



# 2017 社会责任报告暨 ESG (环境、社会与管治) 报告

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个别及连带责任。

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The Board of Directors and all directors of the Company guarantee that there is no false record, misleading statement or major omission in this report and they will bear individual and joint liabilities for the authenticity, accuracy and integrity of the contents.



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标识由公司汉语简称“中国中铁”与英文简称“CREC”构成，采用象征科技和高远的蓝色为标准色。经纬交织的地球背景，展现了公司的全球视野和战略眼光。端正、刚健的“工”字既型如坚实的钢轨，承载着辉煌厚重的历史，又势如擎天的建筑，昭示着蒸蒸日上的未来。

The logo is constituted of the Chinese abbreviation of company name "中国中铁" and the English abbreviation "CREC", adopting blue color that symbolizes technology and ambition as the standard color. The background of the globe with meridians and latitudes interwoven indicates the company's global and strategic vision. The upright and vigorous word "工" is not only like a solid rail, carrying the glorious and heavy history, but also like giant building, illuminating a flourishing future.

## 关于本报告

欢迎阅读中国中铁股份有限公司 2017 社会责任报告暨 ESG（环境、社会与管治）报告

为便于您的阅读,中国中铁股份有限公司在本报告中以“中国中铁”、“公司”、“我们”等方式进行表述。

本报告是公司第 10 份年度社会责任报告,时间跨度以 2017 年 1 月 1 日至 12 月 31 日为主,重点表述了 2017 年度中国中铁在依法治企、优质服务、创造效益、员工发展、安全监管、科技进步、环境保护、精准扶贫、公益事业、合作共赢、海外责任等方面的工作,适当关注了 2017 年以前公司履行社会责任的情况。

报告编写参照联合国全球契约（Global Compact）颁布的“十大原则”,全球报告倡议组织（GRI）、社会责任国际（SAI）和中国国家标准 GB/T36000-2015《社会责任指南》GB/T36001-2015《社会责任报告编写指南》GB/T36002-2015《社会责任绩效分类指引》《中国企业社会责任报告编写指南（CASS-CSR3.0）之建筑业》《中国对外承包工程行业社会责任指引》等相关标准,以及国务院国资委、上海证券交易所、香港联合交易所的有关规定。

报告中使用的相关数据和案例,均来自中国中铁及其子公司。

本报告以中英文两种文字出版,若两种文字间有差异,按中文版解读。

本报告力求完整、客观和准确,并积极回应利益相关方的主要关切。本着精益求精的原则,公司下一年度及以后的社会责任报告的编写和发布工作还将持续改进、日臻完善,也欢迎您的支持。

本报告的电子版同时在公司网站发布您可以根据需要进行下载。

<http://www.crec.cn>

## About This Report

Welcome to read Social Responsibility Report (Environment Society Governance Report) in 2017 of China Railway Group Limited.

In order to facilitate your reading, China Railway Group Limited in this report will be expressed by "CREC", the "Company" and "we/us", etc.

This report is the Company's tenth annual social responsibility report with the time span of 1st January to 31st December of 2017, mainly focusing on the work about managing enterprises according to law, high-quality service, benefit creation, staff development, safety supervision, science & technology progress, environmental protection, targeted poverty alleviation, public welfare undertaking, win-win cooperation and overseas responsibility during the year of 2017, with due attention to the status of company fulfilling their social responsibility before 2017.

We prepared the report by referring to the "ten principles" promulgated by the United Nations Global Compact (Global Compact), the relevant standards of the Global Reporting Initiative (GRI), Social Accountability International (SAI), Chinese National Standards GB/T36000-2015 Social Responsibility Guidelines, GB/T36001-2015 Social Responsibility Reporting Guidelines, GB/T36002-2015 Social Responsibility Performance Classification Guidelines, Construction Industry in China CSR Reporting Guidelines (CASS-CSR3.0), Guide on Social Responsibility for Chinese International Contractors and relevant requirements of the SASAC, Shanghai Stock Exchange and the Stock Exchange of Hong Kong.

All relevant data and cases used in the report are from the CREC and its subsidiary (branch) companies.

This report is published in both Chinese and English. In case of any discrepancy between the two versions, the Chinese version shall prevail.

This report strives to be complete, objective and accurate, and actively responds to the main concerns of the interested parties. In line with the principles of pursuit for excellence, the Company will continuously improve and strive for perfection in the work of Social Responsibility Report's preparation and publishing in the next year and the following years, and also welcome your support.

The electronic version of this report will be published in the Company website at the same time, and you can download it as needed.

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## 领导致辞

2017 年，是中国中铁非凡的一年，难忘的一年。这一年，我们坚持用习近平新时代中国特色社会主义思想武装头脑、指导实践、推动工作，把十九大精神切实转化为企业改革发展的根本指引和关键动能，加速向高质量、高效益方向发展。这一年，我们抢抓市场机遇、乘势而上，主要经济指标再创历史新高。这一年，我们全力以赴打好提质增效攻坚战，深入推进项目管理实验室活动、压减法人户数、处僵治困、清收清欠、集中管理、财务共享中心建设等工作，企业管理水平进一步提升。这一年，我们持续全面深化改革，率先完成党建工作进公司章程，成功实现中铁工业重组上市，积极开展中铁设计咨询混合所有制改革试点，扎实推进“三供一业”分离移交，企业发展后劲大大增强。这一年，我们优质高效安全推进京张高铁、蒙华铁路等项目建设，如期建成宝兰高铁、西成高铁、京新高速公路等一大批重点工程，服务经济社会发展屡建殊功。这一年，我们积极推进雅万高铁、中老铁路、亚吉铁路、匈塞铁路等“一带一路”重大项目建设，国际化大公司地位和作用日益凸显。这一年，我们致力企业形象塑造，广泛传播价值理念，营造良好舆论环境，品牌知名度和社会美誉度不断提升。

这一年，我们更加注重实现员工全面发展，在提高福利待遇的同时，着力畅通职业发展通道，广泛开展丰富多彩的文化活动，员工获得感、幸福感越来越强。这一年，我们积极履行央企社会责任，进一步加大精准扶贫力度，在拉动经济增长、推动科技进步、促进就业、环境保护等方面做出了重要贡献，得到了社会各界的高度评价和广泛认可。

2017 年，中国中铁排名世界企业 500 强第 55 位，中国企业 500 强第 13 位。公司获得国家科技进步奖 2 项、国家技术发明奖 1 项、建筑工程鲁班奖 11 项、国家优质工程金质奖 2 项、国家优质工程奖 35 项。

2018 年，中国中铁将一如既往地忠实履行企业使命，不断探索造福社会的新形式，努力为推动科学发展、促进社会和谐做出新的更大贡献。

董事长：李长进

2018 年 3 月



## Leader's Message

The year 2017 is an extraordinary year for CREC, and it is also an unforgettable year. In this year, we insisted on following Xi Jinping's socialist ideology with Chinese characteristics in the new era, guiding our practice and promoting our work with the socialist ideology so as to effectively transformed the spirit of the 19th CPC National Congress into the fundamental guideline and key impetus for enterprise reform and development, and accelerate our efforts toward high quality and high efficiency development. In this year, we seized market opportunities and took advantage of the momentum, and reached a new record high in major economic indicators. In this year, we worked hard to improve the quality and efficiency, and further promoted the works including laboratory activities of project management, reduction of the number of legal persons, rigescence and poverty governance, clearing & recovering and debts pay-off, centralized management and the construction of financial sharing center in order to further enhance the level of our business management. In this year, we continued to deepen the reform in an all-round way, took the lead in taking the party building work into the articles of association, and successfully completed CREC industrial reconstruction and listing. In addition, we actively carried out pilot reform in mixed ownership of China Railway Engineering Consulting Co., Ltd and steadily pushed forward the separation and transfer of "three supplies and one property", thus the potential for business development has been greatly enhanced. In this year, we promoted the construction of such projects as Beijing-Zhangjiakou Railway and the Mongolian-Central China Railway in high-quality, high-efficiency and safety way, and completed a large number of key projects such as Baoji-Lanzhou High-Speed Rail, Xi'an-Chengdu High-Speed Rail and Beijing-Xinjiang Expressway on schedule, and gained outstanding achievements in serving economic and social development. In this year, we actively promoted the construction of major projects of the "Belt and Road", including Jakarta-Bandung High-Speed Rail, China-Laos Railway, Addis Ababa-Djibouti Railway and Hungary-Serbia Railway. The status and role of the large international corporation have become increasingly prominent. In this year, we were committed to shaping the corporate image,

widely disseminating the corporate values, creating a good public opinion environment, thus our brand recognition and social reputation have been continuously rising. In this year, we paid more attention to the all-round development of our employees. While improving the benefits, we focused on smoothing the career development channels and carrying out extensive and colorful cultural activities. In this way, our employees have obtained more and more sense of gain and happiness. In this year, we actively fulfilled the social responsibility of a central enterprise and further enhanced our efforts on targeted poverty alleviation. We have made important contributions to stimulating economic growth, promoting scientific and technological progress, promoting employment, and protecting the environment, having been highly praised and widely recognized by all sectors of society.

In 2017, CREC ranked 55th in top 500 enterprises of the world, and ranked 13th in top 500 Chinese enterprises. The Company won 2 prizes for National Progress in Science and Technology, 1 prize for National Technical Invention Award, 11 Luban Prizes for China Architecture Project, 2 gold awards for National High-Quality Project, and 35 prizes for National High-Quality Project.

In 2018, CREC will continue to faithfully fulfill its corporate mission and constantly explore new forms of society benefiting and make efforts to make new and greater contributions to promoting scientific development and social harmony.

Chairman of the Board: Li Changjin  
March, 2018





**企业精神:**

勇于跨越 追求卓越

**核心价值观:**

诚信敬业 共建共享

**企业宗旨:**

创新创效 优质发展

**企业使命:**

奉献精品 改善民生

**企业愿景:**

国内领先 世界一流

**Corporate Spirit:**

Brave to Overcome Difficulties and Pursuit for Excellence

**Core Value:**

Honesty and Professionalism, Co-building and Sharing

**Corporate Tenet:**

Innovation and Efficiency for High Quality Development

**Corporate Mission:**

Dedication to Excellent Products for Better Life

**Corporate Vision:**

Leading in China and First-class in the World





## 社会责任规划

## Planning of Social Responsibility

作为建筑行业的领军企业，中国中铁始终以成为企业社会责任的实践者、推动者和引领者为己任，自 2008 年起，开始着手建立科学、规范、系统、有效的企业社会责任管理体系，从依法治企、优质服务、创造效益、员工发展、安全监管、科技进步、环境保护、精准扶贫、公益事业、合作共赢、海外责任等方面进行社会责任规划，并从公司总部到各子公司全面开展了一系列社会责任管理实践活动，以实现全面覆盖、充分履行、日臻完善、行业领先的社会责任目标，为社会持续提供不可替代的杰出贡献。

As a leader in the construction industry, CREC has always been to become a practitioner, propellant and leader of Corporate Social Responsibility as its mission. Since 2008, it began to establish a scientific, standardized, systematic and effective management system of corporate social responsibility, and planned social responsibility from such aspects as managing enterprises according to law, high-quality service, benefit creation, staff development, safety supervision, science & technology progress, environmental protection, targeted poverty alleviation, public welfare undertaking, win-win cooperation and overseas responsibility. And the Company launched a series of management practices of social responsibility from the Company Headquarter to the subsidiaries in order to achieve the goal of full-coverage, full-fulfillment, pursuit for perfection and industry-leading social responsibility, making the irreplaceable and outstanding contributions to a sustainable society.

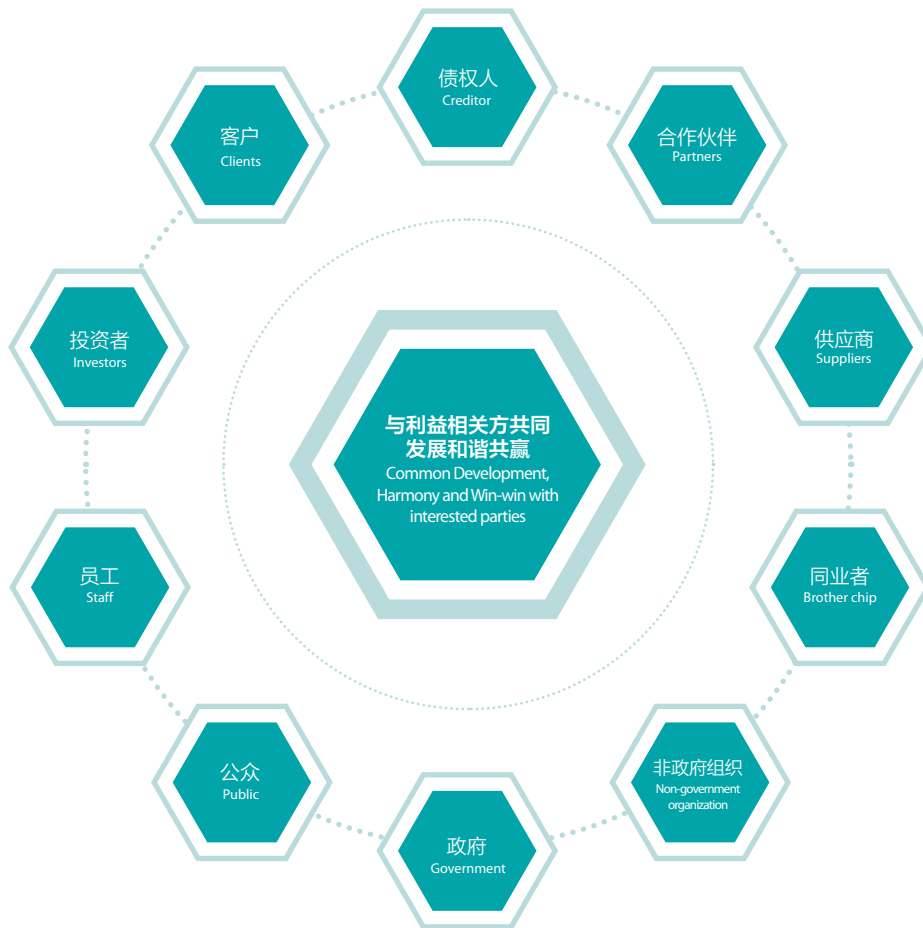


## 利益相关方

## Interested Parties

多年来，中国中铁始终与利益相关方保持和谐互信、互惠互利的合作关系，坚持从利益相关方视角，积极回应利益相关方关注的重要问题，建立顺畅、规范、富有特色的利益相关方沟通机制，努力实现与各利益相关方共同发展、和谐共赢。经全面分析所在行业产业链条和宏观环境，中国中铁的利益相关方主要由十类群体构成，即债权人、客户、政府、投资者、合作伙伴、同业者、非政府组织、员工、公众、供应商。

Over several years, CREC has always maintained the cooperation relationship of harmony, mutual trust, mutually benefit with all interested parties, adhered to the interests of interested parties in the perspective of interested parties, responded actively to important issues that interested parties pay attention to, established smooth, standardized and distinctive communication mechanism of interested parties, and made efforts to achieve common development, harmony and win-win with all interested parties. After a comprehensive analysis of the production chain and macro-environment in the industry, CREC interested parties are mainly constituted by ten groups, i.e. creditor, clients, government, investor, partners, brother chip, NGO (non-governmental organization), staff, public and suppliers.



## 公司概况

中国中铁是集勘察设计、施工安装、工业制造、房地产开发及其他业务于一体的特大型企业集团，全球最大的建筑工程承包商之一，在世界企业 500 强中排名第 55 位。公司于 2007 年 12 月 3 日、12 月 7 日分别在上海、香港两地上市。公司总资产 8440.8 亿元，净资产 1697.2 亿元。

中国中铁建设者先后修建了中国 2/3 的铁路干线、15% 的高速公路；参与建设了 2000 多公里的城市轨道交通工程，占全国城市轨道交通工程总里程的 3/5；修建了武汉长江大桥、南京长江大桥、东海大桥、杭州湾跨海特大桥等近万座大桥，总长达 2.1 万多公里；建成秦岭隧道、太行山隧道、厦门翔安海底隧道、武汉长江隧道等长大隧道共计近 1.9 万公里。公司建设者先后 15 次远征南极，承担了中山站、长城站、昆仑站建设和维护任务。公司还先后参加了国内近 6000 项机场、码头、水电、高层建筑、市政等大型工程的设计与施工，经营范围覆盖到基础设施建设的各个领域，工程项目遍布中国除台湾省以外的各省市自治区以及全球 80 多个国家和地区，科技水平在诸多领域达到世界先进水平，并且屡获国家科技进步奖。

## Company Profile

CREC is an extremely large enterprise group with survey and design, construction and installation, industrial manufacturing, real estate development and other business. It is the largest construction contractors in the world, ranking 55th in the top 500 enterprises of the world. CREC was listed respectively on December 3rd, 2007 and December 7th, 2007 in Shanghai and Hong Kong, with the total assets of RMB 844.08 billion Yuan and net assets of RMB 169.72 billion Yuan.

The builders of CREC have successively constructed two-thirds of trunk railways and 15% of expressway in China; they have participated in the construction of urban rail transit works of more than 2,000 kilometers, accounting for three-fifth of China's urban rail transit works; they have constructed nearly ten thousand bridges with total length of more than 21,000 kilometers including Wuhan Yangtze River Bridge, Nanjing Yangtze River Bridge, the East Sea Bridge, Hangzhou Bay Cross-sea Bridge; they have built long tunnels of Qinling Tunnel, Taihangshan Tunnel, Xiamen Xiang'an Undersea Tunnel, Wuhan Yangtze River Tunnel and so on, with the total length of 19,000 kilometers. The builders have participated in the Antarctic expedition for 15 times, undertaking the construction and maintenance tasks of Zhongshan Station, Great Wall Station and Kunlun station. The Company also has participated in design and construction of more than 6000 large-scale projects including national airports, docks, hydropower, high-rise buildings, municipal and other large projects, with the business scope covering all infrastructure construction fields, and the projects spreading all over China's provinces and autonomous regions except for Taiwan and more than 80 countries and regions in the world. The technological level in many areas has reached the world's advanced level, and has won the prizes for National Progress in Science and Technology for many times.





# 依法治企

Managing Enterprises  
According to Law

 公司治理  
Corporate Governance

 内控监督  
Internal Control Supervision

 诚信经营  
Honest Management



## 公司治理

2017年，公司依法合规完成治理结构换届工作。报告期末，换届产生的第四届董事会由9名董事组成，其中执行董事4名，独立非执行董事4名，非执行董事1名。董事队伍建设得到加强，公司法人治理结构得到进一步优化。董事会下设战略、审计与风险管理、薪酬与考核、提名、安全健康环保五个专门委员会，其中战略委员会由5名董事组成，委员会主任由党委书记、董事长担任，含1名独立非执行董事和1名非执行董事；审计与风险管理委员会由3名董事组成，全部为独立非执行董事，其中2名分别是境内外企业财务会计金融领域专家；薪酬与考核委员会由2名独立非执行董事和1名非执行董事组成，均具有大型企业业绩考核和薪酬管理经验；提名委员会由5名董事组成，委员会主任由党委书记、董事长担任，含3名独立非执行董事；安全健康环保委员会由5名董事组成，委员会主任由总裁担任，含2名独立非执行董事和1名非执行董事，设置与组成符合公司实际以及沪港两地上市规则要求。新任董事均签署了声明及承诺书，按时完成了个人信息申报和资格审查工作，依规完成任前启导和业务培训，有效确保了公司治理的平稳过渡和持续发展。公司监事会由5名成员组成，其中股东代表监事2人，职工代表监事3人。公司高管层由5名成员组成，其中包括总裁1名，副总裁兼总工程师1名，副总裁1名，财务总监1名，董事会秘书兼总法律顾问1名。

2017年是中国中铁发起设立股份公司并A+H整体上市十周年，也是公司第四届董事会组建运作之年。公司董事会、监事会和经理层认真学习贯彻习近平新时代中国特色社会主义思想，把坚持党的领导和完善公司治理统一起来，忠实体现出资人意志，紧密围绕企业年度中心工作，切实履行《公司法》和公司章程所赋予的职责，董事监事高管谨遵法度、勤勉尽责，开拓进取、继往开来，董事会充分发挥市场研判、战略引领、深化改革、科学决策、防范风险作用，监事会充分履行监督检查职能，经理层依法行使管理生产经营、组织实施董事会决议等职权，持续提升运作质量，推动公司治理在从规范性向有效性转变的基础上，从有效性向科学性转变。

## Corporate Governance

In 2017, the Company completed the office-term change of governance structure in accordance with laws and regulations. At the end of report period, the 4th Board of Directors is composed of 9 members including 4 executive directors, 4 independent non-executive directors, and 1 non-executive director. The construction of the Board of Directors has been strengthened and the corporate governance structure of the company legal person has been further optimized. There are 5 special committees of strategy, audit and risk management, remuneration and performance assessment, nomination as well as safety, health and environment under the Board of Directors, among which strategy committee is composed of 5 directors, and the director of the committee is taken by the Party Secretary and Chairman of the board, including one independent non-executive director and one non-executive director; audit and risk management committee is composed of 3 directors, all of them are independent non-executive directors, among them two are experts in finance and accounting fields in domestic and overseas enterprises respectively; remuneration and performance assessment committee is composed of 2 independent non-executive directors and 1 non-executive director, having rich experiences in large corporate performance assessment and remuneration management; nomination committee is composed of 5 directors, and the director of the committee is taken by the Party Secretary and Chairman of the board, including 3 independent non-executive directors; safety, health and environment committee is composed of 5 directors, and the director of the committee is taken by the President, including 2 independent non-executive directors and 1 non-executive director. The setup and composition are in line with the actual situation of the Company and listing rules requirements in Shanghai and Hong Kong. All the new directors have signed the statement and letter of commitment, completed personal information declaration and qualification examination on time, received pre-service mentoring and business training according to the regulations, thus effectively ensuring the smooth transition and sustainable development of corporate governance. The Board of Supervisors is composed of 5 members including 2 shareholder representative supervisors and 3 workers' representative supervisors. The upper management is composed of 5 members including 1 president, 1 vice president and chief engineer, 1 vice president, 1 CFO, 1 board secretary and general counsel.

