

# 2016 社会责任报告

SOCIAL RESPONSIBILITY REPORT 2016



# 编制说明

## About the Report

本报告是中国能源建设集团有限公司发布的第五份年度社会责任报告。报告面向中国能源建设集团有限公司所有利益相关方，以开放坦诚的态度全面披露公司社会责任理念、实践和成效。报告为中英文双语版本，如中文和英文内容有细微出入，请以中文为准。

### 报告范围

本报告为 2016 年年度报告，内容覆盖中国能源建设集团有限公司总部以及所属企业（单位）2016 年 1 月 1 日至 2016 年 12 月 31 日期间履行社会责任工作的表现，部分内容超出上述范围。

### 编制标准

全球报告倡议组织《可持续发展报告指南》（GRI G4）  
国务院国资委《关于国有企业更好履行社会责任的指导意见》（国资发研究〔2016〕105 号）  
国家标准化管理委员会《社会责任报告编写指南》（GB/T 36001-2015）  
中国社会科学院《中国企业社会责任报告编写指南之建筑业》（CASS-CSR3.0）

### 质量保证

报告中所引用 2016 年财务数据来自经审计的财务报告，其他数据来源于中国能建正式文件和统计报告。中国能建承诺本报告内容不存在任何虚假记载、误导性陈述或重大遗漏，并对其内容真实性、准确性负责。

### 称谓说明

为了便于表述和阅读，本报告用“中国能建”“集团公司”“公司”或“我们”指代中国能源建设集团有限公司。

### 报告获取

您可以在中国能建集团网站（www.ceec.net.cn）上浏览或下载本报告的电子文本，并了解我们的更多相关信息。如对报告内容有疑问或者需要纸质版报告，可通过以下方式联系我们。

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We are now presenting the 5th social responsibility report of China Energy Engineering Group Co., Ltd. (hereinafter referred to as Energy China Group) as an open, sincere and comprehensive disclosure of our CSR concepts, practices and achievements to all our stakeholders. This report is prepared in Chinese and English versions. In case of minor disparities, the Chinese version shall prevail.

### Reporting Period

The 2016 annual report covers Energy China Group and all its subsidiaries throughout the period from January 1, 2016 to December 31, 2016, and this report includes additional content and information that pre-dates the stated reporting period.

### Compliance Conformance

*Sustainable Reporting Guidelines*（GRI G4）by the Global Reporting Initiative (GRI)  
*Guiding Opinions on Better Fulfilling Social Responsibilities of State-owned Enterprises* (GZFYJ [2016] No.105) by SASAC;  
*Guidance on Social Responsibility Reporting* (GB/T 36001-2015) by SAC;  
*Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises in Construction Industry* (CASS-CSR3.0) by CASS

### Reliability Assurance

All financial data contained herein for the year 2016 is from audited financial statements, while other data is sourced from Energy China Group official documents and statistics reports. We hereby represent that the report contains no false representations, misleading statements or material omissions, and is liable for the authenticity, accuracy and completeness of the contents.

### References to the Corporation

To facilitate expression and for better reading experience, China Energy Engineering Group Co., Ltd. is hereinafter referred to as “Energy China Group” or “we/us”.

### Availability

For more information, please visit our website (www.ceec.net.cn) where a PDF version of this report is available for reading or download. If you have any questions or need a hard copy, please contact us:

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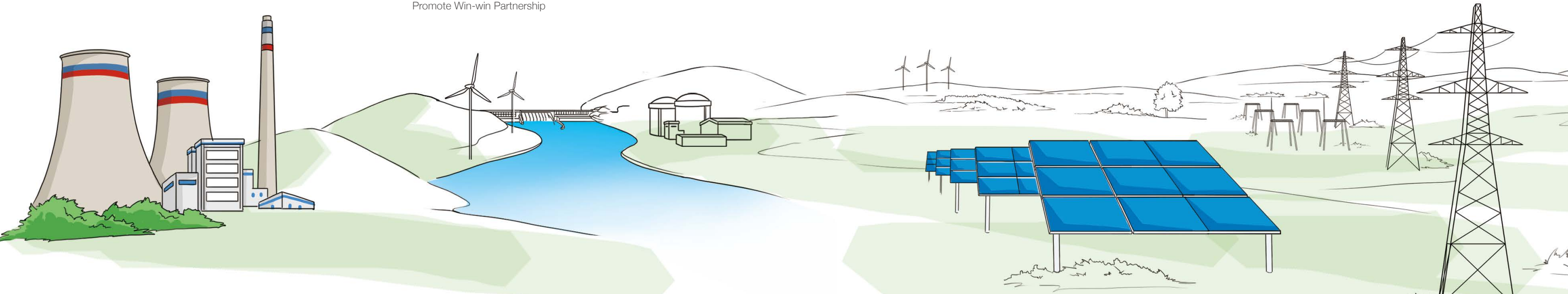
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## 董事长致辞

### Message From the Chairman



#### 尊敬的各利益相关方：

衷心感谢各位多年来对中国能建的倾心支持与帮助！

当前世界经济复苏乏力，增长动力不足、需求不振、金融市场反复动荡，与此同时，我国经济发展进入新常态，能源转型发展进入攻坚期。面对错综复杂的国内外发展形势，中国能建遵循“自主创新、奉献社会，科学发展、共建和谐”的社会责任观，全力践行政治、经济、环境和社会责任，着力打造政府认可、投资者青睐、业主满意、绿色环保、职工幸福的和谐发展企业，矢志为我国和世界能源产业科学发展作贡献，切实承担起大型央企的责任担当。

2016 年是集团公司实施“十三五”发展战略的开局之年，也是新一轮能源建设的启动之年。在国务院国资委的正确领导和国资委监事会的监督下，中国能建紧紧围绕“行业领先，世界一流”的战略愿景，全力应对复杂经济形势、激烈市场竞争和繁重改革发展任务的多种考验，使得公司各项工作取得了稳中有进、全面增长的良好成绩，全年新签合同额 4160.74 亿元，完成营业收入 2254.07 亿元，实现利润总额 92.36 亿元，据此名列“财富世界 500 强”第 312 位，名列 ENR 发布的年度 150 强全球工程设计公司和 225 强国际工程设计公司排名第 4 位和第 29 位，实现了“十三五”发展的良好开局。

回望 2016 年，是各位利益相关方的期许和支持，让我们取得了良好成绩。展望 2017 年，更加值得期待，我们将深入学习贯彻习近平总书记系列重要讲话精神和治国理政新理念新思想新战略，按照国务院国资委的总体部署，大力践行创新、协调、绿色、开放、共享的发展理念，加快转型升级，着力深化改革，推进创新发展，做大做强做精各项业务，把履行社会责任与促进企业发展紧密结合起来，促进企业健康平稳快速发展。

在朝着“具有国际竞争力的工程公司”前行的路上，我们愿与中外朋友真诚携手合作，共谋事业发展，共享发展成果，共创美好未来！

——中国能源建设集团有限公司董事长、党委书记



#### Respected stakeholders,

I would like to express my heartfelt thanks for your vigorous supports for Energy China Group over all these years.

Now, the lack of momentum, sluggish demands and volatility in the financial market hampers the global economic recovery. China, is facing tough challenges in the transition of energy industry while heading towards “a new normal” of economic growth. Amid the domestic and international complexities, we have embarked upon “independent innovation, social contribution, scientifically sound development and shared harmony” in every endeavor to fulfill political, economic, environmental and social responsibilities. Our ambition is to build a harmonious enterprise with a green mindset that is recognized by the government, favored by the investors, satisfied by the proprietors and loved by the employees. We’ve put determined efforts into scientifically-sound development of the national and global energy industry, and assumed all due responsibilities as a large central SOE.

2016 marked the first year for the 13th Five-Year development strategy of Energy China Group and the start of a new round of energy development program. Under the great leadership of SASAC and the supervision of its Board of Supervisors, we’ve worked hard towards the strategic vision of “becoming an industrial leader and world-class engineering enterprise” and made steady progress in all aspects of work amid the challenging economic complexities, intense competitions and arduous tasks of reform and development. In 2016, we signed RMB 416.074 billion worth of new contracts, and realized operation revenue of RMB 225.407 billion and gross profits of RMB 9.236 billion. We ranked 312ed among “The Fortune Global 500”, ranked 4th in the list of the Top 150 Global Design Firms and 29th in the list of Top 225 International Design Firms released by ENR, sending a good start to the 13th Five-Year Plan journey.

In retrospect of 2016, we know full well that we could never have gone this far without your expectations and supports. But 2017 promises better. We’ll put into thorough practice the guiding principles from the 18th CPC National Congress, all plenary sessions of the 18th CPC Central Committee and General Secretary Xi Jinping’s major speeches, and vigorously implement the development concepts of “innovation, coordination, green, openness and sharing”. We’ll accelerate the transformation and upgrading, deepen reform and promote innovation-driven development to expand, strengthen and excel in our businesses. We’ll perform social responsibilities in every step we take towards sound, stable yet fast business growth.

On the journey towards “an engineering enterprise with global competitiveness”, we look forward to joining hands with all our friends at home and abroad for shared progress, success and future.

Chairman  
China Energy Engineering Group Co., Ltd.





关于我们  
About us

公司简介  
Company Profile

中国能源建设集团有限公司成立于 2011 年 9 月 29 日，是经国务院批准、由国务院国资委直接管理的特大型能源建设集团，是集电力和能源规划咨询、勘测设计、工程承包、装备制造、投资运营等于一体的完整业务链的特大型骨干企业，是我国和世界能源建设的主力军，注册资本 260 亿人民币，营业收入逾 2000 亿人民币，资产总额逾 3000 亿人民币。

2014 年 12 月 19 日，中国能源建设集团有限公司与其全资子公司电力规划总院有限公司发起设立了中国能源建设股份有限公司。2015 年 12 月 10 日，中国能源建设股份有限公司公开发行 H 股在香港联合交易所主板挂牌上市（股份代码：3996.HK）。截至 2016 年底，在 H 股上市公司中国能源建设股份有限公司中，中国能源建设集团有限公司直接持股占比 68.82%，电力规划总院有限公司持股占比 0.33%，公开发行 H 股占比 30.85%。

2016 年中国能建新签合同额、营业收入、利润等主要经营指标稳中有进，名列“财富世界 500 强”第 312 位，名列 ENR 发布的年度 150 强全球工程设计公司 and 225 强国际工程设计公司排名第 4 位和第 29 位。

在多年的发展过程中，中国能建形成“一家企业、一个标志、多个品牌”的母子品牌群体系，主要企业品牌有中国能建、葛洲坝集团、中电工程、电规总院等；主要产品品牌有北京设备厂、易普力、三峡牌、扬修等。

第 312 位  
“财富世界 500 强” 排名

第 4 位  
ENR 年度 150 强全球工程  
设计公司排名

第 29 位  
ENR 年度 225 强国际工程  
设计公司排名

We ranked 312ed among "The Fortune Global 500", ranked 4th in the list of the Top 150 Global Design Firms and 29th in the list of Top 225 International Design Firms released by ENR.



With registered capital of RMB 26 billion, China Energy Engineering Group Co., Ltd. was established on September 29, 2011, upon approval of the State Council as a super-sized energy group under the direct administration of SASAC. As a key player in domestic and international energy markets, Energy China Group has business in survey, design and consultancy, construction and contracting, equipment manufacturing, investment, etc. in electric power and energy field across the entire business chain. With recorded business revenue of over RMB 200 billion and total assets of over RMB 300 billion.

On December 19, 2014, China Energy Engineering Corporation Limited was initiated and incorporated by Energy China Group and its wholly-owned subsidiary Electric Power Planning & Engineering Institute Co., Ltd. (EPPEI). On December 10, 2015, Energy China was listed on the main board of Hong Kong Stock Exchange (Stock code: 3996.HK). As of the end of 2016, China Energy Engineering Group Co., Ltd. owned 68.82% direct shareholding in China Energy Engineering Corporation Limited which is listed in the H-share, with Electric Power Planning & Engineering Institute Co., Ltd. (EPPEI) holding 0.33% and publicly issued H-share accounting for 30.85%.

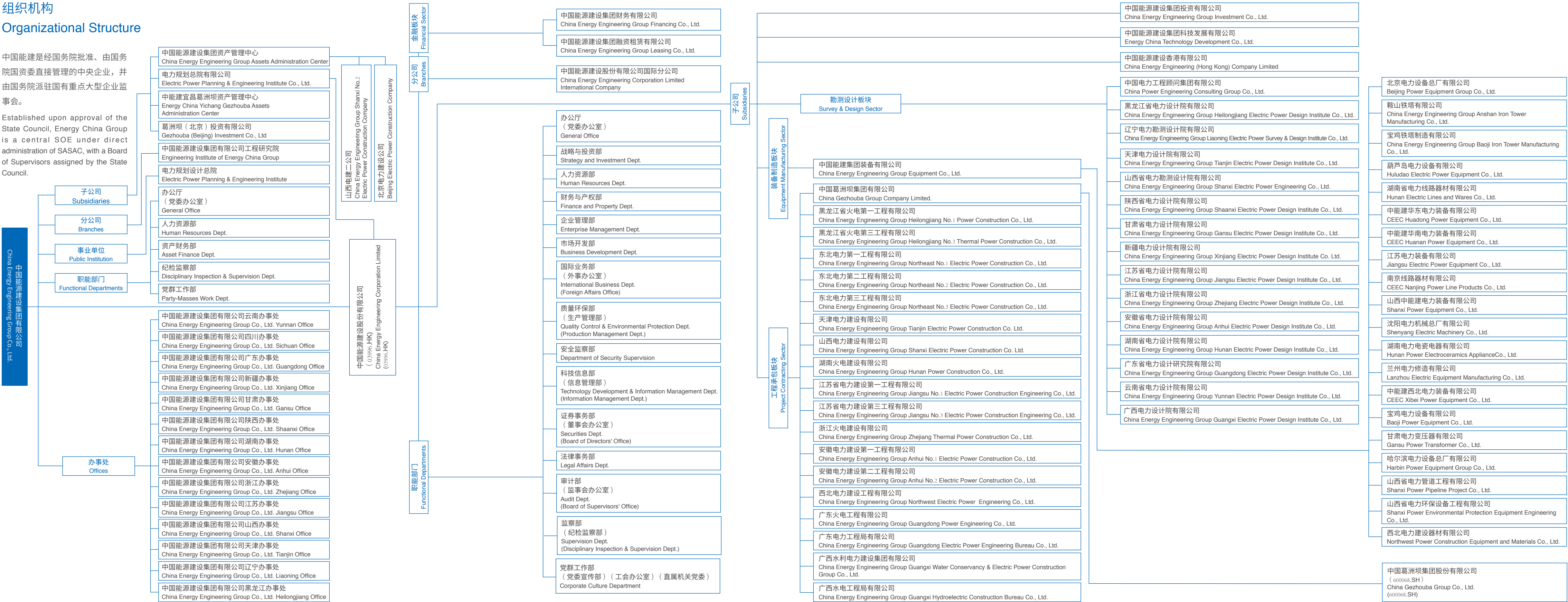
In 2016, we witnessed steady growth in the value of newly signed contracts, ranked 312ed among "The Fortune Global 500", ranked 4th in the list of the Top 150 Global Design Firms and 29th in the list of Top 225 International Design Firms released by ENR.

Over the years, we have developed a brand group system of “a logo of a parent company is leveraged across multiple brands”. Our corporate brands include Energy China Group, CGGC, CPECC and Electric Power Planning & Engineering Institute, etc. Our product brands mainly include “Beijing Power Equipment Group”, “EXPL”, “San Xia”, and “Yang Xiu”, etc.

组织机构  
Organizational Structure

中国能建是经国务院批准、由国务院国资委直接管理的中央企业，并由国务院派驻国有重点大型企业监事会。

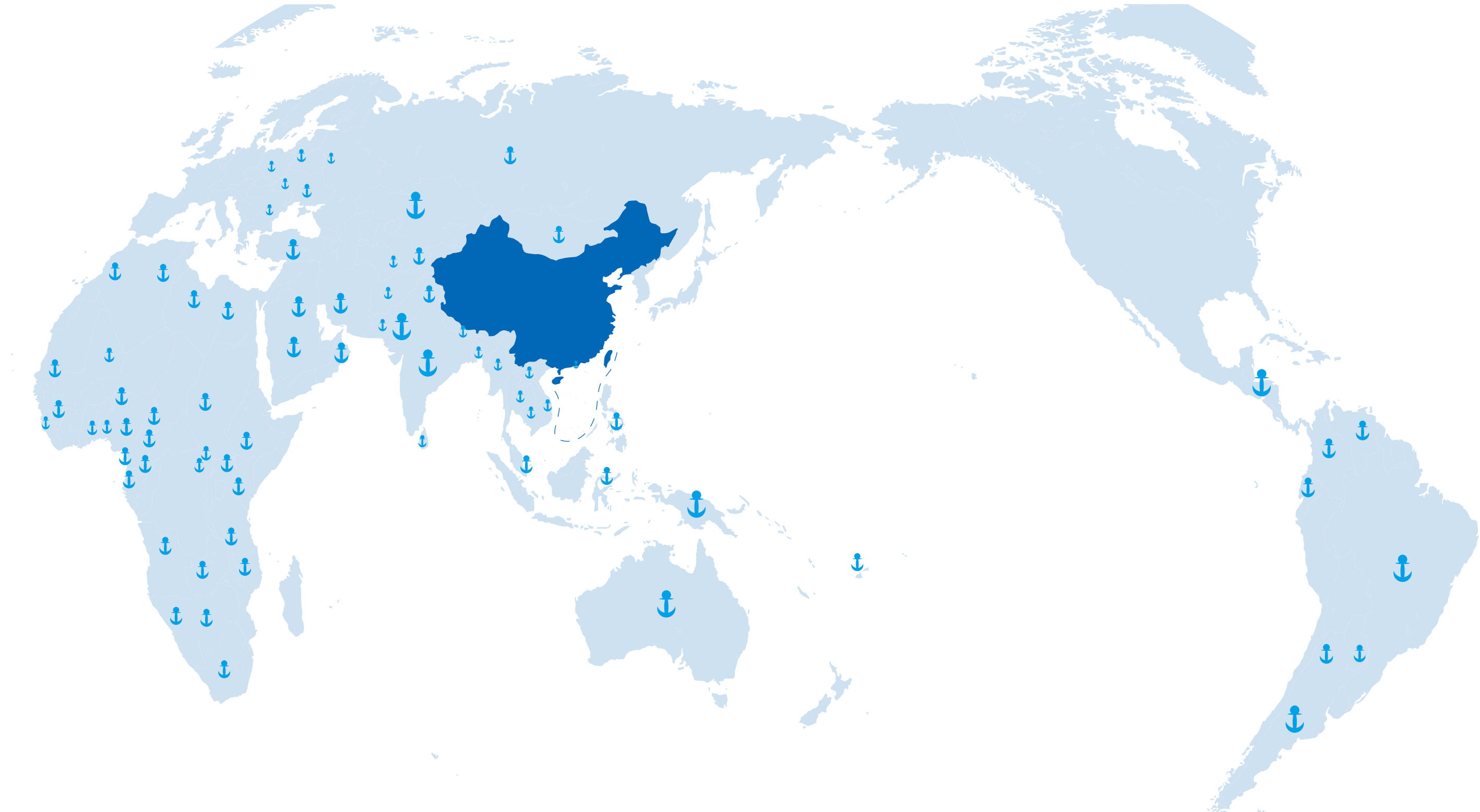
Established upon approval of the State Council, Energy China Group is a central SOE under direct administration of SASAC, with a Board of Supervisors assigned by the State Council.





全球业务分布  
Global Business

中国能建是中国乃至全球电力行业最大的综合解决方案提供商之一，核心业务涵盖勘测设计及咨询、工程建设、装备制造、民用爆破及水泥生产、投资运营，已在亚洲、非洲、大洋洲、拉丁美洲及欧洲的 80 多个国家和地区设立了 235 个分支机构，业务足迹遍布中国所有省区和 100 多个国家和地区。



Energy China Group is among the largest comprehensive solution providers in power industry of China and even the world. Our core businesses include survey and design, consultancy, engineering construction, equipment manufacturing, civil explosives & cements production, investment and operation. Up to now, our footprints have reached all over the China and over 100 countries and regions in Asia, Africa, Oceania, Latin America and Europe, over 80 of which are home to our 235 overseas branches.

发展目标  
Development Target

“十三五”时期，是全面建设小康社会决胜期，是全面深化改革攻坚期。为推动公司取得更大发展，中国能建积极把握机遇、占据主动，在破解难题中实现发展、寻求突破。综合分析内外部发展形势，中国能建提出到 2020 年，基本建成具有国际竞争力的工程公司的发展目标，并在此目标基础上，再用 5 到 10 年，努力建设具有强大创新能力和国际竞争力的跨国公司，即主业优势明显，公司治理优良，具有自主知识产权核心技术，国际化经营能力处于同行前列，综合指标在同行中处于先进水平，品牌影响力突出，实现国内一流向世界一流的新跨越。

The 13th Five-Year Plan period is decisive for building a moderately prosperous society in all aspects and overcoming major difficulties in comprehensively deepening reform. To achieve greater progress, Energy China Group will seize opportunities and take the initiative in realizing growth and breakthroughs while solving difficulties. Our ambition is to become a globally competitive MNC by 2020 and grow further into a multinational corporation with strong innovation and global competitiveness in another 5 to 10 years. We will make big strides from a national giant to a top-notch global player with prominent edges in principle businesses, sound corporate governance, core proprietary IPR technologies, industrial-leading international operation and comprehensive indicators as well as outstanding brand impacts.

The 13th Five-Year Plan Period 『十三五』期间	>	中心任务 Vision	>	到2020年,基本建成具有国际竞争力的工程公司。 Basically build an engineering enterprise with global competitiveness by 2020.
	>	公司目标 Goals	>	要做市场竞争的进取者,企业综合实力进一步增强; 要做经营管理的佼佼者,企业经营效果进一步优化; 要做行业发展的领跑者,企业布局结构进一步完善。 Forge ahead amid intense competitions, to further enhance our strengths in all aspects; Adopt leading operational and managerial practices, to further improve our business performance; Become the pacesetter of the industry, to further optimize our business structure.
	>	做到“四个必须” Four Imperatives	>	必须加快完成业务转型创新的功能性平台建设; 必须加快完成主业突出、差异发展的内部重组整合; 必须加快完成转变机制、激发活力的改革任务; 必须加快形成以母公司集中管控与子公司自主经营相结合的现代企业集团管理架构。 Build a functional platform for business transformation and innovation; Reallocate internal resources for differentiated development with a focus on principal businesses; Accomplish the reform of transforming the operational mechanism and stimulating vitality; Form a modern managerial framework that combines centralized control of Energy China Group with independent operation of all subsidiaries.
	>	取得“四个新突破” Four New Breakthroughs	>	公司价值创造要有新突破; 改革发展要有新突破; 创新驱动发展要有新突破; 国际战略实施要有新突破。 New breakthroughs in creating corporate values; New breakthroughs in implementing the reform; New breakthroughs in innovation-driven development; New breakthroughs in practicing the international strategy.



年度大事记  
2016 Memorabilia

日期 Date	大事记 Memorabilia
1月1日 Jan. 1	中国能建设计和参与建设的中国西部首座核电站——广西防城港核电站1号机组圆满完成168小时试运行。 Guangxi Fangchenggang No.1 Nuclear Plant designed and co-built by Energy China Group, the first nuclear plant in western China, successfully completed the 168-hour trial run.
1月26日 Jan. 26	中国能建所属湖南院与缅甸电力部在缅甸内比都举行直通燃机电厂EPC合同签约仪式。直通燃机电厂是缅甸实行对外开放政策以来由世界银行贷款援建的第一批电力建设项目。 China Energy Engineering Group Hunan Electric Power Design Institute signed the Thaton Combined Cycle Gas Turbine PP EPC contract with Burmese Electric Power Administration in Naypyidaw. This was one of the first electric PP projects funded by World Bank since the reform and opening up of Burma.
1月29日 Jan. 29	国家能源局副局长王晓林一行到中国能建集团进行安全生产工作调研。 Wang Xiaolin, deputy director of the National Energy Administration, led a delegation to Energy China Group for work safety investigation.
2月13日 Feb. 13	中国能建所属葛洲坝股份公司在国家商务部公布的“2015年我国对外承包工程业务新签合同额前100家企业”与“2015年我国对外承包工程业务完成营业额前100家企业”排行榜中, 均列第六位。 China Gezhouba Group Co., Ltd. ranked 6th on “2015 Top 100 enterprises in the newly-signed contract value of foreign project contracting” and “2015 Top 100 enterprises in accomplished turnover of foreign project contracting”.
2月16日 Feb. 16	中国能建所属中电工程华东院公司中标深圳市东部环保电厂项目设计, 该项目将成为单线处理能力和全厂处理总规模均为世界第一的生活垃圾焚烧发电厂。 East China Electric Power Design Institute Co., Ltd. won the bid to design Shenzhen East Power Plant. This will become the world's No.1 municipal waste incineration PP in terms of single processing capacity and gross processing capacity.
2月26日 Feb. 26	中国能建代表在扶贫会交流发言。 Poverty alleviation representative from Energy China Group made remarks and speeches at the Meeting on Poverty Alleviation.
2月29日 Feb. 29	中国能建承建的首个“一带一路”核电项目——巴基斯坦卡拉奇K-2/K-3核电项目正式开工。 Karachi K-2/K-3 nuclear power project, the first B&R project of its kind undertaken by Energy China Group, officially started.
3月14日 Mar. 14	中国能建(股份代码:03996.HK)被香港恒生指数有限公司正式纳入恒生综合大中型指数成份股。 Energy China (03996.HK) was officially included into Hang Seng Composite MidCap & LargeCap Indexes.
3月29日 Mar. 29	中国能建所属葛洲坝一公司、天津电建、安徽电建一公司、安徽电建二公司、湖南火电和江苏电建三公司六家企业荣获2015年度“全国电力建设优秀施工企业”称号。 CGGC No.1 Company, Tianjin Electric Power Construction Co. Ltd., Anhui No.1 Electric Power Construction Engineering Co., Ltd., Anhui No.2 Electric Power Construction Engineering Co., Ltd., China Energy Engineering Group Hunan Power Construction Co., Ltd. and Jiangsu No. 3 Electric Power Construction Engineering Co., Ltd. won the title of “2015 National Excellent Electric Power Construction Enterprise”.

