接,面临着峡谷大风、高温差等不利因素影响,技术难度和风险世界罕见。该公司创新采 用"大吨位横移式缆索吊机"和"多扣塔斜拉扣挂悬臂拼装体系"等多项前沿技术,通过上万次监测和复测,确保每根 杆件的对位精度误差不超过2毫米,全桥钢桁拱的精度误差不超过3毫米;采用GPS卫星定位监控、24小时不间断测 量观测等技术手段,对梁体进行线形监测,采取抗风措施克服峡谷大风、高温差对梁体变形的影响,顺利实现精准合 龙,成为高质量建设桥梁的标杆。

On December 30th, 2019, the main works of the Nujiang Railway Bridge, the arch bridge with the longest span in the world which links Dali City and Ruili City of Yunan Province, were completed by China Railway 18th Bureau Group Co., Ltd. as the general contractor. The bridge is 1,204.2 meters long and 25 meters wide. The main truss arch of the bridge was built by 922 steel poles in different sizes which were assembled with near 800,000 bolts in the air 230 meters above the Nuijang River in the way we build blocks. It required high installation accuracy and involved complicated processes. The adverse factors which affected the overhanging and accurate joining of the members of the main beam, which uses more than 13,000 tons of steel in total, in the air above the river, such as heavy wind and high temperature difference in the canyon, brought about the rarest technical difficulties and risks in building bridges in the world. The company used multiple research in cutting-edge technologies, such as the "largetonnage traversing cable crane" and the "multiple upside-down tower cable-stayed and suspension cantilever assembly system," to make sure, through more than ten thousands of tests and retests, the accuracy error of joining each pole member is less than 2 millimeters and that of all the steel truss arches of the bridge is less than 3 millimeters. In addition, the project team used the GPS satellite positioning system, 24 hours ongoing measurement and observation and other techniques to conduct lineal monitoring of the beam system, and took wind-proof measures to address the deformation of the beam due to heavy wind and high temperature difference. At last, the bridge, the benchmark of high-quality bridges, was successfully closed.



▶ 怒江特大桥 Nujiang Railway Bridge

提供至臻服务

Providina **First-Rate** Services

公司践行"以客户为中心"的服务理念,坚守对客户的每一份承诺,为客户提供 高品质的产品与服务;加强客户关系管理,积极保障客户权益,畅通客户反馈渠 道,倾听客户心声,保护客户信息,持续提升客户满意度。

CRCC has insisted on the service idea of putting clients first, honored every commitment to clients, and provided them with high-quality products and services. The Company has enhanced customer relationship management, actively maintained rights and interests of clients, smoothed customer feedback channels, earnestly conducted communications with clients, protected clients information, and constantly improved customer satisfaction.

以优质产品服务浇筑客户满意 Offering high-guality services to clients

中国铁建房地产集团有限公司围绕"做中国最具价值的美好生活服务商"的发展愿景,构建 优质客服体系,服务业主美好生活。该公司全力推进精装修交付,引入WELL健康标准,全新 打造精品住宅,为业主优质生活提供保障;建立乐享家、悠享家、尊享家三级物业服务标准体 系,上线"美好家"APP,推进智慧社区运营试点,让业主充分享受科技带来的便利;专门设立 品质提升基金,对已交付的楼盘进行持久品质提升维护,全方位提升业主居住体验,满足业 主美好生活需求。2019年,该公司荣获"中国好房子"优选服务商。

China Railway Construction Real Estate Group Co., Ltd., sticking to the vision of being the most valuable good life service provider, is committed to building an excellent owner service system and enabling owners to have a better life. The company fully promotes the delivery of finely decorated apartments and has introduced the WELL building standard to deliver high-end residences and ensure that its owners have quality life; has established property management standard systems at three levels, that is, happy home, cozy home and luxury home, and has released its APP "Good Life," to conduct pilot operation of smart 2019 communities and enable its owners to take 甲房 '中国好房子"优选服务商 full advantage of the benefits of science and technology; and has set up a dedicated fund for quality improvement and provides ongoing quality improvement and maintenance of buildings it has delivered, to comprehensively uplift the living experience of its owners and meet their demands for a better life. In 2019, the company was awarded the title of the "Selective ▼ 荣获"中国好房子"优选服务商 Service Provider" in the Good Residence in China Railway Construction Real Estate Group Co., China selection event

Building Future with Excellent Quality and Craftsmanship Spirit



全面实施创新驱动 IMPLEMENTING INNOVATION-DRIVEN DEVELOPMENT

公司坚持创新驱动,大力实施"科技兴企、科技强企"战略,积极打造创新平台,培育科技人才,加强科研成果转化运用, 提升企业竞争力。

Adhering to innovation-driven development, CRCC has vigorously implemented the strategy of invigorating and developing the enterprise through science and technology, taken initiative to build innovation platform, cultivated science and technology personnel, and enhanced the transformation and application of science and technology achievements, improving corporate competitiveness.

打造创新平台

Building Innovation Platform

公司持续完善科技创新管理体制机制,建设以企业为主体、市场为导向、各类 创新平台为依托,与高校、科研院所和社会力量多方联合的科技创新基本架 构,形成以企业主管领导为首的科技创新领导决策体系,确立"1+N"科技创 新制度体系。打造国家级一省部级一股份公司一集团公司一三级公司5个 层级的科研平台体系,为中国铁建打造创新驱动引擎奠定坚实基础。2019年,公 司拥有国家级创新平台22家,博士后科研工作站11家,科技投入165.278亿元。

CRCC has constantly perfected the management system and mechanism of science and technology innovation, and built the basic structure for science and technology innovation, which takes the enterprise as the main body, adopts market-oriented approach, relies on all kinds of innovation platforms, and focuses on cooperation with colleges and universities, scientific research institutes and social forces. The Company has established the leadership decision-making system for science and technology innovation, which is in the charge of the competent executive, and set up the "1+N" institutional system for science and technology innovation. It has also developed a scientific research platform system covering national platforms, platforms at provincial/ ministerial level, CRCC-level platforms, group company-level platforms, and affiliated company-level platforms, laying a solid foundation for CRCC to build an engine for innovation-driven development. In 2019, the Company boasted 22 national innovation platforms and 11 postdoctoral scientific research workstations; the investment in science and technology reached 16.5278 billion yuan.



公司拥有国家级创新平台 22 🕫 博士后科研工作站

In 2019, the Company boasted 22 national innovation platforms and 11 postdoctoral scientific research workstations



and technology reached 16.5278 billion yuan





was selected as one of the Outstanding Science and Technology Innovation Teams of Central SOEs



Building Future with Excellent Quality and Craftsmanship Spirit

2019 我们的荣誉 Honors & Awards in 2019 Won **4** prizes of National Science and Technology Progress Awards Won **82** science and technology awards at provincial/ministerial level Won 9 prizes of China Civil Engineering Zhan Tianyou Awards 获中国专利奖 9 项,获奖数量位居建筑类央企第一 Won 9 prizes of China Patent Awards, ranking first among central SOEs 水下隧道工程技术创新团队入选中央企业优秀科技创新团队 Underwater Tunnel Engineering Technology Innovation Team



中国铁建港航局集团有限公司参与完成的"海上大型绞疏浚装备的自主研发与产业化"项目,荣获2019年国家 科技进步奖特等奖。该项目创新研发顺应式钢桩台车定位技术、海底高强度岩礁快速挖掘技术、大通道高效疏 浚输送技术、复杂多系统优化集成技术等技术成果,攻克了漂浮作业装备高效定位难、海底坚硬岩石快速挖掘 难、大颗粒物料高浓度长距离连续输送难等一系列难题,实现了船舶在恶劣海况下"定得稳、挖得快、排得远" 的施工目标,综合性能达到国际领先水平。目前,该项成果已成功应用于我国自主设计和建造、拥有完全自主 知识产权的"铁建绞01""顶峰浚""海神浚"三艘大型绞吸式挖泥船舶中,在吹填造陆重点工程、"一带一路" 国内外港口建设、"海洋强国"等国家重大战略任务和重大工程建设中发挥重要作用。

CRCC Harbour and Channel Engineering Bureau Group Co., Ltd. participated in and completed, together with other participants, the "Independent R&D and Industrialization Project of Large Marine Cutter Section Dredging Equipment," which won the Special Prize of the National Science and Technology Progress Awards in 2019. The dredging equipment developed in the project uses technological innovations such as adaptive steel pile carrier positioning, quick excavation of high-strength rocks on the seabed, efficient dredging and conveying through large channels and optimization and integration of multiple complex systems, and can work under hard situations such as efficient positioning of floating equipment, guick excavation of hard rocks on the seabed and long-distance continuous conveying of dredged rocks and high-density mud. The equipment can position stably, excavate quickly and convey the dredged rocks and mud across long distances under harsh sea conditions, and is the best of its kind in the world in terms of overall performance. In addition, the achievements of the project have been applied in independently designing and building three large cutter section dredgers, that is, "CRCC Cutter 01," "Dredger Dingfeng" and "Dredger Haishen," the intellectual property rights of which are owned fully by Chinese companies, and are playing important role in major national strategies and projects in connection with land reclamation, port construction both in and out of China along the "Belt and Road" and the "Sea Power Strategy."



▼"铁建绞01"绞吸式挖泥船 Cutter section dredger "CRCC Cutter 01"

培养科技人才

Cultivating Science and Technology Talents

公司高度重视科技人才的培养,以重难点项目为依托,突出抓好技术研究和科 研能力建设,培育了一批高层次科技创新平台、创新团队和创新人才,为中国 铁建创新发展提供智力保障。公司现拥有中国工程院院士1人,国家勘察设计 大师11人,"百千万人才工程"国家级人选12人,"万人计划"中青年科技创新 领军人才1人,享受国务院特殊津贴专家251人。

CRCC has attached great importance to the cultivation of science and technology talents, boosted technological research, enhanced scientific research capabilities, and developed a batch of high-level science and technology innovation platforms, innovation teams and innovative talents, providing intelligent support for innovation-driven development of the Company. CRCC now has 1 academician of Chinese Academy of Engineering, 11 national survey and design masters, 12 candidates of the "National Hundred, Thousand and Ten Thousand Talent Project," 1 candidate of the Innovation Leadership Program in Science and Technology for Young- and Middle-Aged Scientists of the "Ten Thousand Talent Program," and 251 experts enjoying special allowance of the State Council.

激发青年创新创效活力

案例

Innovation event inspires creativity of young people

8月22日,中国铁建举办了首届"青创杯"BIM技术成果邀请大赛,所属23家单位的26个团队参与同台竞技。 选手们通过展示 BIM 团队及研发思路,BIM 应用的软硬件配置、特点亮点、成果效益和创新,下一步实施 BIM 技术的改进方向及措施等内容,全方位展示 BIM 技术成果。经过激烈角逐,最终 15 个项目获得表彰。本次大赛 结合青年岗位实际和专业技术发展趋势,以创新实践为平台,推动了"创新发展"理念在青年中的贯彻落实,提 升了青年对 BIM 技术的实践运用能力。

On August 22nd, 2019, a total of 26 teams from 23 units under CRCC participated in the first "Youth Innovation Cup" Competition on BIM Technological Achievements held by CRCC. The contestants fully demonstrated their BIM technological achievements by presenting their BIM teams and R&D ideas, hardware and software for, and characteristics, highlights, achievements, benefits

and innovations of the application of BIM, as well as the direction of and measures for improving BIM technology in the next step, and so on. After fierce competition, 15 projects won prizes. The competition, focusing on the development trends of actual practices and professional technologies at positions, is a platform to promote the implementation of the "innovation and development" idea among young people and improve young people's ability to apply BIM technology in practice.



▶ 为获奖选手颁发证书 Presenting certificates to winners

Building Future with Excellent Quality and Craftsmanship Spirit



促进成果转化

Promoting Achievement Transformation 公司积极承担和参与国家重大科技项目,持续开展城市地下空间等关键技术攻关,着手开展新兴产业企业技术标准编制工作,加强知识产权保护和科研成果转化运用,有效推进各业务领域现代技术体系的建设。2019年,公司累计授权专利14023件,其中发明专利2546件;新增授权专利3349件,其中涉外专利9件、发明专利438件;主持和参与国家标准9项,获省部级工法455项。

CRCC has taken initiative to undertake and participate in major national science and technology projects, constantly tackled problems in key technologies including the field of urban underground space, carried out the preparation and formulation of enterprise technological standards of emerging industries, and enhanced the protection of intellectual property rights and the transformation of scientific research achievements, effectively promoting the building of modern technology system in various business fields. In 2019, the Company accumulatively owned 14,023 authorized patents, among which 2,546 were patents for invention; the numbers of newlyobtained authorized patents were 3,349 pieces, among which 9 were international patents and 438 were patents for invention; presided over and participated in the preparation and formulation of 9 national standards, and obtained 455 construction methods at provincial/ministerial level.



In 2019, the Company accumulatively owned **14,023** authorized patents



The numbers of newlyobtained authorized patents were **3,349** pieces

聚焦科技成果转化

案例

Focusing on transformation of S&T achievements

12月23日,中央电视台《新闻联播》以近1分20秒的时长,报道了中国铁建 重工集团股份有限公司推动科技创新,促进科技成果转化为生产力,带 动外贸出口结构调整,实现高质量发展的新闻。报道介绍了该公司研发 团队对出口俄罗斯,应用于莫斯科地铁西南环线隧道挖掘工程的盾构机 开展科技攻关,最终成功研制出在极寒环境下能够正常工作的液压泵加 热装置,并创新了103项特殊设计,单台设备的创新点接近1000项。该公 司自主研发的盾构机首次成功打入俄罗斯本土市场,为中国智造、中国 制造进入欧洲高端市场建立了良好的开端。 On December 23rd, 2019, CCTV's *XINWEN LIANBO* (*Evening News Bulletin*) reported China Railway Construction Heavy Industry Group Co., Ltd. The report lasts for 1 minute and 20 seconds, and covering the efforts and achievements made by the company in promoting science and technology innovation and transformation of science and technology achievements to drive trading and export restructuring and enable quality development. The coverage also tells the story of a R&D team of the company which tried their best to tackle the science and technology difficulties in connection with the TBM exported to Russia and used in the construction of the southwest loop of Moscow Metro, successfully developed the heating equipment for hydraulic pumps that works normally in the extremely cold environment, made 103 special design innovations, and made near 1,000 innovations points in a single device. The TBM, which was independently developed by the company, was the first of its kind which was exported to Russia from China, setting up a good start of Created in China and Made in China for entering the high-end markets in Europe.