The year 2017 is the tenth anniversary of the establishment of a joint-stock company by CREC and the overall listing of A + H, and is also the year for the formation and operation of the 4th Board of Directors of the Company. The Board of Directors, the Board of Supervisors and the Management of the Company seriously studied and implemented Xi Jinping's socialist ideology with Chinese characteristics in the new era, unified its adherence to the Party leadership and improvement of corporate governance, faithfully reflected the will of the investors, closely centered on the annual corporate work and earnestly performed the duties given by the Corporate Law and the Articles of Association. Following the laws and regulations and forging ahead as well as being diligent and conscientious, pioneering and enterprising, the Board of Directors gave full play to the roles of market analysis, strategy guidance, reform deepening, scientific decision-making and risk prevention. In addition, the Board of Supervisors fully performed the functions of supervision and inspection, and the management exercised its power to manage the production and operation according to law and organized the implementation of resolutions of the Board of Directors. Moreover, it continued to improve its operation quality and promoted the transformation of corporate governance from standardization to effectiveness and then to scientificity.

## 内控监督

中国中铁高度重视内控体系建设，按照《企业内部控制基本规范》要求，在制定下发《工程项目内部控制指导手册》等相关文件的基础上，2017年，根据企业全面深化改革的需要，加强对内控审计和评价中发现的管理缺陷的整改，修订完善了总部内部控制体系文件。召开管理制度评审会议5次，完成了32项规章制度的评审工作。

公司结合企业实际，在组织开展风险管理初始信息收集和所属各单位风险评估结果的基础上，编制风险评估调查问卷，从5大类76个风险点列举出公司层面面临的风险，从风险发生的可能性和影响程度两个维度制定风险评估准则，开展了风险问卷调查，评估确定公司层面重大和重要风险，并编制了《2017年度全面风险管理报告》。

公司严格遵守中国及海外业务所在国和地区的法律法规，坚决禁止贿赂、勒索、欺诈及洗黑钱等行为不断加强反腐败制度建设和员工培训，设立独立的审计部门，加大内部审计力度，加强对各业务的监控，积极营造“不想腐、不能腐、不敢腐”的廉洁文化氛围。

## Internal Control Supervision

CREC attached great importance to construction of the internal control system. According to Basic Norms of Corporate Internal Control, by issuing relevant documents including Instruction Manual for Internal Control of Engineering Projects, in 2017, CREC strengthened efforts on management defect rectification found in internal control audit and appraisal under the requirements of overall in-depth corporate reform. It took relevant rectification measures, revised and improved internal control system documents of the Headquarter. In the whole year, management system appraisal meeting was held for 5 times, and 32 rules and regulations have been appraised.

In combination with its reality and based on the organization of initial information collection for risk management and risk assessment results of all subordinate units, CREC compiled the risk assessment questionnaire, listed five categories and 76 risk points that it was facing, formulated risk assessment standards from the probability and influence degree of risk, carried out risk questionnaire survey, assessed and determined the great and major risks that it was facing and compiled the Overall Risk Management Report 2017.

The Company Strictly abide by the laws and regulations of the countries and regions of China and overseas business, and resolutely prohibit bribery, extortion, fraud and money laundering, etc. continuously strengthened the building of anti-corruption system and staff training, set up an independent audit department, intensified internal audit efforts, strengthened the monitoring of various businesses and actively created an incorruptible culture atmosphere of "do not want to corrupt, cannot corrupt, and dare not corrupt".



中铁五局AAA信用证书



中铁建投2014-2016连续3年广东省守合同重信用企业

## 诚信经营

2017年，公司坚持“治理完善、经营合规、管理规范、守法诚信”的“法治中铁”宗旨，严格贯彻执行境内外法律法规、公司制度，坚持全员参与、全过程监控、全领域覆盖的合规管理原则，重视企业信用管理，全面兑现了各项合同承诺，把依法治企贯穿于企业生产经营活动始终，无不良经营行为。

2017年，中铁一局、中铁三局、中铁九局、中铁建投等被评为省级守合同重信用企业，中国中铁股份有限公司、中铁三局、中铁十局、中铁电化局、中铁大桥局等十六家单位被评为全国交通企业法治先进单位，中铁五局等被评为AAA级信用企业，中铁电化局被评为全国用户满意企业。

资料1：在2017年上半年铁路施工企业信用评价中，中铁二局、中铁三局、中铁四局、中铁五局、中铁七局、中铁北京局、中铁上海局被评为A级，占A级的70%。下半年，中铁一局、中铁三局、中铁四局、中铁九局、中铁大桥局、中铁北京局、中铁上海局被评为A级，同样占A级的70%。

资料2：2017年，全公司如期保证了西成高铁、宝兰高铁、石济高铁、成贵铁路金沙江大桥、石家庄地铁1号线、贵阳轨道交通1号线等一批重点工程相继建成。

## Honest Management

In 2017, the Company insisted on the tenet of governing CREC according to law including "governance perfection, operation compliance, management standard, law-abiding and integrity", strictly implemented the domestic and overseas laws and regulations as well as the Company system, adhered to the compliance management principle of all staff participation, whole process monitoring and whole field coverage. In addition, it attached great importance to the corporate credit management and fully fulfilled all the contractual commitments. It always implemented the principle of governing the corporate according to law throughout the enterprise's production and operation activities without bad business practices.

In 2017, CREC No.1, CREC No.3, CREC No.9 and CRCIG (China Railway Construction & Investment Group Co., Ltd.) were awarded national contracted honor enterprises, 16 units including China Railway Group Limited, CREC No.3, CREC No.10, CREC Electricization Bureau and CRBB (China Railway Bridge Bureau) were awarded advanced legal units in national transportation corporates, CREC No.5 was rated as AAA credit corporate, and CREC Electricization Bureau was rated as national customer satisfaction corporate.

Information 1: In the credit rating of railway construction enterprises in the first half of 2017, CREC No.2, CREC No.3, CREC No.4, CREC No.5, CREC No.7, CREC Beijing Bureau and CREC Shanghai Bureau were rated as Class A, accounting for 70% of Class A. In the second half year, CREC No.1, CREC No.3, CREC No.4, CREC No.9, CRBB, CREC Beijing Bureau and CREC Shanghai Bureau were rated as Class A, also accounting for 70% of Class A.

Information 2: In 2017, CREC completed the construction of a batch of key projects and put them into use on schedule, including Xi'an-Chengdu High-Speed Rail, Baoji-Lanzhou High-Speed Rail, Shijiazhuang-Jinan High-Speed Rail, Shijiazhuang Metro Line 1 and Guiyang Urban Rail Transit Line 1, etc.



# 优质服务

High-Quality Service

 改善物理环境  
Improvement of Physical Environment

 提高服务质量  
Improvement of Service Quality

 建设精品工程  
Construction of High-Quality Project





## 改善物理环境

中国中铁具有在复杂地质及水文条件、以及特殊环境下进行各种结构形式诸如铁路、公路、桥梁、市政等工程建设的雄厚技术力量和机械装备。从塞外到南国，从东海之滨到雪域高原，中国中铁人发扬“勇于跨越，追求卓越”精神，出色地完成了各个时期国家和人民交付的神圣使命，在全球基础设施建设领域留下了一串串闪光的足迹，在为人类理想而改善地球物理环境的伟大事业中做出了不凡业绩。

2017年，全公司先后建设完成了西成高铁、宝兰高铁、石济高铁等一大批高速铁路，并新建成公路2439公里，桥梁2073公里，隧道1430公里。

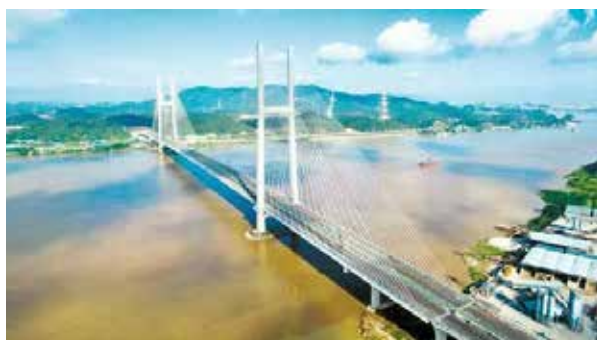
## Improvement of Physical Environment

CREC has powerful technical forces and mechanical equipment that can be used in complex geological and hydrological conditions as well as special environment for construction of railways, roads, bridges and municipal buildings with various structures. From beyond the Great Wall to the south, from the East Sea to the snow-covered plateau, CREC people, by developing the spirit of "brave to overcome difficulties and pursuit for excellence", have perfectly achieved the sacred mission that the state and people delivers during various periods, and left a string of flash footprints in the field of global infrastructure construction, making impressive performance in the great cause of improving the geophysical environment of the Earth for mankind's ideal.

In 2017, CREC completed the construction of a batch of high-speed rail projects including Xi'an-Chengdu High-Speed Rail, Baoji-Lanzhou High-Speed Rail and Shijiazhuang-Jinan High-Speed Rail. In addition, it newly built 2439 kilometers of highways, 2073 kilometers of bridges, and 1430 kilometers of tunnels.



合肥枢纽南环线合肥南站工程



广佛江快速通道江顺大桥工程



杭州市紫之隧道（紫金港路~之江路）工程



浙江国际赛车场

## 提高服务质量

2017年，中国中铁始终坚持“精益求精，持续改进”总体思路，坚持以人为本的理念，以对国家、对人民、对企业高度负责的态度，不断提高服务质量。同时，我们全面保护客户商业敏感信息和个人隐私。

工程质量管理方面，公司认真贯彻实施ISO9000体系标准和《工程质量管理监督办法》，大力开展QC活动，编制可行的质量计划，采取设置专业质量工程师和编制专项创优计划等措施，确保质量创优目标的实现。

工业装备服务方面，公司以秉承“以技术服务先行，造顾客信任发展”的发展理念，加强售后服务体系建设，推动公司从工业产品自我创造价值向为用户创造价值转变，以销售产品为基础向制造与服务并重转变，由提供产品向提供增值服务转变，从一次性产品销售向全生命周期取得收益转变，形成一体化、综合型服务体系，为客户提供全生命周期“管家式”售后服务，促进公司从工业制造企业向工业制造服务型企业的全面转型升级。

资料1：2017年，中铁大桥局的“天堑变通途，四位一体质量管理模式”入围第三届中国质量奖，是唯一入围的工程建筑业企业。

资料2：公司全面开展盾构再制造、设备组装调试、以旧换新、技术咨询、盾构租赁、掘进分包、盾构云信息技术服务等一揽子工程技术附加服务，并建立了隧道掘进机远程信息服务中心，为客户提供实时远程监测、智能故障诊断与预测服务。

## Improvement of Service Quality

In 2017, CREC always insisted on the general idea of "ever perfecting and continuous improvement" and adhered to people oriented concept to constantly improve its service quality in an attitude of highly responsible for the nation, the people and the corporate. In the meantime, we fully protected our customers' sensitive business information and personal privacy.

In project quality management, CREC seriously implemented ISO9000 system standard and Measures for Project Quality Supervision and Management, vigorously carried out QC activities, developed feasible quality plan, set up professional quality engineers and prepared special excellence programs to ensure the quality of excellence to achieve the goal.

In industrial equipment service, CREC adhered to the development philosophy of "Advancing with Technical Services and Developing with Customer Trust", strengthened the construction of after-sales service system and promoted the transformation from the self-creation value of industrial products to value creation for customers. Based on the product marketing, it achieved the transformation toward manufacturing and service and the transformation from product providing to value-added service providing as well as from one-time product selling to profiting in the entire life cycle, thus forming an integrated and comprehensive service system so as to provide customers with "Butler" after-sales service in full life cycle to promote the Company to realize comprehensive transformation and upgrading from an industrial manufacturing enterprise to an industrial manufacturing service-oriented enterprise.

Information 1: In 2017, the "deep chasm turning into thoroughfare and four-in-one quality management mode" of CRBB (China Railway Bridge Bureau) was nominated for the 3rd China Quality Award, which was the only short-listed construction company.

Information 2: The Company fully carried out technical additional services to a package of project engineering including shield re-manufacturing, equipment assembly and debugging, trade-in, technical consulting, shield leasing, tunneling subcontracting, shield cloud information technology services, and established a remote information service center for tunneling machine so as to provide customers with real-time remote monitoring, intelligent fault diagnosis and prediction services.



中铁隧道局承建的大瑞铁路高黎贡山隧道“彩云号”始发

## 建设精品工程

2017年,中国中铁继续发扬“精心设计,绘制时代蓝图;科学施工,构筑精品工程”理念,始终把每一个施工现场管理作为一个系统工程,通过开展标准化工地达标活动,严把质量关口,严格执行施工工艺标准,不断提高建筑产品质量,不断丰富建筑产品内涵,努力把每一项工程都建设为国际一流建筑和百年精品工程。

2017年,公司11项工程荣获中国建设工程鲁班奖,分别是:中新天津生态城天津医科大学生态城代谢病医院工程、武汉鹦鹉洲长江大桥正桥工程、新建林歹至织金(新店)铁路站前工程施工纳界河特大桥、合肥枢纽南环线合肥南站工程、新建杭州至长沙铁路客运专线金华江特大桥、杭州市紫之隧道(紫金港路~之江路)工程、山东中烟工业有限责任公司滕州卷烟厂易地技术改造项目一标段、广佛江快速通道江顺大桥工程、“1600工程”II期工程、乌兹别克斯坦安革连至琶布铁路卡姆奇克隧道、刚果(金)SICOMINES铜钴矿采选冶一期工程。至此,中国中铁累计有162项工程获此殊荣。

## Construction of High-Quality Project

In 2017, CREC continued to carry forward the philosophy of "elaborately design to draw the blueprint for the times; scientifically construct to build high-quality project". The Company has always made every construction site management as a system work. Through standardization of site compliance activities, it strictly controlled quality and strictly implemented construction technology standards. It constantly kept improving the quality of construction products and enriching the content of construction products. Moreover, it strove to build every project as an international first-class architecture and a hundred-year fine project.

In 2017, the Company's 11 projects were awarded Luban Prize for China Architecture Project, which respectively were metabolic disease hospital project of Tianjin Medical University Eco-City in Sino-Singapore Tianjin Eco-City, the right bridge works of Wuhan Parrot Island Yangtze River Bridge, newly-built Najiehe Super-large Bridge pre-station project construction in Linxi-Zhijin (Xindian) Railway, Hefei South Railway Station Project of Hefei Hub South Loop Line, newly built Jinhua River Super-large Bridge (the special passenger transport line of Hangzhou-Changsha Railway), Hangzhou Zizhi Tunnel (Zijingang Road-Zhijiang Road) project, the first section of technical renovation project on location change of Tengzhou Tobacco Factory of China Tobacco Shandong Industrial Co., Ltd., Jiangshun Bridge project (Guangzhou-Foshan-Jiangmen fast channel), Phase II project of "1600 Project", Uzbekistan Kamchik Tunnel in the Angren-Pap Railway, and Phase I project of Congo-Kinshasa SICOMINES copper and cobalt mining and smelting. Till now, CREC has accumulated 162 projects awarded with this prize.



中新天津生态城天津医科大学生态城代谢病医院工程



山东中烟工业有限责任公司滕州卷烟厂易地技术改造项目一标段



新建杭州至长沙铁路客运专线金华江特大桥



武汉鹦鹉洲长江大桥



# 创造效益

Benefit Creation

 促进经济发展  
Promotion of Economic Development

 社会贡献价值  
Social Contribution Value

 持续推动就业  
Continuous Promotion of Employment



## 促进经济发展

中国中铁致力成为国民经济发展的支柱。2017年，公司通过完成全球市场，特别是中国市场的铁路、公路、轨道交通、港口、市政、机场等基础设施建设，拉动了全球和地方经济增长，促进了经济发展和社会进步，不断为社会创造和积累着优质的物质财富。

2017年，公司营业收入6933.7亿元，同比增长7.8%；新签合同额15568.6亿元，同比增长26.1%；实现归属母公司净利润160.7亿元，平均每股收益0.669元，成为社会财富的重要创造者和社会经济发展的重要推动力量。

## Promotion of Economic Development

CREC has worked hard to become the prop for the national economic development. In 2017, the Company has driven the global and local economic growth and promoted the economic development and social progress through the construction of railway, highway, rail transit, port, municipal building, airport and other infrastructures in the global market especially the Chinese market, and constantly created and accumulated high-quality material wealth for the society.

In 2017, the Company total revenues was RMB 693.37 billion Yuan, with a year-on-year growth of 7.8%; the amount of newly-signed contracts reached RMB 1556.86 billion Yuan, with a year-on-year growth of 26.1%; net profit belonged to parent company was RMB 16.07 billion Yuan, with the average profit of RMB 0.669 Yuan for each share. CREC has become the major creator of social wealth and an important driving force for social and economic development.

(单位：亿元)  
(Unit: RMB 0.1 Billion Yuan)



## 社会贡献价值

2008 年以来，我们在行业中率先披露了公司每股社会贡献值。

2017 年，我们继续完善评估体系，采用自我统计、估算与专家评审相结合的方法，研究测算了中国中铁 2017 年度企业社会贡献值和每股社会贡献值，供您参考。

### 我们的计算公式：

企业社会贡献值 = 盈利贡献 + 税费贡献 + 债息贡献 + 雇员贡献 + 公益贡献 + 其他贡献 - 环境负贡献 - 安全质量负贡献 - 其他负贡献。

每股社会贡献值 = 企业社会贡献值 / 总股本

### 近三年统计情况：

中国中铁 2015 年企业社会贡献值为 1439.4 亿元，每股社会贡献值为 6.3 元。

中国中铁 2016 年企业社会贡献值为 1454.2 亿元，每股社会贡献值为 6.37 元。

中国中铁 2017 年企业社会贡献值为 1587.98 亿元，每股社会贡献值为 6.95 元。

### 术语解释：

- (1) 盈利贡献：公司通过实现盈利为股东创造的价值
- (2) 税费贡献：公司为国家和地方财税缴纳的税收、费用等价值
- (3) 债息贡献：公司为债权人创造的利息等价值
- (4) 雇员贡献：公司为员工（含农民工）支付的工资福利价值
- (5) 公益贡献：包括捐款捐物在内的企业扶贫助困、奉献爱心等直接支出
- (6) 其他贡献：前述所列项以外的企业活动给社会带来的正效益评估值
- (7) 环境负贡献：企业行为对环境造成的负影响价值
- (8) 安全质量负贡献：企业安全质量事故对社会造成的负影响价值
- (9) 其他负贡献：前述所列项以外的企业活动给社会带来的负效益评估值

## Social Contribution Value

Since 2008, we have taken the lead to disclose the social contribution value per share in the industry.

In 2017, we continued to improve the assessment system, researched and estimated corporate social contribution value per share of CREC in 2017 with the method of combination of self-statistics, estimation and expert assessments, which is just for your reference.

### Our formula:

Corporate social contribution value = profit contribution + tax contribution + debt interest contribution + employee contribution + the public welfare contribution + other contributions - negative contribution to the environment - negative contribution to the safety and quality - other negative contributions.

Social contribution value per share = corporate social contribution value / total equity

### The statistics in recent three years:

The corporate social contribution value of CREC in 2015 reached RMB 143.94 billion Yuan, and social contribution value per share was RMB 6.3 Yuan.

The corporate social contribution value of CREC in 2016 reached RMB 145.42 billion Yuan, and social contribution value per share was RMB 6.37 Yuan.

The corporate social contribution value of CREC in 2017 reached RMB 158.798 billion Yuan, and each share of social contribution value was RMB 6.95 Yuan.

### Terminological Interpretation:

- (1) Profit contribution: the value that the Company has created through making profits for shareholders.
- (2) Tax contribution: the value that the Company has paid the state and local tax revenue, fees and others.
- (3) Debt interest contribution: the value such as interest that the Company has created for creditors.
- (4) Employee contribution: the value of wages and benefits paid by the Company for employees (including peasant workers).
- (5) Public welfare contribution: the direct expenditures for helping the poor, dedication of love and others including donated money and things.
- (6) Other contribution: the positive benefits assessment value that corporate activities bring for the society except the above items listed.
- (7) The negative contribution to the environment: the negative impact value on the environment caused by corporate behaviors.
- (8) The negative contribution to the safety and quality: the negative impact value on the society caused by corporate safety and quality accidents.
- (9) Other negative contribution: negative benefits assessment value that corporate activities bring to the society except the above items listed.

## 持续推动就业

中国中铁始终把促进就业作为公司社会责任的一项关键内容。2017年，公司认真落实《集体合同》员工上岗就业承诺，千方百计促进企业下岗职工实现再就业。公司每年通过接收大中专毕业生、接收转业军人、通过人才市场引进人才等形式，为社会创造和提供了大量新的岗位。2017年，全公司新接收大中专毕业生11014人，军转干部在京安置工作也得到国务院军转办肯定。

2017年，全公司为180万农民工提供了就业岗位，在大力推行农民工与职工“五同”管理的基础上，持续推进农民工实名制管理、工资专用账户、工资保证金和银行代发工资等制度。严格做好农民工岗前安全教育培训和现场操作技能培训，对特殊工种全部进行岗前强化培训，不断提高农民工作业技能。同时，采取多种措施，保证农民工工资按时足额发放。我们坚持用工平等原则，严格遵守国家《禁止使用童工规定》条例，禁止聘用强制劳工及童工。目前为止未发现雇佣童工现象。同时加强对分包队伍用工情况管理，如发现有非法使用强制劳工及童工，坚决清除。坚持提供多元化发展机会，不会因性别、种族、宗教、年龄、国籍而歧视员工。

资料：2017年，公司严格落实《人才引进管理办法》，把好人才引进关，组织所属单位人力资源部门在西南交大等重点高校集中开展了主专业大学毕业生招聘工作，共招聘优秀大学毕业生550多人，为企业补充了新鲜血液和后备力量。

## Continuous Promotion of Employment

CREC always fulfills employment responsibility which is taken as a key content of its corporate social responsibility. In 2017, CREC strictly implemented the staff employment commitment of Collective Contract, making every endeavor to promote laid-off employees for re-employment. Every year, the Company will create and provide large amounts of new job positions for the society through receiving the graduates from junior college and technical secondary school, receiving demobilized armyman and introducing talents from HR market. In 2017, the whole company received more than 11014 new graduates from junior college and technical secondary school, and was praised by Military Demobilization Office of the State Council for its good reception work for demobilized army cadres.

In 2017, the whole company provided employment opportunities for 1.8 million peasant workers. On the basis of vigorously promoting "Five Same" Management for peasant workers and staff, the Company continued to promote the management of real-name system of peasant workers, special wage account system, wage deposit and bank payoff system, etc. In addition, it strictly carried out pre-job safety education and training to the peasant workers and on-site operation skill training, and gave intensive pre-job training for all special work posts to constantly improve their job skills. At the same time, it took various measures to ensure that the wages of peasant workers were paid off in full and on time. Moreover, we uphold the principle of equal employment. Strict compliance with the state regulations on the prohibition of the use of child labour and prohibit the employment of forced labor and child labor. Child labour has not been found so far. At the same time, the management of the use of subcontractors is strengthened, such as the discovery of illegal use of compulsory labor and child labor, and resolutely clear up. We always insist on providing diversified development opportunities without discrimination against employees in gender, race, religion, age or nationality.