日期 Date	大事记 Memorabilia
4月19日 April 19	中国能建所属葛洲坝集团索普拉多拉项目部成立首支救援队, 并参与厄瓜多尔当地政府组织的抗震救灾工作, 其抗震救灾义举获得厄瓜多尔总统科雷亚称赞。 CGGC Sopladora Workforce sent the first rescue team to assist the Ecuadorian government with earthquake relief and won praises from President Rafael Correa of Ecuador.
5月13日 May 13	中国能建所属葛洲坝三峡建设公司承建的世界最大升船机通过验收。 The world's largest ship lift built by China Gezhouba Group Three Gorges Construction Engineering Co., Ltd. was examined and accepted.
5月31日 May 31	由中国能建所属中电工程西北院和天津电建组建的联合体, 与国家电投中电国际公司签订了巴基斯坦中电胡超临界燃煤电站EPC总承包合同。 The conglomerate of CPECC Northwest Electric Power Design Institute Co., Ltd. and Tianjin Electric Power Construction Co. Ltd. signed the EPC general contract with SPIC China Power International Development Limited, on CPHGC CPECC Northwest Electric Power Design Institute Co., Ltd. in Pakistan.
6月5日 June 5	中国能建所属中电工程成功开展国内最大深度海上静力触探试验。 China Power Engineering Consulting Group successfully conducted a seabed cone penetration test. So far, no other test in China has ever been to such a depth.
6月18日 June 18	在中国国家主席习近平、塞尔维亚总统尼科利奇、总理武契奇的共同见证下, 中国能建和丝路基金有限责任公司、中国环保能源有限公司代表的中方联营体与塞尔维亚矿产和能源部签署联合投资开发塞尔维亚新能源项目合作谅解备忘录。 The Chinese conglomerate, represented by Energy China Group, Silk Road Fund Co., Ltd. and China Environmental Energy Investment Limited, signed an MoU of jointly investing and developing a new energy project in Serbia with the Ministry of Mining and Energy of Serbia, under the witness of Chinese President Xi Jinping, Serbian President Tomislav Nikolić and Serbian Prime Minister Aleksandar Vučić.
7月3日 July 3	中国能建所属中电工程华北院参与建设的全球最大的500米口径球面射电天文望远镜(英文简称FAST)主体工程在贵州省平塘县全面竣工。 North China Power Engineering Co., Ltd. delivered the main part of the 500-meter aperture spherical radio telescope (FAST) in Pingtang County, Guizhou Province. It is the world's largest telescope of its kind.
7月20日 July 20	中国能建集团获评国务院国资委央企负责人经营业绩年度考核A级企业和任期考核A级企业, 并荣获“业绩优秀企业”称号(任期考核特别奖)。 Energy China Group was rated Class A in the annual business performance assessment by the SASAC, and was rated Class A in terms of SOE leadership performance during the three-year tenure and was awarded the title of “An excellent enterprise in business performance” (special award during three-year tenure).
8月底 End of August	在2016年度美国《工程新闻记录》(ENR)杂志“250家全球承包商”“250家国际承包商”“225家国际工程设计公司”和“150家全球工程设计公司”榜单排名中, 中国能建所属葛洲坝股份公司、中电工程、天津电建3家单位再次上榜。 China Gezhouba Group Co., Ltd., China Power Engineering Consulting Group (NCPPE) and Tianjin Electric Power Construction Co. Ltd. were once again rated on “Top 250 Global Contractors”, “Top 250 International Contractors”, “Top 225 International Design Firms” and “Top 150 Global Design Firms” by Engineering News-Record (ENR) in 2016.

日期 Date	大事记 Memorabilia
9月3日至4日 Sep. 3-4	中国能建董事长、党委书记汪建平应邀出席2016年二十国集团工商峰会（B20峰会），期间与乍得总统伊德里斯•代比•伊特诺进行会谈。 Wang Jianping, Chairman of Energy China Group, was invited to attend the G20 Hangzhou Summit in 2016, where he held talks with Idriss Déby Itno, President of Chad.
9月11日 Sep. 11	中国能建两名选手获2016年中国技能大赛——第四届全国吊装技能竞赛第一名、第四名。 Two contestants of Energy China Group won the first and fourth prizes at the 2016 China Skills Competition · 4 <sup>th</sup> National Hoisting Skills Contest.
当地时间 10月14日 Oct. 14 (local time)	中国国家主席习近平与孟加拉国总理哈西娜在达卡共同为中国能建所属东电一公司EPC电站揭牌。 Chinese President Xi Jinping and Bengal Prime Minister Sheikh Hasina inaugurated the Power Plant of Northeast No.1 Electric Power Construction Co., Ltd. in Dhaka (an EPC project).
10月24日至27日 Oct. 24-27	中国能建所属安徽电建一公司、天津电建、北京电建、西北电建、江苏电建三公司五家企业七项工程在中国工程建设焊接论坛会议上获“2016年度全国优秀焊接工程一等奖”。 Seven projects of five subsidiaries of Energy China Group, namely, Anhui No.1 Electric Power Construction Engineering Company, Tianjin Electric Power Construction Co. Ltd., Beijing Electric Power Construction Co., Ltd., Northwest Power Construction Engineering Co., Ltd., and Jiangsu No. 3 Electric Power Construction Engineering Co., Ltd., won the First Prize of 2016 National Award for Outstanding Welding Projects at China Engineering Construction Welding Forum.
11月17日至20日 Nov. 17-20	中国能建所属华东装备扬州设备公司参展产品“核级气动执行机构”在第九届国际发明展览会上获得金奖。 The “nuclear-grade pneumatic actuator” developed by CEEEC Yangzhou Equipment Company wins the gold prize at the 9th International Invention Exhibition.
11月29日 Nov. 29	中国能建所属江苏院、安徽电建一公司、中能装备扬州电力设备修造厂三家单位获得中国电力企业联合会“2015-2016年度电力标准化工作先进集体”称号。 China Energy Engineering Group Jiangsu Electric Power Design Institute Co., Ltd., Anhui No.1 Electric Power Construction Co., Ltd. and Yangzhou Electric Power Equipment Manufacture Factory Co., Ltd. was awarded the title of “2015-2016 Advanced Collectivities of the Power Electric Industry in Standardization” by China Electricity Council.
12月1日至2日 Dec. 1-2	中国能建18项成果在第八届全国电力职工技术成果奖颁奖大会上受到表彰，其中一等奖1项、二等奖4项、三等奖13项。 Energy China Group won one First Prize, four Second Prizes and 13 Third Prizes at the Awarding Ceremony of the 8th National Competition of Technical Achievements by Power Workers.
12月11日 Dec. 11	中国能建多家单位参建的国家风光储输示范工程在第四届中国工业大奖发布会上荣获“中国工业大奖”。 The National Wind/Photovoltaic/Energy Storage and Transmission Demonstration Project, participated by several affiliates to Energy China Group, win the 4th China Grand Awards for Industry.

## 责任管理

中国能建高度重视企业社会责任管理工作，逐渐将社会责任工作提升到公司战略发展的高度，明确将保护劳动者权益、环境保护、诚信、热心公益事业和促进社会和谐稳定等社会责任内容纳入公司战略目标管理系统。

## 责任理念

中国能建肩负“世界能源，中国能建”的组织使命和“行业领先，世界一流”的战略愿景，遵循“自主创新、奉献社会，科学发展、共建和谐”的社会责任观，深入关注各利益相关方对公司的期望和要求，着力打造政府认可、投资者青睐、业主满意、职工幸福、绿色环保的和谐发展企业。

## 责任治理

结合发展战略和运营模式，中国能建持续完善社会责任管理体制机制，努力推动社会责任管理融入企业理念、职能部门、生产运营过程，满足国务院国资委、股东、政府等各利益相关方的期望与诉求。

## CSR Management

Energy China Group attaches considerable importance to CSR management, and has gradually enhanced CSR management to the high level of corporate strategy development, and included CSR issues, such as protecting the rights and interests of workers, environmental protection, integrity, contributing positively to social welfare, and promoting social harmony and stability into the corporate management system of strategic goals.

## CSR Philosophy

We work hard towards the strategic vision of becoming a “world-class industrial leader” under the mandate of “bringing energy to the world”. We embark upon “independent innovation, social contribution, scientific development and mutual harmony” in social responsibility efforts and pay close attention to the expectations and appeals from all stakeholders to build a harmonious enterprise with government recognitions, customer satisfactions, investors’ high favors, employee happiness and green consciousness.

## CSR Governance

We have made continuous efforts in improving CSR management system to combine with our development strategies and business model. Our aim is to integrate CSR management into our business philosophy, functional departments and production and operation process, thus satisfying the expectations and appeals from SASAC, shareholders, governments and other stakeholders.





组织体系

中国能建积极推进社会责任管理工作，已建立了分工明确、高效运转、三级联动的社会责任组织体系，并按照《社会责任管理暂行办法》严格落实社会责任的组织、计划、执行、沟通和绩效管理，初步建立了企业社会责任管理与实践的长效机制。

Organizational System

We have pressed ahead with CSR management and set up a social responsibility organizational system with clear distribution, high efficiency, close interconnection among CSR Committee, CSR Management Dept. and CSR Leadership Teams of Subsidiaries. We have carried out management over CSR organization, planning, implementation, communication and performance in line with *the Interim Measures for CSR Management*, and preliminarily set up a permanent mechanism for CSR management and practices.



责任推进

中国能建持续完善社会责任管理体系和制度，将社会责任理念和管理要求逐步融入企业各项日常工作中，有效管理企业运营对社会和环境的影响，推动企业发展和履行责任良性循环，努力成为履行社会责任的表率，实现企业与职工、社会、环境等利益相关方的和谐发展。

Pressing ahead with CSR Works

We have made continuous efforts in improving the institutional systems on CSR management and will integrate CSR philosophy and management into daily routine to effectively control social and environmental impacts of business operation, and ensure virtuous interactions between corporate development and CSR performance. We aspire to set an exemplary model of fulfilling social responsibilities and achieve harmonious development of Energy China Group, employees, society, environment and other stakeholders.



- 2016 年初，中国能建印发 2016 年社会责任工作要点，要点明确了 2016 年社会责任工作的总体要求，配发了公司 2016 年核心责任议题指引，对经济、社会和环境等利益相关方的重点责任议题进行了梳理和指引，要求子企业对社会责任工作按季度进行通报，对标工作开展情况、促进子企业相互交流和学习。
- 2016 年上半年，中国能建印发《关于做好环境、社会及管治报告信息披露工作相关事宜的通知》，对相关工作背景、监管要求进行了说明，对重点工作、职责分工等进行了安排，以确保公司年度业绩公告配发的环境、社会及管治报告信息披露内容完整、准确、合规。
- 2016 年 12 月，中国能建印发《中国能源建设集团（股份）有限公司国际工程项目社会责任指引》，指导并规范所属单位做好国际工程项目社会责任建设工作。
- In early 2016, we printed and issued *The 2016 CSR Priorities* with general requirements and guidance on core CSR issues. The *Priorities* provides a clear guidance on key responsibilities for stakeholders in society, economy and environment. The *Priorities* requires all subsidiaries to report respective CSR work on a quarterly basis, compare their work with other enterprises' excellent CSR practices and promote mutual learning and exchanges.
- In 2016, we printed and issued *the Notice on Related Works of Information Disclosure in Environmental, Social and Governance Reports Disclosure*, clarifying the backgrounds and regulatory requirements of relevant work, and arranging major tasks and responsibilities distribution to ensure a complete, accurate and compliant disclosure of environmental, social and corporate governance reports attached to the annual business performance statements.
- In 2016, we printed and issued *the Energy China International Engineering CSR Guide* to direct and standardize related works among subordinated companies



责任沟通

中国能建在履行社会责任的同时积极与利益相关方进行有效地沟通，根据利益相关方的诉求与建议，改进优化内部工作流程，不断加强自身能力建设，努力满足各方的期望。

责任沟通活动

中国能建注重与利益相关方开展沟通交流活动，通过发布社会责任报告、组织社会责任管理培训等多种渠道立体地向各利益相关方展示公司社会责任工作情况，以回应各界期望与诉求，同时增加公司运营透明度，增进其对公司的信任。



中国能建参加2016中国国际清洁能源博览会，宣传公司积极投身绿色、低碳、安全、高效电力能源发展，大力拓展清洁能源建设，将绿色设计、绿色施工、绿色产品融入企业经营管理的理念

Energy China Group took part in the Clean Energy Expo China 2016, sharing the Group's ambition of pursuing green, low-carbon, safe and highly efficient power development, vigorously expanding green energy building, and integrating green design, green construction and green production into business operation philosophy.



中国能建在公司职工培训中心举办社会责任管理培训班，邀请社会责任专家对社会责任相关内容进行专题授课和辅导，进一步加深了员工对社会责任管理工作的理解和认识

Energy China Group organized a CSR management training program at the Staff Training Center, inviting experts to give special lectures and mentoring on CSR-related issues to deepen understanding about CSR management among the employees.



中国能建发布《2015 年度社会责任报告》，旨在进一步加强公司与社会各界的沟通，提升企业品牌形象与影响力

Energy China Group issued the *Social Responsibility Report 2015* to further enhance the communication with the society, and strengthen the brand image and impacts.

CSR Communication

While fulfilling social responsibilities, Energy China Group also effectively communicates with stakeholders. According to the appeals and suggestions from stakeholders, we improve and optimize internal workflows, and continuously enhance capacity building to meet their expectations.

CSR Communication Activities

We have attached great importance to communication and exchange activities with all stakeholders, and we have also informed them of CSR work through annual CSR reports, CSR management training programs and many other patterns to meet their expectations and appeals, enhance our operational transparency and gain greater trusts from all related stakeholders.

常态化沟通表

中国能建更注重与利益相关方建立常态沟通机制，通过多渠道、多形式的沟通，了解不同利益相关方对公司的期望与诉求，并以此作为制定公司发展战略和责任实践、对外信息披露的重要参考。

Routine Communication

We have laid more emphasis on building a routine communication mechanism with all stakeholders to understand their expectations and appeals through multiple patterns, and taking this understanding as a basis for us to formulate corporate strategy, CSR practices and information disclosure plans.

利益相关方 Stakeholders	期望与诉求 Appeals & Expectations	回应方式 Responses	责任实践 CSR Practices
国务院国资委 SASAC	收益回报 Return on investment 社会责任 Social responsibilities	接受派驻监管 Accept the assigned Board of Supervisors 全面工作汇报 Report all works 严格报送报表 Strictly submit statements 贯彻相关精神 Implement relevant spirits	超额完成业绩考核 Exceed the performance target 持续加强风险管控 Continuously enhance risk management and control 配合国资委调研 Assist SASAC with investigation and research 承担企业社会责任 Assume social responsibilities
股东与投资者 Shareholders & investors	收益回报 Return on investment 公开透明 Transparency 权益保护 Protect rights and interests	阳光治理 Ensure transparent governance 投资者关系维护 Maintain good investor relationship 严格信息披露 Strictly disclose information	提升经营业绩 Promote business performance 完善公司治理 Improve corporate governance 保护股东权益 Protect the rights and interests of shareholders
政府 Governments	依法纳税 Pay tax in accordance with the law 遵纪守法 Observe disciplines and laws 响应政策 Respond to policy	主动纳税 Pay taxes on our own initiative 合规经营 Run business in compliance 参与扶贫、拉动就业 Engage in poverty relief and promote employment	依法合规经营、足额纳税 Run business in compliance, and pay all due taxes 参与定点扶贫 Take part in targeted poverty alleviation 稳定增长、带动就业 Realize stable growth, and stimulate employment
业主和客户 Proprietors and Customers	严格履约 Strictly perform agreements and contracts 质量优良 Good quality 响应投诉 Respond to complaints	调查客户需求 Investigate into customer demands 严格生产管理 Conduct strict production management 积极沟通 Carry out active communication	确保履约率和交工合格率100% Ensure 100% contract performance rate and acceptance rate 技术工艺和产品创新 Innovate on technologies, techniques and products 正面解决投诉 Solve complaints in a positive manner

利益相关方 Stakeholders	期望与诉求 Appeals & Expectations	回应方式 Responses	责任实践 CSR Practices
供应商与分包商 Suppliers and contractors	公开采购 Open procurement	招投标、商业谈判 Biddings, business negotiations	坚持诚信、严格履约 Commitment to integrity, strict contracts performance
	公开公正 Transparency and fairness	合同执行 Contact performance	公开采购、公正评标 Open procurement, fair bids evaluation
	严格履约 Strict performance of agreements and contracts	公开采购平台 Open procurement platform	遵守互利、共赢原则 Observe the principle of mutual benefits and win-win cooperation
		会议、互访与交流 Meetings, mutual visits, exchanges	建立良好合作关系 Establish sound partnership
员工 Employees	薪酬与福利 Salaries & benefits	健全的制度基础 Sound institutional basis	稳定的薪酬激励 Develop stable system of salary incentives
	健康与安全 Health & safety	职工监事、代表、工会 Workers in the Board of Supervisors, representatives, and Labor Union	关注员工发展 Pay attention to staff development
	职业发展 Occupational development	征求合理化建议 Ask for reasonable advices	开展各类培训 Organize various trainings
	人文关怀 Care for employees	完善培训体系 Improve training system	关注并预防职业病 Pay attention to and prevent occupational diseases
社区与公众 Communities and the public	公益慈善 Welfare & philanthropy	关注员工困难 Pay attention to employees in difficulties	开展困难职工帮扶 Make efforts in helping employees in difficulties
	环境友好 Environmental friendliness		
	社区发展 Community development	社区交流、慰问 Community exchanges & greetings	参与社区公益和福利事业 Engage in community welfare service
	社区就业 Community employment	社会公益活动 Social welfare activities	投身抢险救灾 Devote to disaster rescue and relief
行业 Industries	公平竞争 Fair competition	捐赠、捐助 Donations	推进本地采购和雇佣 Promote local procurement and employment
	推动行业进步 Promote industrial progress	志愿者活动 Volunteer activities	重视项目对社会环境的影响 Attach importance to social and environmental impacts of projects
		环境保护 Environmental protection	加大环保产业投入 Enlarge inputs into environmental industries
		编制标准和规范 Formulate standards and specifications	开展规划研究、技术研发引领行业发展 Conduct planning research and lead the development of the industry through technology R&D
		加大研发投入 Intensify R&D efforts	发挥全产业链优势，为行业提供优质服务 Give full play to the edges of the whole industrial chain and offer good quality services
		参加行业协会 Join industrial associations	配合、支持协会、推进行业公平竞争与良性发展 Support and coordinate with industrial associations in promoting fair competition and sound industry development
		战略合作 Carry out strategic cooperation	

责任荣誉  
Honors

荣誉称号 Honorary Titles	评奖机构 Award Institutions
2016-2017年度第一批国家优质工程奖31项 31 First Batch of the 2016-2017 National Excellent Project Awards	中国施工企业管理协会 China Association of Construction Enterprise Management
国家科技进步二等奖 1项 1 second prize of "National Scientific and Technological Progress Award"	国家科学技术奖励工作办公室 National Office for Science & Technology Awards
中国电力科技进步奖一等奖3项、二等奖1项 3 first prizes and 1 second prize of "Electric Power Scientific and Technological Progress Award"	中国电机工程学会 Chinese Society for Electrical Engineering
水力发电科学技术奖特等奖2项、二等奖2项 2 Special Prizes and 2 Second Prizes of Hydropower Science and Technology Award	中国水力发电工程学会 China Society for Hydropower Engineering
2016年度中国电力优质工程奖39项 39 National Excellent Electric Power Projects of 2016	中国电力建设企业协会 China Electric Power Construction Association
电力建设科学技术进步一等奖4项 4 first prizes of "Scientific and Technological Progress Award on Electrical Engineering"	中国电力建设企业协会 China Electronic Power Construction Association
2016年度电力行业优秀工程咨询成果奖一等奖43项、二等奖58项、三等奖82项 43 First Prizes, 58 Second Prizes and 82 Third Prizes of the 2016 National Excellent Engineering Consultancy Achievements in Electric Power Industry	中国电力规划设计协会 China Electric Power Planning & Engineering Association
2016年度电力工程科学技术进步奖一等奖11项、二等奖13项、三等奖16项 11 First Prizes, 13 Second Prizes and 16 Third Prizes of 2016 Power Engineering Science and Technology Progress Award	中国电力规划设计协会 China Electric Power Planning & Engineering Association
国企好新闻一等奖1项、二等奖1项、三等奖2项 1 First Prize, 1 Second Prize and 2 Third Prizes of the SOE Good News Award	国务院国资委新闻中心 SASAC News Center
全国能源行业微信传播奖3项 3 National Energy Industry WeChat Communication Awards	中国能源报社 China Energy News
2016年度电力企业文化建设优秀成果奖4项 4 Excellent Culture Building Achievements Awards for Electric Power Enterprises	中国电力企业联合会 China Electricity Council
第十三届“全国技术能手”1个 1 Award of the 13th “National Technical Expert”	人力资源与社会保障部 Ministry of Human Resources and Social Security of the P.R.C
全国五一劳动奖章1个 1 National May 1 Labor Medal	中华全国总工会 All-China Federation of Trade Unions
全国工人先锋号2个 2 National Workers Vanguard Awards	中华全国总工会 All-China Federation of Trade Unions
中央企业先进基层党组织标杆1个 1 Advanced Central SOE Grass-roots Party Organization Benchmark	国务院国资委党委 SASAC Party Committee
中央企业先进基层党组织1个 1 Advanced Central SOE Grassroots Party Organization	国务院国资委党委 SASAC Party Committee



## 完善公司治理

### Improve Corporate Governance

面对错综复杂的国内外形势，中国能建紧紧抓住提质增效稳增长中心任务，强化规范管理，确保依法合规高效运行和全面、协调、健康可持续发展，实现国有资产保值增值，提升公司的活力、竞争力和影响力。

To fight through the complexities in domestic and overseas markets, Energy China Group has strengthened standard governance under the core mandate of improving quality and efficiency and keeping steady growth to ensure highly efficient operation in strict compliance with laws and regulations and realize comprehensive, coordinated and sound sustainable development. We have maintained and increased the value of state-owned assets and obtained growing vitality, competitiveness and impacts.

## 规范集团管控

中国能建以对全体股东负责为己任，不断完善企业治理政策和机制，规范信息披露机制，从而规范和完善集团公司管控，促进企业整体持续、稳定、健康发展。

### 完善企业治理机制

中国能建制定《中国能源建设股份有限公司章程》，明确股东的权利和义务，同时立足自身实际情况，不断完善法人治理机构。建立公司的权力机构——股东大会，制定《股东大会议事规则》，进一步明确了股东大会的职责与权限，确保股东大会规范、高效、平稳运作及依法行使职权，维护股东、中小投资者的合法权益。

### 保护中小投资者权益

中国能建通过规范召开股东大会，适时组织开展各专门委员会等，切实维护中小投资者的合法权益。

- 组织召开股东大会，充分保障股东权利以及保护中小投资者权益。2016 年，公司共召开两次股东大会，审议通过 11 项普通决议案和 7 项特别决议案。
- 规范运营，确保公司股东大会、董事会及专门委员会、监事会和高级管理层组成的内部治理架构运行规范、有效，加强公司内幕消息管理和关联交易管理，充分发挥独立非执行董事在保护中小股东利益中的作用，进一步保护中小投资者权益。

### 规范化信息披露

中国能建逐步建立以董事长为公司信息披露管理工作的第一责任人，董事会秘书负责具体协调的信息披露机制，并严格按照有关规定，对须予披露及自愿披露的信息进行及时、有效、完整、合规地披露，进一步保护公司股东、债权人及其他利益相关者的合法权益。全年共发布各类公告 53 项，其中定期公告 22 项，临时公告 31 项。

## Standardize Corporate Management and Control

We act responsibility towards all shareholders through continuously improved corporate governance policies and mechanisms as well as standardized information disclosure mechanism to ensure the sustainable, stable and sound development of Energy China Group.

### Improving Corporate Governance Mechanism

We have formulated the *Articles of Association of China Energy Engineering Corporation Limited* which identifies the shareholders' rights and obligations, and we have kept improving the corporate governance structure to combine with our own practical situations. We have also established the authoritative Shareholders Meeting and drawn up the *Rules of Procedure* to clarify its duty and authority to ensure standard, efficient and steady operation and exercise all powers in accordance with the law, and protect the legitimate rights and interests of shareholders and small/medium investors.

### Protecting the Rights and Interests of Medium and Small Investors

We have made practical efforts in safeguarding the legitimate rights and interests of medium and small investors through regular Shareholders Meeting as well as timely meetings of special committees.

- The Shareholders Meeting aims to fully safeguard the rights and interests of shareholders and small/medium investors. In 2016, two Shareholders Meetings were held, where 11 ordinary resolutions and 7 special revolutions were reviewed and approved.
- Efforts have also been made to ensure an effective and standard performance of the internal governance structure which is composed of the Shareholders Meeting, Board of Directors, Special Committees, Board of Supervisors and senior management, enhance the management over insider information and connected transaction, and give a full play to the role of independent non-executive directors in protecting the rights and interests of small and medium shareholders and investors.