"中国盾构机在施工中各方面性能优异,施工速度非常快,我切身感受到了中国制造的魅力。" ——莫斯科地铁项目工程师 叶夫根尼•沃罗宁

"The China-built TBM performed very well, accelerating the construction process. I really felt the charm of 'Made in China."



▼ 中国铁建莫斯科地铁西南环线项目盾构机投入使用 The TBM was put into use for the construction of the southwest loop of Moscow Metro undertaken by CRCC

Building Future with Excellent Quality and Craftsmanship Spirit

— Yevgeny Voronin, engineer of Moscow Metro Project

全力保障安全生产 **GUARANTEEING SAFETY PRODUCTION**

公司高度重视安全生产工作,始终坚持"安全生产,预防为主,综合治理"方针,强化安全风险管理、开展隐患排查整治、 加大安全教育培训力度,切实提升安全生产管理水平。2019年,公司未发生重特大安全事故。

CRCC has paid great attention to the work of safety production, insisted on the guidelines of "safety in production, prevention first and comprehensive treatment," enhanced safety risk management, troubleshot potential safety risks, and strengthened safety education training, effectively improving the safety production management level. In 2019, there were no serious or major safety accidents occurred in the Company.

公司安全生产投入

25.18 亿元

安全生产管理

Safety Production Management

公司建立健全安全生产管理体制,强化安全生产源头管控,建立层级分明、管 理科学的安全生产岗位责任制体系,扎实推进安全生产集中整治;完善应急管 理体系建设,增强应急预案的科学性、针对性和实效性,组织开展应急预案的 培训和演练,加强专(兼)职救援队伍和应急救援培训演练基地建设,切实提 升应急作战能力。2019年,公司安全生产投入125.181亿元。

CRCC has established and perfected the safety production management system, strengthened safety production management and control at the source, set up postbased responsibility system featuring clear levels and scientific management, and effectively promoted centralized treatment on safety production; boosted the building of emergency management system, improved the scientific integrity, pertinency and effectiveness of contingency plans, organized and conducted emergency trainings and exercises, strengthened the constriction of professional and part-time rescue teams and the building of bases for emergency rescue, emergency training, and emergency exercise, effectively improving the emergency operation capabilities. In 2019, CRCC invested 12.5181 billion yuan in safety production.

> In 2019, CRCC invested **12.5181** billion yuan in safety production



11月26日,中铁二十局集团有限公司所属中铁太白山520职业教育培训中心设立的 国家安全生产应急救援培训演练基地通过审查验收,正式落户。该基地是陕西省唯 一一家国家级应急救援培训演练基地,集仿真、实操、演练于一体,可通过理论学 习、远程培训、实景模拟演练等形式,对桥梁施工事故、大型深基坑施工坍塌等8类 典型建筑行业应急救援进行培训,以此提高应急管理人员的应急管理能力和专业应 急救援队伍的应急救援能力。

On November 26th, 2019, the National Safety Production Emergency Rescue Training Exercise Base of the Taibai Mountain #520 Vocational Education and Training Center affiliated to China Railway 20th Bureau Group Co., Ltd. was officially passed inspection acceptance and opened up. The base is the only one of its kind in Shaanxi Province, offering simulationbased training, actual training and drills programs. The trainees takes theory courses, remote training programs, simulation-based drills and other courses there to learn how to deal with eight common types of emergencies in the construction industry, such as accidents in building bridges and collapse of large and deep foundation pits to improve emergency management ability of emergency management personnel and emergency rescue ability of professional emergency rescue team.



▼ 国家安全生产应急救援培训演练基地

Building Future with Excellent Quality and Craftsmanship Spirit

国家应急救援培训演练基地正式落户

National Safety Production Emergency Rescue Training Exercise Base established

National Safety Production Emergency Rescue Training Exercise Base



安全教育培训

Safety Educational Training

公司高度重视全员安全教育培训,加大安全教育培训工作力度,开展各类安全 教育培训活动,全面提升员工安全意识和操作技能,夯实安全生产工作根基。 2019年,公司安全培训人数25800人次。

CRCC has attached great importance to safety educational training for employees, boosted safety educational training work, conducted various safety educational activities and training programs, and fully improved the safety awareness and operation skills of employees, laying a solid foundation of safety production of the Company. In 2019, CRCC trained a total of 25,800 personnel in terms of safety training.

安全知识培训为安全生产护航

Safety knowledge training guarantees safety production

9月21-24日,中国铁建水利水电工程施工企业安全生产管理"三类人员"培训考试和继续教育培训班在中国铁建 北京培训中心举办。培训邀请专家针对水利安全生产法律法规、水利安全生产管理知识、水利安全生产风险管控 与隐患排查治理双重预防机制等内容进行了讲解,320余人参加了培训和考试。此次培训巩固了参训人员的安全 生产管理知识,增强了法律意识和风险识别、防控能力,为参训人员提高专业理论水平和技术水平打下了坚实的 基础。

The training, examination and continuing education program of safety production management for relevant personnel in hydraulic and hydroelectric engineering and construction companies under CRCC was held at CRCC Beijing Training Center from September 21st to September 24th, 2019. The lectures invited the experts presented relevant safety production laws and regulations, management expertise, risk control and potential danger identification measures and so on in

hydraulic engineering industry, and more than 320 trainees took part in the training and examination. The program enhanced traniees' safety production and management knowledges, and improved their legal awareness, ability of risk identification, prevention and control, laying a solid foundation for them to improve further their theoretical and practical knowledge.



▼ 中国铁建 2019 年安全生产管理"三类人员"培训

The 2019 training program of safety production management for relevant personnel in hydraulic and hydroelectric engineering and construction companies under CRCC was held in Beijing

隐患排查治理

Hidden Defects Inspection and Administration

公司全面推进安全生产风险管控和隐患排查治理双重预防性机制建设,强化 工程项目施工全过程生产安全风险管理,完善安全风险防控机制。全面开展 安全生产隐患排查和治理工作,坚决防范遏制安全事故发生,确保安全生产 形势稳定。

CRCC has fully promoted the building of the dual prevention mechanism for safety production risk control and potential risks investigation and management, enhanced safety production risk management in the whole process of project construction. and perfected the safety risk prevention and control mechanism. The Company has comprehensively carried out the works for troubleshooting potential safety risks, and resolutely prevented the occurrence of safety accidents, ensuring a stable work safety situation.

京张高铁清华园隧道安全贯通

Work on Qinghuayuan tunnel completed in Beijing

中铁十四局集团有限公司京张高铁项目部承建的京张高铁清华园隧道穿越北京市核心区及周边多座敏感建筑物, 面临3处特级风险源、80处一级风险源,是目前国内城市核心区穿越地层最复杂的高铁单洞双线大直径高风险盾 构隧道。该项目部建立清单式管理体系,细化量化隐患管控要点;将一线作业人员收入与安全行为挂钩,进行积分 制考核,对制止他人违章、主动发现并上报重大安全隐患的给予积分奖励;通过监控中心的终端设备开展现场风 险识别和隐患排查治理,解决现场监管存在的死角,极大促进了现场安全质量管理的提升,实现了安全"穿越江河 湖海城"的建设目标。

The Qinghuayuan Tunnel on the Beijing-Zhangjiakou High-Speed Railway, which was undertaken by the Beijing-Zhangjiakou High-Speed Railway Project Department of China Railway 14th Bureau Group Co. Ltd., went through the stratum under the central area of Beijing Municipality, facing with many sensitive buildings around, as well as 3 superlevel risk sources and 80 first-level risk sources. It is a two-way large-diameter high risk tunnel built by TBM for single hole high-speed trains which going through the most complicated stratum under the central area of city in China. To build the tunnel successfully, the project department established the list-based management system, and sorted out hidden danger control points in detail and in quantity; paid the wages of frontline workers based on the assessment of their acts in term of safety, conducted the credit

assessment system, and granted credits to workers who stopped other workers from violating any rules or voluntarily identified and reported any major hidden danger; and identified and dealt with risks and hidden dangers which were hard to be found on the site through terminal equipment in the monitoring center of the project. All the measures taken by the project department promoted greatly the safety and quality of the project and enabled the project to be another example of CRCC's goal of safely "going through rivers, lakes, seas and cities."



Building Future with Excellent Quality and Craftsmanship Spirit

▼ 京张高铁清华园隧道 *Qinghuayuan Tunnel on the Beijing-Zhangjiakou High-Speed Railway*





and jointly built a "High-Quality CRCC," striving to achieve win-win cooperation and mutual development.



ACHIEVING WIN-WIN RESULTS WITH STAKEHOLDERS





Achieving Win-Win



人尽其才谋发展 PURSUING DEVELOPMENT THROUGH TALENTED PEOPLE

公司秉持"以人为本"理念,维护员工基本权益;建立完善的培训体系和科学的晋升机制,为员工成长成才提供保障; 积极关爱员工,增强员工的获得感、幸福感;组织开展多元化的文体活动,提升员工的向心力、凝聚力。

CRCC has insisted on putting people first, and maintained basic rights and interests of employees; established complete training system and scientific promotion mechanism to guarantee the career development of employees; enhanced employee care, increased the employees' sense of gain and sense of happiness; organized and conducted diversified cultural and sports activities to strengthen the centripetal force and cohesive force of employees.

维护员工权益

Maintaining Rights and Interests of **Employees**

公司严格遵守劳动法律法规,依法保障员工各项权益,创建和谐的劳动关 系。遵循平等雇佣原则,坚持男女平等、同工同酬,反对就业歧视和强迫劳 动,禁止使用童工,公平对待不同国籍、种族、性别、年龄、宗教信仰和文化 背景的员工;构建公平合理的薪酬福利体系,为员工提供具有行业、地区竞争 力的薪酬福利,建立规范的企业年金和补充医疗保险制度,推行灵活的休假 制度,鼓励员工带薪休假;坚持民主管理,建立健全以职代会为基本形式的 民主管理制度,鼓励员工参与民主管理与决策,确保员工合法权益得到有效 保障;关注员工身心健康,建立健全职业病防治体系,加强施工现场管理,严 格发放劳动防护用品,积极开展职业健康宣传教育,定期组织员工体检,建 立职业健康档案并跟踪复查,切实保障员工职业健康权益。2019年,公司员 工总数293884人,劳动合同签订率100%,社会保险覆盖率100%,女性管理 者比例21.58%。

公司员工总数 1 293884 In 2019, the Company had a total of **293,884** employees

and interests of employees, and creates harmonious labor relations; follows the principle of equal employment, upholds equality between men and women, insists on equal pay for equal work, opposes employment discrimination and forced labor, prohibits the employ of child labor, and provides employees with equal and fair opportunities regardless of nationalities, race, gender, age, religious belief, or cultural background. The Company has built a fair and reasonable salary system, providing employees with competitive compensation and benefits in the industry and by region; set up regulated enterprise annuity and supplementary medical insurance system, implemented flexible vacation system, and encouraged employees to enjoy paid leave benefits; insisted on democratic management, established and perfected the democratic management system that takes workers' congress as basic form, and encouraged employees to participate in democratic

CRCC strictly abides by the labor laws and regulations, guarantees the rights

100%

100%

室例

劳动合同签订率 The signing rate of labor contracts reached 100 percent

社会保险覆盖率

The coverage of social security of employees reached 100 percent

management and decision-making, ensuring the legitimate rights and interests of employees are effectively protected; paid attention to employees' physical and mental health, enhanced construction site management, offered articles for labor protection to employees, taken initiative to conduct occupational health publicity and educational activities, carried out physical examination for employees regularly, and set up and tracked the occupational health files of employees to effectively guarantee their health. In 2019, the Company had a total of 293,884 employees; the signing rate of labor contracts and the coverage of social security of employees both reached 100 percent; the proportion of female managers was 21.58 percent.

让每一个员工都在服务区

Promoting family culture

在"家文化"的引领下,中铁二十五局集团有限公司积极创新员工维权服务,在服务平台、服务载体、服务方式、服 务质量等方面下功夫,形成"全方位立体式服务员工"的维权服务格局。在服务平台上,以"下基层,送服务""解 决小诉求,凝聚大力量"为载体,持续开展各类员工服务活动185场次,服务员工、农民工8200余人次;在服务内容 上,尽可能满足员工在物质、精神、文化等方面的需求;在服务模式上,将常态服务与精神文化服务相结合,普惠性 服务与精准化服务相结合,季节性服务与长效性服务相结合,员工被动接受的"菜单式"服务与主动送去的"点菜 式"服务相结合,全面拓展与创新服务理念和服务方式,精准化、长效性服务于员工权益维护。

Guiding by the "family culture," China Railway 25th Bureau Group Co., Ltd. took initiative to make innovations in connection with protecting the rights and interests of its employees. It made efforts to build excellent service platforms, service carriers, service approaches and service quality, establishing an all-around protection system for employees' rights and interests. In terms of service platforms, the company conducted 185 employee service activities and offered services to 8,200 employees and migrant

workers through "going to the grassroots and offering services to the grassroots" and "satisfying small demands to gather greater strength". In terms of services content, the company tried its best to satisfy the material, spiritual, cultural and other demands of its employees. In terms of the ways to deliver services, the company integrated normal services with spiritual and cultural services, inclusive services with targeted services, seasonal services with long-term services, and services provided to employees based on menus with services ordered by employees on their own, fully expanding and innovating service ideas and approaches, protecting the rights and interests of the employees on a targeted and long-term basis.