Information: In 2017, CREC strictly carried out Measures for CREC Talent Introduction Management for talent introduction control. It organized human resources departments of its affiliated units to conduct graduates recruitment work for main specialties in Southwest Jiaotong University and other colleges and universities, and a total of more than 550 excellent university graduates were recruited, adding fresh blood and reserve forces for the corporate.



中国中铁国际工程班招聘会



# 员工发展

Staff Development

 维护员工权益  
Safeguard of Staff's Rights and Interests

 促进员工成长  
Promotion of Staff's Growth

 加强三工建设  
Reinforcement of Three Projects Construction





## 维护员工权益

中国中铁高度重视员工权益保护，坚持男女平等，依法签订劳动合同，建立科学的薪酬管理制度，维护职工合法权益。

### 劳动合同管理

2017年，公司认真贯彻落实《劳动合同法》，以书面形式与员工签订劳动合同，员工劳动合同签订率达到100%，严格执行合同条款；通过劳动合同明确双方的权利和义务，严格执行合同条款，有效维护企业员工的合法权益。强化劳动合同管理，对合同到期、变更、解除的员工及时办理相关手续。员工因不能胜任岗位或严重违反公司规章制度等，双方将终止劳动合同。

### 员工薪酬管理

2017年，公司按照国家法规、政策要求，在原有薪酬制度基础上，进一步规范了员工工资正常增长和收入保障机制，员工收入增长与企业经济效益增长相适应，员工收入水平稳步提高，工资能够按时足额发放，员工享受到公司发展成果。

### 员工社保管理

公司切实保障职工合法社保权益，督促成员企业及时为员工参加基本养老保险、基本医疗保险、工伤保险、失业保险及生育保险。积极贯彻落实国家关于行业、企业社会保险纳入地方管理的要求。推进企业年金规范管理，督导成员企业规范运作年金计划。

### 员工民主权利

2017年，公司召开二届三次职代会，由工会代表全体员工与企业签订了《中国中铁2017年集体合同》；坚持职代会审议行政工作报告、民主评议领导人员、职工提案报告等制度，进一步畅通了职工民主参与、民主管理、民主监督的渠道。

### 员工生活保障

2017年，公司认真贯彻落实《职工生活保障工作指导意见》，全面推进“三让三不让”职工关爱工程、“两节送温暖”等活动，积极为困难员工排忧解难，全年支出“三不让”资金5650万元，救助困难员工3万人次；筹集“两节”送温暖资金1.66亿元，走访慰问职工和农民工25万余人次；发放助学款878万元，资助职工民工子女3936人。

### 员工休假制度

公司严格遵守国家劳动法律法规，认真执行国家《员工带薪年休假条例》及其他各类假期规定。对在法定节假日、公休假日工作和延长工作时间的职工，按照国家法律规定采取支付薪酬及加班工资或调休等方式保障员工权益。

## Maintenance of Staff's Rights and Interests

CREC paid high attention to maintenance of staff's rights and interests, and supported gender equality. Through signature of labor contract according to law, it established a scientific salary management system and maintained the staff's legal rights and interests.

### Labor Contract Management

In 2017, CREC strictly implemented the national Labor Contract Law and signed labor contract with its staff in written form, and the signature rate of labor contract reached 100%. Moreover, it strictly executed contract clauses; in addition, it clearly defined the rights and obligations of both parties through labor contract, and strictly executed the terms of the contract to effectively safeguard the staff's legal rights and benefits. CREC strengthened the management of labor contract and handled the relevant formalities in time for employees whose contracts have been expired, changed or terminated. Both parties will terminate the labor contract if an employee is not competent for the work post or seriously violates the Company rules and regulations.

### Staff Salary Management

In 2017, in accordance with the requirements of national laws, regulations and policies, CREC further standardized the normal staff salary growth and income guarantee mechanism on the basis of original remuneration system so that the staff income growth could keep up with the corporate economic growth and the staff income level was steadily increased. The staff salaries were paid off in full and on time, and they could enjoy the Company's development achievements.

### Staff Social Insurance Management

CREC protected legal social security rights and interests of the staff, supervised and urged member corporates to join in primary endowment insurance, basic medical insurance, work-related injury insurance, unemployment insurance and maternity insurance for the staff. In addition, the Company actively implemented national requirements about industry and corporate social insurance to be listed into local management. In 2016, it vigorously standardized and boosted enterprise annuity management, supervised member corporates to establish annuity plan.

### Democratic Rights of Staff

In 2017, CREC held the 3rd session of the second workers' congress. On the congress, the labor union signed CREC 2017 Collective Contract with the corporate on behalf of all staff; it insisted on the systems of workers' congress review of administrative work report, democratic appraisal to leaders, and staff proposal report, and further unblocked the channel for democratic participation, management and supervision.

### Life Guarantee for Staff

In 2017, CREC seriously carried out Guidance to Staff Life Guarantee Work, further deepened the "three permissions and three preventions" commitments for staff care program and the activity of "warmth-delivery in two festivals" to help staff solve the difficulties. It spent annual expenditure of RMB 56.50 million Yuan for "three preventions" activity, and helped over 30,000 staff in difficulty. The Company raised warmth-delivery fund of RMB 166 million Yuan for "warmth-delivery in two festivals", visited over 250,000 staff and peasant workers, and granted study aid payment of RMB 8.78 million Yuan to help 3936 children of the staff and peasant workers.

### Staff Holiday System

CREC strictly followed the national labor laws and regulations, carefully implemented the national Regulations on Paid Annual Leave of Employees and various other holiday regulations. It paid remuneration and overtime salary to staff or implemented days-off pattern to staff who worked on legal holidays, public holidays or work overtime according to national legal provisions.



中国中铁员工技能竞赛

## 促进员工成长

中国中铁大力实施“人才强企”战略，把人才资源视为企业的第一资源，努力做到人才资源优先开发、人才结构优先调整、人才投入优先保证、人才制度优先创新。公司有工程、会计、经济、政工多个系列的专业技术职务人员晋升评审委员会，按照公司有关规定对申报上述系列高级专业技术职务人员进行资格评审。

2017年，公司研究制定了中国中铁“十三五”人才发展规划和人才培训规划，为深入推进人才强企战略，打造“八支人才队伍”，提供了蓝图和依据。

2017年，公司先后举办了1期领导干部井冈山理想信念培训班、2期领导干部政治理论培训班、2期领导干部经营管理培训班、1期中央党校国资委分校处级干部进修班，大力开展理想信念、党风党纪、政治理论教育，共培训各级领导人员350多人次。全公司共培训各级各类人才30余万人次，促进了人才队伍能力素质的大幅度提高。

2017年，公司组建了新一届中国中铁专家委员会，设立了17个专业组。各专业组年初围绕科技创新、项目建设与管理、重大关键技术问题研究确定课题，年终要向专家委员会报告课题进展情况和成果，同时对各业态

发展动态进行超前研究，创新工艺工法，为企业科技创新和各业态技术水平的提高提供强有力的技术支撑，充分发挥了专家人才的专业优势和高端智囊作用。

2017年，公司新增“全国工程勘察设计大师”3人，“全国交通运输青年科技英才”2人，享受国务院政府特殊津贴专家18名人，晋升高级职称4090人。

资料1：2017年，公司继续开展国际工程后备人才“3+1”订单式培养工作，在8所合作高校共计招收了338名大三学生，比去年增加16人。与此同时，第二届国际工程班毕业的300余名大学生全部分配到各个海外项目，开始了岗位实践锻炼。第二届中国中铁国际工程研修班圆满毕业的60名青年骨干人员经过历时近10个月的脱产学习，全面提高了外语水平，进一步熟悉掌握了国际工程合同、法律、商务、管理等知识，为今后更好地投身于国际业务发展奠定了坚实基础。

资料2：2017年，公司认真组织开展技能鉴定及高技能人才评价和特级技师评审工作，评审通过高级技师597人、特级技师通过139人，巨晓林、白芝勇、窦铁评为工匠技师。



中铁一局新员工岗前培训

## Promotion of Staff's Growth

CREC strongly implemented the "Talent Corporate" strategy, treated the talents as the first corporate recourse, made effort to give priority to development of talent resources, give priority to adjustment of talent structure, give priority to talent investment and give priority to innovation of the talent system. The Company has set up professional and technical personnel promotion appraisal committee in engineering, accounting, economy, political work and other series, and carried out qualification review to senior professional and technical personnel who applied for the above series in accordance with the relevant provisions of the Company.

In 2017, the Company developed the CREC "13th Five-Year" talent development plan and talent training program, in order to provide a blueprint and basis for further promotion of the strategy of talent thriving enterprises and creation of "eight talent teams".

In 2017, the Company organized Jinggangshan ideal and faith training class once for leading cadres, theoretical training class twice for leading cadres, operation management training class twice for leading cadres, advanced study class once for department leaders in SASAC branch of Party School of the CPC Central Committee to vigorously carry out the education on ideal and faith, party style and party discipline, political theory, and has trained more than 350 leaders at all levels. The whole company has totally trained over 300,000 talents in all fields and promoted the substantially improvement of talent team in capacity and quality.

In 2017, CREC established a new CREC Expert Committee and set up 17 professional groups. At the beginning of the year, each professional group determined the projects by centering on scientific and technological innovation, project construction and management, research on major and key technical issues, and reported to the Expert Committee on the progress and achievements of the projects at the end of the year. At the

same time, CREC conducted advanced research on various industry development trends and innovated new processes and methods to provide powerful technical support for technological innovation of enterprise and improvement of technological level of all industries, and gave full play to the professional advantages of experts and high-end think tank.

In 2017, CREC added 3 "master designers in national engineering survey and design", 2 "young science and technology talents in national transportation", 18 experts enjoying the State Council special contribution allowance, and promoted 4090 personnel to senior professional title.

Information 1: In 2017, the Company continued to carry out "3 + 1" order-oriented training work for international engineering reserve talent, and totally recruited 338 junior students in 8 cooperative colleges and universities, an increase of 16 students over last year. At the same time, more than 300 college students graduated from the second international engineering class were assigned to various overseas projects to begin the actual practice. 60 young backbones who successfully graduated from the second CREC International Engineering Seminar have completed full-time study of nearly 10 months. They have improved the level of foreign languages and become familiar with the international engineering contracts, laws, businesses, and management knowledge, laying a solid foundation for better participation in the development of international business in the future.

Information 2: In 2017, the Company carefully organized the appraisal of skills, appraisal of high-skilled personnel and appraisal of premium technicians. It appraised and approved 597 senior technicians and 139 premium technicians, and Ju Xiaolin, Bai Zhiyong and Dou Tie were evaluated as Great Craftsman Technicians.



中铁七局三公司曲江大道项目端午节慰问现场



中铁十局蒙华铁路梁场办公生活区

## 加强三工建设

2017年，中国中铁坚持以工地生活、工地文化、工地卫生“三工”建设为抓手，全年累计投入“三工”建设资金约2.81亿元，全面改善施工一线的生活文化卫生水平，为一线员工营造了良好的生活和工作环境。

资料1：2017年，中国中铁在工程项目部全面实施“幸福之家十个一工程”，以提升员工幸福指数为目标，紧紧围绕项目部中心工作，重点抓好美化劳动工作环境、搭建建功立业平台、丰富工地文化生活、关爱员工身心健康、维护员工合法权益、构筑员工精神家园等工作，让每位职工都有一个安全卫生的好环境、一个工作生活的好心情、一个身心健康的好体魄，实现体面劳动、幸福生活、全面发展。

资料2：中铁上海工程局广泛开展“职工小家”标准化建设，规范统一工程项目驻地建设标准，使项目“职工小家”的外观色彩、整体风貌、形象元素和设备设施整齐划一，不仅节约了项目驻地建设成本，也使企业更加“像家”、“是家”，职工更加“爱家”、“恋家”。

## Reinforcement of Three Projects Construction

In 2017, CREC adhered to the “three projects” construction as the main content, namely construction site life, culture and hygiene. It accumulatively invested RMB 281 million Yuan in the “three projects” construction, fully improved the standard of living, culture and hygiene in forefront of the construction and created good living and working environment for front-line staff.

Information 1: In 2017, CREC overall implemented “Ten One Program of Happy Family” in Project Department to improve staff happiness index as the goal. Closely centering on the core work of Project Department, it focused on beautifying working environment, building a platform for making achievements, enriching the cultural life of construction site, caring for employees' physical and mental health, protecting the legitimate rights and interests of employees and building a spiritual home for employees in order to let every employee have a good environment for safety and health, a good mood for work and life, a sound physique in body and mind to realize decent work, happy life and all-round development.

Information 2: CREC Shanghai Bureau extensively carried out the standardization construction of “Family for the Staff”, standardized and unified the resident construction standard so that the appearance color, overall style, image elements, equipment and facilities of the project of “Family for the Staff” become neat and uniform, which not only saved the project resident construction cost but also made the Company look “like family” and take it as the “family”, and let employees more “love family” and “attached to the family”.



# 安全监管

Safety Supervision

 完善管理体系  
Perfection of Management System

 落实保障措施  
Implementation of Safeguard Measures

 保障职业健康  
Concerns about Occupational Health



## 完善管理体系

中国中铁始终将“保持安全生产的稳定局面，为社会提供安全优质的建筑产品，为公众提供安全愉悦的周边环境，为员工创造安全健康的工作条件”作为履行社会责任的重要方面。在长期的施工生产和项目管理过程中，形成了一整套完善的安全管理体系，包括安全生产责任制、防治重大事故、安全投入、安全教育、安全管理和安全督查、安全考核及奖惩等方面。

中国中铁安全观：隐患险于明火，防范胜于救灾，责任重于泰山。

安全管理工作方针：安全第一，预防为主，综合治理。

安全管理工作原则：统一领导、落实责任、分级管理、分类指导、全员参与。

安全管理目标：建设本质安全型企业。

2017年，中国中铁牢固树立安全发展和“零事故”理念，进一步强化“红线”意识和“底线”思维，结合企业改革发展实际，以问题为导向，坚持标本兼治，注重顶层设计，健全规章制度，先后研究制定了《防范惯性事故强化技术与管理交底刚性要求》，就预防惯性事故在技术与管理交底提出了刚性要求，通过强化管理培训与交底，进一步完善现场防控措施，做好源头控制，坚持过程管控，严格工艺标准要求，努力防范生产安全事故发生。下发了《关于将“安全质量隐患排查治理系统”运行情况纳入各级安全质量检查考核的通知》，发挥科技支撑作用，深入开展违规违章整治行动，推进工程项目及安全管理标准化建设；加强安全教育培训，策划实施全公司安全生产系统“学习年”活动，加大安全生产检查、隐患排查治理和事故责任追究力度，加强投资项目和总承包项目安全质量管控，确保了全公司安全生产、职业健康、环境保护状况的稳定。



安全生产工作季度例会

## Perfection of Management System

CREC is constantly taking "to maintain stable condition of safe production, to provide the society with safe and good-quality architectural products, to provide the public with pleasant environment and create safe and health working condition for the staff" as the most important aspect of its social responsibility. In the long-term construction production and project management process, CREC formed a complete set of perfect safety management system, including the safe production responsibility system, prevention of major accidents, safety input, safety education, safety management and safety inspection, safety assessment, rewards and punishments and so on.

CREC safety concept: Hidden danger is more dangerous than open fire, prevention is better than disaster relief, and responsibility is extremely heavy.

Safety management policies: Safety first, prevention as the main and comprehensive management.

Safety management principles: Unified leadership, responsibility implementation, classification management and guidance, full participation.

Safety management objectives: Building of intrinsic safe enterprise.

In 2017, CREC firmly established the concept of safety development and "Zero Accident" and further strengthened the "Red Line" awareness and "Bottom Line" thinking. Combining with the actual situation of corporate reform and development and being problem-oriented, CREC insisted on resolving the current problems and eliminating the root causes, paid attention to top-level design, improved rules and regulations. Moreover, it successively studied and formulated the Rigid Requirement on Prevention of Inertial Accidents and Strengthening of Technology and Management Exchanges, and put forth rigid requirement on technology and management exchanges for preventing inertial accidents. By strengthening management training and information exchange, CREC further improved the on-site prevention and control measures, controlled the accident source, adhered to the process control and strictly followed technical standards, and worked hard to prevent production safety accidents. In addition, CREC issued Notice on Putting the Operation of "Safety and Quality Hidden Danger Investigation and Management System" into Safety and Quality Inspection and Assessment at All Levels". It gave full play to the role of science and technology, carried out regulation violation rectification actions in an in-depth manner and promoted the standardization construction on engineering project and safety management; it strengthened safety education and training, planned and implemented the "Year of Learning" activities in the whole company production safety system, intensified safety production inspection, hidden danger investigation and management as well as accident liability investigation, strengthened safety and quality control over investment projects and general contracting projects so as to ensure the stability of the whole company in production safety, occupational health, and environmental protection.



铁路桥梁隧道施工安全质量培训



中铁上海工程局蒙华铁路大中山隧道安全宣誓

## 落实保障措施

2017年，公司多次召开安全生产专题会议，保持警钟长鸣，对安全生产工作再进行再部署、再安排、再落实，进一步突出重点城市、重点领域，坚持严控事故总量和各类事故频次，坚持问题导向，坚持面向现场，坚持规范管理，健全体制机制，努力做到规章制度落实“零偏差”、技术管理“零失误”、分包管理“零漏洞”、施工作业“零违章”、设备状况“零缺陷”、物资设备验收“零遗漏”、施工现场“零隐患”，实现企业和项目“零事故”。

资料1：2017年下半年，中国中铁在全公司开展了安全生产大检查，各单位成立了由主要领导带队的专项检查组，以隧道与地下工程、大型临时设施、支撑体系、起重设备拆卸与吊装作业、营业线施工，事故警示教育、隐患排查系统应用为重点，狠抓现场文明施工、环境保护和职业健康管理，杜绝现场“三违”等惯性问题，确保了全公司安全生产形势稳定可控。

资料2：2017年，中铁北京工程局在所属各单位和项目部分行推行互联网+安全培训模式试点，在培训的形式、内容、载体等方面进行全面创新，开发的网络培训平台支持全球200多个国家与地区访问，实现了安全教育的全员覆盖；开发了离线端程序，并配合二代身份证识别仪，支持一线作业人员和农民工在会议室等场所集中视频学习，通过现场身份证识别仪、投影机、笔记本电脑，为企业组建一个移动的电子教室，有效地解决项目部安全教育问题。

## Implementation of Safeguard Measures

In 2017, CREC held production safety conferences for many times to keep alarm bell ringing. Moreover, it redeployed, re-arranged and re-implemented the safety production work and further highlighted key cities and key areas. CREC strictly controlled the total number of accidents and the frequency of various types of accidents, insisted on problem orientation, adhered to the on-site management, insisted on standardization management, perfected system and mechanism, strove to achieve "zero deviation" in rules and regulations, "zero error" in technical management, "zero loophole" in subcontracting management, "zero violation" in construction operation, "zero defect" in equipment status, "zero omission" in acceptance of materials and equipment, and "zero hidden danger" in construction site so as to realize "zero accident" in the enterprise and projects.

Information 1: In the second half of 2017, CREC conducted a large-scale inspection of safety production in the whole company and each unit set up a special inspection team led by key leaders. They focused on tunnel and underground engineering, large temporary facilities, supporting systems, lifting equipment disassembling and lifting operations, construction of business lines, accident warning education, troubleshooting system application to carry out on-site civilized construction, environmental protection and occupational health management in order to completely eradicate inertial problem such as "three violations" on site and ensure that the situation of safety production in the whole company is stable and controllable.

Information 2: In 2017, CREC Beijing Engineering Bureau conducted a pilot program of Internet + safety training mode in all affiliated units and project departments. It carried out comprehensive innovation in terms of training form, content and carrier, and developed a network training platform to support more than 200 countries and regions in the world to access, having achieved full coverage of safety education; it developed an off-line program and used the second-generation ID card identification device to support front-line workers and peasant workers for centralized video learning in meeting rooms and other places. Through on-site ID identification devices, projectors, notebook computers, it has set up a mobile electronic classroom for enterprises to effectively solve the safety education problem in project departments.



为农民工义务体检



中铁三局京张铁路怀来梁枕场安全体验馆组织员工进行安全体验

## 保障职业健康

2017年，认真组织宣传落实《中华人民共和国职业病防治法》(2016修订)，坚持依法依规做好职业健康工作。为进一步整体提升施工项目安全技术管理水平，公司下发了《关于2017年度安全生产培训计划的通知》，确定2017年度为全公司安全生产系统“学习年”，全年计划组织培训11期，其中由总部组织4期，就铁路桥梁、隧道施工安全质量管理、优质工程创建管理、地下工程、盾构施工技术及安全质量管理、桥梁、支撑体系、起重吊装及消防、临时用电施工技术及安全质量管理等举办培训班。通过开展安全生产系统“学习年”活动，持续提高了项目管理人员、作业人员的施工技术水平和安全质量意识。

全公司进一步完善员工健康档案，定期组织员工体检，为员工办理职业伤害保险，开展健康讲座，引导员工和企业共同做好职业危害源头控制，积极配合相关部门做好职业危害科学防治。在工程现场，加大资金投入力度，改善员工工作环境，不断完善现场防尘、降噪及安全设施，加强作业场所所有有害气体、粉尘、噪声的检测和治理，为作业人员提供符合安全卫生标准的劳动保护设施和个人防护用品，最大程度地减少职业危害，积极为员工创造安全、卫生、舒适、和谐的工作环境。

资料：2017年，全公司重点工程项目部都设立了“员工心灵驿站”，由项目工会挂牌并开展服务工作，借助心理咨询、EAP心理援助等技术辅助手段，为员工解决心理、情感、职场、学习、家庭、人际关系等方面的心理困惑和思想问题。

## Concerns about Occupational Health

In 2017, CREC seriously organized the implementation of "Law of the People's Republic of China on Prevention and Control of Occupational Diseases" (revised in 2016), adhered to doing occupational health work in accordance with the laws and regulations. In order to further enhance the safety and technical management of construction projects, CREC issued the "Notice on 2017 Safety Production Training Program" and determined that the year 2017 would be the "Year of Learning" in the whole company production safety system. The Company planned and organized 11 training courses throughout the year, of which 4 ones were organized by the Headquarter. Up to now, the Company has held four training courses in railway bridge, technical management on tunnel construction safety and quality, management on high quality engineering, underground engineering, shield construction technology and safety and quality management, bridge, supporting system, lifting and fire fighting, temporary electricity construction technology as well as safety and quality management. Through the "Year of Learning" activity in safety production system, the construction technology and safety and quality awareness of project managers and workers have been continuously improved.