### Standardizing Information Disclosure

We have appointed our Chairman of the Board as the first responsible person for information disclosure management. The Secretary to the Chairman of the Board shall assume the responsibility of coordinating the information disclosure and making timely, effective and complete disclosure of compulsory and optional information in strict compliance with relevant rules and regulations, in a bid to protect the legitimate rights and interests of shareholders, creditors and other stakeholders. Throughout the year 2016, we issued 53 public announcements, including 22 regular ones and 31 provisional ones.



## 严格依法合规

中国能建严格遵守《中华人民共和国公司法》等法律法规，推进合规治理和运营，加强内部风险防范，坚决抵制商业贿赂和商业腐败。2016 年，公司未发生任何违反运营地反贪污、反勒索、反欺诈及反洗钱法律法规所引起的质询、通报或惩罚事件。

## 依法治企

中国能建积极组织编制《法治能建建设实施方案（2016-2020）》，部署法治能建建设工作。加大法律人才的引进和培养力度，法律顾问专业化水平进一步提升。

集团公司落实国资委要求及央企法治工作会的精神，将“明确公司实行总法律顾问制度；总法律顾问为企业高级管理人员，并由董事会聘任；董事会审议事项涉及法律问题的，总法律顾问应列席会议并提出法律意见”纳入公司章程，进一步完善了公司治理主体依法履职的保障机制。

集团公司法律事务部参与重要改革方案的研究制订和审核，开展项目法律论证和法律审核，为公司改革发展提供法律支撑。2016 年法务部共审核各类合同 73 份，金额 790 亿元；审查规章制度 65 项；参与重要决策法律论证 220 项 / 次；出具法律意见书 47 份。

## 风险管控

中国能建持续加强风险防范，大力开展项目审计工作，加强审计整改，更全面和高效地防范风险，保障企业稳定健康发展。全年开展各类审计 1330 项，含经济责任审计 202 项、专项审计 126 项、内控制度审计 87 项、风险管理审计 37 项，共计审计资产量 1347.4 亿元。

73 份

全年审核各类合同

73 contracts were reviewed in 2016.

790 亿元

涉及金额

The value of reviewed contracts is worth of RMB 79 billion.

## Strictly Observe the Laws and Regulations

We have managed and run our business in faithful adherence to, among other relevant laws and regulations, *the Company Law of the People's Republic of China*; enhanced preventive measures against internal risks; and firmly resisted commercial bribery and corruptive practices. In 2016, there was no incidence of questioning, reporting or punishment against us due to the breach of anti-corruption, anti-racketeering, anti-fraud and anti-money laundering laws and regulations in our operations.

## Corporate Governance by Law

Energy China Group has formulated *the Energy China Group's Implementation Plan on Rule of Law (2016-2020)*. In addition, we have intensified efforts in recruiting and cultivating law talents, thus bringing the expertise and professionalism of legal advisers up to a higher level.

Energy China Group has also implemented the SASAC's requirements and the instructions given at the Central SOEs Legal Work Meeting. We have made plain in the Articles of Corporation that “Energy China Group shall implement the system of General Counsel who will be appointed by the Board of Directors as part of the senior management; in case the Board of Directors discusses any issues that involve legal matters, the General Counsel shall attend the meeting and give legal advices”, to further improve the safeguard mechanism of corporate main body in performing the duty by law.

The Department of Legal Affairs has contributed to the research, formulation and review of important reform plans, and provided supports through legal argumentation and review. In 2016, our Department of Legal Affairs reviewed 73 contracts with a value of RMB 79 billion, examined 65 rules and regulations, participated in legal argumentation for 220 major decisions, and issued 47 legal opinions.

## Risk Management and Control

Energy China Group has strengthened risk prevention, and worked vigorously on project auditing and rectification to ensure more comprehensive and efficient risk prevention, and guarantee sound and steady development. Throughout the year, we audited 1,330 items worth RMB 134.74 billion in total, including 202 economic audits, 126 special audits, 87 internal control system audits and 37 risk management audits.

1330 项

全年开展各类审计

1,330 items were audited in 2016.



2016 年股东大会

2016 General Meeting of Shareholders

加强内控建设 Intensify Internal Control	<ul style="list-style-type: none"><li>结合企业发展战略和年度经营目标,系统评估内外部风险,合理制定重大风险管理策略和解决方案,编制公司全面风险管理报告。</li><li>开展“规范管理、防范法律风险”效能监察,以发现问题、堵塞漏洞、完善制度为工作重点,推动效能监察工作有序、有效深入开展。</li><li>Assessed internal and external risks in a systematic way, worked out reasonable policies and solutions against major risks and compiled reports on comprehensive risk management and control to align with our development strategies and annual business targets.</li><li>Carried out efficiency supervisions to standardize managerial practices and prevent legal risks; and identified problems, corrected loopholes and improved institutional systems to promote effective and orderly progress of the supervision work.</li></ul>
开展审计项目 Conduct Audits	<ul style="list-style-type: none"><li>创新开展经济责任审计,提高审计效率和质量,实现经济责任全覆盖。</li><li>围绕国际业务优先发展战略,组织21家所属企业开展境外专项审计。</li><li>认真组织相关单位开展“僵尸企业”与特困企业专项审计工作;督导开展贸易风险业务专项审计。</li><li>配合国资委监事会对葛洲坝集团、中电工程集团和中能装备公司进行监督检查。</li><li>Blazed new trails in the auditing of all economic responsibilities to achieve higher efficiency and quality;</li><li>Organized special audits on overseas business ,which is our priority, among 21 subordinated companies;</li><li>Organized special audits on "zombie enterprises" and straitened enterprises among related companies; offered guidance and monitoring over special audits on businesses that involve trade risks.</li><li>Assisted SASAC's Board of Supervisors with its supervisory and inspective actions against CGGC, CPECC and CEEEC.</li></ul>
落实审计整改 Take Post-audit Corrective Actions	<ul style="list-style-type: none"><li>印发《关于中国能建审计查出主要问题的通报》,要求所属企业积极开展对照检查工作,对于自查出现的问题采取措施及时整改。</li><li>加强审计问题整改跟踪.明确责任单位和责任主管部门,按照整改“三不放过”原则,加强审计问题整改情况的专项跟踪检查。</li><li>建立审计问题整改数据库.将2012年至2015年审计发现的问题与整改情况进行了全面整理,建立完整的审计问题清单与对应的审计整改台账。</li><li>Printed and issued <i>the Circular of Energy China Group on Major Problems Identified through Auditing</i>, requiring all subsidiaries to run self-inspections and take immediate corrective actions against any problems.</li><li>Made clear the responsibilities of specific companies and departments to intensify follow-ups of corrective actions and progress against the problems.</li><li>Established a database that includes a complete list of all problems identified from 2012 to 2015 through auditing and a corresponding ledger that explains how they've been corrected.</li></ul>



反腐倡廉

中国能建深入开展党风廉政建设和反腐败工作，通过廉洁文化建设，提高从业人员对商业贿赂和商业腐败危害性的认识，构建和谐、阳光的商业环境，树立企业良好形象。

Anti-corruption

Energy China Group has put intensive efforts in building a clear Party culture, keeping clean organizations and being against corruption. Our aim is to raise the awareness of the harms from business bribery and business corruption to build a sound and harmonious commercial environment as well as a good corporate image.

宣传廉洁文化

构建防治商业贿赂和商业腐败的思想道德防线  
Building a culture of honesty and integrity as well as strong moral principles against commercial bribery and corruption

- 广泛开展“树廉洁家风，创廉洁家庭”活动，推动廉洁文化“进机关、进项目、进车间、进班组、进家庭”。
- 通过参观监狱、“互联网+微党课”等途径开展廉洁教育，共计开展教育活动963次，参加人数近10万人次。
- Organized extensive activities to build the culture of honesty and integrity among administrative organs, project teams, workshops, groups and families.
- Organized 963 educational activities, including jail visits and online CPC lectures, etc., reaching out to nearly 100,000 persons.

深化监督检查

谨防商业贿赂和商业腐败问题  
Intensifying supervision and inspection against commercial bribery and corruption

- 开展“三重一大”决策管理、党风廉政建设主体责任和监督责任、领导人员履职待遇和业务支出监督检查，并对发现问题监督整改。
- 开展电子集中采购平台采购情况监察。
- 开展“四风”问题监督检查，对驻京办事处、内部食堂等场所进行突击检查。
- 实行国际项目预防商业贿赂和商业腐败承诺制，往来单位签订《业务合作廉洁承诺书》。
- Made supervisory and inspective efforts over decision management practices, major responsibilities and supervision responsibilities for improving Party conduct and upholding integrity, and salary packages of SOE executives, and demanded corrective actions against any identified problems.
- Supervised and checked our purchases on the digital platform for centralized procurement.
- Ran spot checks on the offices of our offices in Beijing and staff canteens, etc.
- Committed to preventing corruption and bribery in international projects and signed *Letters of Commitment on Honest Conducts in Business Cooperation* with all business contacts.

完善举报平台

严查商业贿赂和商业腐败案件  
Improving whistleblowing channels against commercial bribery and corruption

- 完善网上举报平台、举报电话、通讯地址和电子信箱等多种举报途径，形成便捷有效的监督网。
- 对重点的违纪违规问题严肃执纪问责，严肃查处贪污、贿赂诉讼案件3件，处分8人次。
- Opened up channels for whistleblowing, including online platform, hot line, correspondence and e-mail for convenient and effective supervision.
- Strictly enforced disciplines against major violations, investigated into 3 bribery and corruption cases, and punished 8 persons.

打造品牌价值

中国能建依托自身全产业链优势，坚定不移地实施国际业务优先发展战略，积极承包国际项目，持续提高和树立其在国际市场的品牌形象，巩固提升海外电力建设市场行业地位。

2016 年，中国能建所属葛洲坝股份公司在“我国对外承包工程业务新签合同额前 100 家企业”与“我国对外承包工程业务完成营业额前 100 家企业”年度排行榜中均列第六位。中国能建所属葛洲坝股份公司、中电工程、天津电建 3 家单位同时上榜年度“250 家全球承包商”“250 家国际承包商”“225 家国际工程设计公司”和“150 家全球工程设计公司”排名，充分彰显了“世界能源，中国能建”的品牌形象。

Create Brand Value

In virtue of our edges across the whole industrial chain, we have unswervingly prioritized the expansion of global business and maintained an actively contracted for international projects. This has helped us build and improve a sound brand image in global market, and enhance our position in the overseas electric power construction industry.

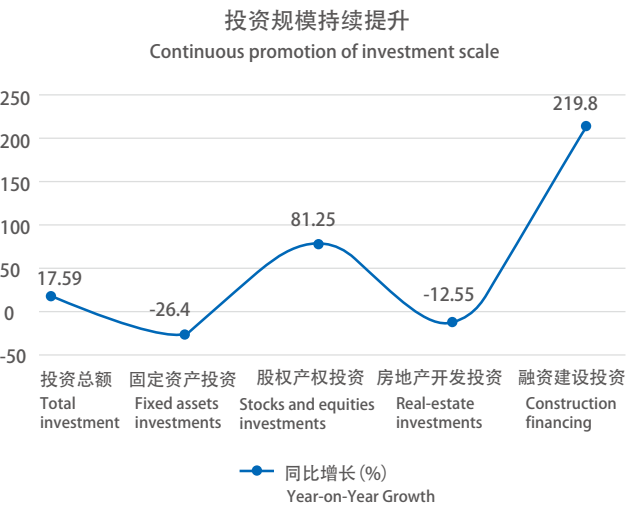
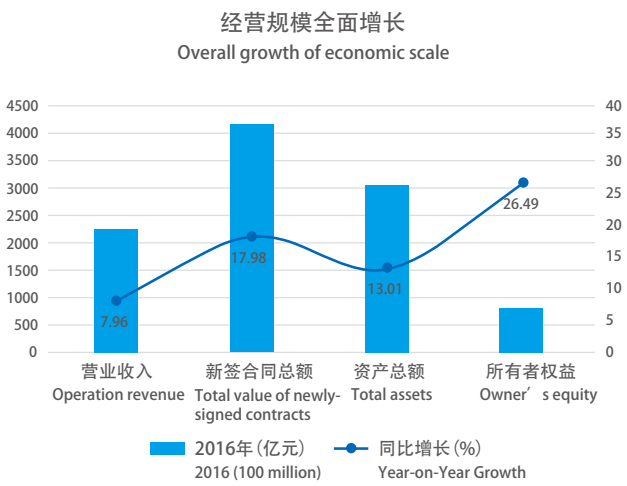
In 2016, China Gezhouba Group Co., Ltd. ranked 6th on the annual list of “Top 100 enterprises in the newly-signed contract value of foreign project contracting” and “Top 100 enterprises in accomplished turnover of foreign project contracting”. China Gezhouba Group Co., Ltd., China Power Engineering Consulting Group (NCPE) and Tianjin Electric Power Construction Co. Ltd. were rated on “Top 250 Global Contractors”, “Top 250 International Contractors”, “Top 225 International Design Firms” and “Top 150 Global Design Firms” which fully highlighted the brand image of “bringing energy to the world”.



浙江火电参建的国内最大海河联运工程启用  
China's largest sea-river transport project undertaken by Zhejiang Thermal Power Construction Co., Ltd. comes into service.

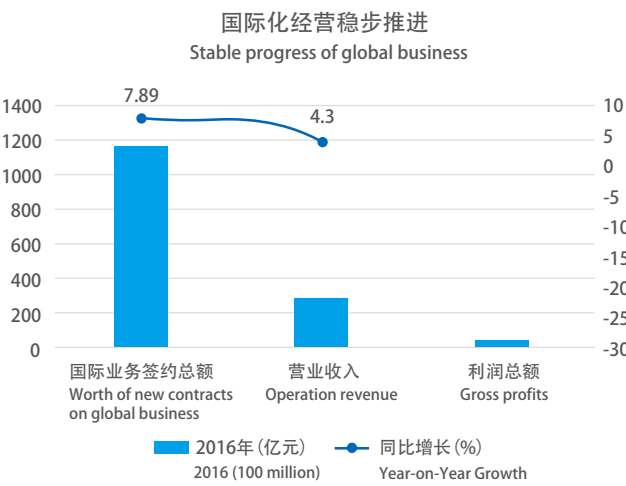
提升经营业绩

中国能建充分发挥自身产业、资源等协同优势，不断完善经营管理体系，实现国有资产的保值增值，2016 年，公司国有资产保值增值率 107.9%。



Enhance Business Performance

Energy China Group has fully unleashed its edges in industrial and resource collaboration, continuously improved its business management system, and realized value preservation and appreciation of state-owned assets. In 2016, the rate of value preservation and appreciation of state-owned assets reached 107.9%.



经营效益进一步提升  
Further promotion of business benefits

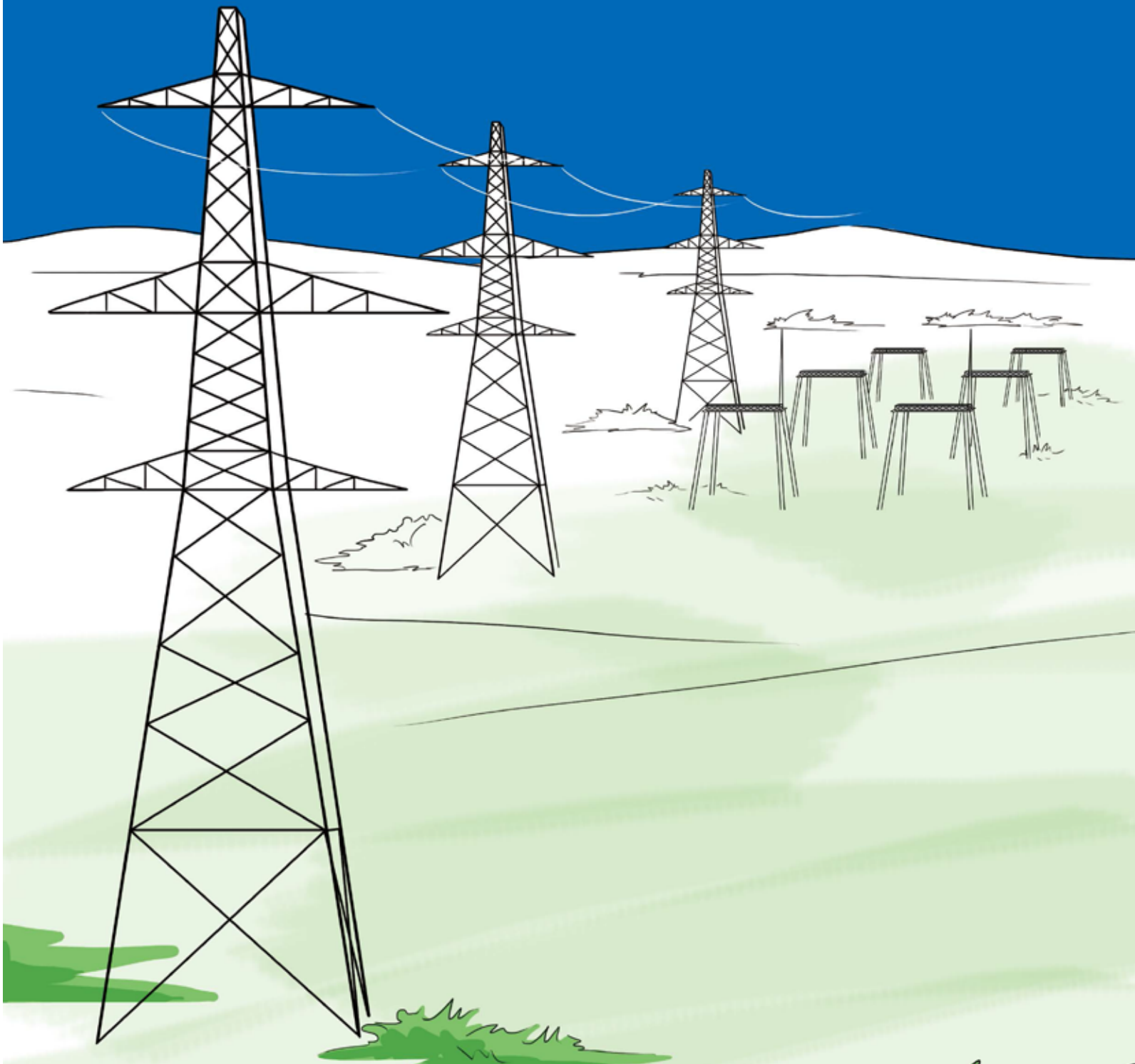
	同比变化 Year-on-year change
利润总额 Gross profits	增长15.00% Grew by 15.00%
净利润 Net profits	增长14.81% Grew by 14.81%
资产负债率 Debt-to-asset ratio	下降6.52个百分点 6.52 percentage points lower
成本费用占营业收入比重 Cost ratio	降低0.54个百分点 Down 0.54 percentage point

提升客户满意

Improve Customer Satisfaction

中国能建高度重视客户关系管理，坚持从客户需求出发，在科技创新引领下，不断为客户提供精品工程和全生命周期的精益服务，回报客户期许。

We have attached considerable importance to customer relationship management (CRM), having delivered quality projects through innovative S&T efforts and offered excellent services that cover the whole life cycle to satisfy customer needs and expectations.





## 丰硕科技成果

科技创新是引领企业发展的第一动力，中国能建作为行业技术创新的“引领者”，是电力建设领域科技创新的骨干单位，大力实施“建设世界一流科技型企业集团”的科技发展战略，将科技创新与企业发展战略相融合，不断建立和完善创新制度，搭建创新平台，加强自主创新能力建设，提升公司核心竞争力。

### 完善科技管理体系

公司以院士专家工作站、博士后科研工作站、国家级和省级研究机构为主体，以依托所属企业成立的国家电力规划研究中心和部分省市能源、电力规划研究中心为补充，以高新技术企业为基础，不断完善技术研发体系。2016 年，公司新增省级企业技术中心 2 家，高新技术企业 7 家。目前已有院士工作站 1 个，博士后科研工作站 8 个，国家级研究机构 3 个，省级研究机构 40 个，高新技术企业 63 家。

### 加大科技创新投入

2016 年公司所属单位共完成科技投入 477658.1 万元，同比增长 0.7%，科技投入占比达 2.14%，其中研究与试验发展（R&D）经费支出 410573.1 万元，进一步增强公司自主创新能力。

2016 年集团获得专利授权 1456 项，专利授权同比增长 7.9%，其中发明专利 352 项，同比增长 39.7%，累计拥有有效专利 6766 项，其中发明专利 968 项。

2016 年集团获得国家级科技奖 1 项，省部和行业级科学技术奖励 136 项，获得中国电力创新奖 9 项；公司设计、建设的 31 项工程获得年度国家优质工程奖，其中 7 项获得金质奖，占金奖总数的 63.64%，39 项工程获得中国电力优质工程奖，超过获奖总数的 80%。

477658.1 万元

全年完成科技投入

More than RMB 4.7 billion were invested in science and technology.

1456 项

全年集团获得专利授权

We granted 1,456 patents in 2016, increased by 7.9%.

7.9 %

同比增长

## Substantial S&T Achievements

Scientific and technological innovation is the No.1 powerhouse for corporate development. As an industrial leader and backbone in this regard, we have taken big strides towards the goal of “building a world-class S&T conglomerate” by making S&T innovation part of our development strategy. We have established and continuously improved our innovation system and platform, and enhanced capacity building for independent innovation to sharpen our core edges.

### Improving S&T Management System

Treating the academician and expert workstation, postdoctoral science workstations, national research institutions and provincial municipal research institutions as the main body, supplemented by the established National Electric Power Planning & Research Center and several energy & electricity centers at the provincial and municipal levels based on our subsidiaries, and build upon the new high-tech enterprises, we are constantly improving the S&T management system. There are new 2 provincial corporate technical centers and 7 high and new-tech enterprises last year. Now our technological R&D system composed of one academician and expert workstation, 8 postdoctoral science workstations, 3 national research institutions and 40 provincial municipal research institutions has taken shape. The high and newtech enterprises have adding up to 63 in total.

### Intensifying Inputs into S&T Innovation

In 2016, our subsidiaries spent more than RMB 4,776,581,000 on science and technology after a 0.7% year-on-year increase, accounting for 2.14% of the overall spending. To be specific, RMB 4,105,731,000 went to R&D works to further enhance our independent innovation capacity.

In 2016, we were granted 1,456 patents, including 352 invention patents, up 7.9% and 39.7% year-on-year, respectively. The valid patents have added up to 6,766, of which 968 are invention patents.

Our honors and awards in 2016 included: 1 national S&T award, 136 S&T awards at the provincial, ministerial and industrial levels and 9 China Electric Power Innovation Awards. 31 projects designed or undertaken by Energy China Group won the national excellent quality prizes, including 7 gold prizes, accounting for 63.64% of all gold prizes; 39 projects won the China Quality Electric Power Project Award, taking up over 80% of all winners.



中能装备扬州公司承担的江苏省重大科技成果转化项目“超（超）临界机组配套电动执行机构研发及其产业化”通过验收。Undertaken by CEEEC Yangzhou Equipment Company, “the R&D and Industrial Application of Supportive Electric Actuator for (Ultra) Supercritical Units”, a commercial application project of major S&T achievements in Jiangsu, passes the acceptance check.

### 重视创新成果应用

公司将科技创新取得的成果积极应用在电力规划、勘测设计、工程建设、装备制造等业务领域，获得科技收入 125.7 亿元，支撑公司相关业务发展。其中在清洁能源、智能电网、高端装备领域主导立项的科技项目取得的成果助力市场开发签约 2.8 亿元，应用于在建工程，节约工程开支 5700 余万元。



广东火电通过国家高新技术企业认定

Guangdong Power Engineering Co., Ltd. is certified by the State as a high and new-tech enterprise.

### Highlighting the Application of Innovative Achievements

In 2016, we applied innovative S&T achievements to electric power planning, survey & design, construction, contracting and equipment manufacturing, and other areas, generating a RMB 12.57 billion worth of revenue for us to support related businesses. Under our leadership, many S&T innovations were translated into new projects of clean energy, smart grid and high-end equipment, leading to the conclusion of RMB 280 million contracts on the market to help ongoing projects save more than RMB 57 million in costs.

中能装备江苏装备公司承担的“AP 系列核 I、II 级大口径厚壁不锈钢、合金钢弯管成型工艺研发”科技项目通过专家验收。

“AP Series Nuclear I & II Grade Large-caliber Thick-wall Stainless Steel and Alloy Steel Bended Tube Forming Technique”, an R&D project undertaken by CEEEC Jiangsu Equipment Company, passes the acceptance check by experts.

### 国家科技重大专项“大型先进压水堆核电站CAP1400”两个子课题

Two sub-topics of the key national S&T project “Large Advanced PWR Nuclear Plant (CAP1400)”

子课题一  
AP系列核 I、II 级大口径厚壁不锈钢、合金钢弯管成型工艺研发

Sub-topic I: AP Series Nuclear I & II Grade Large-caliber Thick-wall Stainless Steel and Alloy Steel Bended Tube Forming Technique

为我国CAP1400管道及特殊部件制作和取代美国锻造压制弯头提供了技术保障,成功应用在浙江三门核电站两台机组和山东海阳核电站两台机组主蒸汽弯管中

We have offered technical supports for Chinese companies to produce CAP1400 tubes and special parts and to replace the forged elbows made in the USA. This technique has been applied to Zhejiang Sanmen Nuclear Plant (2 units) and Shandong Haiyang Nuclear Plant (steam elbows in 2 main units).