"下基层,送服务"活动

助力员工成长

Boosting **Employees Growth** 公司关注员工职业发展,为员工搭建畅通的发展通道,激发员工充分施展才 干,帮助员工实现自我价值。持续加大人才队伍建设,以员工能力建设为核心, 以员工岗位技能培训和知识更新培训为重点,开展多层次、多渠道、多方式的 员工培训,全面提升员工的能力素质和技术水平,为员工实现个人价值提供良 好平台。2019年,公司员工培训投入74160万元,培训人数511385人次。

CRCC focuses on career development of employees, and has built smooth development channels and platforms for employees to give full play to their talents, helping them achieve self-fulfillment. Centering on capability building of employees and focusing on post-based skill and knowledge training, the Company has constantly enhanced the building of talent team, conducted diversified training programs for employees by various approaches, comprehensively improved the quality and ability of employees, as well as their skills, providing a good platform for employees to realize their own value. In 2019, the Company invested 741.6 million yuan in employee training, and a total of 511,385 personnel were trained.



In 2019, the Company invested 741.6 million yuan in employee training

培训人数 511385人次



A total of **511,385** personnel were trained





11月7-9日,2019年中国技能大赛——中国铁建职业技能竞赛在湖南省湘潭市成 功举办。竞赛采用理论考试和技能竞赛考核相结合的方式进行,内容紧贴施工生 产实际,涉及工程试验前沿技术,将考核重心放在实际操作环节,全面客观地考察 了参赛选手的实际操作能力。公司所属20家单位的80名员工参赛,团体前3名的单 位和前15名的选手分别被授予"中国铁建技术能手""中国铁建青年岗位能手"荣 誉称号和"中国铁建工人先锋奖章"。此次技能竞赛搭建了技能人才切磋技艺、交 流经验、提高技能、展现风采的平台,引导了他们在本职岗位上钻技术、学技能、长 本领、当能手。

The 2019 China Skills Competition - CRCC Occupational Skills Competition was held in Xiangtan City of Hunan Province from November 7th to 9th, 2019. The competition assessed the contestants on construction and production practices, engineering experiments and cutting-edge technologies through paper tests and skills contests. With its focus on actual practices, the competition fully examined the contests' actual ability of practice in an objective way. A total of 80 contestants from 20 affiliates of the Company participated in the competition. The top 3 teams and the top 15 individuals were awarded respectively the titles of "CRCC Outstanding Technical Workers" and "CRCC Outstanding Youth Workers" and the medal of "CRCC Workers' Vanguard." As a platform for its skilled workers to communicate and exchange with each other, improve and demonstrate their skills, the competition encouraged them to study technologies and skills and strive for the best.



Awarding the winners

Achieving Win-Win Results with Stakeholders

让"比武"成为人才培养的"摇篮" Competition becomes cradle of talent cultivation


真情关爱员工

Enhancing Employees Care 公司积极关爱员工,将人文关怀与温暖传递至员工心田。建立困难员工帮扶长 效机制,加大帮扶力度,帮助困难员工解决后顾之忧;建立女性员工劳动保护 机制,为孕期、哺乳期的女性员工提供特殊关爱;推行农民工实名制管理、工 资专用账户、工资保证金和银行代发工资等制度,创办农民工夜校对农民工进 行技能和素质培训,建立沟通渠道,倾听农民工心声,切实维护农民工权益。 2019年,公司投入资金4500余万元,重点帮扶1320余个偏远艰苦项目改善工 作环境;筹集送温暖资金7604万元,慰问困难员工家庭7788户,慰问劳模先 进、生产一线员工、离退休员工以及农民工56208人。

CRCC takes initiative to enhance employees care, conveying humanistic care and warmth to employees. The Company has established a long-term assistance mechanism for employees who have difficulties in their life, helping them to solve their worries; established labor protection mechanism for female employees, and offered special care to pregnant employees and employees in lactation; promoted the real-name management system for migrant workers, as well as the systems relating to individual wage accounts, wage deposits and payment of wages through the bank, set up night schools to conduct skills and quality training for migrant workers, and opened channels to communicate with them, so as to effectively maintain their rights and interests. In 2019, the Company invested more than 45 million yuan in project assistance funds, focusing on assisting over 1,320 projects in remote areas or under harsh conditions to improve working environment; raised 76.04 million yuan of employee assistance funds, condoled 7,788 families of needy employees, as well as 56,208 model workers, outstanding workers, front-line workers, retired employees and migrant workers.



为让农民工兄弟欢欢喜喜回家过年,中铁十七局集团有限公司二公司所属各项目部开 展农民工工资发放专项督查,杜绝拖欠农民工工资行为,保证农民工工资按时足额 发放。为全面掌握各项目部农民工工资发放情况,该公司实行工资发放周期统计,每 周汇总各项目部报表,每月制作曲线统计图反映实时数据变化,对发现的欠薪问题 和隐患,早预防、早解决。不定期到施工现场向农民工宣讲欠薪治理政策,发放《农 民工维权宣传手册》,帮助他们了解维权渠道,真正为劳动者撑起维权"保护伞"。

To enable the migrant workers to go back home for the Spring Festival lightheartedly, the project departments under the 2nd Engineering Co., Ltd. of China Railway 17th Bureau Group Co., Ltd. conducted special inspection of the payment of migrant workers' wages to eliminate any delayed payment and make sure the migrant workers could receive their full wages as scheduled. To fully understand the actual situation in connection with the payment of migrant workers' wages by each department, the company regularly counted the wage payment periods, consolidated statements submitted by each department on a weekly basis, and made curve diagrams to show the real-time changes on a monthly basis; and prevented and solved unpaid wages or hidden risks as soon as possible. In addition, the company communicated unpaid wages governance policy with migrant workers and distributed the Rights and Interests Protection Manual for Migrant Workers on the construction site at irregular intervals, to help them understand the approaches available and protect their rights and interests.



▼ 公司领导慰问老党员



中铁十九局集团有限公司组织女员工学习茶艺 🤻



中国铁建国际集团有限公司在泰国为员工 🥄 举办集体婚礼

Achieving Win-Win Results with Stakeholders

Wages paid to migrant workers on time and in full

▼ 中国铁建港航局集团有限公司开展夏送清凉 慰问活动



工作生活平衡

Balancing Work and Life

公司提倡工作与生活平衡,组织读书活动、演讲比赛、文化艺术节、运动会、 联欢会等文体活动,丰富员工业余生活,让员工健康工作、幸福生活。

CRCC advocates employees to pursue work and life balance, and has organized reading activities, speech competitions, cultural and art festivals, sports events, get-togethers and other cultural and sports activities to enrich the spare time life of employees, so as to let employees work healthily and enjoy happy life.



▶ 中铁十六局集团有限公司 员工绘制中国铁建"福鹿娃"



▼ 中铁二十四局集团有限公司 单身青年联谊活动

China Railway 24th Bureau

中铁十四局集团有限公司 🥄 第五届员工运动会



中国铁建房地产集团有限公司 员工春游活动





▶ 中铁十八局集团有限公司 员工在"开心农场"愉快采摘 Employees of China Railway 18th



▶ 中铁城建集团有限公司 举办"饺子宴"活动

案例

为进一步丰富广大干部员工业余生活,积极引导广大员工自觉养成爱读 书、多读书、读好书的良好习惯,同时搭建学习交流的良好平台,提升员 工的理论素养、文化底蕴和业务能力,助力企业高质量发展,中铁第五 勘察设计院集团有限公司成立"五院读书会",组织、策划系列读书活 动,评选优秀作品。该公司还建成了咖啡厅图书广角、城市轨道交通设 计处图书角、地质路基设计处图书角、建筑设计处图书角、铁研监理公司 图书角,5个图书角合计建筑面积190平方米,藏书量近3000册,成为集 读书、阅览、休闲、开展文化活动及交流于一体的场所,切实推动员工读 书活动形成常态。

To further enrich the life of its employees at all levels after work and facilitate its guality development, China Railway Fifth Survey and Design Institute Group Co., Ltd. encourages its employees to develop a habit of reading good books and improve their theoretical and cultural knowledge and professional skills through the communication platforms it offers. The company started a book club, which plans a series of reading activities and organizes its members to select good books. In addition, the book corners at the café and other four departments of the company, covering an area of 190 square meters in total, have nearly 3,000 books and are good places for its employees to read and communicate and to conduct cultural and recreational activities, enabling them to read books on a regular basis.



▶ 读书活动 Reading activity

Achieving Win-Win Results with Stakeholders

让读书成为工作生活的常态

Make reading a regular part of life



携手合作享共赢 ACHIEVING WIN-WIN COOPERATION WITH PARTNERS

公司坚持诚信经营、公平竞争,完善供应商管理,开展责 任采购,打造责任供应链。广泛开展合作交流,实现互惠 互利、合作共赢。

CRCC insists on integrity management and fair competition, and has enhanced supplier management, conducted responsible procurement, and built responsible supply chain. The Company has carried out extensive cooperation and exchanges, striving to achieve mutual benefits and win-win cooperation.



公司秉持合作共赢发展理念,加强与地方政府、企业、 银企、科研院校等开展多维度的战略合作,实现优势互 补、互惠共赢、共同发展;积极参与国际交流与合作,推 动建设开放型世界经济,构建人类命运共同体。

Insisting on the idea of win-win cooperation and mutual development, CRCC has strengthened strategic cooperation with local governments, enterprises, banking institutions, and colleges and universities, aiming at making their respective advantages complementary to each other and realizing mutual benefits, win-win results and common development. The Company has actively participated in international exchanges and cooperation, promoted the development of open world economy, and worked hard to build a community with a shared future for mankind.



▼ 公司与海南省签订战略合作协议 CRCC signed strategic cooperation agreemen with Hainan Provincial People's Government



■ 公司与青岛市签订战略合作协议 CRCC signed strategic cooperation agreement with Qingdao Municipal People's Government



■ 公司与中国节能签订战略合作协议 CRCC signed strategic cooperation agreement with China Energy Conservation and Environmental Protection Group



公司与中国银行签订战略合作协议 ▼ CRCC signed strategic cooperation agreement with Bank of China



公司与中国人寿签订战略合作协议 ▼ CRCC signed strategic cooperation agreement with China Life



中铁物资集团中南有限公司与武汉 **厂** 大学签订战略合作协议

China Railway Materials Group Central-South Co., Ltd. signed strategic cooperation agreement with Wuhan University Achieving Win-Win Results with Stakeholders

<mark>案例</mark> Case

以可持续基础设施建设理念推进中非合作

Promoting China-Africa cooperation with sustainable infrastructure construction concept

中国铁建贯彻对非洲"真、实、亲、诚"理念,用精 益求精的"工匠精神"建设高质量、可持续的基础设 施,在47个非洲国家修建了10000多公里铁路及城市 轨道、5000多公里公路等在内的工程项目,运营及 维护铁路里程超过2800公里,促进了非洲经济社会 发展。6月27-29日,中国铁建作为中非合作龙头企 业参加了第一届"中国——非洲经贸博览会",并在 中非合作龙头企业展区设置展馆,展现公司参与中 非合作成果及在非发展业绩,表达合作愿景,受到中 外参观人员的热情关注。

Insisting on the concept of "sincerity, real results, affinity, and good faith," CRCC has built high-quality and sustainable infrastructure with the craftsmanship spirit of striving for the best. The Company has constructed over 10,000 kilometers of railway lines and urban rails, as well as over 5,000 kilometers of highways in 47 African countries, and operated and maintained the railways over 2,800 kilometers there, greatly promoting the economic development and social progress of Africa. From June 27th to 29th, 2019, CRCC, a leading enterprise in promoting China-Africa cooperation, participated in the first China-Africa Economic and Trade Expo, and set up a pavilion at the exhibition zone for leading enterprises to exhibit the China-Africa cooperation results and the achievements the Company made in Africa and to express the wish of cooperation, attracting extensive attention from both Chinese and foreign visitors.



▼ 中国铁建展厅 Pavilion of CRCC

"友谊的小船"行稳致远 案例

Working for solid, steady and sustained growth of China-Russia cooperation

6月5-7日,"中俄建交70周年纪念大会"及"第二十三届圣彼得堡国际经济论坛全会"在俄罗斯莫斯科举行,中 国铁建应邀出席会议,并在"国家发展项目的成功之道"分论坛上作交流发言,表示公司将以此次中俄两国元 首宣布发展"新时代全面战略协作伙伴关系"为契机,积极对接俄罗斯发展战略,开展业务合作,为中俄友谊的 进一步发展和两国人民的福祉做出更大贡献。

The 70th anniversary of the establishment of the China-Russia diplomatic relations and the plenary session of the 23rd St. Petersburg International Economic Forum were held in Russia, from June 5th to 7th, 2019. CRCC attended the conference upon invitation, and delivered a speech at the parallel session, saying the Company will take the China-Russia comprehensive strategic partnership of coordination in the new era announced by the two heads of state as opportunity, actively synergize the development strategies of Russia, and conduct business cooperation, so as to make greater contributions to the development of China-Russia friendship and to bring more benefits to people of the two countries.