The whole company further perfected staff health record, regularly organized staff physical examination, conducted occupational injury insurance for the staff, carried out health lectures so as to lead staff and enterprises to control the occupational hazard source and actively carry out scientific prevention and treatment to occupational hazard by cooperating with related departments. On the construction site, the Company continued to increase fund investment, improved staff's working conditions, constantly improved the site dustproof, noise reduction and safety facilities, enhanced the inspection and governance of all hazardous gas, dust, noise in the workshop, provided the personnel with working protection facilities and personal protecting devices that meet the safety and sanitation standards, maximally minimized the occupational hazards, and actively created a safe, clean, comfortable and harmonious working environment for the staff.

Information: In 2017, the key project departments in the whole company set up the "Staff Soul Shelter", which was listed and carried out service work by the project labor union. With psychological counseling, EAP psychological assistance and other technical assisted measures, it helped the employees to solve psychological confusion and ideological problems in psychology, emotion, career, learning, family, relationship and other aspects.





# 科技进步

Science & Technology Progress

-  完善创新体系  
Improvement of Innovation System
-  引领产业进步  
Leading Industrial Progress
-  强化创新驱动  
Strengthening Innovation Drive

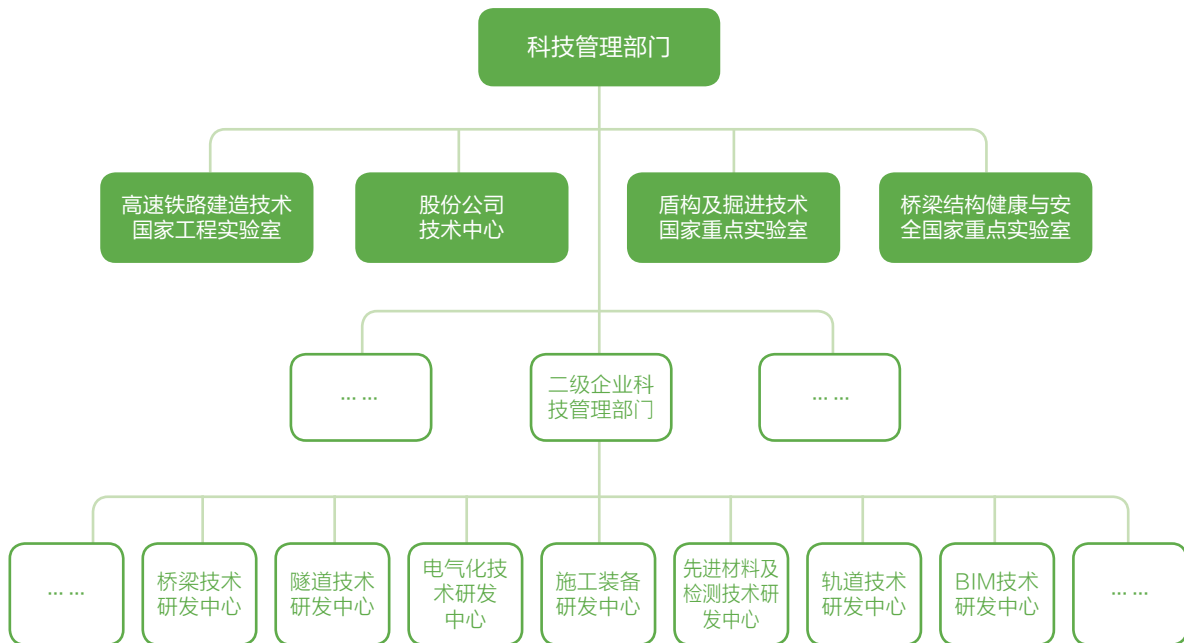


## 完善创新体系

公司根据国家和建筑行业对科技创新提出的新需求，以及企业自身发展需要，加快实施科技创新驱动发展，对已有的科技资源进行统筹规划、优化整合，不断完善以市场为导向、以企业为主体、以项目为载体、以国家级实验室为依托、以技术中心为平台、以专业研发中心为骨干，联合搞攻关、开放搞科研的具有中国中铁特色的“两级四层”技术创新体系，实现以中国中铁技术中心为龙头、各成员企业技术中心为主体、各专业研发中心为骨干的纵向有层次、横向有分工的技术创新的运作管理模式，为公司科技创新打下坚实基础。2017年，公司认真落实国家和国务院国资委关于创新驱动发展的有关要求，统筹规划，突出创新，参加了中央企业创新成就展，受到广泛好评，并荣获多项奖励。

## Improvement of Innovation System

According to the new requirements for scientific and technical innovation put forward by the state and construction industry and the demand for corporate self-development, the Company sped up the implementation of scientific innovation driven development. It carried out overall planning and optimization and integration to existing scientific resources and constantly perfected "two grades and four layers" technical innovation system with Chinese characteristics with market as orientation, corporate as main body, project as carrier, national laboratory as basis, technical center as platform and professional R&D center as backbone through joint tackling and open scientific research so as to achieve technically innovative operation management mode with layers in longitudinal direction and divisions in transverse direction by taking CREC technical center as the leading, all member enterprises' technical centers as main body and all professional R&D centers as backbone, laying a solid foundation for scientific innovation. In 2017, the Company seriously implemented the requirements of the state and SASAC of the State Council on innovation-driven development, made overall plans, highlighted innovations, participated in the innovation achievements exhibition of central enterprises, and received wide acclaim and won numerous rewards.



“两级四层”技术创新体系

## 引领产业进步

作为中国和世界建筑业发展的重要参与者推动者，多年来中国中铁不仅追求自我的发展，还担当着引领行业发展的重要责任，努力实现与产业协同共进，主要表现在扩大产业规模、带动行业自律、引领科技创新、与合作者共赢的诸多方面。

作为科技部、国务院国资委和中华全国总工会授予的全国首批“创新型企业”，拥有“高速铁路建造技术国家工程实验室”、“盾构及掘进技术国家重点实验室”和“桥梁结构健康与安全国家重点实验室”三个国家实验室及7个博士后工作站。拥有11个国家认定的企业技术中心和50个省部认定的企业技术中心，并先后组建了桥梁、隧道、电气化、先进工程材料及检测技术、轨道、施工装备、城市轨道交通及磁悬浮交通工程等8个专业研发中心和1个BIM技术应用研发中心。

资料1：2017年，公司获国家科技进步奖一等奖1项，二等奖1项，技术发明奖1项；获省级（含国家认可的社会力量设奖）科技进步奖298项。截止2016年底，公司共荣获国家科技进步奖和发明奖110项，其中特等奖5项，一等奖15项，稳居国内建筑企业榜首；获省部级科技进步奖2997项。

资料2：目前，公司拥有有效专利7169项，其中发明专利2009项；国家级工法166项，省部级工法2151项。

## Leading Industrial Progress

As the main participator and promoter of the development of Chinese and world architecture, CREC has not only been in pursuit of self-development for many years, but also taken the leading of industrial progress as its important responsibility, which mainly manifested in expanding the industrial scale, driving the industrial self-discipline, leading technical innovation, win-win cooperation with partners and so on.

As the first batch of national "innovative corporate" granted by Ministry of Science and Technology, SASAC and ACFU (All China Federation of Trade Unions), the Company owns 3 national laboratories, i.e. "national engineering laboratory for high-speed rail construction technology", "national key laboratory for shielding and tunneling technology" and "national key laboratory for bridge structure health and safety", and 7 postdoctoral centers. The Company owns 11 nationally certificated technical centers and 50 provincially certificated technical centers, has successively set up 8 professional R&D centers for bridge, tunnel, electrification, advanced engineering materials and measurement technique, rail and construction equipment, urban rail transit engineering and maglev transportation engineering, having one BIM technical application R&D center.

Information 1: In 2017, the Company has been awarded one first-prize and one second-prize for National Progress in Science and Technology and one Invention Award, as well as 298 provincial and ministerial prizes for science and technology progress (including the prizes set by social forces recognized by the state). By the end of 2016, the Company has been totally awarded 110 national prizes for progress in science and technology and invention award including 5 special prizes and 15 first prizes, ranking top among domestic construction enterprises; in addition, it won 2997 provincial and ministerial prizes for science and technology progress.

Information 2: At present, the Company owns 7169 valid patents including 2009 patents for invention. In addition, it owns 166 national construction methods and 2151 provincial and ministerial construction methods.

2017年国家科技奖励获奖情况

序号	项目名称	奖种	获奖等级
1	复杂环境下高速铁路无缝线路关键技术及应用	科技进步奖	一等
2	高速铁路狮子洋水下隧道工程成套技术	科技进步奖	二等
3	超细贝氏体钢制造关键技术及应用	技术发明奖	二等

National Science and Technology Awards in 2017

SN	Name of Project	Type of Award	Grade of Award
1	Key Technology and Application of Seamless Track in High-Speed Rail under Complex Environment	Science & Technology Progress Award	First Prize
2	Complete Set of Technology for Shiziyang Underwater Tunnel Project in High-Speed Rail	Science & Technology Progress Award	Second Prize
3	Key Technology and Application of Superfine Bainitic Steel Manufacturing	Technical Invention Award	Second Prize



科技创新奖项

## 强化创新驱动

2017年，公司认真贯彻落实国家关于“自主创新，重点跨越，支撑发展，引领未来”的科技工作指导方针，结合企业发展实际和工程建设需要，新开科研课题1109项，围绕国家重点支持的高新技术领域和企业“十三五”科技发展规划，针对高速铁路、大跨度桥梁、长大隧道、低碳技术、产业升级、科研成果转化、产融结合等领域加大科技攻关力度，组织开展科技攻关，攻克了一系列关键技术难题，进一步增强了企业科技创新能力。

资料1：2017年公司科技研发紧密围绕公司“十三五”科技发展规划，以京张铁路、伊朗德伊高铁、成兰铁路、拉林铁路、印尼雅万高铁、成贵高铁、渝昆高铁、郑济高铁、银西铁路、郑万高铁、大瑞铁路，郑州黄河特大桥、马尔代夫中马友谊大桥、赤壁长江公路大桥、雅鲁藏布江特大桥、柳州市官塘大桥、阿富准铁路喀腊塑克水库特大桥、八达岭隧道、高黎贡山隧道、成兰铁路杨家坪隧道工程、玉京山隧道、元宝山隧道，广州地铁、北京地铁、昆明地铁、大连地铁、长沙地铁、济南地铁、南宁地铁、哈尔滨地铁等重点工程为依托，重点开展复杂环境地质条件下的长大山岭隧道建造技术、土-岩-孤石混合地层超大直径盾构装备及施工关键技术、大跨

度铁路（公铁两用）斜拉悬吊组合体系桥梁关键技术、地下管廊综合施工技术、市域铁路无砟轨道系统、跨座式单轨轨道交通项目等关键技术的研究。

资料2：2017年，中铁三局集团有限公司等4家单位获中国施工企业管理协会科技创新先进企业。“共振破碎机”，“一种高速铁路无砟轨道自密实混凝土专用减水剂”，“具有曲线线形的桥梁钢塔柱曲线控制方法”、“伞齿棘轮补偿装置”、“铁路轨道几何状态精密测量系统”等5项专利获得第十八届中国专利奖优秀奖。



授权专利

## Strengthening Innovation Drive

In 2017, CREC carefully implemented the national guidelines for scientific and technical works of "independent innovation, key spanning, supportable development and leading the future". Combined with the actual enterprises development and engineering construction demands, it newly started 1109 research projects. Centering on the high-tech fields mainly supported by the state and enterprise "13th Five-Year Plan" for technology development, the Company enhanced scientific research strength in high-speed rails, large span bridges, long tunnels, low-carbon technologies, industrial upgrading, transformation of scientific research achievements, integration of industry and finance, organized and carried out scientific and technological research. It overcame a series of key technical problems, and further enhanced the scientific and technological innovation capability.

Information 1: In 2017, the Company carried out scientific research and development by centering on the Company "13th Five-Year Plan" for technology development. It took major and difficult projects as the support in its science and technology development plan, including Beijing-Zhangjiakou Railway, Iran Tehran-Isfahan High-Speed Rail, Chengdu-Lanzhou Railway, Lasa-Linzhi Railway, Indonesia Jakarta-Bandung High-Speed Rail, Chengdu-Guiyang High-Speed Rail, Chongqing-Kunming High-Speed Rail, Zhengzhou-Jinan High-Speed Rail, Yinchuan-Xining Railway, Zhengzhou-Wanzhou High-Speed Rail, Dali-Ruilu Railway, Zhengzhou Yellow River Super-large Bridge, Maldives China-Maldives Friendship Bridge, Chibi Yangtze River Highway Bridge, Yarlung Zangbo River Super-large Bridge, Liuzhou Guantang Bridge, Kalasuk Reservoir Super-large Bridge in Altay-Zhundong Railway, Badaling Tunnel, Gaoligongshan Tunnel, Yangjiaping Tunnel Project in Chengdu-Lanzhou Railway, Yujingshan Tunnel, Yuanbaoshan Tunnel, Guangzhou

Metro, Beijing Subway, Kunming Metro, Dalian Metro, Changsha Metro, Jinan Metro, Nanning Metro, Harbin Metro, and it mainly carried out the research on key technologies such as long and big mountain tunnel construction technology under complex environment and geological conditions, key technologies for large-diameter shield equipment and construction in earth - rock - boulder mixed layer, key technologies for bridges of long-span railway (highway) cable-stayed suspension system, comprehensive construction technology for underground pipe gallery, ballastless track system in city railway, and straddle-type monorail mass transit project, etc.

Information 2: In 2017, 4 units including CREC No.3 were awarded advanced enterprises for scientific innovation granted by China Association of Construction Enterprise Management. Five patents including "resonance crusher", "a special water-reducing agent for self-compacting concrete of ballastless track of high-speed railway", "curve control method of steel bridge tower with curved line", "umbrella ratchet compensation device", "geometrical precision measurement system for railway track" won the Excellence Award of 18th China Patent Award.



# 环境保护

Environmental Protection

 推进节能减排  
Promotion of Energy Saving and  
Emission Reduction

 加强环境治理  
Strengthening Environment  
Governance

 保护生态环境  
Protection of Ecological  
Environment





节能减排知识学习

## 推进节能减排

2017年，全公司积极开展节能减排工作，发布了中国中铁十三五节能减排规划，全面推行节能减排标准化工地建设，推广应用新技术、新工艺和新设备，提高能源利用效率的同时对污染物排放量进行严格控制，加大技术改造和淘汰落后设备力度，减少废气、废液的排放，充分利用废渣等废弃物。对所属42家单位进行了节能减排工作培训，并组织在京相关单位全面开展北京地区散煤治理工作。2017年全公司无环境责任事故及节能减排重大违规违纪事件，排放污染物均达到国家和所在地相应排放标准。

2017年，全公司每季度按时完成节能减排数据统计和总结分析报告，年度万元营业收入综合能耗（可比价）为0.0571吨标煤/万元，同比下降3.22%，圆满完成了节能减排既定年度工作目标。

资料1：2017年，18个项目被确立为第五批全国建筑业绿色施工示范工程，71个项目获得中国中铁股份有限公司节能减排标准化工地称号。

资料2：2017年，中国中铁进一步加大节能低碳重点技术研发力度，27项技术被评选为中国中铁重点节能低碳技术。同时还开展了企业标准《桥梁工程绿色施工规范及评价标准》的课题研究。

## Promotion of Energy Saving and Emission Reduction

In 2017, CREC actively carried out energy saving and emission reduction work, issued CREC "13th Five-Year" energy saving and emission reduction plan, and fully implemented standardized site construction of energy saving and emission reduction, promoted the application of new technologies, new processes and new equipment to improve energy efficiency while strictly controlling pollutant emissions, increased technological transformation and elimination of backward equipment, reduced emissions of waste gas and waste liquid, and made full use of waste residues and other waste. It carried out energy saving and emission reduction training to its 42 units and organized the relevant units in Beijing to carry out the management of scattered coal in Beijing area in an all-round way. In 2017, there was neither environmental liability accident nor major illegal event on energy saving and emission reduction; and the pollutant emission reached both relevant national and local emission standards.

In 2017, CREC completed the energy saving and emission reduction statistics and summary analysis report in time on a quarterly basis. The annual consolidated energy consumption (comparable price) of operating revenue was 0.0571 tonne of standard coal/ten thousand yuan, which was reduced by 3.22% on year-on-year basis, so that it successfully completed the scheduled annual objectives for energy saving and emission reduction.

Information 1: In 2017, 18 engineering projects were defined as the 5th batch of national green construction demonstration projects in construction industry, and 71 projects won the title of CREC standardized construction site for energy saving and emission reduction.

Information 2: In 2017, CREC made further efforts in R&D of key energy-saving and low-carbon technologies, and 27 technologies were selected as CREC key energy-saving and low-carbon technologies. At the same time, it also carried out the research on enterprise standard, "Green Bridge Construction Project Specifications and Evaluation Criteria".

### 排放物、资源使用、环境及天然资源三个层面的关键绩效指标

	排放物及能源种类	去年累计完成值	本年累计完成值	环境及天然资源
废气排放种类及相关排放数据	氮氧化物、硫氧化物及其他受国家法律及条例规定管理的污染物	---	---	---
温室气体排放总量 (吨)	CO <sub>2</sub>	13195853.6	12613192	---
	其它气体 (如有须注明)	---	---	---
所产生有害废弃物	2017 年度中国中铁以不断完善节能减排管理体系建设为基础, 以评优促建为抓手, 基础设施建设、工业制造、房地产和投资等业务板块的节能减排示范项目绿色施工和绿色制造水平显著提高, 废气排放和废弃物总量较去年同期均有下降, 节能减排和环境保护工作取得新进展。公司计划持续开展节能减排示范项目创建工作, 评选并推广应用重点节能低碳技术, 全面减少废气排放和废弃物总量; 努力提升中国中铁废气及有害、无害废弃物排放相关数据统计水平, 全面完善公司环境、节能减排数据监测体系, 在废气排放、有害/无害废弃物总量分类及量化统计方面取得新提升, 全面推进中国中铁节能减排及环境保护工作。			
所产生无害废弃物总量	同上			
细化描述节能减排放量的措施及所得成果	全公司 2017 年度万元营业收入综合能耗 (可比价) 0.0571 吨标煤, 比去年同期下降 3.22%, 完成年度节能减排工作目标			---
细化描述处理有害及无害废弃物的方法、减低生产量的措施及所有成果	一般通过物理、化学、生物、物化及生化方法处理有害及无害废弃物, 使之适于运输、贮存、利用或处置。废弃物处理的目标是无害化、减量化、资源化。目前采用的主要方法包括压实、破碎、分选、固化、焚烧、生物处理等。例如我公司针对南京南部新城南片区拆迁产生的约 120 万方建渣处理和再生利用难题, 在全国首创探索大批量建渣再生利用, 目前已在该项目建成建渣处理厂, 集中加工处理拆迁产生的混凝土块、费砖及渣土等建筑固体废弃物, 并用于填筑道路结构层。通过建渣再生利用, 能够有效减少约 100 多万吨建筑材料的运输量。			---
按类型划分的直接/间接能源 (如电、气或油)	电 (千瓦)	837891	829139	---
	汽油 (吨)	372650	357620	---
	柴油 (吨)	1267443	1218530	---
	天然气 (万标准立方米)	4100	4390	---
	其它能源 (如有须注明名称)	17080 (吨标煤)	14850 (吨标煤)	---
总耗水量	水 (吨)	170082209.45	163640091	---
描述能源使用效益计划及所得成果	全公司 2017 年度万元营业收入综合能耗 (可比价) 0.0571 吨标煤, 比去年同期下降 3.22%, 完成年度节能减排工作目标			---
描述求取适用水源上可有任何问题, 以及提升用水效益及所得成果	求取适用水源上无问题, 施工生产用水主要用于混凝土养护、车辆冲洗以及抑制扬尘。公司所属项目部高度重视施工节水, 制定有效措施, 其中包括设置三级沉淀池、研发自动喷淋系统以及采集天然降水, 有效节约水资源。			---
不适用, 略	---			---
描述业务活动对环境及天然资源的重大影响, 及已采取管理有关影响的行动	高度重视节能减排示范工程建设, 从源头控制, 降低能耗, 通过在施工现场通过开展节能减排目标管理、制度建设, 落实节能减排责任制, 制定有效措施, 规范项目管理, 实现资源能源的节约及综合利用, 确保无环境责任事故和节能减排重大违法违规违纪事件发生。根据《中国中铁股份有限公司重点节能低碳技术评选推广管理暂行办法》(后简称办法)规定要求, 经严格评审, 征集评选股份公司第三批重点节能低碳技术, 鼓励各子分公司组织进行重点节能低碳技术研发, 共 27 项技术被评选为中国中铁重点节能低碳技术 (第三批), 纳入股份公司重点节能低碳技术目录库。			