子课题二  
AP系列三代核电站用核级电动装置的研发

Sub-topic II: AP Series Third-Generation Nuclear Plant Electric Actuator R&D

研制出具备鉴定试验条件的样机2台,并通过核电站最严苛设计基准事故LOCA鉴定试验

We have developed two prototypes eligible for evaluation tests and passed the strictest design basis accident (LOCA) testing for nuclear plants.

## 持续推进信息化建设

公司发布“十三五”信息化规划,规划要求发挥数据在生产经营及决策支持中的价值,实现“数字能建”,要求业务实现在线化和数字化,推进集成和共享,实现“信息互联”。各单位按照规划要求,编制主营业务信息化“十三五”实施方案,持续推进主营业务和信息化融和。2016年,所属单位有12家已编制“十三五”信息化规划。

### 信息化成果

- 在2016年电力行业信息化成果评选中,公司所属企业共12项成果获奖
- 在第二届中国数字化设计(EIM)大赛中,包揽火力发电工程组前三名,在送电工程组和变电工程组也名列前茅
- 在第二届中国建设工程BIM大赛中,分别荣获两项二等奖和一项三等奖
- 积极参加国资委熠星创新创业大赛,推荐报送的项目中6个项目进入导师辅导阶段

## Promoting IT Application

We've released the 13th Five-Year Plan for IT Application to fully unleash the potential of data in business production, operation and decision making. Our aim is to build a “Digital Energy China Group” with online and digital businesses and “a highly connected community” through information integration and sharing. All subsidiaries are required to work out specific plans of applying information technologies in principal businesses. In 2016, 12 subsidiaries drew up the 13th Five-Year Plans for IT Application.

### Achievements on IT Application

- 12 projects of our subsidiaries won the 2016 IT Application Achievements Award in Electric Power Industry.
- We took the top three among thermal power engineering candidates and ranked high among power transmission and power transformation candidates in the 2nd EIM.
- We won 2 second prizes and 1 third prize in the 2nd China Construction Engineering BIM Competition.
- We participated in SASAC's “Shining Star Innovation” competition, where six of our projects were qualified for the mentoring round.

## 强化质量管理

公司以工程质量为本,实施工程建造标准化,不断强化质量保障体系建设,严格控制过程质量工艺,加强质量监督检查,以保证建造设施整个使用寿命的安全,用最踏实的努力,回报客户期许。2016年未发生质量事故,未受到相关影响和处罚。

2016年,在建工程项目单元(分项)工程合格率100%,优良率93.73%;勘测设计成品合格率100%,优良品率98.66%;工业和装备产品出厂合格率100%。

## 完善管理制度

公司制定质量管理方面的考核办法、事故报告与调查处理等3个层级的制度,各单位再根据自身实际制定和完善相关质量管理制度;统筹规划全年工作,编制质量专项计划并下达目标指标;与公司所属单位签订质量责任书,按不同行业和板块特点,个性化地下达责任目标,并督促各单位层层签订责任书,逐级落实质量主体责任;组织开展责任制落实情况半年检查和年终考核。公司所属单位均建立质量管理体系并通过第三方认证,取得并保持质量管理体系认证证书,确保质量管理体系运行有效,工程质量可控在控。



辽宁院组织召开2016版整合型管理体系文件宣贯会  
Liaoning Electric Power Survey & Design Institute Co., Ltd. holds the meeting to publicize and implement integrated management system documents of the year 2016.

## Intensify Quality Management

Quality is our best policy and we aspire to meet customer expectations through the earnest efforts. For that, we have standardized engineering construction practices, intensified the building of quality assurance system, exercised strict process quality control and strengthened supervision and inspection to ensure the safety of construction facilities across the whole life cycle. The year 2016 recorded a zero incidence of quality accidents. There was no related impacts or other punishments on us.

In 2016, the projects under construction (sub-divisional works) reached a 100% acceptance rate, where 93.73% were of an excellent quality; the completed survey & design works proved to be 100% qualified and 98.66% excellent. Also, the ex-factory industrial and equipment products all measured up.

## Improving Management Systems

We have formulated three institutional systems concerning “assessment methods”, “accident reporting” and “investigation” in quality management and required all subsidiaries to establish and complete quality management systems based on their respective situations. We have made overall plans for the whole year with specific quality concerns and issued quality targets; signed letters of quality responsibilities with subsidiaries, which also identify quality-related CSR targets for each specific industry and sector; and urged them to sign Letters of Responsibility with all its suppliers to make sure all responsibilities would be properly assumed. To evaluate the progress, we have also conducted semiannual examinations and year-end assessments. Up to now, all subsidiaries have established quality management systems, passed the third-party certification, and obtained and maintained certificates to make sure that the quality management system will function effectively and the project quality will be placed under proper control.



## 加强监督检查

公司组织各单位开展质量风险识别与评价，排查重大质量风险，确定公司级重点监控项目；组织开展数次质量专项检查，针对查出的隐患（问题）下发通知、限期整改。

## 强化质量意识

公司各单位分级开展质量教育培训，全年累计培训 29.56 万人次；组织开展以“提升供给质量 建设质量强企”为主题的“质量月”活动，通过质量知识培训、质量重点检查、质量品牌创优等各类特色活动，增强质量意识。



中能装备北京设备公司召开质量管理活动经验交流会

CEEEEC Beijing Equipment Company holds a meeting for experience exchange on quality management activities.

## 推动达标创优

公司组织所属单位积极开展质量创优活动，累计荣获省部级及以上质量奖项 1103 项，主要包括国家优质工程金质奖 7 项、鲁班奖 1 项、国家优质工程奖 24 项、全国工程勘察设计行业第八届优秀工程总承包项目金（银、铜）钥匙奖 4 项、全国优秀质量管理小组 21 个等重要质量奖项。

中国能建浙江院连续十年获评全国实施卓越绩效模式先进企业，并获得 2016 年全国电力行业质量金奖荣誉称号。

## Intensifying Supervision and Inspection

All subsidiaries have conducted quality risk identification and assessment to screen the major risks, and identify key projects to be supervised at the company level. We have also organized several specific examinations, and issued notices for any detected risks to be rectified before a given deadline.

## Strengthening Quality-oriented Awareness

All subsidiaries have offered quality-related trainings in 2016 with 295,600 participants, and “Quality Month” activities themed with “building a strong Energy China Group with superior quality and improved benefits”. Our aim is to equip all employees with a quality-oriented awareness through quality knowledge training, quality checks and other quality-focused activities.



中电工程华东院公司开展质量管理先进个人和质量技术能手评选

East China Electric Power Design Institute Co., Ltd. holds evaluation activity on advanced quality management individuals and quality specialists.

## Pursuing the Excellence

We have organized activities among subsidiaries to strive for excellent quality. Our efforts have been paid by 1,103 quality prizes and awards at provincial, ministerial and even higher levels, including 7 gold prizes of the “National Quality Project Award”, 1 Luban Prize for Construction Project, 24 excellent quality prizes of the “National Quality Project Award”, 4 gold (silver, bronze) prizes of the 8th Excellent EPC Project Award of the National Engineering Survey & Design Industry, and 21 honorable titles of National Excellent Quality Management Teams.

Zhejiang Electric Power Design Institute has been named a “national model in pursuing excellent business performance” for ten consecutive years, and won the 2016 National Power Industry Best Quality Award.

## 质量工艺亮点展示板



江苏电建一公司在宁夏方家庄电厂现场开展“亮点策划、样板引路”等质量工艺创优活动

Jiangsu No. 1 Electric Power Construction Engineering Co., Ltd. organizes activities to pursue excellent quality in Ningxia Fangjiazhuang Power Plant.

## 提升资质等级

公司及所属单位拥有涵盖规划咨询、勘测设计、工程承包、装备制造、投资运营等全业务链的各项资质权益近 1400 项，主要包括工程咨询类甲级资质 22 项、工程设计综合类甲级资质 8 项、工程勘察综合类甲级资质 21 项、水利水电工程总承包特级 4 项、电力工程总承包特级 2 项、房地产开发一级资质 2 项等行业最高等级资质，以及对外援助成套项目 A 级实施企业资格、外事审批权等高等级权限。



## Upgrading Qualifications

Now, we have approximately 1,400 qualifications across the entire business chain from planning consultancy, survey & design, construction and contracting, equipment manufacturing to investment & operation. To be specific, we have 22 grade-A engineering consultancy qualifications, 8 grade-A comprehensive engineering design qualifications, 21 grade-A comprehensive engineering survey qualifications, 4 special-grade general contracting qualifications of hydraulic and hydro-power engineering works, 2 special-grade general contracting qualifications of electrical engineering, 2 grade-one real-estate development qualifications, among other top-level industrial qualifications; as well as A-grade qualifications for enterprises to undertake the construction of complete foreign aid projects, the right to examine and approve foreign affairs and other high-ranking authorities.

广东火电特级资质申报专项工作小组成员合影

Group photo of the special-grade qualifications application team of Guangdong Power Engineering Co., Ltd.



延伸服务能力

Expand Service Ability

客户是企业生存、发展的生命线，为客户创造价值是中国能建一贯的追求和坚持，公司高度重视客户关系管理，不断完善全生命周期的管理服务能力，跟踪、掌握客户需求，提升客户满意度，努力为客户创造更多价值。

Customers are the foundation for a business to survive and thrive, and it is our perpetual pursuit to create value for customers. We highly value customer relationship management and have continuously improved our ability to offer managerial services across the whole life cycle, tracking up and understanding the needs of customers to create greater values for them.

客户关系管理

Customer Relationship Management

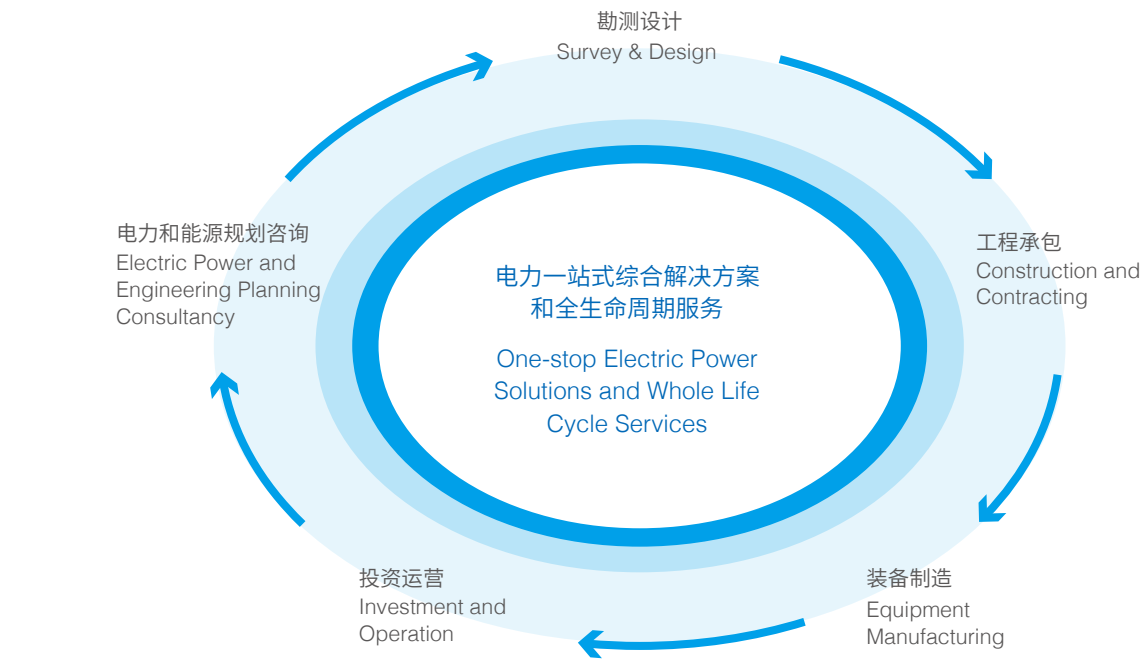
<p><b>完善管理体系</b> Improve CRM System</p> <p>公司按照《国内市场客户关系管理办法》明确客户关系管理原则和要求，确定管理责任，规范管理工作流程，提出客户关系管理考核目标，加强与重点客户的日常联系和对接，确保客户信息有效、及时传递</p> <p>In line with the <i>Regulations on Customer Relationship Management in Domestic Market</i> which outlines CRM principles and requirement as well as responsibilities in this regard, we have standardized the CRM workflow, set up CRM evaluation targets and intensified daily liaison with key accounts to ensure an effective and timely delivery of customer information.</p>	<p><b>重视客户需求</b> Pay Attention to Customer Needs</p> <p>公司及时梳理、挖掘客户需求，并作出主动、正面回应；研究制定客户所反映问题的解决措施和期限，编撰重要客户的年度分析报告，以维护和保持良好客户关系，赢得客户信赖</p> <p>We've identified customer needs and made positive and active responses on a timely basis. We've worked out solutions and deadlines for any questions put forth by our customers on the basis of adequate studies and compiled annual analysis reports on key accounts to maintain a good customer relationship and win their trusts.</p>	<p><b>创新管理方式</b> Blaze New Trails in CRM</p> <p>公司不断完善客户资料信息数据库，加强客户拜访档案管理，积极推进客户关系管理信息系统平台建设，实现客户关系管理工作信息化、标准化、规范化目标，提高客户关系管理运作的水平和效率</p> <p>We have upgraded and improved the customer information database, strengthened the management over archives related to customer visits, and advanced CRM information platform building to enhance our CRM competence and efficiency.</p>	<p><b>保护客户信息</b> Protect Customer Information</p> <p>公司将客户信息安全作为生产经营工作安全的保障，重视客户信息保护，依托公司保密工作的健全机制、丰富经验，对客户信息采取分级、分权限管理，提高员工的客户信息安全意识，为客户信息安全提供强有力的保障</p> <p>We've attached constant importance to the protection of customer information, and viewed customer information security as the bulwark of safe production and operation. Our efforts are underpinned by a robust mechanism and rich experiences in privacy protection. The hierarchal operation of and limited access to CRM system is taken as a mandatory mechanism to safeguard customer information security which can be further assured by a stronger awareness among employees.</p>
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全价值链服务

中国能建拥有成熟的工程管理能力、可靠的专业技术能力、强大的业务拓展能力、高效的资源整合能力、全面的服务运营能力，能够为客户提供一站式综合解决方案和全生命周期的管理服务。公司在中国及海外国家及地区的电力工程建设项目中获得丰富的服务经验。

Offering Services across the Value Chain

Relying on well-developed engineering management, reliable expertise, strong business ability, efficient resource integration and all-round operation, we can offer one-stop comprehensive solutions and managerial services across the whole life cycle, and have obtained rich experiences from our extensive presence in electric engineering and construction projects coveirng China and overseas countries and regions.



中国能建 39 项工程上榜 2016 年度中国电力优质工程奖  
39 projects win the China Quality Electric Power Project Award 2016

2016 年，在中国电力建设企业协会公布的 2016 年度中国电力优质工程奖获奖名单中，中国能建通过 EPC 总承包、设计、施工等方式建设的 39 项工程榜上有名，超过获奖工程总数（48 项）的 80%。获奖工程分布在国内 21 个省（市、自治区）和境外的土耳其，涵盖火电、水电、新能源、输变电等电力业务。榜单中仅有的 2 个国内水电工程均由中国能建承建，7 个新能源工程中 6 个是中国能建承建。获奖情况充分展现了中国能建在电力能源工程领域全产业链和全生命周期的服务优势。

In the list of recipients of the China Quality Electric Power Project Award 2016, as announced by China Electric Power Construction Association, 39 projects undertaken by Energy China Group via EPC, design or construction contracts were included, accounting for over 80% of all winners. The award-winning projects were in 21 Chinese provinces (municipalities and autonomous regions) and Turkey, covering thermal power, hydropower, new energy, and power transmission & transformation, etc. The only two hydropower projects in China and 6 out of the 7 new energy projects in the list were undertaken by us, which fully explained our strengths in power energy engineering across the whole industrial chain and through the whole life cycle.

## 赢得客户满意

2016 年，公司高层多次面向发电、电网等主要客户开展互访活动，听取客户建议和意见，积极推动客户营销平台建设，积极推动战略合作落地，持续加强市场推介，对各类整改进行反馈，获得客户的普遍好评。

云南院、新疆院和江苏院等荣获“全国电力行业用户满意企业”称号。

## Satisfying Customer

In 2016, our senior management organized several mutual visits with our key clients in power generation and power grid sectors for their advices and opinions. We have promoted to establish customer marketing platform and implement strategic cooperation. We have intensified market introduction, and sent feedbacks on rectified issues. All these efforts translated into universal praise from our customers.

Yunnan Electric Power Design Institute Co., Ltd., Xinjiang Electric Power Design Institute Co., Ltd. and Jiangsu Electric Power Design Institute Co., Ltd., etc. won the title of "Enterprise with Customer Satisfaction in the National Electric Power Industry".



甘肃院为提高服务质量、加强客户沟通，走访省内多家地市供电公司并开展工程回访

Gansu Electric Power Design Institute Co., Ltd. pays visits to several municipal and prefecture-level power supply companies in Gansu and revisits the project sites to enhance service quality and customer communication.

## 引领行业发展

## Lead Industrial Development

中国能建的发展离不开政府和行业伙伴的支持，我们依托高端咨询业务为政府出谋划策，秉承合作共赢的责任理念携手合作伙伴，共同推进行业健康可持续发展。

We would never have gone this far without the supports of government and industrial partners. In addition to providing workable strategies for the government through our high-end consultancy services, we have also worked with our partners through win-win cooperation to promote sound and sustainable development of the industry.





## 服务政府决策

中国能建密切关注并跟踪发改委、国资委等国家部委有关国企改革的政策与工作动态，提出有关深化国有企业改革、深化电力体制改革、电改配套政策、电力交易中心组建、混合所有制改革等政策的方案和报告。2016 年，公司受国家能源局和地方政府委托，完成国家能源与电力发展“十三五”规划研究、能源国际合作专项规划研究和地方能源与电力发展规划研究报告，充分发挥政府智库作用。

## Support Government Decisions

We pay close attention to and follow up the policies and updates about SOE reform issued by NDRC, SASAC and other national ministries and commissions; and have launched programs and reports for deepening SOE reform, power system reform, supportive power reform, establishment of power trade center and mixed-ownership reform. In 2016, commissioned by National Energy Administration and the local governments, we conducted the research on national energy and electric power planning during the 13th Five-Year Plan period, the research on special planning of international energy cooperation and finished the research report on local energy and electric power planning, playing the role of the think-tank of the government.

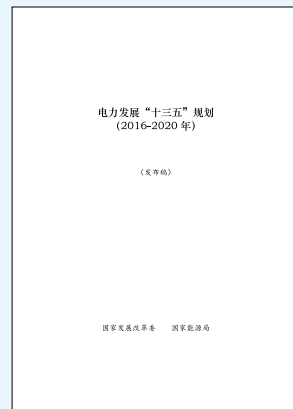


### 服务国家能源 / 电力领域重要规划

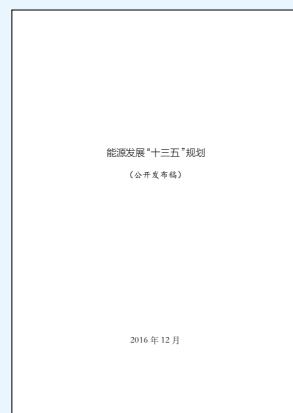
### Supporting major national power & energy planning

2016 年，国家电力规划研究中心充分发挥好智库作用，继续深入推进能源发展“十三五”规划和电力发展“十三五”规划研究工作，相继完成国家级与省级规划的衔接、相关机构及专家对规划意见的反馈、中介机构对规划的评估、规划文本的编制及报批等工作。在大量研究成果的基础上，《电力发展“十三五”规划》正式发布，《能源发展“十三五”规划》由国家能源委员会审议通过。两大规划是贯彻落实五大发展理念和“四个革命，一个合作”能源战略的重要举措，是对我国“十三五”能源电力行业发展蓝图的精彩描绘，对于推动能源电力行业科学健康可持续发展具有重要意义。

In 2016, as the think tank of the government, the National Electric Power Planning & Research Center conducted in-depth researches on the 13th Five-Year Plans of energy and electric power development and aligned national plans with provincial ones; collected feedbacks from related institutions and experts and evaluations from the third-parties; compiled such plans and submitted the same to upper authorities for approval. Finally, the extensive research findings led to the release of the *13th Five-Year Plan on Power Development* and the review and approval of the *13th Five-Year Plan on Energy Development* by National Energy Administration. The two plans are the key to implement the “Five Development Concepts” of innovation, coordination, green, open and sharing and the energy strategy. They are a vivid portrayal of the energy and electric power development blueprint during the 13th Five-Year Plan period, and are of considerable significance to the scientifically sound and sustainable progress of the energy and electricity industry.



电力发展“十三五”规划  
The 13th Five-Year Plan on Power Development



能源发展“十三五”规划  
The 13th Five-Year Plan on Energy Development

## 行业交流合作

公司严格遵守行业秩序和商业道德，积极参与行业规范和标准制定，引领和维护行业的科学发展。组织参加各类行业论坛和交流会，与同行企业共享经验、共话合作，为推动能源产业和电力行业健康可持续发展贡献能建力量。

## 服务行业发展

公司负责国家电力规划设计行业的标准组织管理工作，承担四个标准化委员会日常工作，以及全国 90% 以上电力勘测设计的科研及标准化任务和 50% 以上火电、核电常规岛及 BOP、水电施工的科研及标准化任务。

## Facilitate Industrial Exchange and Cooperation

We have strictly observed industrial orders and business ethics, taken an active part in the compilation of industrial standards and regulations, and led and safeguarded the scientifically sound development of energy and electric power industries. We have organized and participated in various industrial forums and meetings, and contributed greatly to the sound and sustainable progress of the electric power & energy engineering industry through experience sharing and cooperation.

## Offering Services to Promote Industrial Development

We are responsible for the management over standards of the national electric power planning and design industry, undertake the routine work of four standardization committees, over 90% of all scientific research and standardization mandates for electric power survey & design in China, over 50% of all scientific research and standardization works for thermal power, conventional nuclear islands/BOP and hydropower construction projects.



### 参与我国通用机械领域首个国际标准制定

### Contributing to the establishment of the first international standard for China's general machinery industry

中能装备扬州设备公司参与我国通用机械领域首个国际标准《工业阀门电动执行机构一般要求》制定，公司超超临界火电机组阀门配套电动执行机构国产化样机顺利通过鉴定，公司研制的“核级气动执行机构”获第九届国际发明展览会金奖。

CEEE Yangzhou Equipment Company took part in the establishment of the General Requirements on the Electric Actuator of Industrial Valves, the first international standard for China's general machinery industry. The prototype of the supportive electric actuator for the valves of (ultra) supercritical thermal power units, which was made in China, passed the technical test. In addition, the “nuclear-grade pneumatic actuator” developed by us won the gold prize at the 9th International Invention Exhibition.

# 48

项

2016 年公司所属单位主编、参编并发布的国家和行业标准

In 2016, our subsidiaries led and participated in the compilation and release of 48 national and industrial standards.

# 1

项

主编并发布国家标准

# 19

项

行业标准

Our subsidiaries led the compilation and release of 1 national standard and 19 industrial standards.

# 3

项

参编并发布国家标准

# 25

项

行业标准

Our subsidiaries participated in the compilation and release of 3 national standards and 25 industrial standards.



## 参与行业交流

公司积极组织参加各类行业论坛和交流会，携手同行企业深化交流、共享经验，为推动电力和能源工程及服务行业健康可持续发展做出贡献。



### 中国能建应邀参加第七届国际基础设施投资与建设高峰论坛 Energy China Group attends the 7th IIICF

2016 年，中国能建应邀参加由中国对外承包工程商会和澳门贸易投资促进局共同主办的第七届国际基础设施投资与高峰论坛。论坛以“创新产融合作，助力基础设施发展”为主题，通过对“一带一路”建设及国际产能合作、全球区域经济一体化下产融创新合作为国际基建合作带来的机遇等话题的探讨，促进公司应对国际形势，把握发展机遇。

## Engaging in Industrial Exchanges

As an active participant and organizer of industrial forums and meetings, we have contributed greatly to the sound and sustainable development of the electric power & energy engineering and service industry through exchanges and experiences sharing.

Energy China Group was invited to the 7th International Infrastructure Investment and Construction Forum (IIICF), which was co-hosted by China International Contractors Association and Macau Trade and Investment Promotion Institute in 2016. With the theme “Innovating Industry-Finance Cooperation to Energize Infrastructure Development”, the 2016 IIICF shed light on the international infrastructure cooperation opportunities that may be opened up alongside innovative industry-finance cooperation against the backdrop of the Belt and Road Initiative, international industrial capacity cooperation and regional economic integration, helping us adapt to the global trend and seize opportunities.