▼ 第二十三届圣彼得堡国际经济论坛"国家发展项目的成功之道" 分论坛

打造责任供应链

Building Responsible Supply Chain

公司秉持"公开、公平、公正"原则,搭建电子商务平台,实行采购集中化、规 范化、信息化、阳光化管理,营造公平公正的竞争环境;坚持责任采购,优先 采购绿色环保产品,打造绿色供应链。公司实施严格的供应商管理,加强准 入、录用、合同签订及执行、信用评价等重点环节的管控,与实力强劲、信誉 优良的供应商建立长期稳定的合作关系;将供应商社会责任管理融入企业日 常管理,通过供应商社会责任培训、动态量化考核评价等方式,推动供应商 逐步提升履责能力,实现合作共赢。

Adhering to the principle of "openness, fairness and impartiality," CRCC has built e-commerce platform, and carried out centralized, regulated, information-based and transparent procurement, creating a fair and impartial environment of competition; insisted on responsible procurement, given priority to purchase environmentally-friendly products, and built green supply chain. The Company has implemented strict management on suppliers, strengthened control over key links such as access, permission, contract signing and execution, and credit evaluation, and established long-term and stable cooperation relations with suppliers featuring good reputation and strong strength; integrated supplier social responsibility management into day-to-day corporate management, and promoted suppliers to gradually improve social responsibility performance capabilities by conducting social responsibility trainings for suppliers and carrying out dynamic examination and evaluation accordingly, aiming at achieving win-win results.

全面推行区域物资集中采购新模式 案例 Case Promoting centralized procurement of regional materials

中铁物资集团有限公司作为中国铁建物资集中采购中心,负责组织实施中国铁建内部物资 集中采购相关工作和物资采购信息化平台的建设运营。该公司推行"区域物资集中采购"战 略,提供从计划管理、资源聚集、采购供应、物流运输、质量管控、履约监督等全采购过程的 一体化服务,并不断推进从"采购整合"向"供应整合"提升,开创以"源头采购+共同选商+ 一体化服务"为特色的集采供应新模式,让供应链协同效应得到充分体现。此外,该公司还 开发应用中国铁建物资采购网,实现"用户体系、机构管理体系、供应商管理体系、物料编码 体系、专家库体系"统一,助推中国铁建所属各级单位、所有物资采购管理工作的标准化、规 范化。在第十届全球采购(武汉)论坛暨公共采购2019年会上,该公司荣获全国公共采购年 度评选"优秀集中采购机构""先进电子平台"两项荣誉,得到行业内的一致认可。

As the centralized procurement center of CRCC, China Railway Materials Group Co., Ltd. is responsible for the organization and implementation of centralized procurement of materials, as well as the building and operation of the IT platform for material procurement. Adopting the strategy of "centralized procurement of regional materials," the company provided integrated services covering, among others, plan management, concentration of resources, procurement and supply, logistics and transportation, quality management and control, and contract execution and supervision, and constantly promoted "procurement integration" to "supply integration," and developed a new centralized procurement and supply model featuring "procurement at source, joint selection and integrated services," which fully leveraged the coordination effect of supply chain. The company also developed and used the ecm.crcc. cn to integrate "user system, institutional management system, supplier management system, material codification system and expert database service system," helping promote the material procurement management of various affiliated units and companies of CRCC in a standard and regulated manner. At the 10th Global Procurement (Wuhan) Forum and Procurement Fair 2019, China Railway Material Group Co., Ltd. won the two honorary titles of "Excellent Centralized Procurement Organization" and "Outstanding e-Platform," and received wide recognition of industry peers.



▶ 领奖现场 Award presentation Achieving Win-Win Results with Stakeholders



citizen, given full play to its strengths, helped promote targeted poverty alleviation, developed community-based public welfare causes, fulfilled social responsibilities in overseas market, and protected ecological

品"德"共荣 同筑美好家园

environment, striving to build a beautiful homeland.

ACTING AS GOOD CORPORATE CITIZEN 87

倾情奉献社会 Making Contributions to Society



践行海外责任 86 Performing Social Responsibilities in Overseas Market



守护绿水青山 Protecting Lucid Waters and Lush Mountains









助力精准扶贫 HELPING PROMOTE TARGETED POVERTY ALLEVIATION

公司秉持"真心扶贫、精准扶贫、共赢扶贫、创新扶贫、干净扶贫"理念,大力帮 扶河北省尚义县、河北省万全区、青海省甘德县3个定点扶贫区县和新疆维吾尔 自治区伊吾县、甘肃省定西市、陕西省会宁县、四川省甘洛县、重庆市云阳县、 广西壮族自治区隆安县等13个省、自治区、直辖市的贫困地区,开展产业扶贫、 就业扶贫、基建扶贫、党建扶贫、教育扶贫、医疗扶贫,坚决打赢脱贫攻坚战。 2019年,河北省万全区正式脱贫摘帽,河北省尚义县、青海省甘德县顺利通过 省级脱贫验收。

Insisting on the concept of "Sincere poverty alleviation, targeted poverty alleviation, winwin poverty alleviation, innovative poverty alleviation and transparent poverty alleviation," CRCC has vigorously assisted the 3 fixed-point poverty alleviation areas of Shangyi County and Wanguan District in Zhangjiakou City of Hebei Province and Gande County in Oinghai Province, as well as the poverty-stricken areas in 13 provinces (autonomous regions and municipalities) including Yiwu County in Xinjiang Uygur Autonomous Region, Dingxi City in Gansu Province, Huining County in Shaanxi Province, Ganluo County in Sichuan Province, Yunyang County in Chongqing Municipality, and Longan County in Guangxi Zhuang Autonomous Region to carry out poverty alleviation initiatives through industrial development, job opportunity creation, infrastructure construction, Party building, education, and medical care, striving to win the tough battle against poverty. In 2019, Wanquan District was formally lifted out poverty; Shangyi County and Gande County were successfully passed the provincial-level acceptance inspection for poverty alleviation.

公司遵循"中国铁建统筹、二级单位主抓,挂职 干部落实"的扶贫工作原则,定期召开扶贫工作 会,打好扶贫工作思想基础;整合公司物力财力 资源,筑牢扶贫工作物质基础;建立长效扶贫 干部培训机制,夯实扶贫工作人才基础;加大监 管力度,确保扶贫项目及资金阳光诱明运行。 2019年,公司荣获"青海省2018年度脱贫攻坚 先进单位"。

Following the working principle that CRCC makes overall plan for poverty alleviation, second-level companies take main responsibility of implementing the plan, and the personnel selected and appointed to temporary posts in poverty-stricken counties districts and cities are responsible for concrete actions, CRCC has held poverty alleviation working meeting regularly, laying a thought foundation for the work; integrated materials and financial resources of the Company to enhance material foundation; established long-term poverty alleviation personnel training mechanism to strengthen talent foundation; enhanced regulation to guarantee transparent operations of poverty alleviation projects and poverty alleviation funds. In 2019, the Company was awarded the title of "2018 Outstanding Organization for Poverty Alleviation" by Qinghai Province.

2019 我们的行动

Actions in 2019

投入帮扶资金 **5671.6**万元 物资折款 282 万元

CRCC invested 56.716 million yuan in poverty alleviation, and the mount of assistance materials (converted into money) was 2.82 million yuan



3个定点扶贫区县 直接投入 帮扶资金 **828.** 万元 <u>引进帮扶资金</u>216.1万元

CRCC invested **18.281** million yuan in poverty alleviation in the 3 fixed-point poverty alleviation counties (district) directly, and introduced **2.161** million yuan of poverty alleviation assistance funds

在3个定点扶贫区县 购买农产品 1018 万元 购买工业品、**1793.3**万元

CRCC purchased **10.18** million yuan of farm products, as well as **17.933** million yuan of industrial products and light industrial products in the 3 fixed-point poverty alleviation counties (district)

342



Acting as Good Corporate Citizen



▼ 8月3日,公司董事长在青海省甘德县调研扶贫工作 Chairman of CRCC conducted an investigation and research tour for poverty alleviation work to Gande County, Qinghai Province, August 3rd, 2019



▼ 5月8-9日,公司总裁在河北省万全区调研扶贫工作 President of CRCC conducted an investigation and research tour for poverty alleviation work to Wanguan District, Hebei Province, May 8th-9th, 2019

共派出定点扶贫干部

CRCC dispatched a total of **34** personnel to the fixed-point poverty alleviation counties (district), helping promote poverty alleviation works



帮助建档立卡贫困人口



CRCC helped lift 4,058 people registered as living in poor conditions out of poverty

倾情奉献社会 MAKING CONTRIBUTIONS TO SOCIETY

公司积极投身社会公益,充分发挥企业优势,参与志愿服务、抢险救灾,传递向上、向善正能量,为共建和谐社会贡献力 量。2019年,公司对外捐赠4232.84万元。

CRCC has participated in public welfare activities, fully leveraged corporate strengths, taken part in volunteer services, as well as emergency rescue and disaster relief, and injected positive energy into the community, making contributions to the building of a harmonious society. In 2019, the amount of external donations of the Company reached 42.3284 million yuan.

热心志愿服务

Conducting Volunteer Services 公司推进志愿服务规范化、常态化建设,组建1200多支"学雷锋"志愿服务队 伍,在全国各地开展扶贫济困、支教帮教、环境保护、社区服务、关爱孤老、政 策宣讲等公益活动。2019年,公司参与社会公益活动1350次,参加志愿服务 者达3.8万人次。



▼ 中国铁建港航局集团有限公司开展敬老活动 Employees of CRCC Harbour and Channel Engineering Bureau Group Co., Ltd. delivered kindness to the elderly



▼ 中铁十一局集团有限公司慰问留守儿童 Employees of China Railway 11th Bureau Group Co., Ltd. visited left-behind children

and normalization, and set up over 1,200 "Learn from Lei Feng" volunteer service teams to conduct public welfare activities relating to, among others, poverty alleviation, educational assistance, environmental protection, community services, caring for the elderly, and policy publicity countrywide. In 2019, the Company participated in 1,350 public welfare activities, and the participating volunteers reached 38,000 persons.

CRCC has promoted volunteer

services in standardization



▼ 中铁十四局集团有限公司慰问环卫工人 Employees of China Railway 14th Bureau



龙均爵志愿服务队成立 案例 Case

Long Junjue volunteer service group established

3月6日,中国铁建大桥工程局集团有限公司正式命名成立了"龙均爵志愿服务队",授旗成立志愿服务队168支,队 员2800余人,在全国各地开展公益献血、义工环保、植树绿化、关爱福利院儿童、帮扶孤寡老人等志愿服务活动。 2019年,龙均爵志愿服务队开展志愿服务活动200余次,先后参与了凉山州山火、宜宾地震、河源暴雨、六盘水特 大山体滑坡等险情的抢险工作,并在扶危济困、脱贫攻坚、爱心助学、保护环境等志愿服务中积极发力,多次受到 各级政府及有关部门的表扬。"龙均爵志愿服务队"持续推进志愿服务专业化、体系化、项目化、常态化开展,展现 了青年的社会担当,树立了良好的企业形象。

On March 6th, 2019, China Railway Construction Bridge Engineering Bureau Group Co., Ltd. formally set up the "Long Junjue Volunteer Service Group," which consists of 168 teams and over 2,800 members. Since its establishment, the volunteer service group has carried out various volunteer service activities including, among others, voluntary blood donation, environmental protection, treeplanting and gardening, caring for children in welfare institutions, and provision of assistance to the elderly. In 2019, Long Junjue Volunteer Service Group conducted over 200 volunteer service activities, and participated in emergency rescues and disaster reliefs including firefighting in Liangshan Yi Autonomous Prefecture, earthquake relief in Yibin City, rainstorm rescue in Heyuan City and mudslide relief in Liupanshui City. Efforts also made to help those in danger and relieve those in need, promote poverty alleviation, provide assistance to education, and protect environment, winning recognition by governments at various levels and competent authorities. With the implementation of volunteer service activities in a professional, systematical, project-based and regular manner, the volunteer service ▼ "龙均爵志愿服务队" 成立暨 "雷锋日" 志愿服务活动启动仪式 group has showed the social responsibility of the youth, and Launch ceremony of "Long Junjue Volunteer Service Group" & volunteer service activity of "Lei Feng Day" set up a good corporate image.

延伸阅读 FURTHER READING

龙均爵烈士是中国铁建的杰出代表,1951年加入中国人民志 愿军铁道兵团第三师,参加抗美援朝,回国后先后参建了宝 成、鹰厦、漳泉等铁路线,曾多次立功受奖。1958年在修建福 建漳泉铁路期间,11月9日,龙均爵准备去车站接从东北赶来 的未婚妻来工地举办婚礼,突然接到工地附近发生森林火灾 的通知,大火危及潘洛铁矿及509地质队物资器材仓库。面对 国家财产即将遭受重大损失的紧急情况,他毅然带领施工人 员前去扑火,在灭火过程中不幸壮烈牺牲。铁道兵第三师党委 为他追记一等功,铁道兵政治部给他追记一等功,中华人民共 和国内务部誉他为"救火英雄"。

Martyr Long Junjue, an outstanding representative of CRCC, joined the 3rd Division of the Railway Engineering Corps under the Chinese People's Volunteer Army in 1951, and was a veteran of the war to resist U.S. aggression and aid Korea. After returning, Long participated in the construction Acting as Good Corporate Citizen



"救火英雄" 龙均爵 "FIREFIGHTING HERO" LONG JUNJUE

of Baoji-Chengdu Railway, Yingtan-Xiamen Railway, Zhangping-Quanzhou Railway and other railway lines successively, winning several awards and honors. During the construction of Zhangping-Quanzhou Railway in Fujian Province in 1958, Long Junjue, who was going to the railway station to pick up his fiancée from the northeast China to hold a wedding at the construction site, suddenly received a notice saying there was a forest fire endangering Panluo Iron Mine and the materials and equipment warehouse of the No. 509 Geological Team. The day was November 9th, 1958. Facing with the imminent major loss of State property, he resolutely led the construction workers to fight the fire and sacrificed his life protecting the property. Long Junjue was posthumously awarded a First-Class Merit Citation by both the Party Committee of the 3rd Division of the Railway Engineering Corps and the Political Department of the Railway Engineering Corps. He was also recognized as "Firefighting Hero" by the Ministry of Internal Affairs of the People's Republic of China.