## Key performance indicators in three aspects of emissions, resource use, environmental and natural resources

	Emissions and Energy Types	Accumulated Completion Value Last Year	Accumulated Completion Value This Year	Environmental and Natural Resources
Exhaust emission types and related emission data	Nitrogen oxide, sulfur oxide and other pollutants regulated by national laws and regulations	--	--	--
Total amount of greenhouse gas emission (ton)	CO <sub>2</sub>	13195853.6	12613192	--
	Other gases (specify if any)	--	--	--
Hazardous waste produced	In 2017, CREC continued to make the improvement of its energy saving and emission reduction management system as the basis, and excellence evaluation and construction promotion as the starting point, so that its green construction and green manufacturing levels on energy saving and emission reduction demonstration projects in infrastructure construction, industrial manufacturing, real estate and investment sectors have been significantly improved, the exhaust emission and total waste were decreased compared to the same period of last year, and a new progress was made in energy saving and emission reduction as well as in environmental protection. The company plans to continue the establishment of energy saving and emission reduction demonstration project, select and promote the application of key energy-saving and low-carbon technologies, and comprehensively reduce emission and total waste; it will make efforts to improve the statistical level of CREC waste gas and hazardous/non-hazardous waste emissions, comprehensively improve the company's environment, energy saving and emission reduction data monitoring system, and achieve a new promotion in classification and quantitative statistics of exhaust emission and total hazardous/non-hazardous waste so as to overall promote CREC energy saving and environmental protection work.			
Total amount of non-hazardous waste produced	In 2017, CREC continued to make the improvement of its energy saving and emission reduction management system as the basis, and excellence evaluation and construction promotion as the starting point, so that its green construction and green manufacturing levels on energy saving and emission reduction demonstration projects in infrastructure construction, industrial manufacturing, real estate and investment sectors have been significantly improved, the exhaust emission and total waste were decreased compared to the same period of last year, and a new progress was made in energy saving and emission reduction as well as in environmental protection. The company plans to continue the establishment of energy saving and emission reduction demonstration project, select and promote the application of key energy-saving and low-carbon technologies, and comprehensively reduce emission and total waste; it will make efforts to improve the statistical level of CREC waste gas and hazardous/non-hazardous waste emissions, comprehensively improve the company's environment, energy saving and emission reduction data monitoring system, and achieve a new promotion in classification and quantitative statistics of exhaust emission and total hazardous/non-hazardous waste so as to overall promote CREC energy saving and environmental protection work.			
Detailed description of measures and the results obtained in energy saving and emission reduction	In 2017, the comprehensive energy consumption (comparable price) per ten-thousand operating income was 0.0571t standard coal, which was reduced by 3.22% on year-on-year basis compared to the last year, and the Company successfully completed the annual objectives for energy saving and emission reduction.			--
Detailed description of methods for handling hazardous and non-hazardous waste, measures to reduce production and all results	Generally, hazardous and non-hazardous wastes are handled through physical, chemical, biological, physicochemical and biochemical methods in order to make them suitable for transport, storage, utilization or disposal. The goal of waste disposal is harmless, reduced, and resource-based. The main methods currently used include compaction, crushing, sorting, solidification, incineration, and biological treatment, etc. For example, in response to the difficult problem of processing and recycling about 1.2 million cubic meters of construction rubbles produced in housebreaking and migration in the south area of new town in the south of Nanjing, CREC took the first to explore the recycling of large amounts of construction rubbles in China. Up to now, it has completed the construction of construction rubbles treatment plant to process and treat the building solid waste produced in demolition such as concrete blocks, bricks, and muck, and used them to fill road structure layers. Through the recycling of construction rubbles, the transportation volume of more than 1 million tons of building materials can be effectively reduced.			--
Direct/indirect energy classified by type (e.g. electricity, gas or oil)	Electricity (kilowatt)	837891	829139	--
	Gasoline (ton)	372650	357620	--
	Diesel (ton)	1267443	1218530	--
	Natural gas (10,000 standard cubic meters)	4100	4390	--
	Other energy (specify the name if any)	17080 (ton standard coal)	14850 (ton standard coal)	--
Total water consumption	Water (ton)	170082209.45	163640091	--
Describe energy use benefit plan and the results obtained	In 2017, the comprehensive energy consumption (comparable price) per ten-thousand operating income was 0.0571t standard coal, which was reduced by 3.22% on year-on-year basis compared to the last year, and the Company successfully completed the annual objectives for energy saving and emission reduction.			--
Describe any problems on the applicable water source, and enhancement in water efficiency and results obtained	There is no problem on the applicable water source, and the construction production water is mainly used for concrete curing, vehicle washing and dust suppression. The project departments of the Company attached great importance to water saving in construction and formulated effective measures, including setting up a three-stage sedimentation tank, developing an automatic spraying system and collecting natural precipitation to effectively save water resources.			--
NA, omitted	--			--
Describe the significant impact of operational activities on the environment and natural resources and the actions taken to manage the impact	CREC attached great importance to energy saving and emission reduction demonstration project construction, and carried out control from the source to reduce energy consumption. Through energy saving and emission reduction target management, system construction in construction site, it implemented energy saving and emission reduction responsibility system. Moreover, it formulated effective measures to standardize project management and realized the conservation and comprehensive utilization of resources and energy to ensure that there are no environmental accidents and serious violations of laws and regulations in energy saving and emission reduction. According to the requirements of "CREC Interim Measures for Promotion and Management of Energy-saving and Low-carbon Technologies" (hereinafter referred to as the Measures), through strict review, it solicited and appraised the third batch of key energy-saving and low-carbon technologies of joint-stock company, and encouraged all sub-branches to organize research and development of key energy-saving and low-carbon technologies. A total of 27 technologies were selected as CREC Key Energy-Saving and Low-carbon Technologies (the third batch), and were listed into the directory database of key energy-saving and low-carbon technologies of stock company.			



拉林铁路绿色施工

## 加强环境治理

2017年，公司依法依规做好企业环境保护工作，根据《中华人民共和国环境保护法》《建设项目环境保护管理条例》等有关环境保护法律法规、规章制度、技术规范，细化出台了环境保护工作要点和实施要求，构建企业环境保护管理工作体系。公司对企业各级环保工作，贯彻“属地管理”、“预防为主，防治结合”、“谁污染谁治理”的原则，在国家、地方环境保护主管部门的监督、管理下，实行股份公司统一领导，各子、分公司逐级负责的管理模式，走清洁生产，走可持续发展的道路。积极导入ISO14001:2004环境管理体系标准，确保环境保护工作有序可控。对于公司投资、设计、资源类企业作为投资主体的建设项目，坚持依法进行环境影响评价，履行环境审批程序，其环境保护项目必须纳入项目总体施工组织设计，确保相关基建、技改项目防治污染设施与主体工程同时设计、同时施工、同时投产。为保证生产、生活区各类污染源污染排放及处理设施的正常运行，公司持续加强对生产过程中废水（液）、废（烟）气、施工扬尘、噪声（振动）、固体废弃物（碴）、放射性危害的排放控制管理，建立目标、制定措施、落实责任、确保达标排放。对于施工过程中涉及的临时用地，严格编制用地及复垦规划，特别注意居民稠密区、水源保护区、风景游览区、自然保护区和国家重点保护的名胜古

迹的环境保护，并在工程竣工后按照规定复垦，最大限度修复使用环境。作业场所内易产生尘埃的物料，采取围栏、遮盖等防尘措施，施工污水、泥浆必须经三级沉淀池沉淀后排放并由专人负责定期清理，积极打造绿色建筑工地。提高工业用水的重复利用率，降低单位产品的耗水量，节约水资源。

资料1：2017年，公司积极参与国家重点环境保护实用技术和示范工程的评审、推广工作。中铁七局郑州市南四环至郑州南站城郊铁路工程，中铁大桥局港珠澳大桥主体工程、宜昌庙嘴长江大桥等项目荣获2017年全国建筑业绿色施工示范工程。

资料2：2017年，中铁宝桥重点对钢结构涂装过程中的挥发性有机物进行治理，新建成三座移动式喷漆房。喷漆作业时，在排风机的作用下，使喷漆工作区产生一定的断面风速，能够使喷漆产生的漆雾及时有效地排出，保证喷漆工人操作区的环境符合工业卫生标准。有机废气收集后，通过活性炭纤维吸附浓缩、热气流脱附和催化燃烧的组合工艺予以净化。



全国建筑业绿色施工示范工程

## Strengthening Environment Governance

In 2017, CREC performed enterprise environmental protection work according to laws and regulations. In accordance with Environmental Protection Law of the People's Republic of China, Administrative Regulations on Environmental Protection of Construction Project and other related environmental protection laws and regulation, rules and system as well as technical specifications, it released the details of key environmental protection work and implementation requirements, and established enterprise environmental protection management system. The Company carried out the principles of "Localization Management", "Prevention First, Combination of Prevention and Treatment", and "Pollution Control by the Unit Producing Pollution" in terms of enterprise environmental protection at all levels. Under the supervision and administration of national and local environmental protection authorities, it implemented a management model of unified leadership of a joint-stock company and responsibility undertaking at all levels of subsidiaries and branches, taking the road of cleaner production and sustainable development. In addition, it actively introduced ISO14001:2004 environmental management system standards to ensure that the environmental protection work is orderly and controllable. For construction projects that CREC invests, designs, and with resources enterprises as the main investors, it insisted on conducting environmental impact evaluation according to law and fulfilling environmental approval procedures. Its environmental protection projects must be included in the overall project construction design to ensure that the relevant infrastructure and technological renovation projects are designed, constructed and put into operation simultaneously with the pollution prevention and control facilities and the main project. In order to ensure the normal operation of pollution discharge and treatment facilities of various sources of pollution in the production and living areas, the Company continued to strengthen the control management on discharge of waste water (liquid), waste (smoke) gas, dust, noise (vibration), solid waste (fragments) and radioactive hazards, setting goals, developing measures and implementing responsibilities to ensure up-to-standard discharge. For the temporary land involved in the construction process,

the Company strictly prepared land use and reclamation planning, with special attention to the environmental protection in densely populated areas, water source conservation areas, scenic areas, nature reserves and national key protected monuments. In addition, it carried out reclamation in accordance with the provisions after completion of the project to maximize the repair and use of the environment. For materials prone to dust in the workplace, the Company took dust-proof measures such as fencing and covering. The construction sewage and mud must be discharged after being precipitated in three sedimentation tanks and must be cleaned regularly by specially-assigned person so as to actively build a green construction site. It improved the recycle rate of industrial water, reduced water consumption per unit of product, and saved water resources.

Information 1: In 2017, the Company actively took part in the evaluation and promotion of national key practical technologies and demonstration projects of environmental protection. The projects including CREC No.7 suburban railway works from South 4th Ring Road to South Zhengzhou Railway Station, main works of CRBB Hong Kong-Zhuhai-Macau Bridge and Yichang Miaozui Yangtze River Bridge won 2017 national green construction demonstration projects in construction industry.

Information 2: In 2017, CRBBG (China Railway Baoji Bridge Group Co., Ltd.) focused on the treatment of volatile organic compounds in the steel structure coating process and newly built three mobile painting booths. During the painting operation, under the action of the exhaust fan, certain section air velocity is generated in the painting working area, so that the paint mist generated by the painting can be discharged in time and effectively, thus the environment of the painting worker's operation area is in line with the industrial hygiene standards. After organic waste gas is collected, it can be purified by a combined process of activated carbon fiber adsorption and concentration, hot air desorption and catalytic combustion.



官厅水库特大桥钢梁拼装

## 保护生态环境

2017年，公司积极践行“绿水青山就是金山银山”绿色发展理念，坚持节约资源和保护环境并重，努力建设“环境友好型、资源节约型”工程。在工程施工前期，合规组织专业机构开展生态环境保护评估，制定切实可行的保护方案，特别是针对生态易受扰的作业施工场区，做到生态环境与工程建设同步规划，同步实施，开展水土保持、生物多样性保护、植被保护等措施。施工过程中注重生态保护投入，使用环保设备、改进施工工艺和优化施工方案，减少对水、大气、植被和生物的影响。全年未发生生态环境事件。

资料1：中铁大桥局在京张高铁官厅水库特大桥施工中，为保护北京三大水源地之一官厅水库生态环境不受影响，委托第三方水质监测单位对水库水质进行实时监测，并反复优化施工方案，采取钢梁岸上拼装，再从岸边向湖心顶推的施工方式，最大限度减少水上施工工序，最大限度降低施工对库区水资源的影响。

资料2：中铁隧道局施工的京沈高铁望京隧道是北京地区首条高铁大直径泥水盾构隧道。在施工中，项目部通过科技创新，总结出一套由筛分、旋流、压滤、离心并辅助药剂的方法，成功解决了超细泥土颗粒的分离难题，实现了泥水盾构固液分离，分离出的渣土运到专门的储运场所，清水则循环使用，保证零排放、零渗漏、零污染，做到了绿色施工。

## Protection of Ecological Environment

In 2017, CREC actively implemented the green development philosophy of "Lucid waters and lush mountains are invaluable assets", and adhered to both resources conservation and environment protection so as to strive to build "environment-friendly and resource-saving" projects. In the early stage of project construction, CREC always organized professional institutions to evaluate the ecological environmental protection, made practical and effective protection program, especially focusing on construction site whose ecology is liable to be disturbed, it planned the ecological environment and project construction synchronously. Moreover, it carried out works such as conservation of water and soil, biodiversity protection, vegetation protection etc. In the construction process, CREC paid attention to the investment in ecological protection, applied environmental protection equipment, improved ecological construction process and optimized construction program, thus reducing the impact on water, air, vegetation and organism. No ecological destruction event occurred throughout the year.

Information 1: In Guanting Reservoir Super-large Bridge construction in Beijing-Zhangjiakou High-Speed Rail, CRBB (China Railway Bridge Bureau) entrusted a third-party water quality monitoring unit for real-time monitoring of reservoir water quality in order to protect the ecological environment of Guanting Reservoir (one of Beijing's three major water sources) from being affected. In addition, CRBB repeatedly optimized the construction scheme, took the construction scheme of assembling steel beam on the shore and pushing the beam to the middle of lake from the shore to minimize the water construction procedures and minimize the impact of the construction on water resources in the reservoir area.

Information 2: Wangjing Tunnel in Beijing-Shenyang High-Speed Rail constructed by China Railway Tunnel Bureau is the first large-diameter slurry shield tunnel in the high-speed rail in Beijing area. In construction, through scientific and technological innovation, the project departments summed up a set of methods for screening, swirling, filter pressing, centrifugation and auxiliary agents, and successfully solved the problem of separation of ultra-fine soil particles to achieve solid-liquid separation of slurry shield. The separated muck was transported to a special storage place while the fresh water was recycled to ensure zero emissions, zero leakage and zero pollution for green construction.



# 精准扶贫

## Targeted Poverty Alleviation

-  精准扶贫规划  
Targeted poverty alleviation planning

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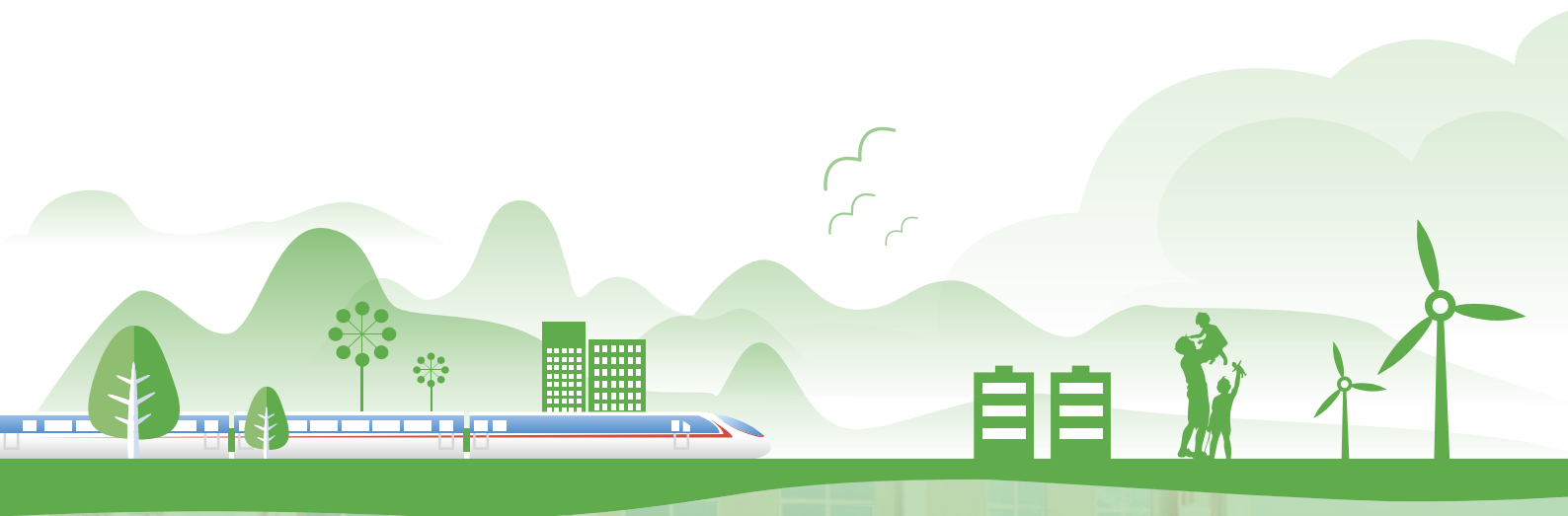
-  年度精准扶贫概要  
Targeted poverty alleviation summary

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-  精准扶贫成效  
Targeted poverty alleviation result

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-  后续精准扶贫计划  
Subsequent targeted poverty alleviation plan



## 精准扶贫规划

在国务院扶贫办和国资委的统一部署下，控股股东中铁工协同公司积极响应党和国家的号召，积极履行中央企业的社会责任和义务，自 2002 年开始参与定点扶贫工作，十多年来，始终从当地老百姓的实际需要出发开展定点帮扶工作，充分发挥企业优势，加大智力支持、技术服务及信息与政策指导，为定点扶贫县如期脱贫做出应有贡献。为贯彻落实《中国农村扶贫开发纲要（2011—2020 年）》《关于创新机制扎实推进农村扶贫开发工作的意见》以及国务院扶贫办、国务院国资委总体要求和部署，公司发布了《中国中铁 2016-2020 年定点扶贫工作实施方案》，全面贯彻落实习近平总书记关于扶贫工作“四个切实”、“五个一批”的指示精神，把干部扶贫作为公司扶贫工作的重要抓手，坚持政府主导，企业参与；坚持实事求是，突出精准；坚持突出重点，分类指导；坚持上下联动，合力攻坚。力争到 2020 年，稳定实现建档立卡贫困户不愁吃、不愁穿，实现三个帮扶县按期脱贫摘帽。

## Targeted Poverty Alleviation Planning

Under the unified arrangement of the Poverty Alleviation Office and the SASAC of the State Council, the controlling shareholder, China Railway Hi-tech Industry Corporation Limited, positively responded to the call of the Party and the State and actively fulfilled the social responsibilities and obligations of a central enterprise. Since 2002 when it began to participate in targeted poverty alleviation, In addition, it has always carried out targeted assistance works from the actual needs of local people, gave full play to the advantages of the enterprise, increased intellectual support, technical services and information and policy guidance, and make its due contributions to throwing off poverty as scheduled in designated poverty alleviation county. In order to implement the "Outline for Rural Poverty Alleviation and Development in China (2011-2020)", "Opinions on Pushing Rural Poverty Alleviation and Development by Innovation Mechanism" and overall requirements and deployment of Poverty Alleviation Office and SASAC of the State Council, CREC released "CREC 2016 - 2020 targeted poverty alleviation work plan". It comprehensively implemented the instructions of General Secretary Xi Jinping on "four practical works" and "five batches" for poverty alleviation, and took cadre poverty alleviation as an important starting point for the Company in poverty alleviation work. It insisted on government-leadership and enterprise participation; it insisted on seeking truths from facts and highlighted targeted poverty alleviation; it insisted on highlighting the important point and classification guidance; it insisted on linkage between the superiors and subordinates for solving problem together. It strives to make the poor households that were established the record not worry about their eating and wearing by 2020, help the three county poverty to uncap.



与桂东县精准扶贫签约仪式



与汝城县精准扶贫签约仪式

## 年度精准扶贫概要

2017年，面对扶贫工作新形势，公司全系继续高度重视扶贫开发工作，立足企业实际，紧扣“精准扶贫、精准脱贫”，各二级单位按照公司所属当地政府安排，共有15家所属企业参与了扶贫开发工作，通过资金投入、产业帮扶、吸纳贫困劳动力就业等方式积极助力贫困地区脱贫攻坚。全年，公司共投入近6500万元助力扶贫开发，帮助近6000个建档立卡贫困户家庭脱贫摘帽。其中投入3000万元支持保德县中南部公路项目改建，将有效解决群众出行、矿产资源利用以及农产品外运等问题；投入2250万元支持桂东县大塘工业园一期工程项目建设、解决了异地搬迁320户共计约1100人就业问题；投入143.4万元支持汝城县技能教育培训基地建设，通过依托中国中铁教育资源支撑，每年可接收建档立卡贫困户家庭学生300人左右，脱贫带动成效明显。同时，因地制宜，积极支持当地产业发展，在汝城县打造了产业扶贫示范基地，在南洞乡山联村建立了万头野猪生态养殖基地，在桂东县建立了新坊乡溪源村朝天椒种植基地、沅江镇上东村中药材建设示范基地，共吸纳1500人贫困人口就业，人均家庭增收1500-3000元左右。

## Targeted Poverty Alleviation Summary

In 2017, facing the new situation of poverty alleviation work, all departments of the Company continued to attach great importance to poverty alleviation and development work. Based on the reality of the enterprises, the Company focused on the objective of "targeted poverty alleviation and targeted poverty elimination". In accordance with the arrangement of the local government, 15 affiliated enterprises under second-level units participated in the poverty alleviation and development work and actively helped poverty-stricken areas get rid of poverty through funds input, industrial assistance and employment of poor labor force. Throughout the year, the Company invested a total of nearly RMB65 million Yuan for poverty alleviation and development and helped nearly 6,000 poor families that were established the record to eliminate poverty. Of which, RMB 30 million Yuan was invested to support the reconstruction of the south-central highway project in Baode County which would effectively solve such problems as the travel of the masses, the utilization of mineral resources and the transportation of agricultural products; RMB 22.5 million Yuan was invested to support the construction of Phase I project of Datang Industrial Park in Guidong County and solved the employment problem of a total of 1,100 persons of 320 relocated households; RMB1.434 million Yuan was invested to support the construction of Rucheng County Skills Education and Training Base. By relying on the support of CREC education resources, it can receive about 300 students each year from poor families that were established the record, thus bringing about remarkable results in poverty elimination. In addition, it adjusted measures to local conditions and actively supported local industrial development. It built an industrial poverty alleviation demonstration and the 10,000-head wild boar ecological breeding base in Shanlian Village of Nandong Township in Rucheng County. It set up the planting base of pod pepper in Xiyuan Village of Xinfang Township in Guidong County and Chinese herbal medicine demonstration base in Shangdong Village of Oujiang Township. A total of 1500 poor people obtained employment, and per capita family income was increased by 1500-3000 Yuan or so.