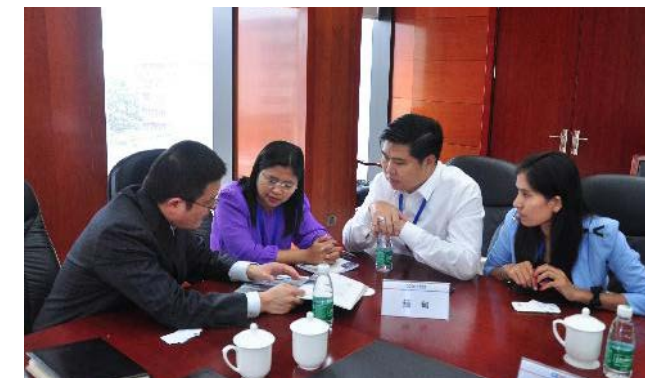
### 部分发展中国家电力行业官员访问中国能建 Some officials from developing countries' power sector visit Energy China Group

2016 年，中国能建与商务部组织的发展中国家电力设备和技术发展研修班开展交流访问，向来自巴基斯坦、缅甸、南苏丹、格林纳达、苏里南等 21 个国家的 65 名电力行业官员和技术人员介绍了中国能建的发展情况，并组织国际分公司与研修班进行业务交流。公司通过引导研修班学员参观集团展厅和观看宣传视频，使学员对中国能建的综合实力及国际业务开展情况有了初步了解。公司还组织学员与国际分公司的国别经理进行分组交流和业务对接，就有关项目进行详细磋商。

In 2016, during the Seminar on Electrical Equipment and Technology Development for Developing Countries organized by Ministry of Commerce and Energy China Group, we received 65 officials and specialists from the power sector of 21 countries, including Pakistan, Myanmar, Republic of South Sudan, Grenada and Surinam, briefing them on our updates and organizing business exchange between them and our international subsidiaries. The guests visited the exhibition hall and watched the video to gain a brief knowledge about our comprehensive strengths and international footprint. We also accompanied the guests with country-specific managers from our international subsidiaries for business talks and negotiations of related projects.



中国能建引导研修班成员参观集团展厅  
The guests visit the exhibition hall.



中国能建国际分公司国别经理与研修班成员进行互动交流  
Country-specific managers from international subsidiaries talk with the guests.



推动伙伴共赢

公司十分重视拓展外部合作，与国内外各类组织和大型企业等积极开展互利合作，建立了广泛的战略联盟和密切的合作关系，促进了多方面的优势互补，实现了资源共享和协同发展。

政企合作 Government-enterprise cooperation	公司加强并做实与地方政府间的战略合作，与陕西省人民政府、四川省人民政府、山东省人民政府等多家地方政府建立了战略合作关系。 We have established and strengthened strategic cooperation with Shaanxi Provincial People's Government, Sichuan Provincial People's Government, Shandong Provincial People's Government and many other local governments.
校企合作 University-enterprise cooperation	公司通过与科研院所、高等院校等深入合作，开展科技攻关、进行科学人才培养，有效促进科学技术的转化。 We have deepened cooperation with research academies and universities to tackle hard-nut S&T problems, cultivate S&T talents, and effectively promote the industrial application of S&T findings.
国际合作 International cooperation	公司重视与巴基斯坦、埃及、白俄罗斯等国家以及美国福陆公司、瓦锡兰集团公司等国际企业间的战略合作，积极交流国际经验，深度扩展国际合作领域。 We have set great store by our strategic ties with countries like Pakistan, Egypt and Byelorussia as well as Fluor Corporation, Wartsila and other international businesses to exchange international experiences and expand the areas of international cooperation.
企企合作 Enterprise-enterprise cooperation	公司不断与中国电力国际有限公司、中铁大桥局集团有限公司、德勤会计师事务所等不同行业间的企业展开强强联合，通过优势互补增强市场竞争力。 We have allied with China Power International Development Limited, China Railway Major Bridge Engineering Group Co., Ltd., Deloitte & Touche and other strong giants from different sectors to sharpen our edges on the market through complementary strengths.
银企合作 Bank-enterprise cooperation	公司与国家开发银行、中国银行、华泰联合证券等金融机构开展广泛、创新合作，为公司稳健经营提供有力资金保障。 We have conducted extensive and innovative cooperation with China Development Bank, Bank of China, Huatai United Securities and other financial institutions to secure strong capital supports for the stable business operation.



在中国国家主席习近平、塞尔维亚总统尼科利奇和总理武契奇的共同见证下，中国能建董事长汪建平与塞尔维亚矿产和能源部部长签署联合投资开发塞尔维亚新能源项目合作谅解备忘录

Under the witness of Chinese President Xi Jinping, Serbian President Tomislav Nikolić and Prime Minister Aleksandar Vučić, Wang Jianping, Chairman of Energy China Group, signed an MoU with the Serbian Minister of Mining and Energy on jointly investing in the development of a new energy project in Serbia.

Promote Win-win Partnership

For us, it is important to expand external cooperation. We have established close partnership and extensive strategic alliances with domestic and overseas organizations and large enterprises to share resources, complement each other's strengths in multiple dimensions, and realize mutual benefits and coordinated progress.



中国能建董事长汪建平在京拜会来华访问的菲律宾总统杜特尔特，双方就深化菲律宾电力建设领域的合作交换意见，并就推动菲律宾马务班 120 万千瓦燃煤电站项目达成共识

Wang Jianping, Chairman of Energy China Group, meets with Philippine President Rodrigo Duterte during his state visit in Beijing. They exchanged views on deepening cooperation in the field of power construction in the Philippines. They also reached a consensus on promoting the implementation of Philippine Mauban 1,200MW coal-fired power plant.

培育员工发展

Facilitate Employees to Grow

公司坚持以人为本，不断完善职工权益体系、推进民主管理，关注员工职业发展，关心员工身心健康，为员工创建良好的成长环境，同员工共享企业发展成果。

Energy China Group insists on a people-oriented approach to embracing democratic management, improve the corporate systems, and protect the rights and interests of the employees. In addition to helping their career development, we've also paid close attention to their physical and mental health, and strived to create a sound environment for them and share our progress with them.





100 %

总部职工健康档案覆盖率

The coverage rate of health records for headquarters staff is 100%.

100 %

劳动用工合同签订率

The rate of signed labor contracts is 100%.

100 %

集体合同覆盖率

The coverage rate of collective contracts is 100%.

保护员工权益

公司重视员工权益保护，严格遵守《中华人民共和国劳动合同法》及海外运营所在地劳动用工的法律法规，尊重人权，奉行平等和非歧视的劳动用工政策，实行民主管理，努力构建和谐劳动关系。

规范雇佣管理

中国能建坚持依法合规用工，对所有签订劳动合同、建立劳动关系的员工执行相同的福利项目体系。遵守运营所在地（国家和地区）法律法规和国际人权公约，保障各类用工的合法权益。2016 年，公司通过毕业生招聘、成熟人才引进、接收安置复转军人等方式全年新增就业 5843 人。

我们严格遵守国家和地方有关最低工资标准的规定，保证在岗职工工资标准均高于当地最低工资标准，政策执行率达到 100%；按照国家和地方政府有关规定为公司及所属企业全部员工参加社会保险（五险一金）；落实《女职工劳动保护规定》等法规制度，所属企业普遍签订《女职工权益保护专项集体合同》，严格实施女职工“五期”保护制度。

Protect Employees’ Rights and Interests

We spare no efforts in protecting the employees’ rights and interests through strict observance of the *Employment Contracts Law of the People’s Republic of China* as well as applicable laws and regulations of host communities on labor and employment. We respect human rights, implement equal and non-discriminatory labor policies and embrace democracy in routine management, striving to establish a harmonious relationship with all employees.

Standardize Employment Management

We strictly follow the national laws and regulations on employment to make sure that the same welfare system applies to all employees who have signed labor contracts and established a labor relationship with us. Also, laws and regulations of host communities (countries and regions) as well as international human rights conventions are abided by to protect the legitimate rights and interests of all employees. In 2016, we offered 5,843 new jobs to the society through hiring graduates and experienced workers as well as receiving demobilized soldiers.

We comply with the provisions on national and local minimum wage standards without the slightest deviations to ensure that the wage standards for all on-the-job employees are higher than the local minimum standard. In line with relevant provisions of the national and local governments, all employees of Energy China Group and its subsidiaries have been covered by the social insurance program (endowment insurance, medical insurance, unemployment insurance, work-related injury insurance, childbirth insurance and housing provident fund). Furthermore, we’ve implemented the *Rules on the Labor Protection of Female Employees* and other relevant laws and regulations, and signed the *Collective Contract on Protection of Rights and Interests for Female Employees* to protect female employees during menstruation, pregnancy, obstetrical periods, lactation and menopause.

推进民主管理

我们坚持职代会制度，充分发挥以职代会为基本形式、以厂务公开制度为主要内容的民主管理体系作用，进一步畅通职工民主管理、民主监督、民主决策的渠道。2016 年，公司员工入会率 100%。

Promoting Democratic Management

We’ve given full scope to the democratic management system by sticking to the workers’ congress system and making public the affairs of companies. We’ve also opened up and unclogged the channels for democratic management, democratic supervision and democratic decision-making. In 2016, all employees joined in the workers’ congress with 100% membership.

坚持职代会制度 Insisting on Workers' Congress System	健全完善以职工代表大会为基本形式的民主管理制度，规范所属企业职代会、工代会的申报、审批、报告等流程，认真落实所属企业“三项改革”进程中职代会审核职工安置方案等民主管理工作，维护企业和职工的合法权益  We’ve improved the democratic management system which is based on the workers’ congress, and standardized the declaration, review, approval and reporting procedures for the workers’ congress among subsidiaries to safeguard the legitimate rights and interests of the companies and employees.
推进企务公开 Making Public Disclosure of Corporate Affairs	按照《企务公开管理办法》要求，全面推行“十公开”，进一步规范公开的内容、方式和途径，并将企务公开实施情况纳入企业文明建设考核范畴，推动企务公开工作向生产一线延伸，保障了职工的知情权、参与权、表达权和监督权  In accordance with the Regulations on Disclosure of Corporate Affairs, we’ve made further efforts in standardizing the contents and paths to make public disclosure of corporate affairs. We’ve also engaged frontline workers in this disclosure process to safeguard all employees’ rights to be informed, participate, express and supervise in this regard.
完善组织架构 Improving Organizational Structure	公司和各所属企业严格按照现代企业制度要求，认真执行职工董事、职工监事制度，通过民主程序完成股份公司监事会职工监事调整工作  Energy China Group and our subsidiaries have strictly observed the modern enterprise system, and carried out the institutional systems on engaging workers in the board of supervisors and the board of directors. We’ve followed through a democratic procedure for the reassignment of workers to the CEEC Board of Supervisors.



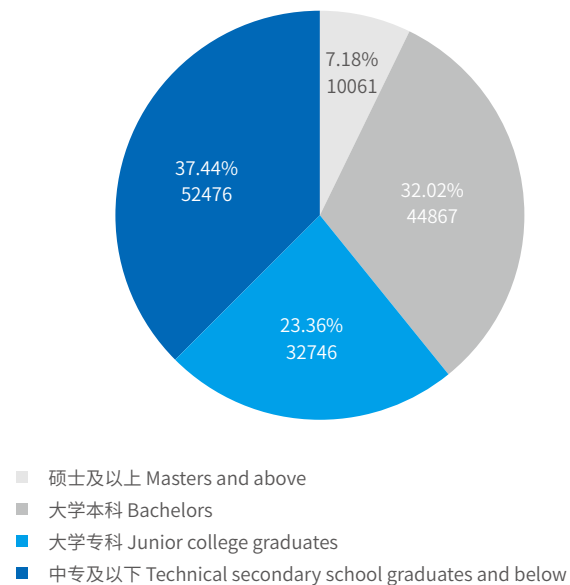


## 促进员工成长

中国能建注重挖掘员工价值，不断加强人才开发与培养，拓宽员工职业发展通道，优化完善培训体系，丰富人才激励方式，最大限度地调动员工的积极性和创造性。

### 开展教育培训

集团公司以科学发展观和科学人才观为指导，以服务公司和员工共同发展为宗旨，以建设高素质人才队伍为重点，推动员工综合能力的持续提升和职业资格的不获取，为员工创造全面发展的机会，助力员工成才。公司注重员工教育培养，不断完善人才梯队建设，形成高层次、高素质和高水准的员工队伍。



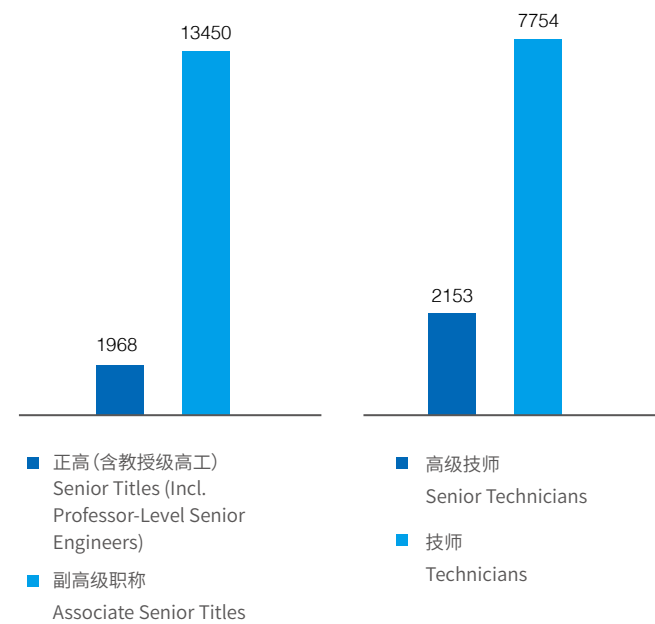
员工学历结构 (数量及比例)  
Educational Background (Number and Proportion)

## Promote Employees' Growth

We keep tapping the potential of employees by intensifying talent development efforts, expanding career landscape and improving training systems. We've also diversified incentive measures to stimulate the initiative and creativity of employees to the fullest extent.

### Offering Training and Education Programs

Guided by a scientific outlook on talents and development, we have offered a wide range of education and training programs with a focus on high-caliber, high-level and high-quality team building to serve the ultimate goal of shared progress between Energy China Group and the employees. The programs have empowered our employees by sharpening their edges and upgrading occupational qualifications constantly to tap their potential to the full in the workplace.



员工职称结构 (单位: 人)  
Titles (Unit: Person)

员工技师等级结构 (单位: 人)  
Skill Grades (Unit: Person)

2016 年，公司按照《教育培训管理暂行办法》和《职工培训体系建设方案》，进一步加强公司培训管理工作，提高培训工作计划性、有效性和针对性，实现教育培训工作的制度化、规范化、科学化。按照“集团公司层面、集团总部部门层面、集团公司所属各单位层面”三个层次积极开展培训项目，对中高层管理人员、一般管理人员和专业技术人员、技能操作人员、新上岗人员等各类别员工在培训内容、方式和时间上作出要求，对培训计划、实施的流程作出具体规定，有效保障员工成长发展。

In 2016, according to the *Interim Measures on Education and Training Management* and the *Plan on Employee Training System Building*, Energy China Group aimed to further enhance our management and offer training and education programs for better planned, effective, targeted and scientifically-sound training plans while in alignment with related standards and institutional systems. Our programs are offered at three levels of Energy China Group, headquarters departments and subsidiaries with specified agendas and procedures, but differ in contents, approaches and schedules to target respectively on junior and senior management, general managers, professional technicians, operators and new comers to ensure the growth and development of all employees.



中电工程举办领导干部党性教育专题培训班

China Power Engineering Consulting Group Co., Ltd. (CPECC) held a thematic training course for the leading cadres on the education of Party spirit.



广西电力院举办基层干部综合素质提升培训班

Guangxi Electric Power Design Institute Co., Ltd. holds the training program to enhance comprehensive qualities of grass-root leaders.



广西局 2016 届新员工入职培训班

2016 New Staff Orientation Training opens at Guangxi Hydroelectric Construction Bureau Co., Ltd.



中国电力工程顾问集团有限公司举办第四届“世界的 CPECC”英语演讲比赛

China Power Engineering Consulting Group Co., Ltd. holds the 4th CPECC English Speech Contest.

59 万余人次

2016 年共举办各类培训涉及员工  
In 2016, we held a variety of trainings involving more than 590,000 employees.

1200 元

人均培训投入约  
Per capita training input was about RMB 1,200.



## 畅通发展渠道

公司持续推进人才强企战略，不断优化公司人力资源配置，发布《员工职业发展通道建设指导意见》，搭建满足各类人才成长需要的职业生涯发展搭建平台，激励员工成才。

## Smoothing Career Paths

We've furthered the strategy of "strengthening Energy China Group through human resource development" and optimized the labor force structure. We issued the *Guiding Opinions on Building Employees' Career Paths*, and built up platforms for all talents to have a better career development.

为员工设计的多项职业发展路径  
Multi - career Development Path



中国能建“一带一路”杯国际商务大赛  
CEEC “Belt and Road Cup” International Business Competition



## 案例 Case

## 广东火电人才培养新举措——“千人计划” GPEC launches the “Thousand Talents Program”

2016 年，广东火电进一步加强人力资源管理工作，推出人才培养新举措。公司强化国际化人才的选拔、培养和储备工作，并建立“国际人才库”，现已完成首批 200 人的报名工作。同时完成了“千人计划”第一期人才选拔环节的工作，确定主管后备 99 人、中层后备 32 人，为员工搭建成长需要的职业生涯发展平台，激励员工成才，同时为公司后续发展积蓄了动力。

In 2016, Guangdong Power Engineering Co., Ltd. (GPEC) further intensified human resource management and introduced new measures on talent development. As part of its effort to better select, train and prepare talents with a global vision, the company established a “Global Talent Pool” and now the first batch of 200 candidates have signed up. In addition, the company finalized the list of participants for the first session of the “Thousand Talents Program” to include 99 backup supervisors and 32 backup junior managers, providing a platform for employees to develop their career and guaranteeing impetus for future development of the company.



“千人计划”培训开班的团队展示环节  
Energy China Group presentation in the “Thousand Talents Program” training



广东火电 2016 “千人计划”主管后备培养人员培训  
The 2016 GPEC “Thousand Talents Program” Training



## 保障安全生产

公司按照“抓重点、树典型、强基础、重管控”的安全生产工作思路，不断完善安全管理体系，积极开展隐患排查治理、安全教育培训、安全标准化建设、应急体系建设、分包队伍专项整治等活动，保障安全生产工作有序推进。

## Guarantee Work Safety

We've followed the rule of “focusing on key risks, setting up exemplary models, laying strong foundations and prioritizing management and control efforts” in ensuring work safety. In virtue of improved safety management systems, we have conducted checks and management of hidden dangers, offered safety-related education and training, established safety standards and contingency plans, and carried out special inspections over contractors to ensure smooth progress in promoting work safety.

# 23

亿元

全年安全投入

Annual safety input was RMB 2.3 billion.

# 38.4

万人次

全年安全培训

Annual safety trainings were 384,000 persons.



天津电建巴基斯坦必凯项目部进行用电安全检查

Bhikki Project Department of Tianjin Electric Power Construction Co. Ltd. conducts power safety check.

## 夯实安全管理

公司根据所属各单位生产经营规模、安全管理水平、行业领域等实际特点，确定年度安全生产工作目标并逐级落实安全生产责任制，开展安全标准化建设，提升应急管理能力，不断夯实安全生产基础。

## Strengthening Safety Management

Energy China Group has determined the annual safety production objectives and gradually implement the safety responsibility system among all subsidiaries to align with their respective business scopes, safety management abilities and industries and sectors. We've also made efforts to standardize the safety management and enhance emergency management, thus laying an ever stronger foundation for work safety.

### 安全生产责任制

#### System of Work Safety Accountability

- **签订安全生产责任书。**2016年初与所属39家单位签订差异化安全生产责任书；
- **组织开展安全生产责任制检查考核。**采用自查自评和现场考核两种方式，分别在8月份、12月份组织开展安全生产责任制半年检查、年度考核。
- **Signed letters of responsibilities for work safety.** In early 2016, we signed letters of differentiated responsibilities for work safety with 39 subsidiaries.
- **Organized inspections and check-ups.** Through self-reviews and field check-ups, we accomplished a biannual examination in August and a year-end assessment in December over the system of work safety responsibilities.

### 标准化建设

#### Standardization

- **开展安全标准化评审。**在各单位安全标准化创建和自查自评的基础上，成立安全标准化专家组，采取听取汇报、沟通交流、逐条评审记分等方式，对自评合格的6家单位实施了专业化评审；
- **开展安全标准化班组创建活动。**印发《关于开展安全管理标准化班组创建活动的通知》，表彰50个安全管理标准化示范班组、50名优秀班组长及10个优秀组织单位，树立先进典型和样板。
- **Conducted standardization reviews.** In addition to self-reviews and appraisals by respective companies, an expert team was set up for the second-round checks over six qualified companies through report hearing, communications & exchanges, and item-by item scoring.
- **Built working groups for work safety standardization.** We printed and issued the *Notice on Building Working Groups for Work Safety Standardization*, and honored 50 outstanding model groups, 50 excellent group leaders and 10 excellent companies for others to learn from.

### 应急管理

#### Emergency Management

- **部署2016年应急管理工作。**发布2016年应急工作要点，策划应急处置方案编制工作，督促所属单位对本单位应急预案进行梳理、补充，不断完善公司应急预案体系；
- **开展应急预案汇编。**对2015年发布的《突发事件总体应急预案》和14个专项预案进行汇编，印发汇编手册，促进所属单位应急预案体系建设。
- **Arranged the emergency management work.** We set out the 2016 contingency priorities, worked out plans for the compilation of contingency solutions, and urged subsidiaries to marshal and extend their respective contingency plans.
- **Compiled contingency plans.** We worked on a compilation of the *General Contingency Plans* issued in 2015 and 14 special plans for subsidiaries to build their contingency systems.



## 提升安全能力

公司以提升员工安全意识和自我保护意识为出发点，针对不同岗位员工，定期组织安全生产培训，结合“安全生产月”、应急管理视频培训班、安全风险培训等主题活动，不断提高员工安全预警及事故应急处理能力，向广大员工及其他利益相关方传递安全理念。

### 组织学习《生产安全事故案例选编（2012-2015）》

要求各单位进行全方位学习、宣贯，全面辨识安全风险，找准安全管理的短板和薄弱环节，研究制定切实有效的管控措施，有效防范安全事故发生。

### 开展 2016 年“安全生产月”活动

成立“安全生产月”活动领导小组，召开分管领导、安全总监参加的专题会议，对“安全生产月”活动进行策划、研讨，活动期间所属单位悬挂横幅41000余条，发布电视新闻340条、网络新闻3900条，出动安全督查组780个，查处违章230人次、隐患18000余项，开展应急演练2600余次。



中国能建南京线材公司开展特种设备故障应急处置以及铝尘防爆应急疏散演练活动

CEEC Nanjing Power Line Products Co., Ltd. organizes drills against special-purpose equipment failures and evacuation in case of potential aluminum dust explosions.

## Upgrading Safety Abilities

We strive to build a stronger awareness on work safety and self-protection among all employees through regular safety trainings for different posts. Coupled with “Work Safety Month” activities, video-based emergency management training, risk management training and other theme programs, our aim is to upgrade the early-warning abilities and emergency responses of employees and to arm them and other stakeholders with a safety-oriented mindset.

### Studying the Cases of Safe Production Accidents (2012-2015)

We've required all subsidiaries to identify safety risks and the weakest links in safety management through comprehensive studies and publicity campaigns, and work out feasible and effective measures against any possible accidents.

### Organizing the 2016 Safety Month

We've set up a Safety Month Leadership Team and held special meetings among division leaders and directors on safety to discuss around Safety Month activities and programs. In 2016, our subsidiaries hung some 41,000 streamers, released 340 pieces of TV news and 3,900 pieces of online news, and sent out 780 safety supervision taskforces. They also investigated and punished 230 persons for the breach of rules, identified over 18,000 hidden dangers, and conducted 2,600 emergency drills.



葛洲坝一公司孟楼渡槽项目部开展高处坠落应急演练活动

CGGC No.1 Company Menglou Aqueduct Project Team organizes high-altitude-falling drills.

### 举办应急管理、安全风险培训

应急管理视频培训班累计培训公司及所属单位领导、高管、部门负责人、相关工作人员等2490人；安全风险培训累计培训各单位安全总监、安全管理部门负责人等94人。



公司承办企业安全生产管理暨非煤矿山企业安全生产管理培训班

Energy China Group organizes the work safety management training for companies and non-coal mining companies.

### Organizing emergency management and risk management training programs

The video-based emergency management training reached out to 2,490 leaders, senior management, departmental heads and other related personnel from Energy China Group and subsidiaries. In addition, 94 safety directors and departmental heads were covered by the risk management training programs.



中电工程西南院公司举办企业负责人及安全管理人员持证上岗培训班

CPECC Southwest Electric Power Design Institute Co., Ltd. holds the training program on prior certification for corporate responsible persons and safety management personnel.



## 落实安全行动

公司积极落实安全行动，加强对各单位及项目安全生产工作的监控管理，通过安全生产大检查、分包队伍生产安全专项整治等活动，不断提升公司的安全保障能力。

### 实行重点项目监控管理

公司组织所属单位开展危险源辨识评价活动，督促所属单位明确安全生产重点监控项目，制定监督检查计划并开展监督检查工作。

### 发布推广安全生产工作“明白卡”

公司编制并发布企业主要负责人、项目经理、安全员、危险作业人员安全生产工作“明白卡”，要求各单位认真组织学习，严格遵照执行。安全生产工作“明白卡”包含安全理念、安全愿景、履职承诺、重点工作等具体内容。

### 开展安全生产大检查

公司印发《关于开展安全生产大检查的通知》，由公司领导、高管、部门负责人带队，全年对 20 个工程项目开展安全生产大检查，各检查组共发现安全隐患 200 余项，下发隐患整改通知书近 30 份。



中国能建南京线材公司开展铝尘防爆疏散演练

CEEC Nanjing Power Line Products Co., Ltd. organizes evacuation drill of aluminum dust explosion protection.

## Taking Safety Actions

We are active in taking safety measures. To be specific, we've intensified monitoring and management over safety performance of subsidiaries and projects, and continuously improved our ability of guaranteeing work safety through thorough safety check-ups, special rectifications among contractors and other related actions.