案例 守候 "军运" 的志愿 "服务员"

Case

Volunteers serve CISM Military World Games

在第七届世界军人运动会举办期间,来自中铁十一局集团有限公司城轨公司的26名志愿者, 在湖北省武汉市体育中心站和洪山广场站的两个服务站点,用饱满的热情提供了长达10天的 购票咨询、饮用热水、手机充电、应急救助等志愿服务,累计服务时长2500小时,服务乘客 2万余名。他们以主人翁的姿态和最美的微笑,递出文明、热情、友善的武汉"名片",彰显了 "新时代盾构铁军"的精神风貌,赢得了广大乘客的交口赞誉。

With full enthusiasm, 26 volunteers from China Railway 11th Bureau Group City Rail Engineering Co. Ltd. provided volunteer services including, among others, ticket booking, provision of hot drinking water, mobile phone charging, and emergency rescues for 10 days at the two service stations of Sports Center Station and Hongshan Square Station during the 7th CISM Military World Games in Wuhan, central China's Hubei Province. The 26-member volunteer team served over 20,000 passengers with an accumulative service time of more than 2,500 hours. With the team work spirit and the considerate services, they showed a progressive, warm and friendly Wuhan to the world, and highlighted the spirit of "Tunneling Shield Army in the New Era," winning wide acclaim and appreciation.



指引乘客"扫码"了解观赛指南 Employee volunteers assisted passengers to scan QR code to learn the matchday programme

倾力抢险救灾

案例

Carrying out Emergency Rescue and Disaster Relief

公司积极发挥基础设施建设的专业优势,在面对地震、暴雨、台风、山体滑 坡、干旱、洪水、山火等灾害时,冲在救援一线,全力组织抢险救灾工作,保 障人民群众的生命安全,为受灾地区的抢修和重建工作贡献力量。

CRCC has actively leveraged its strengths in infrastructure construction. In face of earthquake, rainstorm, typhoon, landslide, drought, flood, wildfire and other disasters, the Company has rushed to the front line, and spared no effort to conduct emergency rescues and disaster reliefs and to ensure the safety of the people's lives, making contributions to emergency maintenance and reconstruction of disaster-stricken areas.

连夜集结驰援宜宾

Rushing to conduct disaster relief in Yibin

6月17日22时55分,四川省宜宾 市长宁县发生6.0级地震。公司 领导高度重视,要求震区附近的 单位在做好自救的同时,火速集 结力量,向当地政府请战救援。 12家所属公司的185人组成多个 救灾队伍,出动13台挖掘机,9 台装载机,29辆运输车,7台发动 机以及3辆拖车陆续抵达灾区, 协助人员搜救,进行危房鉴定 和隐患排查,并购买了矿泉水、 方便面等生活物资向灾区人民 免费发放。同时,在自主运营的

简(阳)蒲(江)高速开启"应急 救援绿色通道",确保运送抗震 人员、物资、装备的车辆优先通 行,为救灾工作的顺利开展赢得

了宝贵时间。

A 6.0-magnitude earthquake rattled in Changning County of Yibin City in southwest China's Sichuan Province, at 22:55, June 17th, 2019. The management of CRCC paid great attention to the earthquake, and required affiliated units nearby to participate in disaster reliefs immediately while guaranteeing their own safety. An emergency rescue team consisting of 185 people from 12 affiliated companies under CRCC rushed to the disaster-stricken area with 13 excavators, 9 loaders, 29 transport vehicles, 7 engines and 3 trailers. They assisted the emergency services in the search for survivors, troubleshot potential risks, and distributed living supplies they purchased including bottled water and instant noodles to disasterstricken people for free. CRCC also opened a "green channel for emergency rescues" in Jianyang-Pujiang Expressway, an expressway independently run by the Company, to ensure the lane clear for the passage of emergency vehicles, which won precious time for the successful implementation of the disaster relief work.



▼ 宜宾地震救援 CRCC supported Acting as Good Corporate Citizen

CRCC supported earthquake relief efforts in Yibin City, Sichuan Province

践行海外责任 PERFORMING SOCIAL RESPONSIBILITIES IN **OVERSEAS MARKET**

案例 Case

公司坚持"海外优先"战略,积极参与"一带一路"建设,全面践行海外社会责任,致力干推动所在国经济社会发展,增强 当地环境保护,提升海外影响力。在2019、中国企业海外形象高峰论坛上,公司选送的案例获评"十大优秀案例""海外 传播创新类优秀案例""跨文化融合类优秀案例"三项大奖。

CRCC has insisted on the strategy of giving priority to overseas business, actively participated in the construction of the Belt and Road Initiative, and fully fulfilled social responsibilities in overseas market. The Company has been committed to promoting economic development and social progress of the countries and regions where the business is conducted, enhancing local environmental protection, and improving corporate influence in overseas market. At the 2019 Chinese Enterprise Global Image Summit, the cases submitted by CRCC were awarded the three major prizes of "Top 10 Excellent Cases," "Excellent Case for Communication Innovation in Overseas Market," and "Excellent Case for Cross-Cultural Exchanges."

带动当地发展

Boosting Local Development

公司倡导包容的合作思想,实施员工本地化政策,优先招聘当地员工,解决当 地就业问题,定期开展职业技能培训,培育本土人才;积极推行属地化采购,不 断强化与当地供应商的合作,加强属地化采购力度,提升属地化采购比例,拉 动当地产业链发展,促进当地经济发展和民生改善。

CRCC has advocated inclusive cooperation, implemented the policy of employee localization, given priority to employ local employees, created job opportunities for local people, carried out vocational training regularly, and cultivated local talent; actively promoted localized procurement, constantly strengthened cooperation with local suppliers, and increased the proportion of local procurement to drive the development of local industry chain, to boost local economic development and to improve the living conditions of local people.

中国在非洲建立的第一个"鲁班工坊"揭牌

First Luban Workshop in Africa unveiled

3月28日,中国土木工程集团有限公司承建的"吉布提鲁班工坊"正式 揭牌运营,成为中国在非洲建设的第一家鲁班工坊。工坊一期设置铁道 类、商科类等4个专业,并在吉布提工商学校设有铁道运营实训区、机车 模拟驾驶实训区等多个高标准教学区,向当地学生提供优质的国际化专 业教学服务,为吉布提经济社会发展培养所需的技术技能人才。

Djibouti Luban Workshop undertaken by China Civil Engineering Construction Corporation was formally launched on March 28th, 2019. As the first of its kind in Africa, the first session of the training courses of the workshop covered four majors including railway and business studies. Several highstandard teaching areas including field training areas for railway operation and locomotive simulated driving were set up in Djibouti Business School, aiming at offering high-quality international teaching services to local students, and cultivating skilled and professional personnel for economic development and social progress of Djibouti.



鲁班工坊

延伸阅读 FURTHER READING

2018中非合作论坛北京峰会提出要重点

实施"八大行动",在"能力建设行动" 方面明确要在非洲设立10个鲁班工坊, 向非洲青年提供职业技能培训,进而提 高非洲国家科技实力和国家竞争力。

The 2018 Beijing Summit of the Forum on China-Africa Cooperation identified eight major initiatives as the focus of China-Africa cooperation in the coming years to strengthen practical cooperation across the board. According to the initiative of capacity building, 10 Luban Workshops would be set up to offer occupational skills training to the young people in Africa, aiming at enhancing the science and technology strengths of African countries and their competitiveness.

助力企地发展 案例

Boosting local economic development

中铁二十四局集团有限公司孟加拉帕德玛水厂项目部坚持属地化管理,加大本地化采购力度。项目部所需的砖、 水泥、钢筋、砂石料等原材料,以及常规机械设备全部在当地租赁或购买。2019年采购总金额约218510万孟加拉 塔卡,充分拉动了当地物资供应和设备租赁市场的发展。在项目实施过程中,积极雇佣当地劳工,解决当地就业人 数320人。通过一系列举措,企业与当地供应商、民众等建立起和谐融洽的关系,推动了当地经济的发展。

The Bangladesh-based Padma (Jashaldia) Water Treatment Plant Project Department of China Railway 24th Bureau Group Co., Ltd. insisted on localized management and strengthened localized procurement. Bricks, cements, steel bars, sands, gravels, and other raw materials essential for the building, as well as conventional machinery equipment were rented or purchased locally. In 2019, the total procurement amount reached 2.1851 billion Bangladeshi taka, which vigorously promoted the development of local material supply and equipment rental markets. During the implementation of the project, the project department took initiative to employ local people and created 320 job opportunities for them. Through adopting various measures, the project department established harmonious relations with local suppliers, local people, and other stakeholders, and boosted local economic development.

品"德"共荣 同筑美好家园

Acting as Good Corporate Citizen

▼"吉布提鲁班工坊"揭牌 Launch ceremony of "Djibouti Luban Workshop"

I UBAN WORKSHOP



促进文化融合

Promoting Cultural Exchanges

公司以开放的胸襟和积极的态度融入海外社区,尊重当地的风俗习惯和宗教信 仰,投身当地公益事业,主动参与道路修缮、医疗援助、公益助学等活动,与当 地社区和谐共融。

CRCC has engaged in the overseas community with an open mind and a positive attitude, respected local customs, habits and religious beliefs, participated in local public welfare activities, taken initiative to help build and repair roads, and provided medical and educational assistance for local people, striving to build harmonious relations with the local community.



安哥拉铁路建设中的文化认同

Promoting cultural identity in Angola

中铁二十局集团有限公司在安哥拉本格拉铁路建设中,积极探索跨文 化管理,组织文化交流活动,推进高端互访,增进文化认同和深度认 可,被列入"最可信赖的合作伙伴名录"。在2019·中国企业海外形象 高峰论坛上,该公司申报的《安哥拉铁路建设中的文化认同》入选"跨 文化融合类优秀案例"。

During the construction of the Benguela Railway in Angola, China Railway 20th Bureau Group Co., Ltd. actively explored cross-cultural management, organized cultural exchange activities, promoted high-level visits, and enhanced cultural identity. The company was included into the "List of Most Trusted Partners" by Angolan authorities. At the 2019 Chinese Enterprise Global Image Summit, Cultural Identity in Benguela Railway Construction in Angola submitted by the company was awarded the "Excellent Case for Cross-Cultural Exchanges."



▶ 跨文化融合类优秀案例颁奖

Awarding ceremony for companies with "Excellent Case for Cross-Cultural Exchanges"

公益助学促进文化交流

案例

Case

Promoting cultural exchanges with educational assistance

尼日利亚杜茨公立女子中学建于1981年,是首都阿布贾唯一一所女子 寄宿学校,长期致力于推动中尼文化交流,拥有良好的中国文化传播 氛围。9月12日,中铁十八局集团有限公司尼日利亚公司在该校举办公 益助学仪式,向学校提供公益捐赠和教学援助,为学生们发放学习用 品、衣物和营养午餐,并开展为期一周的中文教学活动,帮助学生们了 解中国文化,促进中尼文化交流,推进中国企业和文化"走出去"。

Established in 1981, Public Girls Secondary School Dutse is the only girls' boarding school in Abuja, capital of Nigeria, and has long been committed to promoting cultural exchanges between China and Nigeria. It boasts a good atmosphere for broadcasting Chinese culture. On September 12th, 2019, China Railway 18th Bureau Group Nigeria Engineering Co., Ltd. held an educational assistance ceremony at Public Girls Secondary School Dutse. During the event, the company donated teaching materials and supplies to the school, and offered stationery items, clothes and nutrition lunches to students. A week-long Chinese teaching activity had been conducted at the school by the company, aiming at helping students there better understand Chinese culture, boosted cultural exchanges between the two countries, and promoting Chinese enterprises and culture to "go global."



▼ 公益助学活动

China Railway 18th Bureau Group Nigeria Engineering Co., Ltd. conducted educational assistance activity

品"德"共荣 同筑美好家园

Acting as Good Corporate Citizen

"感谢你们对我们教育事业的支持, 我们鼓励孩子们学习中国文化,这 对学校和学生都有很多好处。学生 们喜欢学习中文,希望你们能经常 来教导和帮助他们。"

——杜茨公立女子中学副校长 尤瑟夫

"Thank you for the support to our educational causes. We encourage students to learn Chinese culture, which is of great benefits to both the school and the students. They enjoy learning Chinese, and I hope we could have more gatherings, so you can help and teach them here."

— Yusuf, Vice President of Public Girls Secondary School Dutse

"感谢中铁十八局的叔叔阿姨教我 们中文,并给我们送来文具用品,我 们一定会努力学习,将来更好地回 报社会。"

——杜茨公立女子中学学生主席 克里丽娜

"Thanks to the aunts and uncles of China Railway 18th Bureau Group. Thank you very much for the stationery items and other gifts. We will study hard so that we can better serve the society in the future."

— Kerilina, President of Students' Union at Public Girls Secondary School Dutse



守护绿水青山 PROTECTING LUCID WATERS AND LUSH MOUNTAINS

公司贯彻落实"绿水青山就是金山银山"的发展理念,加强绿色管理,践行绿色施工,推进节能减排,发力环保产业, 为实现天更蓝、山更绿、水更清和建设美丽中国做出积极贡献。

CRCC has effectively implemented the development concept of "lucid waters and lush mountains are invaluable assets," enhanced green management, promoted green construction, boosted energy-saving and emission reduction, and vigorously developed environmentally-friendly industries, making positive contributions to the building of a beautiful China with more blue skies, lush mountains and lucid waters.