## 精准扶贫成效

### 排放物、资源使用、环境及自然资源三个层面的关键绩效指标

单位：万元 币种：人民币

指标	数量及开展情况
一、总体情况	6498.31
其中：1.资金	5457.49
2.物资折款	981.52
3.帮助建档立卡贫困人口脱贫数（人）	8584
二、分项投入	
1.产业发展脱贫	
其中：1.1 产业扶贫项目类型	<input checked="" type="checkbox"/> 农林产业扶贫 <input type="checkbox"/> 旅游扶贫 <input type="checkbox"/> 电商扶贫 <input checked="" type="checkbox"/> 资产收益扶贫 <input checked="" type="checkbox"/> 科技扶贫 <input checked="" type="checkbox"/> 其他
1.2 产业扶贫项目个数（个）	26
1.3 产业扶贫项目投入金额	2607.13
1.4 帮助建档立卡贫困人口脱贫数（人）	3551
2.转移就业脱贫	
其中：2.1 职业技能培训投入金额	165.57
2.2 职业技能培训人数（人/次）	1708.4
2.3 帮助建档立卡贫困户实现就业人数（人）	1801
3.易地搬迁脱贫	
其中：3.1 帮助搬迁户就业人数（人）	83
4.教育脱贫	
其中：4.1 资助贫困学生投入金额	151.09
4.2 资助贫困学生人数（人）	2466
4.3 改善贫困地区教育资源投入金额	1859.5
5.健康扶贫	
其中：5.1 贫困地区医疗卫生资源投入金额	168.4
6.生态保护扶贫	
其中：6.1 项目名称	<input checked="" type="checkbox"/> 开展生态保护与建设 <input type="checkbox"/> 建立生态保护补偿方式 <input type="checkbox"/> 设立生态公益岗位 <input type="checkbox"/> 其他
6.2 投入金额	9.05
7.兜底保障	
其中：7.1 帮助“三留守”人员投入金额	40
7.2 帮助“三留守”人员数（人）	283
7.3 帮助贫困残疾人投入金额	5.71
7.4 帮助贫困残疾人数（人）	40
8.社会扶贫	
其中：8.1 东西部扶贫协作投入金额	35.76
8.2 定点扶贫工作投入金额	4810.5
8.3 扶贫公益基金	404
9.其他项目	
其中：9.1 项目个数（个）	16
9.2 投入金额	2227.85
9.3 帮助建档立卡贫困人口脱贫数（人）	3446
9.4 其他项目说明	
三、所获奖项（内容、级别）	

公司扶贫挂职干部张忠文获得忻州市扶贫模范称号



## Targeted Poverty Alleviation Result

Key performance indicators in three aspects of emissions, resource use, environmental and natural resources

Unit: Ten-thousand Yuan Currency: RMB

Index	Quantity and Development
I. General Information	6498.31
Of which, 1. Fund	5457.49
2. Materials converted into cash	981.52
3. Number of poverty elimination among the poor families that were established the record (person)	8584
II. Sub-item Investment	
1. Industry development and poverty elimination	
Of which, 1.1 Type of poverty alleviation project by industry	<input checked="" type="checkbox"/> Poverty alleviation by agriculture and forestry industry <input type="checkbox"/> Poverty alleviation by tour <input type="checkbox"/> Poverty alleviation by e-commerce <input checked="" type="checkbox"/> Poverty alleviation by assets income <input checked="" type="checkbox"/> Poverty alleviation by science and technology <input checked="" type="checkbox"/> Others
1.2 Number of poverty alleviation project by industry (piece)	26
1.3 Investment amount for poverty alleviation project by industry	2607.13
1.4. Number of poverty elimination among the poor families that were established the record (person)	3551
2. Poverty elimination by transfer and employment	
Of which, 2.1 Investment amount for vocational skill training	165.57
2.2 Number of persons receiving vocational skill training (person/time)	1708.4
2.3. Number of employment among the poor families that were established the record (person)	1801
3. Poverty elimination by relocation	
Of which, 3.1 Number of employment for relocated household (person)	83
4. Poverty elimination by education	
Of which, 4.1 Investment amount for helping poor students	151.09
4.2 Number of poor students receiving financial aid (person)	2466
4.3 Investment amount for improving educational resources in poverty-stricken areas	1859.5
5. Poverty alleviation by health	
Of which, 5.1 Investment amount for medical and health resources in poverty-stricken areas	168.4
6. Poverty alleviation by ecological protection	
Of which, 6.1 Item name	<input checked="" type="checkbox"/> Carry out ecological protection and construction <input type="checkbox"/> Establish ecological protection and compensation method <input type="checkbox"/> Set up ecological public welfare post <input type="checkbox"/> Others
6.2 Investment amount	9.05
7. Catch-all support	
Of which, 7.1 Investment amount for helping the "three left-behind persons (the left-behind elderly, the left-behind women and the left-behind children)"	40
7.2 Number of the "three left-behind persons" receiving the help (person)	283
7.3 Investment amount for helping the poor disabled	5.71
7.4 Number of the poor disabled receiving the help (person)	40
8. Social poverty alleviation	
Of which, 8.1 Investment amount for cooperation in eastern and western poverty alleviation	35.76
8.2 Investment amount for fixed-point poverty alleviation	4810.5
8.3 Public fund for poverty alleviation	404
9. Other items	
Of which, 9.1 Number of item (piece)	16
9.2 Investment amount	2227.85
9.3. Number of poverty elimination among the poor families that were established the record (person)	3446
9.4. Other item description	
III. Received Awards (content, level)	
Zhang Zhongwen, CREC temporary cadre in poverty alleviation, won the title of Xinzhou Model in Poverty Alleviation	



精准扶贫援建项目开工仪式



与保德县精准扶贫签约仪式

## 后续精准扶贫计划

2018 年，扶贫开发工作将进入攻坚拔寨的关键时期，中国中铁将创新思路，积极行动，落实《中国中铁 2016-2020 年定点扶贫工作实施方案》，努力提升工作水平，持续有效推进脱贫攻坚。

## Subsequent Targeted Poverty Alleviation Plan

In 2018, the poverty alleviation and development work will be into a crucial period for tackling key problems. CREC will innovate its thinking and take active actions to carry out the "CREC Implementation Plan for Targeted Poverty Alleviation in 2016-2020", and will strive to upgrade its work standards so as to effectively and continuously carry poverty alleviation forward.



# 公益事业

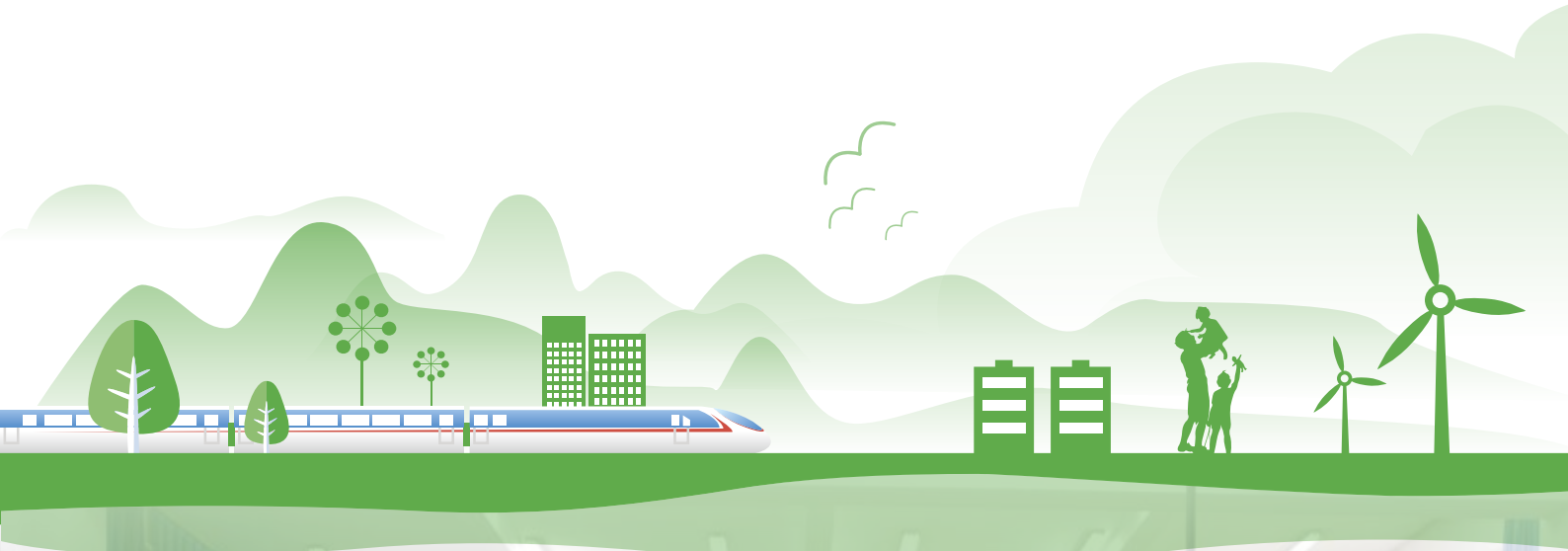
Public Welfare Undertaking



抢险救灾  
Disaster Relief



社区服务  
Community Service





四川阿坝州九寨沟地震抢险救灾

## 抢险救灾

多年来，中国中铁在一系列重大自然灾害面前挺身而出，勇挑重担，积极投身抢险救灾；积极践行央企责任，受到各级政府和社会各界好评。

2017年，全公司积极参与各地各类抢险救灾260多次，投入抢险救灾人员1.8万多人次、设备3000多台套、投入资金近4000万元。中国中铁在昆明、贵阳、西安建立了三支国家隧道专业应急救援队，并多次参与国家重大救援任务。其中，昆明救援队共救出12名被困人员。

资料1：2017年6月24日，四川茂县发生山体滑坡，中国中铁党委高度重视，迅速部署9家单位参与抢险救灾工作，共投入抢险救灾人员300多人次、设备70多台套，以及大量救援物资，并成功救出3人。

资料2：2017年8月8日，四川阿坝州九寨沟县发生地震后，中国中铁各单位迅速行动，立即组织离受灾点较近的项目部全力参与抢险救灾工作。共投入抢险救灾人员200多人次、设备50多台套，以及帐篷、铁锹、矿泉水等大量救援物资，完成了搜救人员、抢修道路、后勤救助等工作。

## Disaster Relief

For many years, CREC has come out boldly and dared to challenge when facing series of serious natural disasters, and it actively took part in the rescue works; it positively fulfilled the responsibility of central enterprise, and has been highly praised by both the government and public.

In 2017, the whole company actively took part in various rescue and relief works in all places for nearly 260 times, with nearly 18,000 person-times of rescue and relief personnel, more than 3000 sets of equipment and nearly RMB 40 million Yuan of investment. CREC has established three national tunnel professional emergency rescue teams in Kunming, Guiyang, and Xi'an, and has participated in major emergency rescue tasks. Of which, the Kunming rescue team successfully rescued 12 trapped persons.

Information 1: On June 24, 2017, a landslide occurred in Mao County, Sichuan Province. CREC Party Committee attached great importance to it, and rapidly deployed 9 units to participate in disaster relief work. It invested more than 300 person-times of rescue and relief personnel, more than 70 sets of equipment, as well as a large amount of relief supplies, and successfully rescued 3 persons.

Information 2: On August 8, 2017, after the earthquake in Jiuzhaigou County, Aba Prefecture, Sichuan Province, all the units of CREC took prompt action and immediately organized the project departments close to the affected area to fully participate in the disaster relief work. It invested more than 200 person-times of rescue and relief personnel, more than 50 sets of equipment, as well as a large amount of relief supplies including tents, shovels, mineral water, and successfully completed such works as people search and rescue, road repair and logistical assistance.



四川茂县山体滑坡抢险救援



首都国企开放日活动

## 社区服务

中国中铁长期以来坚持地企文明、和谐共建的工作思路，广泛开展拥军优属，支持军警建设，志愿服务敬老院、医院、街道、社区、学校等地方单位，以实际行动履行企业公民责任。

2017年，全公司共组建了1105支志愿服务队，投入志愿服务16414人次，开展各类志愿服务活动4283次，帮扶人数达44033人，大力弘扬社会道德风尚，积极构建和谐社会。

2017年，全公司捐资助学1200多万元，帮扶学生近9000人；其他公益慈善事业投入超过6000万元。

资料1：自2013年以来，中铁四局探索开展了包括农民工“幸福工程”志愿项目在内的多项公益活动，旨在通过“全方位的系统规划，全覆盖的资源整合，全周期的志愿行动”，服务农民工，造福农民工。中铁四局爱心团队先后荣获“全国青年志愿者优秀组织奖”、“优秀项目奖”、“全国青年志愿服务项目大赛金、银、铜奖”等奖励，关爱农民工“幸福工程”入选了全国“四个100”最佳志愿服务项目。

资料2：2017年6月10日，中铁六局举行首都国企开放日活动，50余位北京市民、18家媒体的20余名记者及青年汇朋友们走进中铁六局京张高铁项目和磁悬浮S1线工地，分别在高速铁路现代化桥梁施工现场、高科技生产指挥中心、标准化辅助生产区、专业化施工生产、安全体验馆和北京市首条中低速磁悬浮S1线的施工现场进行了体验。

资料3：2017年9月6日，中铁十局机关组织开展了“汇聚热血传递爱”主题献血活动。共有74名爱心志愿者无偿捐献血量26200ml。中铁十局机关每年都组织无偿献血活动，有效地缓解了济南市临床血液供应的紧张局面，为保障人民群众生命健康做出了积极贡献。



中铁十局开展爱心献血活动

## Community Service

CREC always insisted on the work ideas of local corporate civilization and harmonious construction, widely supported the army and gave preferential treatment to the families of the armyman and martyrs, supported military police construction, offered volunteer services to gerocomium, hospital, street office, community, school and other local institutions, implementing its corporate citizenship responsibility by its actual deeds.

In 2017, the whole company totally set up 1105 volunteer service teams that offered volunteer services for 16,414 person-times, and carried out various volunteer service activities for 4283 times, with 44,033 persons receiving the help. It vigorously carried forward the social morality, and actively built a harmonious society.

In 2017, the whole company donated the fund of more than RMB 12 million Yuan for education, helped nearly 9000 students; it invested over RMB 60 million Yuan to other public welfare undertakings.

Information 1: Since 2013, CREC No.4 has explored and carried out a number of public welfare activities including the "Happiness Project" volunteer project for peasant workers to serve peasant workers and benefit peasant workers through "comprehensive system planning, full-coverage resource integration and full-cycle volunteering". The Loving-care Team of CREC No.4 won a number of awards such as National Outstanding Young Volunteer Organization Award, Outstanding Project Award, Gold, Silver and Bronze Prizes of National Young Volunteer Service Project Competition, and its "Happiness Project" volunteer project for caring peasant workers was included in the national "Four 100" best volunteer service projects.

Information 2: On June 10, 2017, CREC No.6 conducted Open Day activity of the capital state-owned enterprises. More than 50 Beijing residents, more than 20 reporters from 18 media and MiniHouse friends walked into the construction site of Beijing-Zhangjiakou High Speed Rail project and the Maglev Line S1 site undertaken by CREC No.6. They respectively experienced at the construction site of the modernized high-speed railway bridges, high-tech production command centers, standardized auxiliary production areas, specialized construction production and safety experience halls and the first medium and low speed Maglev Line S1 in Beijing.

Information 3: On September 6, 2017, the organ of CREC No.10 organized a blood donation activity on the theme of "gathering blood to pass on love". In this activity, a total of 74 loving-care volunteers donated blood of 26200ml. The organ of CREC No.10 organizes voluntary blood donation activities every year, thus effectively alleviating the shortage situation of clinical blood supply in Jinan and making positive contributions to ensuring people's lives and health.



# 合作共赢

Win-Win Cooperation

-  加强战略合作  
Strengthening Strategic Cooperation

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-  推进产业合作  
Promotion of Industrial Cooperation

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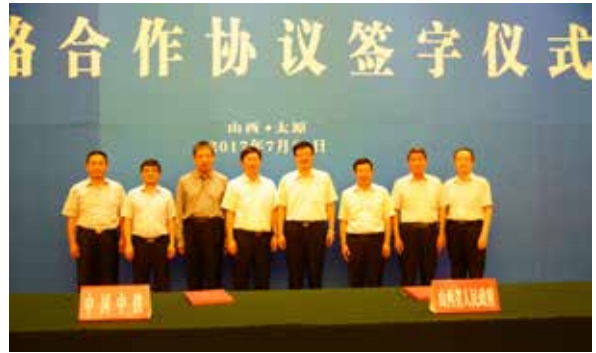
-  实施项目合作  
Construction Project Cooperation

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中国中铁与广西壮族自治区签署合作协议



中国中铁与山西省签署战略合作协议

## 加强战略合作

中国中铁十分重视与国内外各类组织和大型企业的战略合作。公司与各级政府、高校、社会组织、金融机构、相关企业在人才培养、资金管理、施工生产、材料供应、文化构建、科技创新、战略发展等方面，建立了广泛的战略联盟和密切的合作关系，促进了多方优势互补，实现了资源共享与协同发展。

2017 年，公司充分利用在资金、技术、管理及人才等优势，与山东省、山西省、河南省、湖南省、广西壮族自治区、西藏自治区、雄安新区、济南市、太原市、东营市、潍坊市等地方政府广泛开展战略合作。

## Strengthening Strategic Cooperation

CREC attached great attention to the strategic cooperation with domestic and abroad organizations and large-scale corporates. The Company has set up a broad strategic alliance and close cooperative relationship in talent cultivation, funds management, construction and production, material supply, culture construction, scientific innovation and strategic development, promoting all-round complementary advantages to achieve resource sharing and collaborative development.

In 2017, CREC made full use of its advantages in capital, technology, management and talent reserve, and conducted extensive strategic cooperation with Shandong Province, Shanxi Province, Henan Province, Hunan Province, Guangxi Autonomous Region, Tibet Autonomous Region, Xiong'an New Area, Jinan City, Taiyuan City and Dongying City Weifang City and other local governments.



## 推进产业合作

2017年，公司积极推进在高速铁路、基础设施建设、金融服务、建筑材料等领域的产业合作。在高速铁路建设领域，公司与北京联合大学等高校开展人才培养和技术共享战略合作；同时与中国中车等产业链相关企业深入合作，共同推进中国高铁发展。在基建领域，与湖南省交水建集团、碧桂园、湛江市交通投资集团等大型企业开展战略合作，积极参与国内基础设施投资建设。在金融服务领域，与中国工商银行、中国建设银行、中信证券、光大证券等金融机构积极开展合作，创新投融资模式，建立完整的业务链条。在供应商合作方面，与各类供应商在产品研发、技术创新、产品优化、资源整合、信息共享等方面开展多方位深层次合作，实现了和谐共赢，价值共享。同时，我们也不断加强供应链管理，以保持供应链的招标公平为基本要求，持续监察他们在诚信、产品质量、安全、环保等方面的表现。

资料1：2017年6月17日，在2017丝路国际联盟大会开幕式上，中国中铁与浙江省政府、中国建设银行、光大证券、国际金融论坛共同发起成立了丝路国际联盟，总部设在杭州。

资料2：2017年，在国务院国资委指导下，由中国中铁与其他13家央企共同发起成立了中央企业电子商务联盟，中国中铁采购电子商务平台依托该联盟平台，加强与理事会成员单位之间的信息资源共享，推动平台数据的广泛互联，全力支持国家电子商务发展战略。

资料3：2017年，中国中铁继续与中石油开展战略合作，对石化产品推行战略采购、集采专供，累计在1214个项目实现石化产品集采专供，累计供应石化产品60万吨，保证了产品质量，也最大限度地节约了资源，减少了环境污染。



丝路国际联盟成立仪式

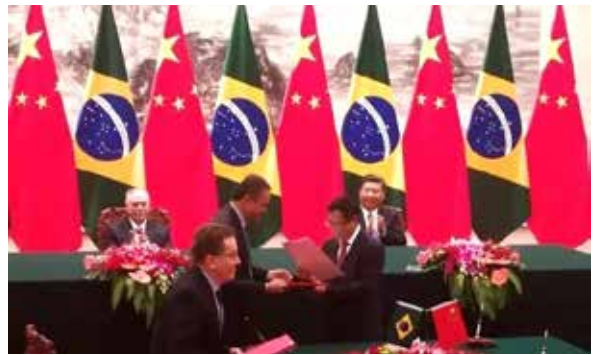
## Promotion of Industrial Cooperation

In 2017, the Company actively pushed forward industrial cooperation in high-speed rail, infrastructure construction, financial service and building materials. In the field of high-speed rail construction, the Company carried out strategic cooperation in talent cultivation and technology sharing with Beijing Union University and other colleges and universities; in addition, it conducted in-depth cooperation with CRRC and other industrial chain-related enterprises to jointly promote China's high-speed rail development. In infrastructure construction filed, the Company carried out strategic cooperation with large-scale corporates such as HNCC (Hunan Communication & Water Conservancy Group Ltd), Country Garden Holdings, and Zhanjiang Communication Investment Group Co., Ltd to actively take part in domestic infrastructure investment and construction. In financial service field, the Company actively carried out cooperation with Industrial and Commercial Bank of China, China Construction Bank, CITIC Securities and Everbright Securities to innovate investment and financing mode and set up complete business chains. In the cooperation with suppliers, it carried out multi-aspect deep-level cooperation with a variety of suppliers in product development, technological innovation, product optimization, resource integration, information sharing and other aspects to achieve a harmonious win-win situation and value sharing. At the same time, we also continuously strengthened our supply chain management and constantly monitor their performance in integrity, product quality, safety and environmental protection by keeping the fairness in the supply chain as the basic requirement.

Information 1: On June 17, 2017 at the Inaugural Meeting of 2017 Silk Road International Association (SRIA), CREC and Zhejiang Provincial Government, China Construction Bank, Everbright Securities, International Finance Forum jointly sponsored the establishment of the Silk Road International Association (SRIA), with the Headquarter in Hangzhou.

Information 2: Under the guidance of SASAC of the State Council in 2017, CREC and other 13 central state-owned enterprises jointly sponsored the establishment of the Central Enterprise E-Commerce Alliance. CREC e-commerce platform relies on the alliance platform to strengthen the sharing of information resources with its council member units, promote the extensive interconnection of platform data and fully support the development strategy of national e-commerce.

Information 3: In 2017, CREC continued to carry out strategic cooperation with PetroChina to implement strategic procurement, centralized procurement and supply of petrochemical products. It achieved centralized procurement and supply of petrochemical products in 1214 projects accumulatively, and supplied petrochemical products of 600,000 tons to ensure product quality and maximize the conservation of resources and reduce environmental pollution.



中国中铁和巴方签署  
《巴西FIOL铁路及相关配套工程综合一体化项目合作备忘录》

## 实施项目合作

2017年，中国中铁与国内外多家企业实施项目合作，积极创新商业模式，分别与多家第三方公司联合中标了青岛地铁8号线、成都轨道交通9号线一期工程等多个ppp项目。在落实“一带一路”和“中国铁路走出去”等国家战略过程中，与相关企业合作推进了中老铁路、越南河南轻轨、哈萨克斯坦阿斯塔纳轻轨等多个海外重点项目。

资料1：由中铁二局等多家企业合作建设的阿斯塔纳轻轨项目是哈萨克斯坦的首条城市轻轨。该项目全部采用中国标准，这也是中亚地区首条全部采用中国标准的轨道交通工程。线路全长22公里，建成后将把轻轨两端的通勤时间缩短将近一半，大大缓解当地的交通拥堵问题。

资料2：2017年9月1日，巴西总统米歇尔·特梅尔访华期间，在中巴两国元首的共同见证下，中国中铁和巴方签署了《巴西FIOL铁路及相关配套工程综合一体化项目合作备忘录》。该项目集铁路、铁矿和港口于一体，项目规模大，涉及专业多。为了提高项目运作效率，中国中铁等三家企业强强联合，创新合作模式，组成团队共同推动项目实施。

## Construction Project Cooperation

In 2017, CREC carried out project cooperation with a number of domestic and foreign enterprises and actively innovated their business models. It won the bid for a number of ppp projects together with numerous third parties, respectively, including Qingdao Metro Line 8, Phase I project of Chengdu Rail Transit Line 9, etc. During the implementation of national strategies including "Belt and Road" and "China high-speed rail going out", it cooperated with related enterprises to boost China-Laos railway, Hanoi light rail in Vietnam, Astana light rail in Kazakhstan and other overseas major projects.