### Monitoring and managing key projects

We've organized activities to identify and assess any sources of dangers among all subsidiaries, and urged them to determine the key projects to be placed under monitoring and management for the sake of work safety. We've also worked out check-up plans and made supervisory and inspective efforts accordingly.

### Issuing and popularizing “notice cards” on work safety

We've prepared “notice card” on work safety for responsible persons, project managers, safety inspectors and high-risk operators and released the same for subsidiaries to learn and observe. The “notice card” embraces the concepts and vision on work safety, duty performance promises and key mandates, etc.

### Running thorough safety check-ups

In 2016, we printed and issued the *Notice on Thorough Safety Check-ups*, and sent out inspection taskforces led by top management, senior management and departmental heads to 20 sites where they identified over 200 hidden dangers and issued nearly 30 rectification notices



中国能建领导赴山西朔州项目进行安全生产检查

Our top management conducts the project safety check-up in Shuo Zhou, Shanxi province.

### 开展分包队伍生产安全专项整治活动

公司印发《关于开展分包队伍生产安全专项整治活动的通知》，结合标准化达标评审、安全生产大检查等工作，对所属单位分包队伍生产安全专项整治活动进行督查，并完成《关于分包队伍生产安全专项整治活动情况的报告》的编写。

### 优化员工职业健康安全服务

公司全面贯彻《中华人民共和国职业病防治法》，注重源头防治，完善制度建设，强化监督检查，改善施工作业条件，为员工配备符合国家安全标准或行业标准的劳动工具及劳动防护用品，预防、控制和消除职业病危害。积极开展职业健康和安全岗位培训，提高员工的劳动保护技能和自我保护意识。

### Carrying out special programs to address safety problems among contractors

We printed and issued the *Notice on Carrying out Special Programs to Address Work Safety Problems among Contractors*. Coupled with standardization reviews and safety check-ups, we supervised the progress of contractors in correcting safety problems, and compiled the *Report on the Progress of Contractors in Carrying out Special Programs to Address Work Safety Problems*.

### Improving occupational health and safety services

In line with the *Law of the People's Republic of China on the Prevention and Control of Occupational Diseases*, we've built a complete set of institutional systems, intensified supervisory and inspective efforts, improved engineering and operation conditions, and equipped all employees with tools and personal protective articles which are up to national or industrial standards to prevent, control and eliminate any occupational diseases from the sources. We've also offered occupational health and post-specific safety trainings to upgrade the employees' skills and awareness on self-protection during work.



## 关爱员工生活

中国能建用心关怀员工的工作与生活，致力于为员工提供人性化的工作生活环境。组织形式多样的文娱活动，帮助员工平衡工作生活；开展员工关爱活动，关爱女性员工、海外员工、离退休员工，帮扶困难员工，努力建设温馨、和谐、幸福的能建大家庭。

### 员工慰问和帮扶

公司坚持做好职工帮扶工作，深入基层，贴近一线，广泛开展慰问、“金秋助学”等活动，为困难职工办实事、解难事。公司领导在春节期间走访慰问部分在京企业困难职工、劳模代表。2016年度，公司向部分所属企业拨付了慰问帮扶资金563.8万元，支付离退休人员统筹外补贴费用合计7.49亿元。



安徽电建二公司为一线员工送去防暑降温慰问品  
Anhui No.2 Electric Power Construction Engineering Co., Ltd. sends anti-sunstroke supplies to frontline workers during summer.

## Care about Employees

We care about our employees and are dedicated to building a people-oriented work and life environment for them. In 2016, we organized diverse recreational activities for employees to strike a balance between work and life, and made every endeavor to create a warm, harmonious and blessed family that always cares about all employees, especially the female, the overseas and the retired (with honors) and lends a helping hand to those in need.

### Offering Condolences and Aids to Employees

We insist on providing aids for the employees in need, especially those at the grassroots level. Part of our efforts includes extensive condolences, "Student Sponsorship" program, and leaders' visits to some needy employees and model workers from companies in Beijing during the Spring Festival. In 2016, we allocated RMB 5.638 million to subsidiaries for staff aids and greetings, and paid RMB 749 million subsidies to the retired.



中国能建领导开展春节慰问  
Our top management conducts visits during Spring Festival.



天津电建公司小蜜蜂艺术团赴陕西富平项目部慰问演出  
"Little Bees" Art Troupe from Tianjin Electric Power Construction Co., Ltd. stages a special performance for Fuping Project Team in Shanxi as an expression of greetings.

## 平衡工作和生活

公司以实际行动关爱员工，不断改善员工的工作、生活条件，做好员工心理健康帮扶，开展各类文体活动，丰富员工精神文化生活。

### 保障员工身心健康

除了依法合规向职工支付劳动报酬外，对职工在工作日、法定休假日或休息日加班而不能安排补休的，以及在法定节假日工作的，按照国家政策规定支付加班加点工资；按照国家规定执行职工带薪年假制度；葛洲坝乌东德施工局、山西院、东电一公司、天津电建、北京设备公司等多家单位举办职工心理健康讲座。

### 丰富员工文化生活

公司以群众性文体协会为依托，开展丰富多彩的文体活动，促进员工身心健康；尊重员工家庭责任，关心长期在外工作的职工家庭，增强员工的幸福感和归属感。

2016年，公司组建了中国能建文学艺术体育委员会，下设文学新闻、书法美术、影像、音乐舞蹈、体育等专业委员会，组织业余爱好者入会，为职工展示才艺、强健体魄搭建平台。开展“最美项目部”“萌宝秀”等活动，通过微信平台进行展示，推动改善一线职工生产生活条件，体现人文关怀。



山西院举办“新起点新征程新梦想”职工新春联欢会  
SEPEC holds the "New Start, New Journey & New Dream" party to celebrate the New Year.

## Striving for a Work-Life Balance

Energy China Group cares about our staff with practical actions. We improve their work and life conditions, provide good mental health support, and enliven their spiritual and cultural life through diverse recreational activities.

### Ensuring mental health of employees

In addition to regular labor remunerations, an employee is entitled to an overtime pay as per the standards written in relevant national policies if he/she (1) works beyond normal hours of work on any workdays, public holidays or weekly off-duty days but cannot take a deferred leave or holiday; or (2) works on any public holidays. We also implement a paid annual leave system in accordance with relevant national provisions. CGGC Wudongde Dam Construction Bureau, Shanxi Electric Power Engineering Co., Ltd., Northeast No.1 Electric Power Construction Co., Ltd., Tianjin Electric Power Construction Co., Ltd., CEEEC Beijing Equipment Company and other companies held employees' mental health lecture.

### Enriching the Cultural Life

Based on mass recreation association, we are committed to benefiting our employees both physically and mentally through diverse recreational activities. In addition, we respect the family responsibilities on the shoulder of our employees, and care about the families of every employees who work outside under long-term projects to enhance a sense of happiness and belonging.

In 2016, we set up the CEEC Literature, Arts and Sports Committee which includes special sub-committees on literature & news, calligraphy & fine arts, image & video, music & dance and sports, etc. It gives enthusiastic amateurs a stage to display their artistic attainments and strengthen physiques. In 2016, we organized "The Most Charming Project Team", "Cute Babies" and many other activities and published the same on Wechat platform to improve the work and life of frontline workers.



## 践行海外责任

### Perform CSR Overseas

中国能建践行“走出去”战略，通过国际标准研究、项目咨询、国际资源并购等手段，加快对国际标准的消化吸收，推动我国电力标准国际化。在海外运营中，尊重当地文化传统，落实属地运营政策，支持当地发展，完成了一大批代表性海外工程的投资和建设，得到海外客户、政府主管部门和广大民众的好评。

Energy China Group is proactive in "Going Global". We've quickened the understanding and digestion of international standards through international standard research, consultancy and global resources M&A, and pushed forward the internationalization of national electric power standards. We've also respected local cultures and traditions, implemented local operational policies, and supported local development, completing the investments and constructions of a large number of representative overseas projects which are well received by foreign customers, government departments and local residents.



## 推动电力标准国际化

中国能建在“走出去”过程中，以技术和标准为引领，以承揽的国际工程项目为载体，以国际学术交流和援外培训等为助力，注重发挥电力规划、勘测设计优势，积极推动我国电力标准国际化，提高我国企业在国际电力行业的话语权和竞争力。

### 对接国际标准

目前，中国能建承建的国际项目中，大量项目全部或部分采用中国标准，工程质量优良，得到了项目业主、咨询工程师的认可，也获得了较好的经济效益。

- 2016 年，中能装备沈阳机械公司成功取得“产品系列 CE 认证”证书，确保了公司产品、设施和生产流程符合欧洲标准及规范，拥有了进入欧共体市场的通行证。中国能建安徽院首次全过程采用国际标准设计的印尼塔卡拉 2 台 10 万千瓦燃煤发电站施工图通过审查。
- 2016 年 6 月，电规总院正式加入能源宪章工业咨询委员会，为参与全球能源合作提供了一个良好的平台。电规总院将更加紧密地参与国际能源合作规则的研究与制定，在国际能源合作事务中享有更多的话语权。

## Promote the Internationalization of Electric Power Standards

With technologies and standards as the lead, undertaking international projects as the carrier, and international academic exchange and foreign-aid trainings as the power, our "Going Global" efforts attach importance to electric power planning, survey and design. We have also contributed positively to pushing forward the internationalization of national electric power standards, and raising the right of speech and competitiveness of Chinese enterprises in global electric power community.

### Meeting Global Standards

A large number of international projects undertaken by Energy China Group have entirely or partially adopted Chinese standards and received recognitions from proprietors and consulting engineers for their premium quality and significant economic benefits.

- In 2016, CEEEC Shenyang Machinery Company won the certificate of "CE certification in product line", facilities and production flow being compliant to European standards and specifications and an access pass to the EC market. In addition, the construction drawing of the 2x100MW Coal-fired Power Plants in Indonesia, which was designed by Anhui Electric Power Design Institute Co., Ltd. with 100% international standards for the first time, was reviewed and approved.
- In June 2016, Electric Power Planning & Engineering Institute (EPPEI) became an official member of the Energy Charter Industry Advisory Panel to provide a good platform for engaging in global energy cooperation. Hence, EPPEI will play a more active role in the research and formulation of related rules and exert greater power to influence actions or decisions in international energy cooperation.





## 中国标准“走出去”

中国能建凭借过硬的技术，积极在国际工程项目中推广应用我国电力标准，为我国电力标准“走出去”打下了坚实的基础。

中国能建承建孟加拉 PAYRA 的 2 台 660 兆瓦超超临界燃煤电站，全部采用中国标准设计和中国设备，应用世界最先进的超超临界燃煤发电技术。

中国能建承建的巴基斯坦必凯、百路凯联合循环电站采用世界最前沿的 9HA 型燃机技术，巴基斯坦卡拉奇核电厂是海外首个采用我国完全自主知识产权“华龙一号”核电技术的项目，这些项目均是“一带一路”沿线国家具有技术引领性和行业标志性的电力能源基础设施项目。



## Chinese Standards “Going Global”

Depending on excellent technology, Energy China Group has promoted and applied national electric power standards to international engineering projects, laying a solid foundation for such standards to “Going Global”.

The Payra SC Coal-fired Power Plant(2x660MW) Project in Bangladesh undertaken by Energy China Group is designed with 100% Chinese standards and Chinese facilities, and applies the most advanced SC coal-fired power generation techniques in the world.

The Pakistani Bhikki-Balloki Combined Cycle Power Plant is equipped with the most cutting-edge 9HA gas turbines; the Nuclear Power Plant in Karachi, Pakistan is the first overseas nuclear project adopting China’s “Hualong One” nuclear power technology with complete independent IPR. These are both electric power infrastructure projects along the Belt and Road that feature leading technologies and represent the industrial trend.

习近平为孟加拉 PAYRA 的 2 台 660 兆瓦超超临界燃煤电站项目揭牌

Xi Jinping unveils the Payra SC Coal-fired Power Plant (2x660MW) Project.



## 推动属地经营

### Promote Localized Operation

中国能建大力推动海外项目属地化经营，重视解决当地人员就业，尊重当地用工的宗教信仰、风土习俗、语言文化，注重与当地员工的尊重沟通，建立平等互信关系，增进双方友谊，实现与当地的互利共赢。

As part of our ongoing efforts to promote localized operation of overseas projects, we have attached great importance to local employment, and held local religious beliefs, social customs, languages and culture in respect. We have communicated with local employees, built relationship with equality and mutual trust, and enhanced mutual friendship to realize mutual benefits and win-win situation with local communities.

## 全球化经营

### Expanding Global Footprint

中国能建在建国际工程项目 700 多个，合同存量超过 4000 亿元，全年实现新签合同 1160.08 亿元，同比增长 7.89%，超额完成年度签约目标。海外员工 2 万多人，其中本地雇员已超过 13000 人，本地雇佣率超过 60%。

中国能建积极稳妥地围绕“一带一路”进行投资项目布局，深化全球化经营。

- 中国能建投资的越南海阳 2×600MW 燃煤电站项目，总装机容量为 1200MW，总投资金额 18.69 亿美元，是中国企业在越南单笔投资金额最大的火电项目。
- 中国能建投资的巴基斯坦 SK 水电站项目，总装机容量 870.25MW，总投资金额 19.62 亿美元，是目前为止中国企业在巴基斯坦投资的最大水电项目。

In 2016, there were over 700 international engineering projects under construction by Energy China Group; the contract amount exceeded RMB 400 billion; the value of new contracts registered RMB 116.008 billion, up 7.89% year-on-year to over-fulfill the pre-set annual target. Among over 20,000 overseas employees, more than 13,000 were local employees, pointing to a local employment rate of over 60%.

Energy China Group made investments along the Belt and Road to deepen the globalization operation.

- We invested in 2x600MW coal-fired power units in Hai Duong, Vietnam. This USD 1.869 billion project is the largest single investment ever made by Chinese enterprises in Vietnam for thermal power plants.
- We invested USD 1.962 billion in the 870.25 MW Suki Kinari Hydropower Project in Pakistan, which is the largest hydropower investment ever made by Chinese enterprises in Pakistan so far.

# 1160

 亿元

全年新签合同金额

The value of new contracts registered was RMB 116 billion.

# 13000

 人

海外本地雇员已超过

Overseas local employees were over 13,000.

# 7.89

 %

新签合同增长率

The growth rate of new contracts was 7.89%.

# 60

 %

本地雇佣率超过

Local employment rate exceeded 60%.



加大属地采购

中国能建大力提倡灵活的国际采购做法，在了解和熟悉当地或周边国家原材料供应渠道的前提下，把国内采购、当地采购和国际采购相结合，以全球视野构建一个广泛的采购网络，并逐步加大当地和国际采购比重，解决项目原材料供应问题，更好地带动运营所在地相关产业发展。

培养属地人才

中国能建加强属地人才培养，在海外项目中积极引入当地高级管理人才，推动当地员工成长发展，属地化经营进一步深入，取得了良好效果。

授人以渔

Providing skill training for local employees

- 广东院承建的越南永新一期工程，在满足越南当地《劳动法》对外商承包项目“二八”原则的同时，以技术水平高的中国籍工人带班越南工人，注重培训教育当地员工技能，为后续调试和生
- 葛洲坝集团巴基斯坦尼鲁姆·杰鲁姆水电工程项目部开展巴基斯坦员工劳务技能培训及鉴定等活动，不仅为当地提供了5000多个就业岗位，更“授之以渔”，培育了大批高技能、高素质的优秀人才，为巴基斯坦基础设施建设储备了力量。
- The Vinh Tan Power Plant (Phase I) undertaken by Guangdong Electric Power Design Institute Co., Ltd. in Vietnam observed the “20/80” rule for foreign contracting projects as set by the local Labor Law. The company teamed proficient Chinese workers with Vietnamese and focused on skill trainings and education for local employees to reserve local talents qualified for the commissioning and operational work that would follow up.
- CGGC Neelum-Jhelum Project Team organized skill trainings and identification for Pakistani employees. It not only created more than 5,000 local jobs, but also provided skill trainings, thus cultivating a large number of high-skilled and high-quality talents that may contribute to future infrastructure development in Pakistan.

Increasing Localized Procurement

We strongly recommend flexible international procurement, and suggest that we shall combine domestic, local and global procurements based on knowledge about the supply channels of raw materials in local communities and surrounding countries. Our aim is to build an extensive procurement network with a global vision, gradually increase the proportion of local and global procurement, and solve problems in raw material supply to better drive related industries in sites where we operate.

Cultivating Local Talents

We’ve intensified efforts in cultivating local talents and engaging local senior management talents in overseas projects to promote the development of local employees. Localized operation had further deep development and gained satisfactory results.

吸纳国际人才

Recruiting international talents

- 浙江火电印尼吉利普多二期项目，先后引进三支有资质的本地劳务队伍，通过“传、帮、带”的学习交流方式，促进当地员工成长发展，部分当地员工成长为管理人员。目前，项目部中方管理人员95人，印尼籍管理人员165人；中方施工人员238人，印尼籍工人967人。
- 葛洲坝集团巴基斯坦尼鲁姆·杰鲁姆水电工程实施过程中，项目部先后从英国、巴基斯坦聘请百余名合同顾问、法律顾问、税务顾问及不同层级的管理人员，项目部管理国际化程度进一步提升。
- Zhejiang Thermal Power Construction Co., Ltd. successively recruited three certified local labor teams for the construction of the Jeneponto thermal Power Plant (phase II). The company promoted local and some development by “teaching, helping, guiding”, and some were promoted to management. Now, the project team has 95 Chinese managements, 165 Indonesian managements, 238 Chinese builders and 967 Indonesian builders.
- During the engineering and construction of the CGGC Neelum-Jhelum Hydropower Station, over 100 contract consultants, legal counsels, tax advisors and different level of managements from the UK internationalization. project team to further enhance its internationalization.

融入当地社区

中国能建充分尊重运营所在地的文化和习俗，注重生态环境保护，参与当地社会公益活动，带动当地就业和民生改善，积极融入当地社会，实现与东道国的共同发展。

尊重当地文化

中国能建尊重当地宗教信仰与风俗习惯，与当地居民建立良好互信关系，增进双方友谊。



葛洲坝集团尊重伊斯兰教斋月习俗  
CGGC respects the Muslim custom of Ramadan

葛洲坝集团承建伊朗鲁德巴水电站项目共装设两台单机容量225MW的水轮发电机组，总装机容量450MW，是伊朗电力系统的主力电站之一。项目实施过程中，葛洲坝集团要求大家尊重当地的风俗习惯和宗教信仰，尊重伊斯兰教斋月习俗，避免伊籍员工在斋月期间从事高强度和长时间作业，并组织参与当地村民联欢活动，促进了中伊两国人民友谊的进一步融合。

安徽院首次全过程采用国际标准设计的印尼塔卡拉2台10万千瓦燃煤发电站施工图通过审查。期间，外籍土建工程师DESY突发生病住院，安徽院提供了周密细致的照顾，受到国外业主公司的赞誉。

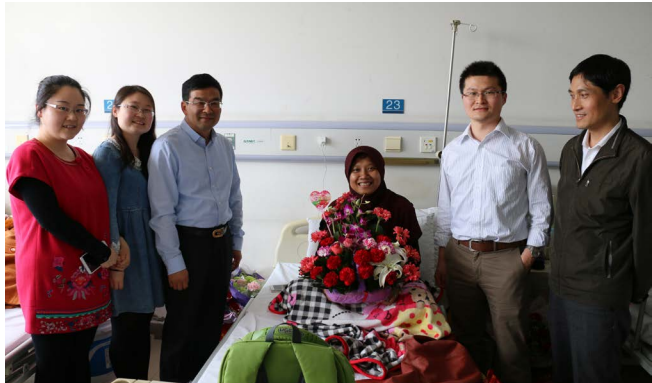
The construction drawing of the 2x100MW Coal-fired Power Plants in Indonesia, which was designed by Anhui Electric Power Design Institute Co., Ltd. (AHEDI) with 100% use of international standards for the first time, was reviewed and approved. Our foreign civil engineer Ms. DESY was taken very good care by the company while she was in hospital, which won praises from the overseas proprietor.

Integrate into Local Communities

We fully respect the traditions and cultures of local communities where we operate and are deeply concerned with ecological protection. We endeavor to improve local employment and livelihood through extensive presence in public service campaigns, and aspire to become part of local communities and achieve common development with the society of host country.

Respecting Local Culture

With due respects for the religious beliefs and customs of the local communities, we have built mutual trusts and deepened the friendship with local residents.





贡献当地发展

中国能建尊重、热爱海外运营所在地，积极贡献当地发展。葛洲坝国际公司党委引领 12 个基层党组织与 363 名党员带动中外员工为当地工程项目出谋划策，用“五大工程”塑造与当地共同发展的愿景，将党建、思想政治、企业文化优势转化为国际竞争优势，打造“最有担当的创造者”队伍。葛洲坝国际公司伊朗分公司副总经理法尔斯，持续 3 年跟进鲁德巴水电站 25% 增融项目，充分展示了中国能建员工在海外的担当精神，也为当地发展贡献了力量。

Contributing to Local Development

We hold respects and passions for local communities and will do every endeavor to promote their progress. In 2016, under the guidance of the party committee of China Gezhouba Group International Engineering Co., Ltd. (CGGIE), 12 grassroots Party organizations and 363 CPC members led Chinese and foreign employees in advising on local engineering projects. They strived to create a vision of shared development with local communities through “five projects”, transform the party building, ideological & political education and corporate culture edges into the international competitive edges, and foster a team composed of “the most responsible constructors”. Mr. Fars, Deputy General Manager of CGGIE Iran, has followed up the 25% additional financing program of Rudbar Hydropower Station for three consecutive years, fully demonstrating the willingness and competence of our employees to assume responsibilities and contribute to local development.



东电一公司 EPC 总承包的菲律宾美萨美斯 3×135 兆瓦燃煤电站工程

Philippine FDC Misamis 3×135MW CFB Coal-fired Power Plant, an EPC project undertaken by Northeast No.1 Electric Power Construction Co., Ltd.

旗帜工程引领先行  
Flagship Projects  
Set Trends

正心工程创新人文  
Cultural Projects  
Present New  
Looks

立业工程汇聚人才  
Development  
Projects  
Attract Talents

扬名工程聚焦共享  
Brand-building  
Projects  
Focus on Sharing

履责工程兼济四方  
CSR Projects  
Benefit All

“五大工程”与当地共同发展

Shared development with local communities through “five projects”



葛洲坝六公司卢阿西姆项目部为当地居民无偿修建爱心供水站，满足当地及周边 1000 余人的日常供水需要。

CGGC No. 6 Company's Luachimo Project Team built a free water supply tank, which will meet the daily needs of over 1,000 residents in local and surrounding communities.

参与公益慈善

中国能建作为负责的国际承包商，积极参与当地抗震救灾、修建道路、捐助物资等活动，切实解决当地居民的生活难题，促进当地公益慈善进一步发展。

- 葛洲坝二公司厄瓜多尔索普拉多拉水电站项目部组织救援队，并调派大量设备物资，会同厄瓜多尔昆卡市政府救援队参与抗震救灾工作，并向当地受灾员工捐赠 1 万美元物资。
- 中国能建出资 30 万元人民币赞助伊朗洛雷斯坦省修建一座桥梁，改善了附近村民的交通状况。
- 安徽电建一公司印尼塔卡拉项目部为当地村政府捐助办公桌椅、铺设道路，并向 100 户困难家庭赠送大米。
- 葛洲坝国际公司无偿为马拉博老城区学校解决雨水改道问题，受到学校领导及当地民众好评。
- 葛洲坝五公司卡塔尔项目部组织青年志愿者赴当地医院献血中心进行献血活动，为当地血库补充新鲜血液。

Contributing to Charity Undertakings

As a responsible international contractor, we have taken an active part in earthquake/disaster relief, road building and material donation to help the residents of our local communities out of difficulties and push ahead the local charity undertakings.

- When an earthquake hit Ecuador, CGGC No.2 Company's Sopladora Hydropower Project Team sent out a rescue team and lots of equipments and materials to assist Cuenca government's rescue services with the earthquake relief work, and donated USD 10,000 worth of materials to the affected local employees.
- We contributed RMB 300,000 to build a bridge in Lorestan, Iran to improve traffic conditions for nearby residents.
- Anhui No.1 Electric Power Construction Engineering Company's Indonesia Project Team donated desks and chairs to the government of the local village, paved roads, and supplied 100 poverty-stricken households with rice for free.
- CGGIE solved the rainwater diversion problem for schools in the old city of Malabo for free, and received high appraises from the school leaders and local residents.
- CGGC No. 5 Company's Qatar Project Team led some young volunteers to the local hospitals for unpaid blood donation, adding new blood to local blood bank.



## 保护生态环境

### Protect Ecological Environment

中国能建坚持低碳、绿色、环保发展理念，以科技创新、管理创新为切入点，深入开展科技研发、技术改造、节能减排等工作，业务覆盖污水污泥治理、再生资源回收、城市垃圾处理、新型材料开发等领域，形成了集规划、研发、设计、制造、施工和运营于一体的环保全产业链。公司加快发展清洁能源，为行业和社会提供优质的节能减排服务，真诚与各界共建绿色家园。

Energy China Group insists on low-carbon, green and environmentally friendly development. Taking sci-tech innovation and management innovation as starting point, we have carried out sci-tech R&D, technical transformation, and energy conservation and emission reduction work. The business covers the fields of sewage & sludge treatment, renewable resource reclamation, municipal waste disposal and new material development, etc., shaping a complete industrial chain for environmental protection that integrates planning, R&D, design, manufacturing, engineering and operation. We will continue to accelerate the development of clean energy to further benefit the industry and society through high-quality energy-saving and emission-reduction services and strive to build a green home with all walks of life.