绿色管理 Green Management

公司环保总投入

In 2019, the Company invested 1.13302 billion yuan in environmental protection

Case

公司坚持企业与自然和谐发展,建立绿色发展长效机制,完善环境管理体 系及环保预警应急机制,将绿色发展理念贯穿于规划、设计、施工、运营 等环节,全方位、全地域、全过程保护生态环境。2019年,公司环保总投入 113302万元。

CRCC has insisted on harmonious development between the Company and the nature, established long-term mechanism for green development, perfected environmental management system and environmental early warning emergency mechanism, and integrated the green development concept into the planning, design, construction, operations and other links, protecting the ecological environment in an all-around way. In 2019, the Company invested 1.13302 billion yuan in environmental protection.

强化环境管理 Enhancing environmental management

公司以"科学管理、节约能源,严 格监控、防止污染,建设资源节 约型、环境友好型企业"为节能 环保管理方针,构建起股份公司-集团公司-工程公司-项目部四级 管理体系,建立了节能环保指标 管理体系,加强指标的监测和考 核,全面推进节能环保工作。

Insisting on the guidelines of "scientific management, energy conservation, strict supervision, prevention of pollution, and construction of a resource-saving and environmentally-friendly enterprise" in terms of energy-saving and environmental protection management, CRCC has built a fourlevel management system covering CRCC, group companies, engineering companies and project departments, established energy-saving and environmental protection indicator system, and enhanced indicator monitoring and performance evaluation, comprehensively promoting energy-saving and environmental protection.

推行绿色办公 Promoting green office practices

公司鼓励节约用水、用电、用纸和减少办公 用品的消耗,用水设施使用红外感应开关, 做到人离水断;采用LED节能光源,对空调制 冷机组严格控制启停时间,最大限度提高能 效;大力推行无纸化办公,推广视频会议, 减少员工出差,降低办公场所和出差产生的 能源消耗和废气排放。2019年,公司总部共 节约办公用纸12389张,减少员工出差3000 余人次,与去年同比节约用水233.67立方米, 节约电能40150.85千瓦时。

CRCC encourages employees to save water, electricity and paper, and to reduce the consumption of office supplies. The Company has installed infrared sensor switches on water facilities to save water, adopted energy-saving LED lights, and strictly control the starting and stopping time of air-conditioning refrigerating units to effectively improve energy efficiency; vigorously promoted paperless office practices and video conferences, and reduced business travels, as well as the energy consumption and exhaust emission at office areas and resulted from business travels. In 2019, the headquarters of CRCC saved 12,389 pieces of papers, and reduced over 3,000 business travels; saved 233.67 cubic meters of water and 40,150.85 kWh of electricity compared with last year.

开展"山河宣言"环保公益活动 案例

Conducting environmental protection activity

8月25日,由中铁二十局集团有限公司房地产公司旗下 中国铁建•燕南苑项目冠名的"山河宣言"环保公益活 动在安徽省蚌埠市拉开序幕,活动以"垃圾分类新时 尚,低碳环保我先行"为主题,数百名志愿者身着"山 河宣言"主题文化衫,积极引导广大市民传播和弘扬 绿色生活方式理念,成为环境保护的宣传者、倡导者 和践行者。该项目部还为蚌埠市禹会区近20个社区捐 赠了分类垃圾箱,并组织环保大使为居民宣讲垃圾分 类知识,真正将环保行动落到实处。

On August 25th, 2019, the CRCC-Yannanyuan Project Department of Real Estate Development Corporation Limited of China Railway 20th Bureau Group Co., Ltd. carried out an environmental public welfare activity named "Declaration on Mountains and Rivers," which took "waste sorting, lowcarbon lifestyle and environmental protection" as the theme. Several hundreds of volunteers wearing the T-shirts printed with "Declaration on Mountains and Rivers" actively promoted the public to publicize and carry forward green and low-carbon lifestyle, and to become disseminators,

advocates, and practitioners of environmental protection. The project department also donated waste sorting bins to nearly 20 communities in Yuhui District of Bengbu City, Anhui Province, and organized environmental ambassadors to publicize waste sorting knowledge for residents there, effectively translating the initiative into actions.



▼ "山河宣言" 环保公益活动启动仪式 Launch ceremony of the "Declaration on Mountains and Rivers," a public welfare activity themed environmental protection

Acting as Good Corporate Citizen

热心环保公益 Participating in environmental protection initiatives

公司组织开展多样化的环保公益 活动,号召员工积极参与,并带动 更多社会人十关注环保问题,共 同参与环保公益活动,为建设绿 色美好家园做贡献。

CRCC has organized and conducted diversified environmental public welfare activities, and encouraged employees to participate in those activities actively. The Company has taken initiative to encourage more people in the community to pay attention to environmental protection and to take part in environmental public welfare activities together, jointly making contributions to the building of a green and beautiful homeland.

绿色施工 Green Construction

公司坚持环境保护与施工生产同时设计、同时施工、同时投产使用,围绕"四 节一环保"目标,优化施工方案和工艺,在保护生态环境的同时,减少施工对 环境的负面影响。施工中坚持采取施工场地硬化、通风及洒水等措施,减少 粉尘对环境的污染;设置沉淀池,合理排放生产生活废水;配备噪声监测仪, 实时监控噪音,减少噪音污染;合理规划场地,减少对农田、耕地等土地的占 用,做好生态恢复工作;保护生物栖息地,降低施工对生物种群造成的影响; 加强对周边生态环境的治理,打造绿色生态家园。

Strictly following the "three-stage simultaneous" requirements, according to which environmental protection facilities shall be designed, constructed and put into production simultaneously with main construction structures and centering on the objectives of "energy-, land-, water-, and material-saving and environmental protection," CRCC has optimized construction plans and processes, and reduced the impact of project construction on environment while protecting ecological environment. The Company has hardened the construction yards, and adopted various measures including venting and water-spraying practices to reduce dust pollution; built settling pools and discharged production and domestic wastewater in a regulated and reasonable manner; installed noise monitors to monitor noise in a real time manner, so as to reduce noise pollution; planned construction yards reasonable to reduce occupation of farmlands, arable lands and other lands, and tried the best to do well in ecological restoration; protected wildlife habitats, and reduced the impact of project construction on native species; enhanced the governance of surrounding ecological environment, striving to build a green and ecological homeland.

科技治尘打造绿色智慧工地 案例 Case

Building green and smart construction site

中铁十四局集团有限公司建筑公司莱芜东升安置房项目部致力于创建"绿色环保、智慧建造"品牌,积极推动生态 文明和施工信息化建设,自主研发智慧工地数字平台,采用实时监测和自控治理双模式,当监测数据超过报警值 时,喷淋系统自动开启,当数据低于预定风险值时自动停止。该项目部采用的科技治尘方法,有效降低了工地扬尘 污染,优化了施工环境。



▶ 塔吊喷淋 Tower crane spraying system

在南美洲开创绿色发展新模式

案例

Case

Promoting green development in South America

中铁十九局集团有限公司矿业公司秉持"科技引领、绿色开采、综合利 用、和谐共赢"的理念,将绿色施工贯穿于海外项目实施过程,在厄瓜 多尔米拉多铜矿项目开发过程中,项目部坚持在剥离中复垦、在建设 中绿化、在生产中美化,按照土地复垦方案,合理安排表层土方剥离、 废石排放、矿石开采、土地复垦等生产工序,最大化保护当地生态环 境。2019年,该项目复垦面积达25000平方米,在南美洲开创出一个绿 色发展新模式。

Insisting on the concept of "guidance with science and technology, green mining, integrated utilization, harmony and win-win results," China Railway 19th Bureau Group Mining Investment Co., Ltd. integrated green construction into the whole process of project implementation in overseas market. During the development of Mirador copper mine project in Ecuador, the project department insisted on taking measures to reclaim land and to conduct

greening and landscaping design for environmental purposes, and arranged production and construction processes including surface earth stripping, disposal of waste gravels, ore extraction, and land reclamation in a reasonable manner, striving to protect local ecological environment. In 2019, with the new green development model developed by the company, the reclamation area of the project reached 25,000 square meters.



▶ 边坡复垦

Acting as Good Corporate Citizen

The Project Department of Laiwu Dongsheng Resettlement Housing Project of China Railway 14th Group Construction Engineering Co., Ltd. was committed to building the brand of "green & environmental protection and intelligent construction," actively promoted ecological progress and construction informatization, independently developed a digital platform for intelligent construction sites, and adopted the real-time monitoring and self-control governance system under which the spraying system would open and close automatically according to a certain alarm value. The dust control approach adopted by the project department effectively reduced dust pollution and optimized construction environment.

Reclamation project along the side slopes of construction site

节能减排

Enhancing Energy-Saving and Emission Reduction

公司积极应对气候变化,持续提升节能减排管理水平,加大节能减排资金投 入,推动技术进步,淘汰落后产能,节能减排工作取得实效。2019年,公司能 耗总量为532.28万吨标煤,企业万元营业收入综合能耗(可比价)0.0807吨 标煤,比2018年下降了6.59%。

CRCC has actively tackled climate change, constantly enhanced energy-saving and emission reduction management, increased investment in energy-saving and emission reduction, boosted science and technology progress, and phased out backward production capacities, achieving effective results in promoting energy-saving and emission reduction. In 2019, the total energy consumption of the Company was 5.3228 million tons coal equivalent, the comprehensive energy consumption per 10,000 yuan in output value (comparable price) was 0.0807 ton coal equivalent, a fall of 6.59 percent compared with the data in 2018.



In 2019, the total energy consumption of the Company was 5.3228 million tons coal equivalent

传递绿色理念 Delivering green concept

公司加强节能减排宣传教育和培训工作力度,普及节能减排知识,提升员工 节能减排意识,促进节能减排在日常工作中得到落实。2019年,公司举办节能 环保管理干部培训班,培训人员7500余人次,培训覆盖率达到90%以上。

CRCC has strengthened energy-saving and emission reduction publicity and conducted educational activities and trainings; popularized energy-saving and emission reduction knowledge, improved the environmental awareness of employees, and effectively promoted the implementation of energy-saving and emission reduction in daily work. In 2019, the Company held energy-saving and environmental protection training programs for management staff; over 7,500 personnel were trained, and the coverage rate reached over 90 percent.



In 2019, over 7,500 personnel were trained

培训覆盖率达到 **90%** The coverage rate reached over 90 percent

提高能源利用 Increasing energy utilization

公司倡导低碳节能的生产方式和消费模式,积极推广应用节能环保新技术、新设备、新材 料、新工艺,提升能源利用率,减少能源消耗;加大对水资源的保护和管理力度,鼓励所属企 业采取节水措施,打造节水型企业。2019年,公司消耗水资源总量为28932.17万立方米。

CRCC has advocated low-carbon and energy-saving production mode and consumption model, actively promoted the application of new energy-saving and environmentally-friendly technologies, equipment, materials and processes, improved energy utilization rate, and reduced energy consumption; intensified efforts to protect and manage water resources, and encouraged affiliated companies to take measures to save water and build water-saving enterprises. In 2019, the consumption of water resources of the Company reached 289.3217 million cubic meters.



降低污染排放 Reducing pollution emissions

公司应用先进环保技术和设备,淘汰落后产能,从源头控制污染物排放,探索建筑垃圾资 源化的方法和技术,对建筑垃圾进行有效处置和回收再利用,降低废弃物排放。2019年, 公司二氧化碳排放量为342.84万吨,固体废弃物排放量为3026.53万吨。

CRCC has adopted sophisticated and environmentally-friendly technologies and equipment, phased out backward production capabilities, controlled pollutant emissions at source, explored the approaches and technologies of turning construction waste into resources, taken effective measures to dispose, recycle and reuse construction waste, and reduced the discharge of waste. In 2019, the emission of CO_2 of the Company was 3.4284 million tons, and the solid waste discharged was 30.2653 million tons.



Acting as Good Corporate Citizen



In 2019, the consumption of water resources of the Company reached **289.3217** million cubic meters



绿色环保骨料加工赢来观摩团"点赞"

Green production of aggregates wins recognition

中铁十一局集团有限公司贵南高铁六标项目部深入贯彻"绿水青山就是金山银 山"的理念,在全线建成首家标准化环保骨料加工场。加工场在设计上着重考虑环 保因素,制定有利于环境保护的建设方案,确保加工场环境保护工作达到设计要 求;采用对环境污染最小的机具设备,使骨料加工过程达到零污染;采用完善的水 循环利用系统,有效杜绝水资源浪费及污染;采用新型液压全自动砌块成型机,将 泥饼制成砌块,变废为宝,打通绿色发展的最后一公里。该项目部将绿色环保贯穿 于骨料加工厂的布局规划、设备选型、水资源利用、废弃物回收利用等全过程的做 法,吸引了全线各参建单位110余人组团观摩,并赢得观摩团的交口称赞。

The Project Department of the 6th Section of Guiyang-Nanning High-Speed Railway under China Railway 11th Bureau Group Co., Ltd. effectively implemented the concept of "lucid waters and lush mountains are invaluable assets," and a standardized environmentallyfriendly aggregate processing plant was built, which was the first of its kind along the Guiyang-Nanning railway line. In the stage of design, the project department focused on environmental factors, and formulated construction plans conducive to environmental protection, ensuring the environmental protection work of the aggregate processing plant meets the design requirements; used the machines, tools and equipment with minimum environmental impact to achieve zero pollution in the process of aggregate processing; adopted sophisticated water recycling system to effectively eliminate water waste and pollution; employed new hydraulic automatic block forming machines to manufacture filter cake into building blocks, further promoting green development. The project department integrated the concept of green and environmental protection into the whole process of the building and operations of the aggregate processing plant, which included the planning, equipment selection, use of water resources, and recycling of waste, attracting a visiting team consisting of 110 people from various contractors of Guiyang-Nanning railway line. The environmentally-friendly practices won wide recognition of the team.