Information 1: Astana light rail constructed by CREC No.2 through cooperation with a number of enterprises is the first urban light rail in Kazakhstan. In this project, all Chinese standards were adopted, and the project is the first rail transit project in Central Asia that uses all Chinese standards. The total length of the line is 22 kilometers. When it is completed, it will shorten the commuting time at both ends of the light rail by nearly half, and will greatly relieve the traffic congestion problem in the area.

Information 2: On September 1, 2017, during the visit period of Brazil President Michel Temer to China, under the joint witness of presidents of China and Brazil, CREC, on behalf of Chinese signed the "MOU for Integrated Project of Brazil FIOL Railway and Related Supporting Projects" with Brazil. The project integrates railway, iron ore and port in large scale, involving many specialties. In order to improve the operational efficiency of the project, three enterprises including CREC carried out powerful combination to innovate the cooperation model and form a team to jointly promote the project implementation.



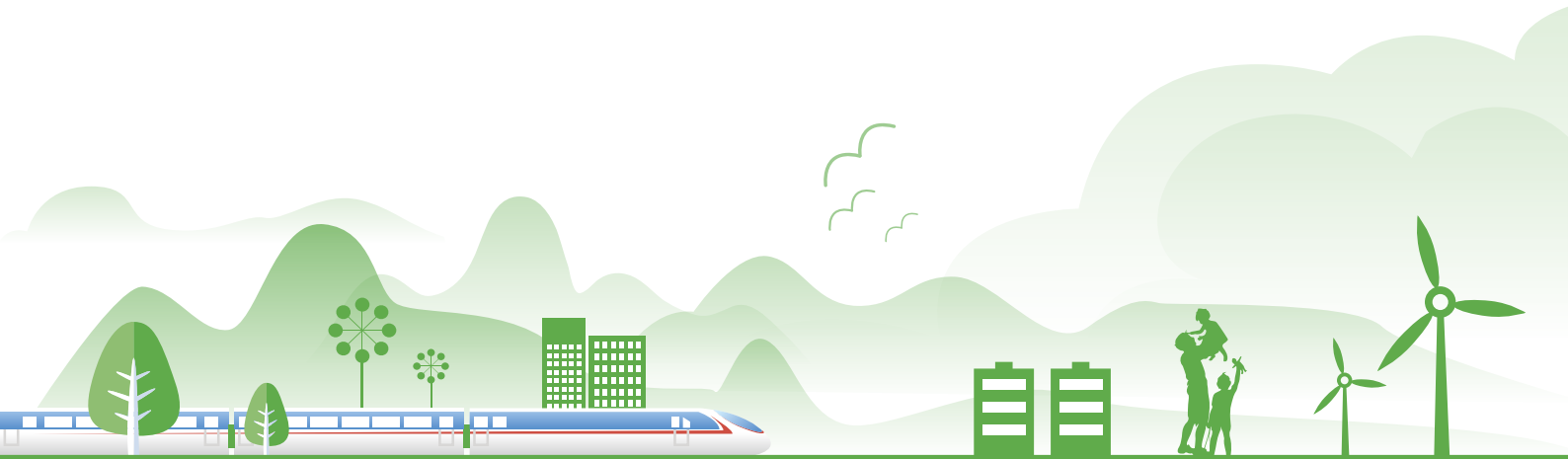
# 海外责任

Overseas Responsibility

 全球发展  
Global Development

 全球服务  
Global Service

 全球公益  
Global Public Welfare



## 全球发展

多年来，中国中铁始终坚持“走出去”战略，积极参与全球基础设施建设。目前，公司国际业务已涉足对外工程承包、设计咨询、机械制造、境外投资、资源开发、劳务输出和国际贸易等，海外工程项目覆盖铁路、公路、桥梁、隧道、房屋建筑、城市轨道交通、市政工程等领域。

2017年，中国中铁实现海外营业收入416.8亿元。

截至2017年底，中国中铁在境外83个国家设有境外机构开展业务，正在实施的境外承包工程、设计和工业产品加工项目493个。公司在2017年ENR全球最大承包商排第2位，国际承包商排第21位。

2017年5月，举世瞩目的中国“一带一路”国际合作高峰论坛在北京开幕，中国中铁作为“一带一路”基础设施建设的排头兵，积极响应政府号召，参与推动的多个“一带一路”重大铁路项目相继取得重要成果：已完成的“一带一路”重点项目有乌兹别克斯坦安哥隧道项目、埃塞俄比亚的斯亚贝巴轻轨线路、项目埃塞俄比亚亚吉铁路项目等；正在建设的重点项目有印度尼西亚雅加达-万隆高铁项目、老挝中老铁路项目、哈萨克斯坦阿斯塔纳轻轨项目、孟加拉帕德玛大桥项目、孟加拉阿克拉至拉克萨姆增建二线项目、越南河内城市轻轨等。

公司充分利用“一带一路”倡议和“走出去”战略，以项目实施带动工业产品出口。盾构设备、配件、施工技术服务出口地区涵盖新加坡、以色列、黎巴嫩等国家；工业施工机械产品已成功打入阿联酋、老挝等7个国家的市场；铁路道岔产品出口至美国、俄罗斯14个国家和地区，在泰国、印尼和马来西亚市场全部实现自营出口，全年整组道岔出口约220组，销往北美辙叉产品达到2300根以上；钢桥梁钢结构出口至北美、非洲市场累计达1万吨。



刚果(金)SICOMINES铜钴矿采选冶一期工程

## Global Development

Over the years, CREC has always adhered to the "going out" strategy, and actively participated in global infrastructure construction. At present, the Company's international business has been involved in foreign engineering contracting, design consulting, machinery manufacturing, overseas investment, resource development, labor export and international trade business, and overseas projects cover railways, highways, bridges, tunnels, housing construction, urban rail, municipal engineering and other fields.

In 2017, CREC achieved overseas business income of RMB 41.68 billion Yuan.

As of the end of 2017, CREC has set up overseas institutions in 83 countries to carry out business, and it has 493 overseas contract projects, design and industrial product processing projects under way. The Company ranked No. 2 in ENR largest global contractors in 2017 and No. 21 in international contractors.

In May 2017, the world-renowned China's Belt and Road Initiative Forum on International Cooperation was opened in Beijing. As a vanguard in "Belt and Road" infrastructure construction, CREC positively responded to the government's call and participated in a number of major railway projects under the Belt and Road Initiative, and achieved great achievements, including the completed "Belt and Road Initiative" projects such as Uzbekistan Angren-Pap Tunnel Project, Addis Ababa Light Rail in Ethiopia and Addis Ababa-Djibouti Railway Project in Ethiopia; the major projects under way includes Indonesia Jakarta-Bandung High-Speed Rail Project, China-Laos Railway Project in Laos, Astana Light Rail Project in Kazakhstan, Bangladesh Padma Bridge Project, newly-added Bangladesh Acora-Laxam Line 2 Project and Hanoi Light Rail Project in Vietnam.

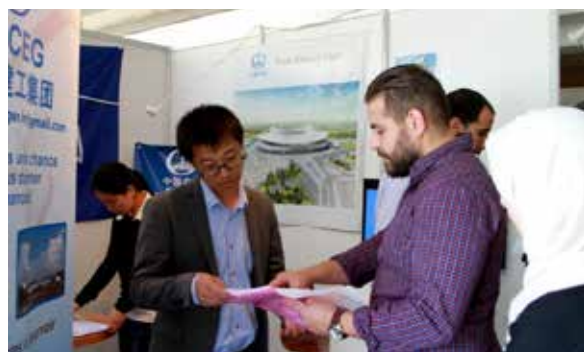
The Company made full use of the "Belt and Road Initiative" and "Going Global" strategy to promote the export of industrial products by means of project implementation. Shield equipment, accessories, construction technology services export areas covered Singapore, Israel, Lebanon and other countries; industrial construction machinery products have been successfully launched in the market of 7 countries including, United Arab Emirates, Laos, etc.; the railway turnout products have been exported to 14 countries and regions including the United States and Russia, and the Company has achieved self-support export in Thailand, Indonesia and Malaysia. In the whole year, about 220 sets of turnout were exported and more than 2,300 pieces of frog product were sold to North America; the steel bridge structure was exported to the market of North America and Africa, with the total export of 10,000 tons.



乌兹别克斯坦安哥连至琶布铁路卡姆奇克隧道



越南河内轻轨项目部对当地员工进行培训



中铁建工集团参加2017年阿尔及利亚第十一届招聘会

## 全球服务

公司充分发挥全产业链优势，采用设计、采购、施工加融资的 EPC+F 模式，为业主提供从投资、勘察设计、施工建设到运营维护全周期的服务，积极推动中国铁路技术标准、设备和运营“走出去”。在设计方面，承揽了大多数重大海外项目设计与可研编制工作，莫喀高铁勘察设计已全部完成递交业主审核、巴基斯坦 ML1 铁路以及新建哈维连陆港勘察设计正在执行、南美“两洋铁路”可行性研究任务正有序推进。在施工技术方面，以专业敬业、追求卓越的工匠精神为工程所在国奉献了一大批优质工程，采用中国标准的孟加拉国帕德玛大桥项目被誉为当地的“梦想之桥”；已完的坦桑尼亚基甘博尼大桥以国父尼雷尔命名，被誉为“东非第一桥”；已完的乌兹别克斯坦安哥隧道项目为中亚第一长隧，创造了海外隧道施工新记录。在运营维护方面，我公司承建并负责运营的埃塞俄比亚的斯亚贝巴轻轨项目截至 2017 年底已安全运营近 28 个月，联合其他中国企业联合承建并中标运维合同的埃塞俄比亚亚吉铁路已进入商业运营阶段。

## Global Service

The Company gave a full play to its advantages of the whole industry chain and adopted EPC+F mode of design, procurement, construction and financing to provide the owners with all-round services from investment, survey and design, construction to operation and maintenance, and actively promoted China's railway technical standards, equipment and operation "going out". In terms of design, CREC undertook the design and feasibility study of most of the major overseas projects. The survey and design of Mosco-Kazan High-Speed Rail have been completed and submitted to the owner for approval, the survey and design of Pakistan ML1 Railway and the new Havelian Land Port are under way, and the feasibility study task of South American "Pacific-Atlantic Railway" is boosted in an orderly manner. In terms of construction technology, a large number of high-quality projects have been dedicated to the project countries with the craftsmanship spirit of professional dedication and pursuit of excellence. Bangladesh Padma Bridge Project adopting the Chinese standard is praised as the "Bridge of Dream" in Bangladesh; the completed Tanzania Jigamboni Bridge is named after Nyerere, the Father of the Nation, which is known as "the first bridge in East Africa"; the completed Uzbekistan Angren-Pap Tunnel Project is the first long tunnel in Central Asia, creating a new record in overseas tunnel construction. In terms of operation and maintenance, Addis Ababa Light Rail Project in Ethiopia constructed and operated by CREC has been operating safely for nearly 28 months as of the end of 2017, and Addis Ababa-Djibouti Railway in Ethiopia that CREC constructed and won the operation and maintenance contract jointly with other Chinese enterprises has been into the business operation stage.

## 全球公益

中国中铁坚持“奉献精品工程，造福东道国家”理念，2017年公司承建的亚吉铁路、孟加拉栋吉至派罗布巴扎尔铁路等一大批海外重大民生工程正式投入运营，大大提高了当地交通运输能力，改善了民众生活条件，促进了当地经济繁荣和发展。

中国中铁累计上千亿美元的国际订单是各东道国 GDP 的重要组成部分，对促进当地就业、经济发展做出了积极的贡献。目前，公司雇用业务所在国当地员工近 4 万人。我们无偿为所在国培养了大批工程技术人员，建立了自上而下、全面监控的绿色环保管理体系，积极做好生态环境保护。此外，我们还积极参与工程所在国公益事业，在消除贫困、健康研究与服务、教育服务、清洁饮水与卫生设施建设、抢险救灾等方面涌现出众多典型事迹，坚持企业海外可持续发展道路。

资料 1：2017 年，中铁三局埃塞俄比亚 AHF 项目进入收尾施工和移交阶段。项目部在还原项目周边生态环境的基础上，利用施工的弃方和剩余材料等对沿线四个乡镇的部分基础设施进行完善，先后帮助当地政府平整足球场 3 个、改拓建城镇道路 3 条。多次受到当地政府来函、来电赞扬，同时得到了 TIGRAY 州 FOOTIG CONSULTING PLC 奖励。



乌干达总统办公室发给中铁三局的感谢信

资料 2：中铁大桥局承建的帕德玛大桥是孟加拉国有史以来最大的工程项目。项目部通过招收大批当地大学生进行技术培养和采用一名中国工长带领一队当地劳工的方式对当地人员开展技术培训，目前雇佣的孟籍劳工数量为 3200 多人，占项目参建人员总数的 85%。同时，项目部还特地为孟籍员工建立了多个 24 小时运营的医务室、免费宿舍及食堂等福利设施，并对家庭经济困难的员工进行慰问。

资料 3：2017 年，中铁装备德国分公司向德国韦格贝格高级中学赞助了学校经费，向参加 Hyperloop 科研项目的德国慕尼黑工业大学团队提供了比赛赞助资金。他们赞助的这支名为 WARR Hyperloop 的德国团队赢得了 SpaceX 公司举办的 Hyperloop Pod 超级高铁车辆大赛冠军和最快速度奖。



中铁四局志愿者为安哥拉当地孤儿送温暖

## Global Public Welfare

CREC insisted on the idea of "offering high-quality project and benefiting host country", and a large number of overseas major livelihood projects in 2017 including Ethiopia Addis Ababa-Djibouti Railway and Bangladesh Tongi-Bhairab Bazar Railway have been put into operation, thus greatly enhancing the local transportation capability, improving the people's living conditions, and boosting the local economic prosperity and development.

CREC international orders with accumulated amount of hundreds of billions of dollars are important part of each host country's GDP, having made a positive contribution to promotion of local employment and economic development. Up to now, the Company has hired nearly 40,000 local staff in the country where the business is located. CREC has cultivated a large number of engineering and technical personnel for the host country free of charge, and established a green management system for full monitoring from top to bottom in order to actively protect the ecological environment. In addition, CREC also actively participates in the public welfare undertakings in the countries where the project is located. A number of typical stories have emerged in poverty elimination, health research and service, education service, construction of clean drinking water and sanitation facilities, and disaster rescue and relief. Furthermore, it always upholds the road of sustainable development of enterprises abroad.

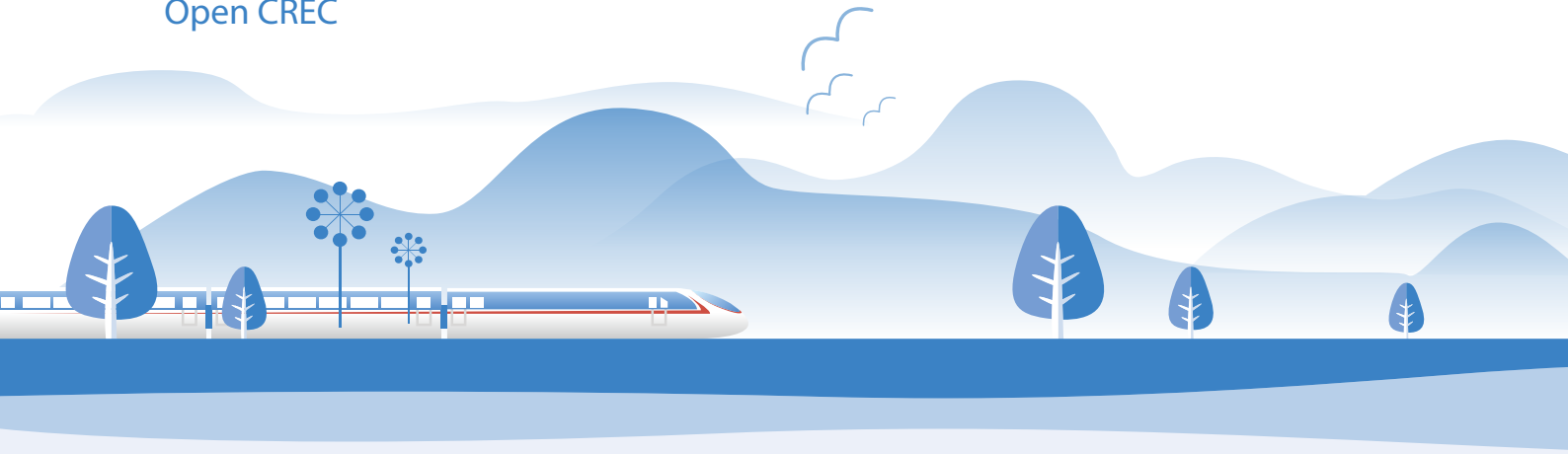
Information 1: In 2017, Ethiopia AHF project undertaken by CREC No.3 was into the final construction and handover phases. On the basis of restoring the ecological environment around the project, the project department used some abandoned facilities and surplus materials to improve some of the infrastructures along the four villages and townships, and successively helped the local government to level three football fields, transformed and expanded 3 urban roads. It has been repeatedly praised by the letters and calls from local government, and has won FOOTIG CONSULTINGPLC award by TIGRAY State at the same time.

Information 2: Padma Bridge constructed by CRBB (China Railway Bridge Bureau) is the largest project in the history of Bangladesh. The project department conducted technical training for local personnel by recruiting a large number of local university students for technical training and employing a Chinese foreman to lead a team of local labors. At present, the number of employed Bangladeshi workers is more than 3,200 persons, accounting for 85% of the total number of participants in the project. At the same time, the project department also set up a number of 24-hour medical clinics, free dormitories, dining halls and welfare facilities specifically for Bangladeshi staff, and expressed sympathy and solicitude for the staff with difficult family finances.

Information 3: In 2017, Germany Branch of CREG (China Railway Engineering Equipment Group Co., Ltd.) sponsored the school funding to Wegberg Senior High School in Germany, and provided game sponsorship funds to the team of German Technical University Munich participating in Hyperloop scientific research project. The sponsored German team, WARR Hyperloop, won SpaceX's Hyperloop Pod Super High Speed Rail Vehicle Championship and Fastest Speed Award.

# 开放的中国中铁

Open CREC



## 规范的信息披露

2017 年，公司积极适应证券监管环境的新变化，落实依法、从严、全面监管的新政策和新要求，进一步完善信息披露的工作机制，加强了与业务合作的上市公司信息披露的沟通协调，妥善处理中央企业信息公开、上市公司信息披露、企业信息公示等信息管理的衔接，有效确保了公司信息披露的质量，防范了信息披露违规风险。全年公司共计披露四期定期报告，披露公告及通函 199 项。其中，A 股公告 86 项；H 股公告及通函中英文 156 项，涵盖股东大会、董事会和监事会决议，定期报告及摘要、会议召开、债券付息、治理规则、框架协议签署、重大资产置换、工程中标、股本变动等重大事项。在上交所 2017 年开展的 2016 年度上市公司信息披露工作评价中，公司信息披露获得了自愿性信息披露、支持监管机构工作等多项加分，评级结果再次获得 A 类（即优秀类）的殊荣，为股份公司及所属企业开展资本运作创造了良好的监管环境。这也是自上海证券交易所 2013 年实施信息披露评价分档考核以来，股份公司连续四年评价结果为 A。

## Normative Information Disclosure

In 2017, CREC actively adapted to the new changes in the securities regulatory environment, implemented new policies and new requirements under strict and comprehensive supervision according to law, further improved the method and mechanism for information disclosure, enhanced the communication and coordination of information disclosure with the listed companies for business cooperation, properly handled the connection of information management including information disclosure of central enterprises, information disclosure of listed companies and public notification of corporate information, thus effectively ensuring the quality of information disclosure of the Company and preventing the risk of irregularities of information disclosure. In the whole year, the Company totally disclosed four periodic reports, 199 notices and circulars, including 86 A-share notices and 156 H-share notices and circulars, with the contents covering such important matters as stockholders' meeting, resolutions of Board of Directors and Board of Supervisors, periodic reports and summaries, meetings, payment of interest of bonds, governance rules, signing of framework agreement, major asset replacement, project bidding winning and capital stock changes. In the evaluation of information disclosure of listed companies in 2016 conducted by Shanghai Stock Exchange in 2017, CREC information disclosure won awarded marks for its voluntary information disclosure and support to the work of supervision authorities. As a result, the rating results have once again won the honor of Category A (i.e. excellent), creating a good regulatory environment for the joint-stock company and its affiliated enterprises to carry out capital operation. This is also the result of A in four-year evaluation of the joint-stock company since Shanghai Stock Exchange began to implement information disclosure evaluation and grading assessment in 2013.



定期报告



公告





## 积极的投资者关系

2017年，公司结合证券监管要求、上海和香港上市地市场情况和公司资本运作需求，有策略、有步骤、多渠道开展了公司投资者关系管理相关工作，取得了良好效果。全年参与论坛峰会 23 场，召开一对一及小组会议 82 场，与业内 322 家境内外基金经理、分析师进行了交流；全年接待或组织投资机构来访 37 次 213 人次，组织对公司设计企业开展反向路演；接听投资者热线来电 2057 话次，转发、回复重要邮件及信息 7932 封，做到始终耐心倾听，细心解释，尽力化解中小投资者的不解和疑问；围绕中国中铁与中铁二局重大资产重组和配套募集资金、美元债发行等资本运作和业绩发布开展了 5 场业绩发布会和境外路演活动，与境内外投资者保持了良好的沟通并取得了投资者的支持。

结合 2017 年公司股东大会召开、重大资本运作、国际信用评级等重要工作安排，有针对性的争取主要股东和债权人对重大事项的支持，确保了公司党建工作要求进入公司章程的修订案以 95.29% 的高比例通过。



## Active Investor Relationship

In 2017, the Office of the Board of Directors (Office of the Board of Supervisors) conducted a series of relevant works on investor relations management in a strategic, step-by-step and multi-channel manner according to securities regulatory requirements, the market conditions of Shanghai and Hong Kong listing locations and the capital operation requirements of the Company, getting good results. Throughout the year, CREC selected and participated 23 summit forums and held 82 one-on-one and group meetings to exchange views with 322 domestic and foreign fund managers and analysts in the industry; it received visit or organized investment institution visit for 37 times of 213 person-times, and organized the reverse roadshow to the Company design enterprises; it answered the investor hotline calls for 2057 times, forwarding and replying 7932 letters to important mail and information, during which, it always listened patiently, explained carefully, and tried to resolve the misunderstanding and doubt of small and medium investors; it held 5 performance release conferences and overseas roadshow activities centering on the capital operation and performance release such as major assets reorganization of CREC and CREC No.2, supporting fund-raising and USD debt issuance, maintaining good communication with domestic and foreign investors and obtaining investors' support.