## 强化环境管理

中国能建不断完善环境保护相关制度，将环保责任落实到各单位和责任人，并加强环保的监督和稽查，持续防控环境风险，推动环境友好型社会建设。

### 完善环保管理

公司成立环境保护和节能减排领导小组，所属单位均设置专职管理机构或专（兼）职管理岗位。公司制定了《环境保护和节能减排管理规定》《环境保护和节能减排考核办法》《环境事件调查处理办法》等管理制度，发布《突发环境事件应急预案》《关于进一步做好环境保护和节能减排工作的通知》、《关于加强节能减排专项资金管理的指导意见》《环境保护和节能减排相关法律法规和政策制度指引》等规定，明确各业务板块节能环保的重点工作，规范节能减排专项资金的使用，提升总承包和建筑施工企业的工程项目节能环保管理水平，进一步强化公司环境管理能力。

2016 年公司层层签订节能减排专项目标责任书，将责任落实到各单位和责任岗位，对年度责任目标和节能减排工作情况进行全面检查和考评。将节能减排工作完成情况纳入所属单位负责人经营业绩考核中，与企业主要负责人的绩效薪酬和岗位升降挂钩，切实落实节能减排责任。

## Tighten up Environmental Management

Energy China Group has kept improving institutional systems on environmental protection, holding all subsidiaries and responsible persons accountable for environmental protection. Energy China Group has also intensified supervisory and inspective efforts for constant environmentally and risk control to build an environmentally friendly society.

### Improving Environmental Protection Management

Energy China Group has set up a team to lead the environmental protection and energy saving and emission reduction. Each subsidiary has also appointed a specific management institution or full-time (part-time) position to manage such work. We have formulated a number of institutional systems, such as the *Administrative Provisions on Environmental Protection, Energy Conservation and Emission Reduction, Assessment Measures on Environmental Protection, Energy Conservation and Emission Reduction and Investigation and Settlement Measures for Environmental Events*. We have also issued the *Contingency Plan for Environmental Emergencies, Notice on Further Enhancing Environmental Protection, Energy Conservation and Emission Reduction and Guiding Laws, Guiding Opinions on Strengthening Management over Special Funds for Energy Conservation and Emission Reduction, Regulations and Policies on Environmental Protection, Energy Conservation and Emission Reduction* to clarify the priorities of each business sector in this regard, standardize the use of special funds, improve the managerial competence of general contracting and construction companies over environmental protection and energy saving efforts, and further enhance our environmental management ability.

In 2016, we signed responsibility letters of energy conservation and emission reduction goals with subsidiaries and branches, holding all subsidiaries and responsible persons accountable for environmental protection. We also reviewed their progress towards annual responsibility goals and energy conservation and emission reduction work, and made them as key indicators in evaluating the business performance of major responsible persons of subsidiaries, and link the performances and remunerations of corporate responsible persons with position promotion, promoting the accountability of energy conservation and emission reduction.



黑龙江火电三公司承建的土耳其 Izdemir 电站 1 号机组荣获 2016 年欧洲环境组织颁发的绿苹果环境奖，该奖旨在认可、奖励和促进全球最佳环保实践。

The Izdemir No. 1 Electric Energy Unit undertaken by Heilongjiang No.3 Thermal Power Construction Co., Ltd. won the "International Green Apple Awards for Environmental Best Practice 2016" awarded by an European environmental organization. The Awards is to recognize, reward and promote best environmental practices in the world.





中国能建承建的蒙西至天津南 1000 千伏特高压交流输电工程全面投运，有利于促进蒙西、晋北能源基地开发，优化电源结构布局，推动低碳经济发展，改善生态环境质量。

The West Inner Mongolia-South Tianjin 1,000 KV ultra-high voltage (UHV) power transmission and transformation project undertaken by Energy China Group, was put into full operation. It will facilitate the development of energy bases in West Inner Mongolia and North Shanxi, optimize the electric power structure, and promote low-carbon economy and improve the ecological environment.

## 加强环保监察

中国能建不断健全和完善节能减排统计、监测方法，推进节能减排信息化建设，建立节能减排统计监测体系，实行逐级报告制度。各单位均制定统计监测管理制度，开展第三方检测，建成节能减排信息统计系统平台，利用统计系统平台加强数据分析管控。葛洲坝水泥公司通过建立环保数据大平台，对排污单位的污染物排放情况采取实时监控，加强对有组织排放源的控制，强化了企业环境风险的管理。

公司针对重点项目（工厂）的节能减排工作情况进行检查，查隐患找问题，迅速制订整改措施。2016 年组织开展投资项目和污水项目专项检查，全面稽查投资项目环评、生产制造类工厂企业生产污水排放、污水纳管净化设施运行情况等。

## Strengthening Environmental Monitoring

We have optimized our statistics and monitoring techniques over energy conservation and emission reduction and advanced statistics and monitoring informatization building. We also have set up statistics and monitoring system of energy conservation and emission reduction and adopted hierarchical reporting system. All subsidiaries have set up their own statistics and monitoring management system in this regard and engaged a third-party testing in emission measurement. They have also intensified data analysis and control through the establishment of energy conservation and emission reduction information statistics platform. CGGC Cement Co., Ltd. has monitored real-time pollutant discharges on its environmental data platform for intensified control over organized emissions source and corporate environmental risks management.

We have also reviewed energy conservation and emission reduction performance of key projects (plants) to identify any hidden danger or problem, and worked out corrective measures in no time. In 2016, we carried out several special checks over sewage project and investment project, and comprehensively inspected EIA of investment projects, production and sanitary sewage emissions of manufacturing enterprises and plants, and the operation of sewage pipe purification facilities.

## 提升环保意识

### Strengthening the Awareness on Environmental Protection

公司开展形式多样的环保活动，提升员工和公众环保意识。2016 年，公司组织所属单位扎实开展“六·五世界环境日”“全国节能宣传周”等丰富多彩的环保主题活动，并对活动开展情况进行总结交流，提高公司员工节能减排的意识和能力。

We aim to build a stronger awareness on environmental protection among all employees and the public through diverse activities. In 2016, under the leadership of Energy China Group, all subsidiaries organized various theme activities of environmental protection, such as the “Celebrations of June 5th World Environment Day” and “National Energy Conservation Week”, etc., and exchanged experiences afterwards to enhance the employees’ awareness and competence of energy conservation and emission reduction.



东电一公司举办 2016 年“世界环境日”签字活动

Northeast No.1 Electric Power Construction Co., Ltd. organizes a signing activity on the 2016 “World Environment Day”.

12.3 万人次

全年环保培训人数

In 2016, we offered trainings on environment protection for 123,000 persons.

29.5 %

环保培训人数同比增加

A year-on-year increase was 29.5%



安徽电建二公司京能五间房项目部开展“保护绿色草原”主题活动

The Jingneng Wujianfang Project Team of Anhui No.2 Electric Power Construction Engineering Co., Ltd. organizes a theme activity of “Protect green prairies”.



## 推进节能减排

25.6 %

二氧化硫排放量同比减少

SO<sub>2</sub> emissions was reduced by 25.6% year-on-year.

11.8 %

氮氧化物排放量同比减少

NO<sub>x</sub> emissions was reduced by 11.8% year-on-year.

16.7 %

化学需氧量排放量同比减少

COD emissions was reduced by 16.7% year-on-year.

18.1 %

氨氮排放量同比减少

Ammonia nitrogen emissions was reduced by 18.1% year-on-year.

16 亿元

全年环保总投资

In 2016, our total environmental protection investments amounted to RMB 1.6 billion.

公司注重加大环保技术的投资与开发，更新改造设备、技术工艺，淘汰落后产能，减少污染物排放，同时大力发展高效清洁能源，节能减排效果显著。

## 加大环保投资

2016 年，中国能建完成环保总投资 16 亿元，深化开展水务处理、垃圾固废处理处置与资源化利用、分布式能源设备生产、环境生态治理等技术服务业务，进一步发展环保产业。

- 葛洲坝水泥公司实施企业能源管理中心建设示范项目，各生产线建设有纯低温余热发电项目，通过产能置换，淘汰落后熟料产能，实施水泥窑协同处理废弃物项目，实现城市垃圾等资源综合利用。
- 电力规划总院组织开展中德火电灵活性技术交流、太阳能热发电汽轮机技术交流等活动，承办第五届中阿能源合作大会、超超临界机组技术交流 2015 年会等，彰显了环境保护和节能减排品牌影响力，推进了电力行业的节能减排技术应用。

## Promote Energy Conservation and Emission Reduction

We have focused on expanding the investments in and development of environmental protection technologies, to reduce pollutant discharges through the renewal and upgrading of facilities, technologies and processes, and eliminate outdated industrial capacity. Our vigorous efforts in developing efficient clean energy have facilitated to remarkable progress in energy conservation and emission reduction.

## Increasing Environmental Investment

In 2016, we invested RMB 1.6 billion into the environmental protection and dedicated our efforts to technological services, such as sewage treatment, solid waste disposal and resource recycling, distributed energy equipment production, environmental and ecological control, etc. to further develop environmental protection industry.

- CGGC Cement Co., Ltd. implemented the plan that corporate energy management center builds exemplary project and each production line builds low-temperature residual heat power units. The company has eliminated outdated clinkers capacity through capacity replacement, implemented the project of co-processing solid wastes of cement kilns, and realized resources' comprehensive utilization.
- The Electric Power Planning & Engineering Institute held activities like Sino-German technical exchange on thermal PP flexibility, technical exchange on solar steam turbines, etc., and co-hosted the 5th China-Arab States Energy Cooperation Conference and the 2015 Annual Meeting of SC Power Units, etc. The company has fully displayed its impacts on environmental protection, energy conservation and emission reduction, and promoted the application of energy conservation and emission reduction technologies in the electric power industry.

## 推动环保研发

### Promoting the R&D of Environmental Protection Technologies

面对能源结构调整和电力市场发展新格局，中国能建践行绿色设计、绿色施工技术以及清洁材料的研发与使用，加强节能减排技术改造。凭借强大的全产业链优势和综合建设能力，中国能建加快由传统电力建设向新能源和清洁能源建设拓展，积极参与风力发电、太阳能发电、生物质发电等清洁能源工程建设，探索符合公司特点的转型升级新路径。

To align with the energy restructuring and the new blueprint of the electric power sector, we have practiced green design, green engineering technology and clean materials R&D and application, and further upgraded energy conservation and emission reduction technologies. In virtue of our strong edges across the entire industrial chain and comprehensive construction abilities in all aspects, we have quickened our business expansion from traditional electric power building to new and clean energy building, and positively engaged in clean energy projects, such as wind power, solar power, biomass power generations, etc. to develop a new path of business transformation and upgrading that is in line with our characteristics.

## 减排技术应用

### Application of emission-reduction technologies

中国能建开展超低排放改造、节能改造、供热改造等机组改造，确保新（改、扩）建机组平均供电煤耗及单位发电量二氧化硫、氮氧化物、烟尘排放水平达到新低，缺水地区电厂废污水实现零排放。

- “十万吨级燃烧后二氧化碳捕集和封存全流程示范项目捕集系统勘察设计及专题研究”项目，是我国西北地区最大的二氧化碳捕集项目，引领行业碳减排设计水平，推进我国能源行业的“近零排放”。
- 水泥窑协同处置固体废物系统集成技术及工程化应用技术已成功应用在老河口，每年可处理生活垃圾约 15 万吨，节约土地约 40 亩。
- HAS 固化剂及污泥机械脱水化学改性一体化技术解决了海泥原位固化的技术难题，填补了相关技术空白，已成功应用于滇池治理，取得了良好效果。
- 先进压缩空气储能技术获全球可再生能源领域最具投资价值的首选技术蓝天奖，有助于雾霾治理和低碳发展。

Energy China Group has improved in-service units for super-low emissions, reduced energy consumption and efficient heat supply, making sure all newly-built (upgraded and expanded) units record new lows in average coal consumption for power supply, and SO<sub>2</sub>, NO<sub>x</sub> and dust emissions per unit of electricity generated. The power plants in water-scarce areas have also realized zero discharge of sewage and waste water.

- The survey, design and specific research on the capture system for the “100,000 t/a post-combustion CCS whole-process demo project” is the largest carbon capture project in Northwes China. This well proved our industry-leading competence of carbon emission reduction system design and pushed China's energy sector towards “near-zero emissions”.
- The “system integration and industrial application technologies for co-processing solid wastes of cement kilns” have proven successful at Laohekou by disposing about 150,000 tons of domestic wastes and saving about 40 mu of lands on a yearly basis.
- The “HAS soil stabilizer” and “sludge integrated technology of mechanical dewatering and chemical modification” have proven a technical solution to sludge in-situ stabilization, filled the relevant technical gap. They have been successfully applied to Dianchi Lake governance, and gained good effect.
- The advanced “compressed air energy storage (CAES)” technology won the Bluesky Award for Global Top Investment Scenarios to Apply New Technologies for Renewable Energy Utilization by dint of its remarkable contributions to smog control and low-carbon development.



## 发展清洁能源

中国能建攻克海上集成变电站和中压风电变流器多项技术难关，掌握了相关核心技术，并首次采取“投融资+EPC”模式承建浙江海盐风电项目，开创了“投资+协同总承包”的先河。

中国能建承建多个复杂山地光伏、屋顶光伏、农光互补、风光同场、渔光互补、尾矿库及灰场光伏等电站工程，成为“太阳能光热产业技术创新战略联盟”的首批缔约方。

中国能建在生物质直燃发电、大型燃煤锅炉生物质混烧发电、垃圾焚烧发电等技术处于国内领先水平，承建了安徽霍邱秸秆焚烧发电工程、阜阳市生活垃圾焚烧发电工程等近 20 项生物质发电项目。

## Development of clean energy

We have solved the technical difficulties in offshore integrated substations and medium-voltage wind power converters, and gained related core technologies. Zhejiang Haiyan Wind Power Project undertaken by us was the first case that adopted an “investment + coordinated EPC” model.

We have undertaken several projects for complex-terrain PV stations, rooftop PV stations, agriculture-light complementary PV stations, wind-light complementary PV stations, fishing-light complementary PV stations, and tailings-storage and ash-yard PV stations, and we are among the first signatories to “China National Solar Thermal Energy Alliance”.

As a national leader in direct biomass combustion power generation, large-scale coal + biomass power generation and waste incineration power generation, we have undertaken nearly 20 biomass power projects, including the straw-based power generation project in Huoqiu and the domestic waste incineration power generation project in Fuyang, Anhui.



河北张北风光储输示范工程是世界规模最大的多类型化学储能电站

Hebei Zhangbei wind and solar power storage and transmission demonstration project is the world's largest multi-type chemical energy storage station.

## 拓展环保产业

### Expand Environmental Protection Business

公司拓展环保咨询服务与节能环保新兴业务，拓宽环保发展的新渠道，不断完善产业链条，加快转型升级步伐，坚定不移地走创新发展、绿色低碳、节能环保的新型工业化道路。

We have expanded environmental consultancy and other emerging businesses for energy conservation and environmental protection, opened up new ways for the development of environmental services, improved the industrial chain, and accelerated the pace of transformation and upgrading. We will unswervingly follow the path of new-type industrialization with a focus on innovation, green & low carbon development, energy conservation and environmental protection.

## 发展环保咨询服务

### Developing Environmental Protection Consultancy Services

作为国家级高端咨询机构，电力规划设计总院积极开展能源减排高端咨询、技术研究、规划、评审等工作，相关科研成果在工程实践中得到广泛应用。

2016 年，电力规划总院开展了燃煤电厂耦合生物质发电技术研究、“十三五”全国电力系统调节能力提升工程、650℃超超临界燃煤发电技术可行性研究、华电江苏句容电厂二期

2×1000MW 机组工程环保专题、智能电网工程评审等环保咨询项目。

As a high-end consultancy institution at the State level, Electric Power Planning & Engineering Institute has engaged in high-end consultancy, technical research, planning and review of energy conservation and emission reduction programs, etc. Related scientific research findings have been applied extensively to engineering practices.

In 2016, Electric Power Planning & Engineering Institute carried out environmental consultancy protection projects, including the research on biomass co-firing power generation technology for coal power plants, the “13th Five-Year Plan” national project of enhancing the electric power system adaptability, the feasibility study over 650℃ ultra-supercritical coal-fired power generation technology, the environmental protection project over 2×1000MW units in Jiangsu Huadian Energy Jurong Power Plant, and smart grid review and evaluation, etc.

## 投资环保新兴产业

### Investing in Emerging Environmental Protection Business

中国能建大力推进污水治理、固废处理、再生资源回收利用等技术的研发，并投资相关产业，推动环保新兴产业的发展。

- 公司所属葛洲坝集团依托葛洲坝投资、葛洲坝水泥、葛洲坝能源重工及绿园科技四家子企业联动效应，打造“大环保”新业务，积极开展分布式能源、水务、固废等环保业务。
- 公司利用低品位工业废渣开发特种胶凝材料及产业化技术，将生活垃圾精细分拣和垃圾焚烧等进行无害化处理，并采用废水回用、渣土制砖、塑料回收等资源再利用手段，实现生活垃圾处理的“零排放”。

- 公司开展食品级塑料再生利用、贵金属提取、废纸塑形、熔盐蓄热储能、二氧化碳（CO<sub>2</sub>）制冷、海水淡化等技术研究。

We have pressed vigorously ahead with the technological R&D for sewage disposal, solid waste treatment and renewable resource recycling, and invested in related sectors to promote the development of emerging environmental protection businesses.

- Relying on the connected effect of four subsidiaries (China Gezhouba Group Investment Holding Co., Ltd., CGGC Cement Co., Ltd., CGGC-UN Power Co., Ltd. and China Gezhouba Group Lvyan Technology Co., Ltd.), CGGC

has created “Giant environmental protection” business, and positively carried out businesses of distributed energy, water, solid waste, etc.

- Based on the special-purpose cementing materials developed by using low-grade industrial wastes and industrial technology, Energy China Group realized “zero emissions” in domestic waste disposal through bio-safe treatment (e.g. precision sorting, incineration) and resource recycling (e.g. waste water reuse, dregs-based brick making, plastics reclamation).
- We have conducted technological researches on food-grade plastics recycling, precious metal extraction, waste paper molding, molten-salt-based heat and energy storage, CO<sub>2</sub> cooling and seawater desalination, etc.



## 真诚回馈社会

### Give back to Society

中国能建的发展离不开社会各界的鼓励和支持。我们推进精准扶贫，参与灾害救助及公益慈善等活动，着力打造一个绿色环保的和谐发展企业，真诚与各社区共享和谐，共同实现可持续发展。

The success of Energy China Group is closely connected with the supports of the society. We've promoted targeted poverty alleviation and taken an active part in disaster relief and charitable undertakings for the public good. Through these efforts, we aim to be a green, environmental friendly enterprise for harmonious development and to share progress and realize common sustainability with host communities.



## 推进精准扶贫

中国能建坚决贯彻落实党中央、国务院关于脱贫攻坚的决策部署，按照“造血功能强、惠民功能强、服务受众广”的原则，精选扶贫项目，推动造血式扶贫的发展。

### 支援少数民族地区发展

中国能建根据党中央、国务院的总体部署和要求，进一步加大援疆援藏援青的扶贫力度，切实履行中央企业社会责任，为维护边疆稳定发展，维护国家能源安全做出积极贡献。

2016 年，中国能建在新疆、青海、西藏以及四川云南甘肃省藏区承建多个项目，项目总体履约良好，进度、质量、安全总体满足业主要求，为地方经济的发展做出了应有贡献。中国能建在项目建设中始终坚持“民族友好、环境和谐”的原则，高标准、高起点、严要求，确保生态环境不遭受破坏，始终注重与当地政府部门、各族牧民建立良好的合作关系。

### Press Ahead with Targeted Poverty Alleviation

We've resolutely implemented the decisions of the CPC Central Committee and the State Council on poverty alleviation and elimination, and prioritized projects that can "best invigorate the economy and benefit the people extensively and profoundly".

### Supporting the Development of Minority Regions

Guided by the instructions of the CPC Central Committee and the State Council, we have intensified poverty-relief efforts for Xinjiang, Tibet and Qinghai. As a responsible SOE directly under the administration of the Central Committee, we have earnestly practiced CSR and contributed positively to safeguarding the stability in border areas and national energy security.

In 2016, Energy China Group undertook several projects in Xinjiang, Qinghai, Tibet as well as areas inhabited by ethnic Tibetans in Sichuan, Yunnan and Gansu. We honored the contracts and met the requirements of our proprietors on the progress, quality and safety performance of all projects in general. While making contributions to the local economy through high-standard and high-quality projects, we also attached great importance to a close partnership with local governmental authorities and herdsmen and ensured no damage to eco-environment in the principle of "maintaining a friendship with other ethnic groups and working in harmony with the environment".



1047 个

全年承建新、青、藏地区项目数量

In 2016, the number of projects in Xinjiang, Qinghai and Tibet was 1,047.

505.17 亿元

项目合同总金额

Total amount of the contract projects was RMB 50.517 billion.

162.67 亿元

已完成项目金额

The amount of accomplished projects reached RMB 16.267 billion.

广西水电集团在河池市金城江区拔贡镇洞江村，开展“青春绿色行动 共建美丽乡村”主题团日活动。

Guangxi Water Conservancy & Electric Power Construction Group Co., Ltd. pays a visit to Dongjiang Village in Bagong Town, Jinchengjiang District, Hechi City for Youth League activities of "building a beautiful village through green actions".



## 改善基础设施

针对西林县和镇巴县人民群众饮水难、出行难、增收难、上学难等实情，中国能建精选扶贫项目，捐助帮扶资金。按照《2015年-2017年度定点帮扶计划》及《“十三五”定点扶贫工作规划》，中国能建2016年投入帮扶资金358万元，其中西林县158万、镇巴县200万，以改善当地经济发展。

在广西西林县，中国能建2016年投入53万元实施央龙村龙汉屯屯内道路硬化3.1公里，改善屯内村民的交通条件，受益贫困家庭17户，受益贫困人口73人，受益群众270人。在陕西镇巴县，中国能建共投入167万元援建东院社区服务中心项目、东院坝平板桥项目及东院社区排洪排污工程的建设，为东院社区及东院坝小组的后续开发建设提供了基础保障，直接受益人口2000余人。



中国能建帮扶央龙屯道路硬化项目  
Road hardening project in Yanglong Village

## Upgrading Infrastructure Facilities

To lift Xilin and Zhenba counties out of the difficulties in accessing clean water, traffic and education and income increasing, we have donated money and identified the most appropriate projects for poverty relief. In 2016, according to the *2015-2017 Targeted Assistance Plan* and the *13th Five-Year Targeted Poverty Relief Programme*, we contributed RMB 3.58 million to Xilin (RMB 1.58 million) and Zhenba (RMB 2 million) to improve local economy.

In 2016, we contributed RMB 530,000 for the hardening of 3.1km roads in Yanglong Village, Xilin County, Guangxi Province to improve local traffic conditions. This project benefited 270 residents, including 17 impoverished households and 73 poor locals. In Zhenba County, Shaanxi Province, we spent RMB 1.67 million on a service center in Dongyuan community, a slab bridge on Dongyuan dam and flood & sewage discharge pipelines in Dongyuan community, which laid a solid foundation for local development and construction and directly benefited over 2,000 residents.



中国能建在镇巴县展开定点扶贫工作  
Targeted poverty alleviation in Zhenba County

## 发展特色农业

2016年，中国能建帮助广西西林县发展特色农业。投入资金40万元，扶持村民建设有机茶种植示范园，扩大有机茶种植面积共200亩，受益建档立卡贫困家庭79户，受益贫困人口348人，每人每年可增收1500元；投入资金65万元，扶持村民发展养羊业，为贫困户购置幼羊722只，受益贫困家庭79户，受益贫困人口348人，每人每年可增收2000元。

中国能建帮助陕西镇巴县发展特色农业，投入30余万元，扶持村民种植天麻，受益建档立卡贫困家庭65户，受益贫困人口271人，每人每年可增收2000元。

## 发挥优势帮扶

中国能建充分发挥在能源、基础设施等领域规划、勘测设计咨询和建设的优势，为贫困县的产业开发提供智力支持。针对西林县风电开发开展初步可行性研究工作，中国能建投资分公司经实地考察，与西林县签订《中国能建投资分公司与西林县新能源战略合作协议》，探索合作开发风电项目，开辟造血式扶贫新途径。

## 选派优秀干部一线扶贫

为了推动扶贫项目的建设，中国能建选派优秀干部进行一线扶贫，为贫困县的经济发展提供更多智力支持。挂职干部牢记使命、克服困难，满腔热忱地融入扶贫工作，主动走访县、乡各部门，深入厂矿企业、田间地头了解情况，出思路、提对策、抓落实，在移民新居建设、产业扶贫、教育扶贫、培训就业、村党支部建设等方面发挥了重要作用。

## 协助劳务输出

中国能建利用陕西和广西完整的产业链优势，为建档立卡贫困户提供务工渠道信息，并根据企业对劳务用工的需求，与当地政府扶贫办对接，定向在贫困户中招收一定名额的劳务工，通过培训，实现其劳务输出并精准脱贫。

## Developing Characteristic Agriculture

In 2016, we made efforts in fostering characteristic agriculture in Xilin County, Guangxi Province. We invested RMB 400,000 in the demonstrative organic tea farm, expanding 200 mu for growing organic tea trees to benefit 79 registered poor households and 348 people living in poverty, and their annual income was expected to increase by RMB 1,500/person. In addition, we invested RMB 650,000 in local sheep farming industry, purchasing 722 lambs for 348 needy persons from 79 households, and their annual income was expected to increase by RMB 2,000/person.