▶ 废物利用制成砖块

The project department used sophisticated equipment to manufacture filter cake into building blocks

循环利用让污水"变废为宝" 案例 Case

Recycling turns wastewater into resources

中铁二十五局集团有限公司五公司青岛地铁四号线07标段辽李区间隧道施工每天约产生200立方米废水,为了 减少污水排放对城区造成的污染,项目部在辽李区间施工现场建起了污泥处理系统,将泥水变成清水后回流再 利用,污水处理率达100%,每天可回收约170立方米左右的清水,不仅避免了直排给城市造成的污染,也为项目 部节省了大量的水资源。

The amount of wastewater produced per day in the construction of the Liaoli running tunnel under the #07 section of Qingdao Metro Line 4 undertaken by The 5th Engineering Co., Ltd. Of China Railway 25th Bureau Group was about 200 cubic meters. To reduce the pollution of wastewater to the environment of urban areas, the project department built a sewage treatment system at Liaoli construction site to dispose and recycle wastewater, and the sewage treatment rate reached 100 percent. With the system, about 170 cubic meters of clean water could be recycled, which not only reduced pollution, but also saved water resources for the project department.

环保产业

案例 Case

Developing Environmentally-Friendly Industries

公司积极顺应生态环保产业发展趋势,拓展生态环保产业布局,培育生态环保 产业投资、设计、建设、运营等全产业链优势,逐步在生态环保技术、工艺革新和 生态环保设备制造等方面形成自主知识产权,服务环境综合治理。

CRCC has taken initiative to adapt the development trends of ecological and environmental protection industries, expanded industrial layout, fostered the strengths of the whole industry chain including industrial investment, design, construction and operations, and gradually developed independent intellectual property rights in the aspects of, among others, ecological and environmental protection technology, process innovation, and equipment manufacturing, so as to serve integrated governance of environment.

首个生态环境设计院挂牌成立

First ecological environment design institute established

3月15日,中国铁建首家专注于生态环保产业规划的设计企业——北京中铁生态环境设计院正式挂牌。该设计院 利用在生态环保领域业务广、技术团队及专家智库完善的业务优势,专注于生态及环境领域,协同固废处理、土壤 修复、能源利用、城乡统筹、智慧城市等相关业务,为客户提供咨询、规划、投资、设计、工程总承包等综合服务, 打造和谐、宜居、可持续的生态环境,助力生态文明建设。

Beijing China Railway Ecological Environment Design Institute Co., Ltd., first design firm focusing on ecological and environment protection industry planning of CRCC, was established in Beijing, March 15th, 2019. The institute will use its strengths of wide range of business, outstanding technology team and perfect expert database system to conduct businesses including ecological and environmental protection, coordinated solid waste treatment, soil restoration, energy use, urban and rural overall development, and smart city building, and to provide integrated services such as consulting, planning, investment, design, and EPC for clients. It is committed to building harmonious, livable and sustainable ecological environment and promoting ecological civilization construction.

Acting as Good Corporate Citizen

责任管理

SOCIAL RESPONSIBILITY MANAGEMENT

品牌形象。

brand image.

责任战略 SOCIAL RESPONSIBILITY STRATEGY

责任治理 SOCIAL RESPONSIBILITY GOVERNANCE

作为联合国全球契约组织的一员,公司持续加强社会责任管理,建立健全社 会责任组织体系,修订完善社会责任管理制度,开展社会责任培训,全面提 升员工责任意识和履责能力。2019年,公司在第三届新时代资本论坛上荣获 "最具社会责任公益先锋"称号。

As a member of the United Nations Global Compact, CRCC has constantly strengthened social responsibility management, established and perfected social responsibility organizational system, formulated and completed social responsibility management systems, and carried out social responsibility trainings, comprehensively improving the social responsibility awareness and social responsibility performance ability of employees. In 2019, the Company won the title of "Pioneer for Social Responsibility and Public Welfare Award" at the 3rd New Era Capital Forum.

中国铁建建立健全社会责任管理体系,持续提升社会责任管理水平,有效推 动社会责任管理与实践的融合,保障社会责任工作有序开展,塑造负责任的

We have established and perfected social responsibility management system, constantly improved social responsibility management level, effectively promoted integration of social responsibility management and practices, and guaranteed the orderly implementation of social responsibility work, building a responsible

公司以"成为技术创新国际领先、竞争能力国际领先、经济实力国际领先,最 具价值创造力的综合建筑产业集团"为愿景,秉持"以人为本、诚信守法、和 谐自然、建造精品"的管理方针和"诚信创新永恒精品人品同在"的企业价值 观,加强责任治理与责任沟通,积极推动社会责任融入企业日常管理,确保企 业与社会和谐发展。

Adhering to the corporate vision of "Striving to be an integrated construction group with world-class technological innovative strength, competitiveness, economic strength, and value creativity," the management guidelines of "People orientation, honesty and law-abiding, harmony and nature, competitive product manufacturing," as well as the corporate values of "Sincerity and innovation for ever, guality and character at once," CRCC has enhanced social responsibility governance and engagement, and actively promoted the integration of social responsibility into daily corporate operation, ensuring the harmonious development of the Company and the society.

责任沟通 SOCIAL RESPONSIBILITY ENGAGEMENT

公司主动识别利益相关方,深入了解利益相关方的期望和诉求, 不断创新沟通方式,通过多渠道回应利益相关方关切。公司连续 12年发布社会责任报告,向利益相关方系统披露公司在经济、社 会与环境方面的履责行动及取得的成效,与利益相关方坦诚沟 通、共谋发展。

CRCC has taken initiative to identify stakeholders and has an in-depth understanding of their expectations and pursuits. The Company has constantly conducted innovation in communications with stakeholders, and responded to the concerns of stakeholders by various channels. It has released corporate social responsibility report for 12 years in a row, systematically disclosed the information relating to social responsibility practices and results achieved in the aspects of economy, society and environment, and communicated openly and sought common development with stakeholders.

Sta	J.	E				@FQ @FQ @
Stakeholders	政府	实际控制人	投资者	金融机构	业主	供应商
der	(中国政府与业务所在地政府)	(国资委)	Investors	等债权人	Proprietors	Suppliers
0	Governments (including the Central Government and local governments where the businesses are conducted)	Actual controller (SASAC)		Financial institutions and other creditors		
	 ····································	• 不断提升公司盈利能力和	• 不断提高公司的价值		• 提供优质合理价格的产品和	• 保持稳定的合作关系
	• 税收	核心竞争力	与市值	● 降低企业风险	服务,并不断改进	• 合理的价格
	● 带动就业	• 全面风险管理要求	• 降低企业风险			• 互助双赢
m	 创新技术 	 确保国有资产保值、增值 	• 保证企业可持续发展			
xpe	● 建设民族品牌					
ctatio	• 节能减排					
Expectations to CRCC	 Abide by related laws and regulations Pay taxes Create job opportunities Conduct innovations in science and technology Build national brands Promote energy-saving and emission reduction 	 Constantly improve corporate profitability and core competitiveness Enhance total risk management Maintain and increase the value of State-owned assets 	 Constantly improve corporate value and market value Reduce corporate risks Guarantee sustainable development of CRCC 	 Integrity and performance of contracts Reduce corporate risks 	 Provide premium products and services with reasonable pricing and make constant improvements 	 Maintain stable cooperation relations Keep reasonable pricing Conduct mutual assistance a achieve win-win results
Со	 	 ● 下发文件并落实 	 ● 定期报告 		····································	 ····································
mm	• 国家与各部委会议	• 参加会议并落实会议精神	 ● 临时报告 	 ● 定期拜访 	 ● 高层会晤 	• 合同执行、业务函电往来
luni.	• 专题汇报、统计报表、	 定期汇报 	• 股东大会	● 业务人员日常交流	● 文件函电往来	• 不定期沟通
cati	信息报送	• 业务主管部门定期沟通、	• 股东书面通知		• 业主评价与管理	
Communication Mecha		报送报表	● 投资者见面会		 招投标管理 日常沟通	
inism and Methods	 Promulgation of laws, 	 Document issuance and 	Regular reporting	Contract performance	Contract performance	 Bidding & tendering and
n ar	regulations and policies	implementation	Interim reporting	Regular visits	 High-level meetings 	business talks
N pr	Meetings at national level and	 Participate in meetings and 	General meeting of	Routine communications	Business correspondence	Contact performance and
leth	ministerial levelSpecial-topic reports,	implement conference spiritRegular reporting	shareholders Written notice of 	of business personnel	Evaluation and management of proprietorsBidding and tendering management	business correspondenceIrregular communication
bot	• special-topic reports, statistical statement and	 Regular reporting Regular talks and reporting of 	shareholders		 Bidding and tendening management Daily communications 	
S	information reporting	competent authorities for business	 Investors' meetings 		Surg communications	





CRCC Social Responsibility Report 2019 103

议题识别 Issue identificatio

基于国内外社会责任标准、政府 政策要求、标杆企业对标、利益相 关方调研,并结合公司发展规划, 中国铁建建立了社会责任议题 池,并将议题分为责任管理、公司 治理、客户责任、员工责任、伙伴 责任、社区责任、环境保护、海外 责任八大类,共计34项。

Based on the social responsibility standards both in China and abroad, the policy requirements of Chinese government, benchmarking with leading enterprises, and investigation and research of stakeholders, as well as its own development plan, CRCC has established social responsibility issue pool, and then classified the issues into eight categories of social responsibility management, corporate governance, responsibility to clients, responsibility to employees, responsibility to partners, responsibility to communities, responsibility to environment, and overseas social responsibility, covering a total of 34 items.

议题分析 Issue Analysis

针对 34项可持续发展议题开展利 益相关方专项调查,通过在线问 卷方式,邀请不同类别的利益相 关方反馈不同议题对他们的重要 程度。通过建立"利益相关方关 注度"和"对公司可持续发展的 重要性"二维矩阵,识别出中国铁 建的实质性社会责任议题。

CRCC conducted a special survey on those 34 sustainable development issues among stakeholders by using online questionnaire, aiming to understand the importance of those issues in their minds. Through the two-dimensional matrix of "attention of stakeholders" and "importance to sustainable development of CRCC," the Company identified the material issues of social responsibility.

责任管理

Social Responsibility management

- 01. 责任战略 Social responsibility strategy 02. 责任治理
- Social responsibility governance
- 03. 利益相关方沟通 Communications with stakeholders

公司治理

Corporate governance

- 04. 完善公司治理 Improvement of corporate governance
- **05**. 定期信息披露 Regular information disclosure
- 06. 投资者关系管理
- Investor relations management 07. 禁止商业贿赂及腐败
- Prohibition of commercial bribery and corruption
- 08. 响应国家战略 Response to national strategies

客户责任

Responsibility to clients

- 09. 工程质量 Project quality
- **10.** 科技创新 Innovation in science and technology
- 11. 优质服务
- High-quality services -----
- 12. 提升客户满意度 Improvement of customer satisfaction

员工责任

Responsibility to employees

- 13. 员工权益保障 Protection of rights and interests of employees
- 14. 员工培训与职业发展 Employee training and career
- development 15. 职业病防治
- Occupational disease prevention and treatment
- **16.** 员工关怀 Employee care
- 17. 安全生产 Safety Production

伙伴责任

Responsibility to partners

- **18.** 规范招投标 Regulate bidding and tendering
- 19. 承包商 / 分包商筛选机制 Contractor/subcontractor selection mechanism
- 20. 推动承包商 / 分包商履行社会责任 Promote contractors/subcontractors to fulfill social responsibilities
- 21. 责任采购 Responsible procurement

社区责任

Responsibility to communities

- 22. 公益慈善 Public welfare and charity
- 23. 志愿者活动
- Volunteer activities
- 24. 精准扶贫 Targeted poverty alleviation
- 25. 关爱农民工 Care for migrant workers

环境责任

Responsibility to environment

- 26. 建立环境管理体系 Establishment of environmental management system
- 27. 节能减排 Energy-saving and emission reduction
- 28. 循环利用 Circular utilization
- 29. 环保宣传 Environmental protection publicity
- 30. 生态保护 Ecological protection

海外责任

Overseas social responsibility

- 31. 帮助当地就业
- Create job opportunities for local people
- 32. 本地化采购
- Local procurement
- 33. 当地环境保护 Protection of local environment

34. 当地志愿帮扶 Local volunteer activities

为了进一步提升报告针对性与回应性,2019年公司根据社会责任议题实质性分析模型,分析比较不同的社会责任议 题对相关方的影响和对公司自身发展的重要性,识别实质性议题。

In 2019, CRCC, aiming at further improving the purpose and responsiveness of the social responsibility report, analyzed and compared the influence of different social responsibility issues to stakeholders and the importance to corporate development in accordance with social responsibility material issue analysis model, and then identified the high-profile material issues.