In light of important work arrangements such as the convening of shareholders' meeting in 2017, major capital operation and international credit rating, CREC earnestly obtained the support from major shareholders and creditors on major issues and ensured that the amendment on taking the Company's party building work into the articles of association was approved by a high proportion of 95.29%.



2017中期业绩发布

## 入选指数情况:

中国中铁2017年度入选沪港两地指数统计表

A股	上证180全收益、上证50、上证50全收益、上证F200、上证F500、上证城镇、上证工业、上证工业类指数、上证国企、上证海外、上证基建、上证流通、上证全指、上证全指全收益、上证市值百强、上证新兴、上证央企、上证中游、上证综指、小康指数、新兴综指、新兴指、雪球智选、央企100、央企100 (SH)、央视500、一带一路、银河99、优化高贝、优化高波、责任指数、治理指数、中关村50、中关村A、中国1000 (CNY)、中国1000工业 (CNY)、中国400、中国400ERC (CNY)、中国400动量 (CNY)、中国400工业、中国内地全指、中华120、中华A80、中华沪深港300、中证100、中证100全收益、中证800、中证800R价值、中证800等权、中证800价值、中证800全收益、中证800资本、中证A股、中证PPP、中证财通ESG100、中证超大、中证超大 (SH)、中证城镇、中证服务、中证工业、中证工业 (SH)、中证工业全收益指数、中证国企、中证国企 (SH)、中证合成期权、中证基建、中证流通、中证流通 (SH)、中证龙头、中证全指、中证全指 (SH)、中证全指建筑工程、中证全指资本品、中证新兴、中证央企、中证央企 (SH)、中证银华价值3070、中证银华价值7030、中证中游、中证中游 (SH)、周期低波
H股	恒生内地及香港可持续发展企业指数、恒生基础设施建设指数、恒盛中国内地综合指数、恒生沪深港AH股A+H指数、恒生可持续发展企业指数、恒生A股可持续发展企业指数、恒生可持续发展企业基准指数、恒生A股可持续发展企业基准指数、恒生中国企业等权重指数、恒生综合中期股指数、恒生中国 (香港上市) 100指数、恒生国企4%比重上限指数、恒生中国企业精明指数、恒生沪深港AH股精明指数、中证恒生沪港通AH股精明指数、恒生综合大中型股指数、恒生综合指数、恒生神州50指数、恒生地产建筑业指数、恒生沪深港通AH股H指数、恒生港股通中小型指数、恒生沪深港通AH股溢价指数、恒生中国企业指数、恒生环球综合指数、恒生综合中小型股指数、恒生50指数、恒生港股通指数、恒生港股通中国内地公司指数、恒生A股100强指数、恒生A股行业龙头指数、恒生中国企业指数
MSCI	MSCI明晟中国A股指数的成份股、MSCI新兴市场指数

## The selected indexes:

Statistics of CREC Selected Indexes in Hong Kong and Shanghai in 2017

A-share	SSE 180 Total Return Index, SSE 50 Index, SSE 50 Total Return Index, SSE F200 Index, SSE F500 Index, SSE Urbanization Index, SSE Industry Index, SSE Industrial Index, Index of State-owned Enterprises, SSE Overseas Index, SSE Infrastructure Index, SSE Free Float Index, SSE Large & Mid & Small Cap Index, SSE Large & Mid & Small Cap Total Return Index, SSE Market Value Top 100 Index, SSE Emerging Industry Index, SSE Central Enterprises Index, SSE Middle Industry Index, Shanghai Composite Index, Well-off Index, Emerging Composite Index, Emerging Index, Snowball Selection Index, Central Enterprises 100 Index, Central Enterprises 100 (SH) Index, CCTV 500 Index, Belt & Road Index, Galaxy 99 Index, Optimized High Beta Index, Optimized High Wave Index, Social Responsibility Index, Governance Index, Zhongguancun 50 Index, Zhongguancun A Index, China 1000 Index (CNY), China 1000 Industry Index (CNY), China 400 Index, China 400ERC Index (CNY), China 400 Momentum Index, China 400 Industry Index, China Mainland Composite Index, CES China 120 Index, CES China A80 Index, CES China Shanghai-Shenzhen-Hong Kong 300 Index, CSI 100 Index, CSI 100 Total Return Index, CSI 800 Index, CSI 800R Value Index, CSI 800 Equally Weighted Index, CSI 800 Value Index, CSI 800 Total Return Index, CSI 800 Capital Index, CSI A-Share Index, CSI PPP Index, CSI Caitong ESG 100, CSI Super-large Index, CSI Super-large Index (SH), CSI Urbanization Index, CSI Service Index, CSI Industry Index, CSI Industry Index (SH), CSI Industry Total Return Index, CSI State-owned Enterprises Index, CSI State-owned Enterprises Index (SH), CSI Synthetic Option Index, CSI Infrastructure Index, CSI Free Float Index, CSI Free Float Index (SH), CSI Leading Index, CSI Large & Mid & Small Cap Index, CSI Large & Mid & Small Cap Index (SH), Construction Engineering of CSI Large & Mid & Small Cap Index, Capital of CSI Large & Mid & Small Cap Index, CSI Emerging Index, CSI Central Enterprises Index, CSI Central Enterprises Index (SH), CSI Yinhua Value 3070 Index, CSI Yinhua Value 7030 Index, CSI Middle Industry Index, CSI Middle Industry Index (SH), Periodic Low Wave Index
H-Share	Hang Seng Mainland and Hong Kong Corporate Sustainability Index, Hang Seng Infrastructure Construction Index, Hang Seng Mainland Composite Index, Hang Seng Shanghai-Shenzhen-Hong Kong AH-Share A+H Index, Hang Seng Corporate Sustainability Index, Hang Seng A-Share Corporate Sustainability Index, Hang Seng Corporate Sustainability Benchmark Index, Hang Seng A-Share Corporate Sustainability Benchmark Index, Hang Seng China Enterprise Equally Weighted Index, Hang Seng Composite MidCap Index, Hang Seng China (Hong Kong) 100 Index, Hang Seng HSCCI Capped 4% Index, Hang Seng China Enterprise Smart Index, Hang Seng Shanghai-Shenzhen-Hong Kong AH Share Smart Index, CSI Hang Seng Shanghai-Shenzhen-Hong Kong Through AH Share Smart Index, Hang Seng Composite Largecap and Midcap Index, Hang Seng Composite Index, Hang Seng China 50 Index, Hang Seng Property Construction Index, Hang Seng Shanghai-Shenzhen-Hong Kong Through AH Share H Index, Hang Seng Shanghai-Shenzhen-Hong Kong Through Midcap and Smallcap Index, Hang Seng Shanghai-Shenzhen-Hong Kong Through AH Share Premium Index, Hang Seng China Enterprises Index, Hang Seng Global Composite Index, Hang Seng Composite Midcap and Smallcap Index, Hang Seng 50 Index, Hang Seng Hong Kong Stocks Through Index, China Mainland Company Index of Hang Seng Hong Kong Stocks Through Index, Hang Seng Top 100 A-Share Index, Hang Seng A-Share Industry Leading Index, Hang Seng China Enterprises Index
MSCI	Constituent stocks of MSCI Ming Sheng China A-share Index, MSCI Emerging Market Index



参加“走进新国企”活动的媒体记者在京张高铁八达岭长城站施工现场合影



中央媒体采访中铁科研院严金秀

## 和谐的媒体关系

多年来，中国中铁和各类社会媒体保持着良好的关系，通过召开新闻发布会，邀请媒体出席企业重要会议，组织报道重要工程，在媒体开辟专栏，举办座谈会、培训班等多种形式加强与新闻媒体的沟通，促进工作，发布信息，接受媒体监督。

2017年，新华社、中央电视台、人民日报、光明日报、经济日报、科技日报、中国证券报、上海证券报、证券日报、证券时报、新华网、人民网及凤凰卫视等媒体发布公司信息超过 150000 条。

## Harmonious Media Relations

Over the years, CREC maintained good relations with various social media. Through holding press conferences, inviting media to attend important enterprise meetings, organizing and reporting opening and completion ceremonies of important project, opening up column in media and holding forum and training courses, the Company enhanced the communication with the media, promoted work, released information and received media's supervision.

In 2017, Xinhua News Agency, CCTV, People's Daily, Guangming Daily, Economic Daily, Science and Technology Journal, the China Securities, Shanghai Securities, Securities Daily, Securities Times, Xinhua Net, People's Net, Phoenix TV and other media have issued more than 150,000 pieces of information.



网站截图



中国中铁官方微信



中国中铁官方微博

## 特色的企业传媒

2017 年，公司在持续加强企业报刊、网站、微博、微信等媒体的日常管理运营的基础上，下发了《关于进一步规范全公司新媒体运营管理的通知》，进一步加强企业新媒体建设。全年利用新媒体推送信息超过 800 条，阅读量超过 900 万。

2017 年，公司积极参与中央电视台《大国外交》《辉煌中国》《华人世界》《远方的家·一带一路》等专题节目制作，播出后反响热烈；与中央电视台共同在中铁大桥局平潭跨海大桥局施工现场举办了《我和我的祖国》大型现场演唱会，投资拍摄的《铁血》电视剧播出，引起强烈反响。

## Characteristic Corporate Media

In 2017, the Company continued to strengthen the daily management and operation of corporate newspapers, websites, microblog, WeChat and other media, on the basis of which, it issued a "Notice on Further Regulating the Management and Operation of New Media across the Company" to further strengthen the construction of new media of the enterprise. In the whole year, it pushed more than 800 pieces of information by means of new media, with more than 9 million of reading quantity.

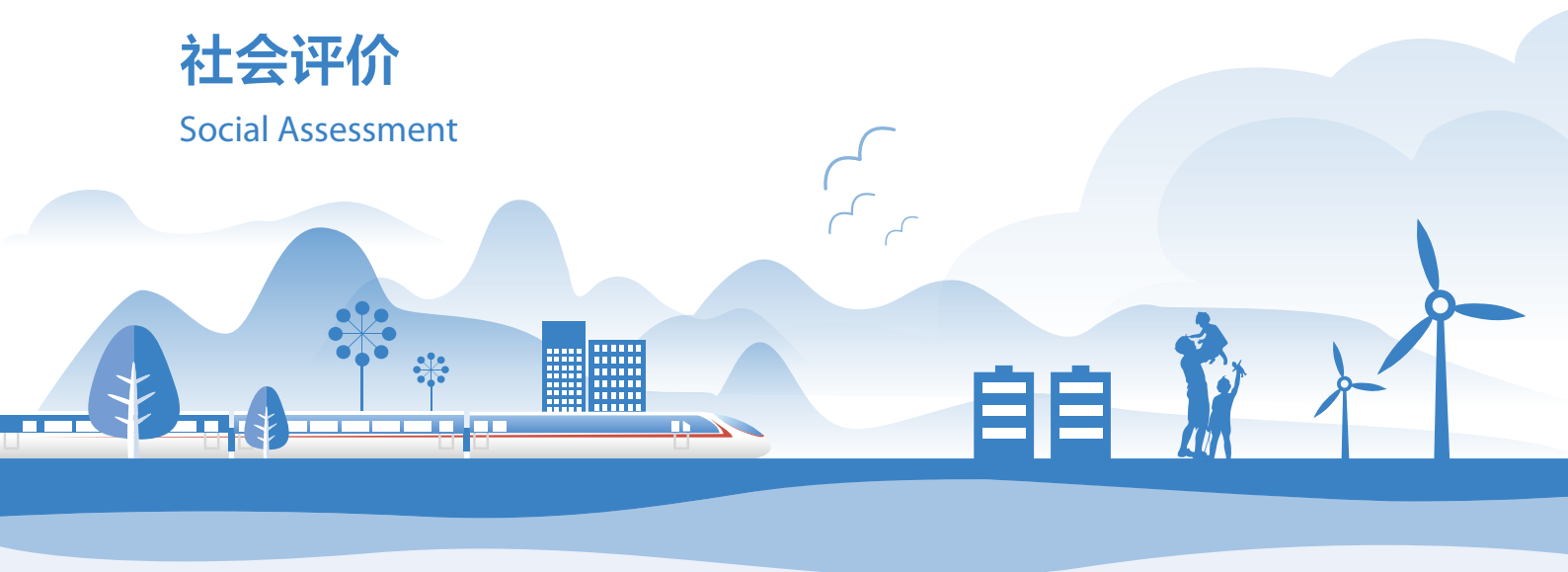
In 2017, CREC actively participated in the CCTV feature program production, and received overwhelming response after broadcast, including Great Power Diplomacy, Amazing China, Chinese World and Homeland · Dreamland; the Company and CCTV jointly held a large-scale live concert themed as "My Motherland and Me" at the construction site of the Pingtan Cross-sea Bridge Engineering Bureau of CRBB (China Railway Bridge Bureau); moreover, the television series, Predator, which was invested and shot by CREC, was broadcast, arousing strong repercussions.



公司报刊

# 社会评价

## Social Assessment



2017年，公司位列《财富》世界500强企业第55位，《工程新闻记录（ENR）》全球最大250家工程承包商第2位，并先后荣获东盟地区最佳海外形象企业奖、天马奖—中国主板上市公司投资者关系最佳董事会、港股100强及港股最高营业额10强、最佳公司治理奖—金奖、CBT100“中国百强企业”、企业交易最佳投资者关系、金紫荆最佳投资者关系管理上市公司”等诸多奖项。

2017年，全公司有4家集体荣获全国五一劳动奖状，5家集体荣获全国文明单位；有3名同志光荣当选为党的十九大代表，1名同志被评为全国三八红旗手，7名同志获得全国五一劳动奖章；还有31个集体、79名个人分别获全国工人先锋号、全国青年文明号、火车头奖杯和火车头奖章。

In 2017, CREC ranked No.55 in "Fortune" Global 500 Companies and No.2 in "Engineering News Record (ENR)" 250 Global Largest Engineering Contractors. In addition, it has won the ASEAN Best Overseas Image Business Award, Tianma Award - the Best Board of Directors in Investor Relationship of China Main Board Listed Company, Hong Kong Stocks Top 100 and Top 10 in Maximum Turnover of Hong Kong Stocks, Best Company Governance Award-Gold Award, CBT100 "Chinese Enterprises Top 100", Best Investor Relationship Award in Enterprise Transactions, and Golden Bauhinia "Listed Company for Best Investor Relationship Management", etc.

In 2017, four collectives of CREC won the National May 1 Labor Certificate of Merit, five collectives won the title of National Civilized Unit; three comrades were gloriously elected as the representatives of the 19th CPC National Congress, one comrade was honored as National March 8th Red-Banner Holder, and seven comrades were awarded National "May 1" Labor Medal; seven collectives and 79 individuals won the title of National Workers Pioneer, National Youth Civilization Unit, Locomotive Cup and Locomotive Cup Medal, respectively.

## 2017年度十佳优秀社会责任实践

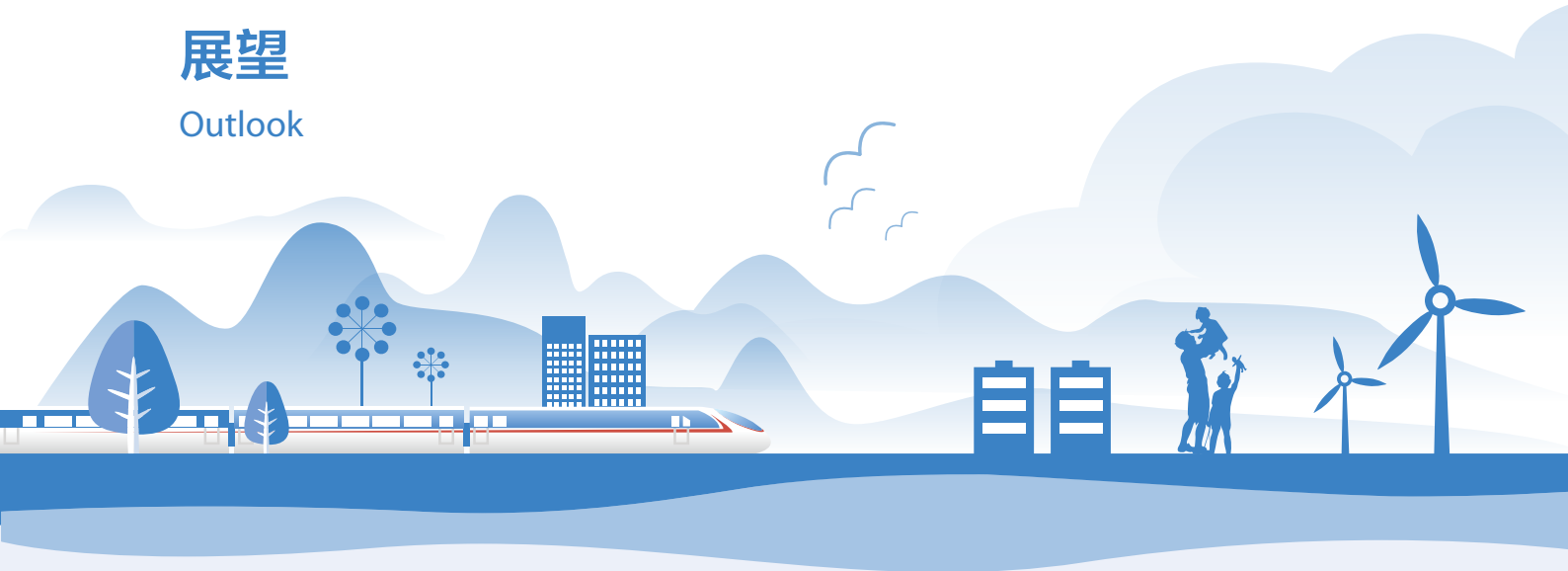
社会责任实践名称	实施单位
精准扶贫湖南汝城、桂东和山西保德三县	中国中铁
四川茂县发生山体滑坡抢险救援	中铁一局、中铁二局、中铁三局、中铁五局、中铁六局、中铁八局、中铁隧道局、中铁北京工程局、中铁科研院等
四川九寨沟地震抢险救援	中铁一局、中铁二局、中铁隧道局、中铁建工、中铁科研院等
工程项目部“幸福之家十个一工程”	中国中铁所属各单位
“一带一路”公益践行者	中铁二局
农民工“幸福工程”志愿项目	中铁四局
“汇聚热血传递爱”主题献血活动	中铁十局
京张高铁官厅水库特大桥绿色施工	中铁大桥局
建筑施工企业“互联网+安全培训”的创新与实践	中铁北京工程局
工程项目“职工小家”标准化建设	中铁上海工程局

## Top Ten Outstanding Social Responsibility Practices in 2017

Name of Social Responsibility Practice	Implementation Unit
Targeted poverty alleviation in Rucheng and Guidong in Hunan Province and Baode County in Shanxi Province	CREC
Emergency rescue in landslide disaster in Mao County, Sichuan Province	CREC No.1, CREC No.2, CREC No.3, CREC No.5, CREC No.6, CREC No.8, China Railway Tunnel Bureau, CREC Beijing Engineering Bureau, China Railway Science Research Institute, etc.
Emergency rescue in the earthquake in Jiuzhaigou County, Sichuan Province	CREC No.1, CREC No.2, China Railway Tunnel Bureau, China Railway Construction Engineering Group, China Railway Science Research Institute, etc.
Project Department "Ten One Program of Happy Family"	CREC Subordinate Units
"Belt and Road" public welfare practitioner	CREC No.2
"Happiness Project" volunteer project for peasant workers	CREC No.4
Blood donation activity on the theme of "gathering blood to pass on love"	CREC No.10
Construction of Guanting Reservoir Super-large Bridge in Beijing-Zhangjiakou High-Speed Rail	China Railway Bridge Bureau
Innovation and practice of "Internet + Safety Training" for construction enterprises	CREC Beijing Engineering Bureau
Project of standardization construction of "Family for the Staff"	CREC Shanghai Engineering Bureau

# 展望

## Outlook



2018年，中国中铁将以习近平新时代中国特色社会主义思想为指导，紧紧围绕建设“国内领先、世界一流”特大型综合产业集团的战略目标，进一步深化企业改革、加强市场经营、推进科学管理、突出创新驱动，切实提升发展质量和竞争能力，努力开创企业持续健康发展新局面。

2018年，中国中铁将进一步发挥行业龙头企业履行社会责任的表率作用，全面深化社会责任管理，拓展社会责任领域，丰富社会责任内容，提升社会责任实践水平，与利益相关方共同携手，为推动全社会的发展进步而不懈努力！

In 2018, CREC will take Xi Jinping's socialist ideology with Chinese characteristics in the new era as the guidance, closely center on the strategic objective of building a large-scale comprehensive industrial conglomerate of "Leading in China and First-class in the World" to further deepen the enterprise reform, improve the market management, promote scientific management, highlight innovation-driven development, and effectively enhance the development quality and competitiveness, and will strive to open up new prospects for sustained and healthy development.

In 2018, CREC will further play an exemplary role of the industry leading corporate to fulfill social responsibilities, comprehensively deepen the social responsibility management, expand the social responsibility fields, enrich the social responsibility contents, enhance social responsibility practices, cooperate with the interested parties to make unremitting efforts in order to promote the development and progress of the whole society!

## 读者反馈

感谢您在百忙之中阅读中国中铁股份有限公司 2017 社会责任报告暨 ESG（环境、社会与管治）报告。

报告在编写过程中难免存在瑕疵和疏漏之处，我们十分愿意倾听您的意见和建议，再一次向您对本公司的支持和帮助表示衷心感谢。

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## Readers' Feedback

Thanks for your reading the Social Responsibility Report (Environment Society Governance Report) in 2017 China Railway Group Limited in your busy schedule.

There are inevitable flaws and omissions in compiling preparation process of the report. We are very willing to listen to your comments and suggestions. We express our sincere thanks for your support and help to the company once again.

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中国中铁官方微信



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