In order to help Zhenba county develop characteristic agriculture, we invested RMB 300,000 to support the villagers planting *Gastrodia* to benefit 65 registered poor households and 271 people living in poverty, and their annual income was expected to increase by RMB 2,000/person.

## Exerting Advantages to Help the Poor

We have given full play to our advantages of planning, survey, design, consultancy and construction in energy and infrastructure, offering intellectual supports for industrial development of counties below the poverty line. Built upon the preliminary feasibility studies on the wind power development in Xilin County and field visits, China Energy Engineering Group Investment Company signed the *Strategic Cooperation Agreement on New Energy with Xilin County*, aiming to blaze new trails in poverty alleviation through joint wind power projects.

## Sending Competent Officers to Poverty-stricken Areas

To further our poverty relief efforts, we've sent competent officers to the poverty-stricken areas to offer intellectual supports for their economic development. With missions and passions, the officers have cut through difficulties and paid extensive visits to related departments of the county and village governments as well as mines, plants, enterprises and fields, proposing solutions and reviewing the implementation progress. They have made major contributions to resettlement housing, poverty alleviation through industrial development and education, employment & training, and CPC village branch building.

## Assisting the Export of Labor Services

By leveraging our complete industrial chains in Shaanxi and Guangxi, we have opened up channels for registered poverty-stricken households to access labor service information, and worked with related local authorities to sign on a certain number of poor locals based on the needs of our companies and realized the export of labor services and targeted poverty relief through trainings.



参与灾害救助

中国能建关注社会问题，积极发挥自身优势，贡献解决方案。2016 年，在长江中下游沿江地区及江淮、西南东部等地遭遇强降雨或台风过程中，中国能建各级企业启动防汛应急预案，快速组织设备、物资，奋力抗洪抢险、积极应对台风风险，最大限度地减少人员和财产损失。



葛洲坝集团抗洪抢险保平安  
CGGC fights against floods

2016年，武汉连续遭受暴雨袭击，降雨来势猛、强度大、范围广、破坏力强，防汛形势极为严峻。葛洲坝集团接受武汉市防汛指挥部统一调度，承担了汉江部分堤段防汛任务。

葛洲坝集团第一时间成立防汛抗洪领导小组，抽调精干力量，组成党员先锋队、防汛抗洪突击队。24 小时三班倒，昼夜坚守岗位，重点排查渗透、管涌、墙体破损等情况，并进行详细记录。同时储备了一批防汛抗洪物资和日常生活必需品，为巡堤人员提供坚实后勤保障。防汛抗洪应急突击队时刻坚守大堤，用实际行动践行着社会责任，誓保大堤安全。在防洪度汛抢险工作中，葛洲坝集团积共计调动 2104 人，调度车辆 140 台，挖掘机 72 台，装载机 44 机，叉车 7 台，吊车 57 台，最终确保武汉地铁 27 号线项目安然无恙。

葛洲坝集团以高度的责任感和使命感，全力以赴、众志成城，经过科学的调度、顽强的拼搏与通力的协作，最终确保堤坝万无一失、在建项目平稳。

Contribute to Disaster Relief

Social issues are among our greatest concerns and we keep putting forth practical solutions by exerting our advantages. In 2016 when intense rainfall and typhoon hit the middle and lower reaches of the Yangtze River, Yangtze-Huai River Valley and the eastern part of Southwest China, our subsidiaries followed the contingency plan and prepared necessary machineries and materials for disaster control and rescue to minimize casualties and property damages.

In 2016, torrential downpours struck Wuhan. The sudden rainfall broke with a destructive force across an extensive area; the flood situation was grim. Instructed by the Office of Flood Control of Wuhan, CGGC was responsible for securing a few banks along the Han River.

In no time, CGGC set up a leadership team, and formed highly capable taskforces which worked round the clock in three shifts, detecting and keeping a detailed record of any water seepage, piping, wall breakages and other dangers. CGGC also stored up emergency materials and daily necessities for flood patrols who worked day and night to practice social responsibilities and safeguard the banks. During the flood control and emergency rescue, CGGC sent altogether 2,104 people, 140 vehicles, 72 mechanical diggers, 44 loading machines, 7 fork-lift trucks and 57 cranes, leaving the Wuhan Subway Line 27 project sound and intact throughout the disaster.

With a strong sense of responsibility and mission, CGGC worked at full stretch to make reasonable arrangements and geared up efforts to ensure no problem with the banks and the construction project.



广东院全力防御台风“妮妲”  
GEDI defends “Nida” with all might

2016 年，近五十年来首个正面袭击珠三角的台风“妮妲”在深圳大鹏半岛沿海地区登陆，给广东省大部分地区带来了强风、强降雨和风暴潮，珠三角地区电网抗风形势严峻。

在广州市发布防台风防汛全民动员令后，广东院便立即启动自然灾害突发事件应急预案Ⅰ级（特别重大）应急响应，并成立由党政一把手挂帅的救灾应急领导小组，安排技术骨干在办公区附近酒店枕戈待旦，同时严苛落实安全隐患排查，检查加固建筑物，督促分包方加强防范，停止户外作业，做好现场值守等多个方面的应急工作。

经过严格的隐患排查与防范，广东院办公区域及各在建项目一切正常，未发生安全事故。

In 2016, typhoon “Nida” made landfall over Dapeng Peninsula in Shenzhen. As the first typhoon that hit the front of the Pearl River Delta in nearly half a century, “Nida” brought strong winds, torrential rains and storm surges to much of Guangdong Province, and challenged the power grid system across the Pearl River Delta.

Immediately upon the receipt of the mobilization order of the Guangzhou Municipal Government against the typhoon and flood, Guangdong Electric Power Design Institute (GEDI), in line with the contingency plan for (extremely serious) natural disasters and emergencies, set up a leadership team led by the top heads of its CPC committee and sent technical experts to a hotel near the office to ensure timely actions and technical rescue in case of power failure. In addition, GEDI strictly checked all hidden dangers, reinforced the architectures, urged contractors to take stronger preventive measures, suspended outdoor operations, and conducted on-site monitoring.

By now, the GEDI office area and all ongoing projects remained sound with a zero incidence of accidents.



## 热心公益慈善

中国能建履行央企应有的责任，积极参与公益慈善事业，用爱心回馈社会，实现与社区共同发展。2016年，公司在扶贫、助学、助残、公益救济等方面开展 39 项捐赠，捐赠金额共计 1427.03 万元，其中向所属企业拨付困难职工帮扶资金 488.3 万元、劳模慰问资金 30.5 万元、金秋助学资金 45 万元等。



中电工程华北院青年志愿服务站开展学雷锋宣讲活动，为中小學生普及节能节电知识

North China Power Engineering popularize, electricity saving knowledge for primary and secondary school students.

## Engage in Charitable Undertakings

We have performed due responsibilities of a central SOE by taking an active part in charitable undertakings and seeking shared development with the community. In 2016, we made 39 donations to support education, alleviate poverty, help the disabled and provide support for the charitable activities, with a total amount of RMB 14.27 million. To be specific, RMB 4.883 million was donated to needy employees of subsidiaries, RMB 305,000 to model workers, and RMB 450,000 to educational funds.



中秋佳节之际，江苏院青年志愿者前往南京市鼓楼区社会福利院给老人们奉送中秋礼物，为节日增添了几分热闹与关爱

Young volunteers from Jiangsu Electric Power Design Institute visit the elderly at Nanjing Gulou District Social Welfare Institute with presents and performance to celebrate the lively Mid-autumn Day.



甘肃院青年志愿者服务队参加了“美丽甘肃 你我同行”2016 植树公益行活动，在永靖县盐锅峡镇荒山上植树，为黄河沿岸增添绿意

As part of the “2016 Tree Planting Program”, young volunteers from Gansu Electric Power Design Institute make a trip to a barren hill in Yanguoxia Town, Yongjing County, adding a hint of green to the view along the Yellow River.

## 为学子筑梦

中国能建重视对贫困地区的教育扶贫，通过建立助学基金、捐助图书、教学设备等方式，助力学子圆梦，促进当地教育发展。集团公司设立“圆梦基金”，先后向西林县学校送出爱心款、教学仪器、电脑、书籍、衣物“五个圆梦礼包”，缓解农民子女上学难问题。中国能建先后募集爱心款 12 万元资助寒门学子，捐赠价值 10 余万元的教学仪器及用品，帮扶学生 2200 余人。



山西院团委组织开展第二届“学雷锋助学义卖”公益活动，将筹集的爱心款全部用于购买“爱心”书籍，向太原市周边困难学生捐赠图书，为知识的传播贡献力量

Shanxi Electric Power Engineering Co., Ltd. organizes the second “Charity Bazaar” via its Youth League committee. All money raised was used to buy books for needy students in surrounding areas of Taiyuan to facilitate the spread of knowledge.



## Building Dreams for Students

We have paid considerable attention to education support in impoverished areas, and promoted it by setting up funds, donating books & teaching instruments and carrying out other charitable practices to assist young students pursue their dreams. In addition to the “Dream Fund”, we have also sent teaching instruments, computers, books and clothes to schools in Xilin County, giving the children of farmers an easier access to education. Till now, we have raised RMB 120,000, donated RMB 100,000 worth of teaching instruments and supplies and helped over 2,200 needy students.



浙江院举办第四届“衣加衣，传爱心”捐赠活动，156 位职工共捐赠衣物 1000 余件，书籍 500 多本，传承弘扬了雷锋精神、传播正能量，把爱心和温暖传递给需要的人，为社会添一份温馨美好

Zhejiang Electric Power Design Institute organizes the 4th Donation Fair, where 156 employees donated over 1,000 pieces of clothing and 500 books as an effort to resuscitate the spirit of Lei Feng and a token of love and care for the needy.

“五四”青年节，宝鸡铁塔公司团委组织青年志愿者来到晁峪中心学校，慰问常年工作生活在大山深处的师生，并捐赠书籍、足球等文体用品，为山区孩子送去关爱

On the May 4th “Youth Day”, Baoji Iron Tower Manufacturing Co., Ltd. leads young volunteers to Chaoyu Central School, expressing greetings and donating books, footballs and other stationery & sports supplies to the students and faculty who have lived for years in the mountain areas.



责任绩效  
CSR Performance

指标类 Category	指标名称 Indicators	2016	2015	2014
市场绩效 Market Performance	资产总额(万元) Total Assets (RMB 10,000)	30703366	27169465	22802033
	负债总额(万元) Total Liabilities (RMB 10,000)	22818705	20935875	17956772
	所有者权益(万元) Investors Equity (RMB 10,000)	7884661	6233590	4845261
	净资产收益率(%) Return On Equity (%)	10.2	11.4	11.4
	总资产报酬率(%) Return On Assets (%)	4.1	4.4	4.3
	国有资产保值增值率(%) Rate of Value Preservation and Increment of State-owned Assets (%)	107.9	106.3	113.1
	年度科技支出总额(万元) Total S&T Expenditures of the Year (RMB 10,000)	477658.1	474138.9	419211.5
	技术投入比率(%) Technical Input Ratio (%)	2.14	2.27	2.24
社会绩效 Social Performance	新增专利数(项) New Patents	1456	1349	1265
	纳税总额(万元) Total Tax Paid (RMB 10,000)	1024693	1038423	812552
	从业人数(人) Employees (person)	149055	154959	174755
	在职职工(人) In-service Employees (person)	140150	140548	144128
	在岗职工(人) On-the-job Employees (person)	126545	125684	126959
	新增从业人数(人) New Jobs Offered (person)	5843	5274	5990
	劳动合同签订(%) Rate of Signing Labor Contract (%)	100	100	100
	社会保险覆盖率(%) Coverage of Social Insurance Program (%)	100	100	100
	女性管理者比例(领导班子)(%) Percentage of Female Leaders (%)	4	4	6.3

指标类 Category	指标名称 Indicators	2016	2015	2014
社会绩效 Social Performance	员工人均培训投入(元) Training Inputs per Employee (RMB)	1200	1200	1400
	员工流失率(%) Turnover (%)	3	3	3
	捐赠总额(万元) Total Donations (RMB 10,000)	1427.03	844.68	694.3
	安全培训人数(人次) Participants in Safety Trainings (person/times)	384000	346100	185000
	安全生产投入(亿元) Inputs in Work Safety (RMB 100,000,000)	23	21.1	18.2
环境绩效 Environmental Performance	环保培训人数/覆盖率(%) Participants in Environmental Trainings /Coverage (%)	123000/76	95000/59	92000/58
	环保总投资(亿元) Total Environmental Investments(RMB 100,000,000)	16	15.7	4.62
	单位产值能耗(吨标煤/万元) Energy Consumption per Unit of Output Value (tons of standard coals/RMB10,000)	0.1066	0.121	0.123
	二氧化硫排放量(吨) SO <sub>2</sub> Emissions (ton)	9071	12197	12949
	氮氧化物排放量(吨) NO <sub>x</sub> Emissions (ton)	17985	20381	21499
	废水排放化学需氧量(吨) COD in Waste Water (ton)	7224	8671	9020
	废水排放氨氮量(吨) Ammonia Nitrogen Discharge in Waste Water (ton)	1088	1329	1386



## 未来展望 Outlook

2017年是实施“十三五”规划的重要一年。中国能建将坚持“建成世界一流的工程建设公司”的战略目标，继续贯彻“创新、协调、绿色、开放、共享”五大发展理念，积极履行社会责任，为促进经济、社会和环境协调发展做出应有贡献。

集团公司将以解放思想、转变观念为先导，立足实际、稳健经营、行稳致远，正确认识和把握经济发展新常态，主动适应市场需求新变化，将创新发展作为重中之重，取得“四个新突破”，积极争取发展主动权，为建成国际一流的工程建设公司再上一个新台阶。

创造多元共享价值。始终置身于国家经济建设和社会发展大局之中，坚持以产品创新和服务创新满足市场多样化需求，以效益为中心不断提高公司的投资价值，将职工价值追求融入公司发展的愿景，实现公司与利益相关者的共同发展。

深入推进转型升级。不断完善现代企业制度和法人治理结构，持续优化集团管控模式，以提升公司科学决策能力、依法治

理水平和合规经营能力，实现各项决策权、执行权和监督权在不同管理层级、不同能力水平企业的合理配置。有序推进内部资源优化重组，促进要素资源向主要业务和优势企业集聚，形成新的经营平台和经济增长点，从而促进产业结构的转型升级。

坚持创新驱动发展。把创新驱动发展摆在更加突出的位置，让创新成为公司做强做优做大的强大引擎。通过转变发展思路、创新商业模式、加快科技进步以及坚持管理创新，以创新能力的建立总揽全局，并以创新的思维 and 创新的探索，走出公司创新发展的新路子。

坚定实施国际战略。坚定不移实施国际业务优先发展战略，以建设世界一流企业为目标，不断构建国际业务发展新格局，搭建全球市场营销网络，大力培养国际化人才，提升国际业务经营层次，全面树立世界品牌形象，推动公司由国内行业龙头升级为国际行业龙头。

2017 is a crucial year to the 13th Five-Year Plan. We will march towards the goal of “building a leading global engineering enterprise”, continue to implement the five development concepts of “innovation, coordination, green, openness and sharing” and remain proactive in fulfilling social responsibilities to make due contributions to coordinated development of economy, society and environment.

We will take “emancipating the minds and changing old mindset” as a guide, recognize and seize the opportunities presented by the economic “New Normal” in alignment with our reality to secure sound performance and steady progress on the long run. We will adapt to the ever changing needs in the marketplace, put innovation development as our top priority, and realize breakthroughs in four aspects to take the initiative in development and go up to a new level for building a leading global engineering enterprise.

Creating multiple shared values. We will keep planning our future in the national economic and social development. We insist on meeting markets’ diversified needs through product and service innovation, taking economic benefit as the center to increase our investment value, and integrating employees’ value pursuit into our corporate vision to realize common development among Energy China Group and all stakeholders.

Further advancing business transformation and upgrading. We will keep improving the modern corporate institutional system, governance structure, and continuously optimizing Energy China Group’s management model to enhance our abilities of scientific

decision making, rule of laws and operation in compliance. We will also ensure reasonable allocation of decision-making, executive and supervisory powers at different levels of the managerial hierarchy and among different companies that vary in competence. Still, we will orderly promote internal resources’ optimizing and recombining, and promote factor resources to the main businesses and advanced companies. Thus, new operational platforms and economic growth points will be shaped to facilitate the transformation and upgrading of the industrial structure.

Insisting on innovation-driven development. We will prioritize innovation-driven development and strive to expand and strengthen our businesses under the strong power of innovation. We will accelerate scientific and technological progress and insist on management innovation, hold a general view of whole situation through building innovation ability, and blaze a new way of innovation development based on innovative thinking and exploration.

Unswervingly implementing a global strategy. We will unswervingly implement priority development strategy of international business. Taking world-class enterprise as the goal, we will keep adding new blueprints to the international business, set up a global marketing network, and cultivate international talents to enhance international business operation level. We will also comprehensively establish a world brand image to push our company towards international industrial leading enterprise from national industrial leading enterprise.





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05 中国能源建设集团投资有限公司 China Energy Engineering Group Investment Co., Ltd.	17 湖南省电力设计院有限公司 China Energy Engineering Group Hunan Electric Power Design Institute Co., Ltd.	27 东北电力第二工程有限公司 China Energy Engineering Group Northeast No.2 Electric Power Construction Co., Ltd.	37 西北电力建设工程有限公司 China Energy Engineering Group Northwest Power Construction Engineering Co., Ltd.
06 中国能源建设集团财务有限公司 China Energy Engineering Group Financing Co., Ltd.	18 陕西省电力设计院有限公司 China Energy Engineering Group Shaanxi Electric Power Design Institute Co., Ltd.	28 东北电力第三工程有限公司 China Energy Engineering Group Northeast No.3 Electric Power Construction Co., Ltd.	38 广东火电工程有限公司 China Energy Engineering Group Guangdong Power Engineering Co., Ltd.
07 中国能源建设集团融资租赁有限公司 China Energy Engineering Group Leasing Co., Ltd.	19 甘肃省电力设计院有限公司 China Energy Engineering Group Gansu Electric Power Design Institute Co., Ltd.	29 天津电力建设有限公司 China Energy Engineering Group Tianjin Electric Power Construction Co. Ltd.	39 广东电力工程局有限公司 China Energy Engineering Group Guangdong Electric Power Engineering Bureau Co., Ltd.
08 中国能源建设香港有限公司 China Energy Engineering (Hong Kong) Company Limited	20 新疆电力设计院有限公司 China Energy Engineering Group Xinjiang Electric Power Design Institute Co. Ltd.	30 山西省电力建设有限公司 China Energy Engineering Group Shanxi Electric Power Construction Co. Ltd.	40 广西水利电力建设集团有限公司 China Energy Engineering Group Guangxi Water Conservancy & Electric Power Construction Group Co., Ltd.
09 中国能源建设集团科技发展有限公司 Energy China Technology Development Co., Ltd.	21 广东省电力设计研究院有限公司 China Energy Engineering Group Guangdong Electric Power Design Institute Co., Ltd.	31 江苏省电力建设第一工程有限公司 China Energy Engineering Group Jiangsu No. 1 Electric Power Construction Engineering Co., Ltd.	41 广西水电工程局有限公司 China Energy Engineering Group Guangxi Hydroelectric Construction Bureau Co., Ltd.
10 黑龙江省电力设计院有限公司 China Energy Engineering Group Heilongjiang Electric Power Design Co., Ltd.	22 云南省电力设计院有限公司 China Energy Engineering Group Yunnan Electric Power Design Institute Co., Ltd.	32 江苏省电力建设第三工程有限公司 China Energy Engineering Group Jiangsu No. 3 Electric Power Construction Engineering Co., Ltd.	

注：中国能源建设股份有限公司企业名单  
Note: Enterprises directory of CEEC



附件 2 公司参加的学协会名单  
Appendix 2: Membership with Social Organizations

社团组织名称 Social Organizations	主管部门 Competent Authorities	社团组织身份 Membership
中国工程咨询协会 China National Association of Engineering Consultants	国家发展改革委 NDRC	副会长单位 Vice Chairman
中国企业联合会 (中国企业家协会) China Enterprise Confederation (China Entrepreneurs Association)	国务院国资委 SASAC	常务理事单位 Executive Council Member
中国电力企业联合会 China Electricity Council	国家能源局 NEA	副理事长单位 Vice President Member
中国勘察设计协会 China Exploration & Design Association	住房和城乡建设部 MOHURD	副理事长单位 Vice President Member
中国电力规划设计协会 China Electric Power Planning & Engineering Association	中国科学技术协会 China Association for Science and Technology	理事长单位 (轮值) President (Rotating)
电力系统人才研究会 Electric Power Talents Seminar	中电联 CEC	常务理事、副会长单位 Executive Council Member Vice Chairman Member
中国开发性金融促进会 China Association for the Promotion of Development Financing	中国社会科学院、民政部 CASS, MOCA	常务理事单位 Executive Council Member
中国银行间市场交易商协会(集团公司) National Association of Financial Market Institutional Investors (Energy China Group)	中国人民银行 PBOC	会员单位 Member
中国银行间市场交易商协会(股份公司) National Association of Financial Market Institutional Investors (Energy China)	中国人民银行 PBOC	会员单位 Member
中华商标协会 China Trademark Association	国家工商行政管理总局 SAIC	会员单位 Member
中国公路建设行业协会 China Highway Construction Association	交通运输部 MOT	理事单位 Council Member
中国水力发电工程学会 China Society for Hydropower Engineering	中国科学技术协会 China Association for Science and Technology	副理事长单位 Vice President Member
中国机电产品进出口商会 China Chamber of Commerce for Import and Export of Machinery and Electronic Products	商务部 MOFCOM	会员单位 Member
中国产业海外发展和规划协会 China Overseas Development Association	国家发展和改革委员会、能源局 NDRC, NEA	理事单位 Council Member
中国电力设备管理协会 China Electric Power Equipment Management Association	国家发展改革委 国家能源局 NDRC, NEA	副会长单位 Vice Chairman

社团组织名称 Social Organizations	主管部门 Competent Authorities	社团组织身份 Membership
中国安全生产协会 China Association of Work Safety	国家安全生产监督管理总局 SAWS	常务理事单位 Executive Council Member
中国电力建设企业协会大型机械装备协作网 Large Machinery Equipment Cooperation Network of China Electric Power Construction Association	中国电力建设企业协会 China Electric Power Construction Association	网长 Network Head
中国电力建设企业协会水电分会 China Electric Power Construction Association Hydro Power Committee	中国电力建设企业协会 China Electric Power Construction Association	副会长单位 Vice Chairman
中国电力建设企业协会火电专委会 China Electric Power Construction Association Thermal Power Committee	中国电力建设企业协会 China Electric Power Construction Association	第一副会长单位 1st Vice Chairman
中国建筑业协会 China Construction Industry Association	住房和城乡建设部 MOHURD	常务理事单位 Executive Council Member
中国电力建设企业协会 China Electric Power Construction Association	国务院国有资产监督管理委员会 SASAC	副会长单位 Vice Chairman
中国质量协会 China Association for Quality	国务院国资委 SASAC	理事单位 Council Member
中国水利电力质量管理协会 China Water Resource Electricity Quality Control Association	国家质检总局 AQSIQ	理事单位 Council Member
中国施工企业管理协会 China Association of Construction Enterprise Management	国家发展和改革委员会 NDRC	副会长单位 Vice Chairman
全国电力技术市场协会 China Electric Technology Market Association	国务院国有资产监督管理委员 SASAC	理事单位 Council Member
中国电机工程学会 Chinese Society for Electrical Engineering	中国科学技术协会 China Association for Science and Technology	常务理事单位 Executive Council Member
中央企业党建思想政治工作研究会 Research Institute for Party Building, Ideological and Political Work of State-owned Enterprises	中国思想政治工作研究会 Chinese Society of Ideological and Political Work	理事单位 Council Member
中国电力思想政治工作研究会 Seminar on Ideology of China Electric Power	中电联 CEC	副会长单位 Vice Chairman
中国青年企业家协会 China Youth Entrepreneurs Association	/	理事单位 Council Member
中央企业媒体联盟 The Central Enterprise Media Alliance	国务院国资委 SASAC	常务理事单位 Executive Council Member
工会工作理论研究会 Trade Union Work Theory Seminar	中国能源化学工会 China Energy and Chemical Workers' Union	名誉副会长单位 Honorary Vice Chairman Member



## 读者意见反馈表

### Feedback

尊敬的读者，为了不断改进报告编制工作，我们特别希望倾听您的意见和建议。请您协助完成以下问题，并反馈给我们，帮助我们改进。

选择题 ( 请在相应位置打√ )

1. 本报告全面、准确地反映了本企业的社会责任工作现状？  
☐很好    ☐较好    ☐一般    ☐较差    ☐很差
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您认为本报告最让您满意的方面是什么？

您认为还有哪些您需要了解的信息在本报告中没有反映？

您对我们今后的社会责任工作及社会责任报告发布有何建议？

如果方便，请告诉我们您的基本信息。

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邮编 \_\_\_\_\_ E-Mail \_\_\_\_\_ 电话 \_\_\_\_\_ 传真 \_\_\_\_\_

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Dear readers,

Thanks for taking your precious time reading this Report. We are looking forward to your suggestions and opinions. Please complete the following feedback form to help us improve future CSR reporting.

Multiple-choice questions: (Please tick the appropriate box.)

1. It provides a comprehensive and accurate disclosure of our CSR performance  
☐ Very good    ☐ Good    ☐ Fair    ☐ Poor    ☐ Very poor
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3. It contains accurate and complete data/information  
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