FUTURE PROSPECT

2020年,是全面建成小康社会的关键之年,是实现"十三五"规划 收官之年,也是中国铁建改革创新、转型升级、强基健体的关键之 年。我们将坚持以习近平新时代中国特色社会主义思想为指导, 坚持稳中求进的工作总基调,坚持打造"品质铁建"工作总方针, 坚持以提高发展质量和效益为中心,坚持以改革创新和转型升

moderately prosperous society in all respects and the o It is also crucial for CRCC to deepen reform, boost innovation,

我们将不断完善公司治理,坚持合规运营,加强风险管控;进一步 完善信息披露,创造股东价值;积极融入国家发展大局,响应国家 战略,助力公司高质量发展。

We will continue to enhance corporate governance, insist on compliance operation, and strengthen risk management and value for shareholder; take initiative to integrate into the overall situation of national development, and respond to national

质量,为客户创造更大的价值;坚持创新驱动,持续推动科学技 术创新,用创新促进质量与效率的提升;狠抓安全生产,确保公 司安全稳定发展。

我们将坚持以人为本,关注员工的权益和职业成长,为员工打造 自我价值实现的平台;广泛开展战略合作与交流,加强供应商管 理,携手合作伙伴前行,实现互惠共赢。

We will put people first, pay attention to the rights and interests of employees as well as their career development, and build a platform for them to achieve self-fulfillment; expand strategic cooperation and exchanges, enhance supplier management, and work together with partners to make win-win results.

我们将持续聚焦精准扶贫,全面打赢脱贫攻坚 战;积极参与社会公益事业,推动社会和谐发 展;深入践行海外责任,提升海外影响力;始终 坚守绿色发展理念,为守护碧水蓝天贡献力量。

We will continue to focus on poverty alleviation, and strive to achieve an overall victory in the fight against poverty; actively participate in public welfare causes, and promote harmonious development of the society; effectively fulfill social responsibility in overseas market, and improve corporate influence there; always insist on the idea of green development, and make contributions to environmental protection and ecological progress.

我们将进一步健全责任管理制度,加强社会责 任培训,不断促进社会责任管理与实践的融合, 打造可感知的中国铁建责任品牌。

promote the integration of social responsibility management and practices, building the appreciable leading social responsibility brand for CRCC.



关键绩效表

	指标名称 Indicator	单位 Unit	2017 年	2018 年	2019 年
Ec	新签合同额 Amount of newly-signed contracts	亿元 100m yuan	15083.124	15844.722	20068.544
onor	营业收入 Operating revenue	亿元 100m yuan	6809.811	7301.23	8304.522
nic 经 Pe 济	净利润 Net profit	亿元 100m yuan	169.192	198.384	226.237
fo绩	缴纳税费 Taxes and fees paid	亿元 100m yuan	239.76	255.927	261.488
'n 效 ar	资产总额 Total assets	亿元 100m yuan	8218.875	9176.706	10812.392
lce	资产负债率 Asset/liability ratio	%		77.41	75.77

	指标名称 Indicator	单位 Unit	2017年	2018年	2019年
	员工总数 Number of employees	人 person	261333	295862	293884
	劳动合同签订率 Signing rate of labor contracts	%	100	100	100
	社会保险覆盖率 Social security coverage	%	100	100	100
	女性员工比例 Proportion of female employees	%	20.89	20.95	21.13
	女性管理者比例 Proportion of female managers	%	21.31	21.61	21.58
	管理人才数量 Number of management personne	人 person	57614	71996	73956
Soci	专业技术人才数量 Number of professional and technical personnel	人 person	122315	134977	139435
社会绩效 Society Performance	技能人才数量 Number of skilled personnel	人 person	81404	88889	80493
会 绩	研究生及以上学历人数 Number of employees with a master's degree or above	人 person	9299	10855	12147
rm 效	本科学历人数 Number of employees with a bachelor's degree	人 person	127730	148220	157200
ICe	大专学历人数 Number of employees with a junior college degree	人 person	55981	67863	62079
	中专学历人数 Number of Employees with a vocational level educational background	人 person	22645	23911	20355
	高中及以下学历人数 Number of employees with a high school diploma or below	人 person	45678	45013	42103
	员工培训总投入 Total investment in staff training	万元 10,000 yuan	58080	67640	74160
	员工培训人次 Number of employees participating in training programs	人次 person/time	408669	468855	511385
	企业领导人员培训人次 Number of senior executives participating in training programs	人次 person/time	14252	13737	21514
	经营管理人员培训人次 Number of operation and management personnel participating in training programs	人次 person/time	62037	41907	86313

TABLE OF KEY PERFORMANCE INDICATORS

	指标名称 Indicator	单位 Unit	2017 年	2018 年	2019 年
	专业技术人员培训人次 Number of professional and technical personnel participating in training programs	人次 person/time	237022	295773	268335
	党群管理人员培训人次 Number of Party-masses management personnel participating in training programs	人次 person/time	23141	33737	41648
	技能人员培训人次 Number of skilled personnel participating in training programs	人次 person/time	72217	83701	93575
	安全生产投入 Investment in safety production	亿元 100m yuan	86.034	91.643	125.181
	安全培训人次 Number of participants in safety trainings	人次 person/time	20000	22600	25800
	筹集送温暖资金 Amount of funds raised for the needy	万元 10,000 yuan	7181	7214	7604
	科技投入 Investment in science and technology	亿元 100m yuan	103.977	115.718	165.278
	新增专利数 Newly-obtained patents	个 Nos.	1719	3128	3349
Societ	项目一次交验合格率 One-time acceptance rate of projects	%	100	100	100
<u>社会绩效</u>	投诉解决率 Solving rate of complaints	%	100	100	100
√ 效	经济合同履约率 Performance rate of economic contracts	%	100	100	100
e	供应商通过质量、环境和职业健康安全管理体系认证的比率 Proportion of suppliers received QEOHS system certificate	%	100	100	100
	捐赠总额 Total donations	万元 10,000 yuan	1006.65	1902.52	4232.84
	员工志愿者参与人数 Number of employees participating in volunteer activities	人次 person/time	20000	32000	38000
	开展公益活动次数 Number of public welfare activities conducted by the Company	次 time	1500	1300	1350
	直接投入帮扶资金 Funds invested directly in poverty alleviation	万元 10,000 yuan	1733.76	4003.6	5671.6
	物资折款 Amount of assistance materials (converted into money)	万元 10,000 yuan	1678.31	4071.2	282
	选派挂职干部数量 Number of personnel selected and appointed to temporary posts	人 person	21	30	34
	脱贫人口数量 Number of people out of poverty	人 person	3114	2156	4058

附录 Appendix 单



指标索引 INDICATOR INDEX

	指标名称 Indicator	单位 Unit	2017 年	2018年	2019 年
	全年能源消耗总量 Total energy consumption in 2019	万吨标煤 10,000 tons of coal equivalent	569	516.32	532.28
	万元营业收入综合能耗 Comprehensive energy consumption per 10,000 yuan in output value	吨标煤 ton of coal equivalent	0.0891	0.0864	0.0807
	煤炭消耗量 Coal consumption	万吨 10,000 tons	31.56	28.51	25.35
	耗电量 Power consumption	万千瓦时 10,000 kWh	830000	873324.19	1017522.01
	汽油消耗量 Gasoline consumption	万吨 10,000 tons	18.32	17.45	19.42
Environi	柴油消耗量 Diesel consumption	万吨 10,000 tons	154.58	144.06	163.28
mental Pe	燃料油消耗量 Fuel oil consumption	万吨 10,000 tons	9.75	8.70	2.89
Environmental Performance	天然气耗气量 Natural gas consumption	万标准立方米 10,000 standard cubic meters	287.32	478.89	523.63
D	水资源总消耗量 Total water consumption	万立方米 10,000 cubic meters	17000	22848.44	28932.17
	环保总投入 Total investment in environmental protection	万元 10,000 yuan	79300	83600	113302
	环保培训人次 Number of participants in environmental protection trainings	人次 person/time	5700	6300	7500
	二氧化碳排放量 Emissions of CO ₂	万吨 10,000 tons	277.87	252.11	342.84
	碳强度 Carbon intensity	吨 / 万元 Ton/10,000 yuan	0.0417	0.0379	0.0526
	固体废物排放量 Volume of solid waste discharged	万吨 10,000 tons	4539	2774.47	3026.53

	目录	中国企业社会责任报告指南(CASS-CSR4.0)	页码
	Table of Contents	Chinese CSR Preparation Guide (CASS-CSR 4.0)	Page
	报告说明	P1.1-1.3	扉页
前言	Report Specification 领导致辞		
Preface	Leader's Speech	P2.1-2.2	P4-11
Treface	关于我们		
	About Us	P4.1-4.3,G1.1	P12-17
	兴轨道 建新国门第一线		
	Developing Urban Rail Transit and Building First	P3.1-3.2,M2.4	P19-23
责任聚焦	Line of New National Gateway		
Social Responsibility	心相连 打赢脱贫攻坚战	P3.1-3.2,S4.12-4.14	P24-29
Features	Striving to Win the Fight against Poverty 新理念 推动高质量发展		
			P30-35
	Promoting High-Quality Development with New Ideas	P3.1-3.2,S1.4	P30-33
品"心"守本	优化公司治理		
夯实发展基础	Optimizing Corporate Governance	M1.1,M1.3-1.4,M1.6-1.8	P38-42
Laying Solid Foundation	服务国家战略		
for Sustainable		M2.4	P43-4
Development	Serving National Strategies		
品"质"致胜	全心奉献精品工程	M2.2-2.3,M2.13,M2.18	P50-53
匠心建造未来	Building Excellent Engineering Projects		
Building Future with	全面实施创新驱动	M2.4-2.7	P54-59
Excellent Quality and	Implementing Innovation-Driven Development 全力保障安全生产		
Craftsmanship Spirit	Guaranteeing Safety Production	S3.1-3.5	P60-63
品"贤"思齐	人尽其才谋发展		
携手一路前行	Pursuing Development through Talented People	S2.2-2.5,S2.7-2.8,S2.10-2.11,S2.14-2.18	P66-73
Achieving Win-Win	携手合作享共赢	M3.4,M3.6,M3.8,M3.10-3.11,M3.14,E1.6	P74-7
Results with Stakeholders	Achieving Win-Win Cooperation with Partners	M3.4,M3.0,M3.0,M3.10-3.11,M3.14,L1.0	F / 4 - / I
	助力精准扶贫	S4.12-4.14	P80-81
	Helping Promote Targeted Poverty Alleviation		
品"德"共荣	倾情奉献社会	S4.6,S4.8,S4.10-4.11	P82-85
同筑美好家园	Making Contributions to Society 践行海外责任		
Acting as Good Corporate	Performing Social Responsibilities in Overseas	S4.1-4.2,S4.4-4.6	P86-89
Citizen	Market	011112,011110	10000
	守护绿水青山	E1.1-1.3,E1.5,E1.7-1.9,E2.1,E2.3-2.6,E2.9-2.10,	D00.07
	Protecting Lucid Waters and Lush Mountains	E2.16-2.17,E2.25,E3.1-3.4,E3.6	P90-9
责任管理		G2.1,G2.3,G3.3,G4.1,G5.1,G6.1-6.2	P98-10
Social Responsibility Man	agement	02.1,02.0,00.0,01.1,00.1,00.1 0.2	1 30 10
未来展望		Al	P106-10
Future Prospect			
	关键绩效表 Table of Key Performance Indicators	A2	P108-11
		A5,M1.6-1.8,M2.3,M2.5-2.6,M2.16,M3.2,S1.3,	
附录	指标索引	S2.1,S2.3,S2.15,S3.4-3.5,S4.8,S4.11,S4.13-	P111
Appendix	Indicator Index	4.14,E1.5,E1.8,E2.5-2.6,E2.17,E2.25	
	意见反馈		D110 -
	Suggestions and Feedback	A6	P112-11

意见反馈 SUGGESTIONS AND FEEDBACK

尊敬的读者:

您好!非常感谢您在百忙之中阅读《中国铁建2019年社会责任报告》。为了不断改进报告编制工作,我们特 别希望倾听您的意见和建议。请您协助完成反馈意见表中提出的相关问题,并选择以下方式反馈给我们。

邮 寄:北京市海淀区复兴路40号中国铁建股份有限公司

您的信息	
姓 名:	工作单位:
职务:	联系电话:
传真:	E-mail:

选择题(请在相应位置打↓)

选项	很 好	较 好	<u></u> 般	较 差	很 差
1.本报告全面、准确地披露了中国铁建对经济、社会、环境的制度、措施、绩效?					
2.本报告对利益相关方所关心问题有所回应和披露?					
3.本报告披露的信息、指标、数据均清晰准确、完整?					
4.本报告的可读性,即报告的逻辑主线、内容设计、语言文字和版式设计?					

开放性问题

1. 本报告最让您满意的方面是什么?

2. 您认为报告中还需要增加哪些内容?

3. 您对我们今后发布社会责任报告有何建议?

Dear readers:

Thank you for taking the time to read the 2019 Social Responsibility Report of China Railway Construction Corporation Limited. For the purpose of continuously improving the preparation of social responsibility report, we are looking forward to listening to your opinions and suggestions. Please assist us to complete the relevant questions in the feedback form. You may choose the following options to contact us.

Mailing address: China Railway Construction Corporation Limited, No. 40, Fuxing Road, Haidian District, Beijing, China

Your Information	
Name:	
Title:	
Fax:	

Multiple Choice Questions (Please mark " $\sqrt{}$ " in the appropriate position)

Option
1. Does this report fully and accurately disclose the systems, measures and pe
in the fields of economy, society, and environment?
2. Does this report respond to the issues and disclose the information concern
3. Does this report disclose clear, accurate and complete information, indicate
4. What is your opinion on the readability of this report, i.e., the logic, conte
and layout?

Open-Ended Questions

. What do you think is the most satisfying part in this rep	oort?
---	-------

2. What kinds of information do you think is not disclosed in this report?

3. What are your suggestions for our future social responsibility reports?

Company/Organization:	
Tel.:	
E-mail:	

	Very good	good	Fair	Poor	Very poor
l performance of CRCC					
erned by stakeholders?					
ators, and data?					
ntent design, wording,					